

Transfer of Polar Bear *Ursus maritimus* from Appendix II to Appendix I

Proponent: United States of America

Summary: The Polar Bear *Ursus maritimus* is the largest living member of the bear family or Ursidae. It occurs at high latitudes in Canada, Greenland/Denmark, Norway (specifically Svalbard area), Russian Federation and the United States of America (Alaska), with vagrants recorded in Iceland. Polar Bears are strongly associated with marine environments where there is sea ice for all or part of the year, particularly in coastal regions but also in the central Arctic basin in regions of permanent pack ice. Preferred habitat is ice that is periodically active, where wind and sea currents cause movements and fracturing of the ice followed by refreezing. It is in such areas that Polar Bears can most successfully hunt. Polar Bears feed primarily on seals, particularly Ringed Seals *Pusa hispida*, Bearded Seals *Erignathus barbatus*, other seals, and walrus *Odobenus rosmarus*, and also scavenge on the carcasses of whales. They will infrequently take terrestrial mammals, birds and vegetation when other food is unavailable but such foods are thought to be energetically insignificant. Polar Bears that have continuous access to sea ice are able to hunt throughout the year. However, in those areas where the sea ice melts completely each summer, Polar Bears spend several months on land relying largely on stored fat reserves until freeze-up. Breeding occurs in March to May, implantation is delayed until autumn, and birth is generally thought to occur from late November to mid-January. The average litter size is somewhere between one and two. Cubs are dependent upon mothers until 2.5 years of age. Age of first reproduction is normally 5–6 years for females. Generation time is usually taken as 15 years, but may range from around 12 years to around 15 years, depending on conditions.

For the purposes of conservation and management, the Polar Bear population is generally divided into 19 subpopulations, or stocks, of very unequal size. However, genetic differences between different subpopulations are small and there is considerable overlap between them. The current overall estimate (2012), taken by summing estimates for different subpopulations, is of a global population of 20 000–25 000. Around 65% of the population either occurs entirely in Canada or is shared by Canada and adjacent territories (Alaska and Greenland).

Various attempts were made from the 1950s to the 1970s to produce global population estimates by extrapolating from surveys or den counts in limited parts of the range. These produced estimates ranging from 5000 to 20 000 bears, but are not considered reliable. Because of the lack of reliable historical data it is not possible to determine quantitative trends in overall population size from historical to present level. However, it is suspected that protective measures introduced in various parts of the range, notably in the then USSR in the 1950s and Norway, Canada and the USA in the 1970s, allowed the size of the global Polar Bear population to increase throughout portions of the range where human-caused removals had been occurring. Data are not available to quantify population trend for most of the currently defined subpopulations over this time period.

An assessment by the IUCN Polar Bear Specialist Group in 2009 concluded that the global population was slowly declining based on individual assessments of each of the subpopulations, of which 1 was increasing, 3 were stable and 8 were known or thought to be declining due to habitat loss, direct human-caused effects, or both. Data were insufficient to provide any assessment of current trend for the remaining 7 subpopulations. A similar exercise in 2005 concluded that 2 populations were increasing, 5 were stable, and 5 declining, with insufficient data to provide trends for the remaining subpopulations. On the basis of the 2005 assessment, the Polar Bear has been classified by IUCN as Vulnerable based on a projected population reduction of greater than 30% within the next three generations (taken as 45 years) as a result of reductions in sea ice habitat availability and quality.

The projected declines in extent and quality of habitat are based on observed and predicted changes in sea ice as a result of climate change. Recent modelling of the trends for sea ice extent, thickness and timing of coverage predicts dramatic reductions in coverage over the next 50–100 years. Satellite observations have shown decreases in the extent of summer sea ice coverage since 1979 with greatest losses compared to the 1979–2012 average occurring since 2000. Studies in the Southern Beaufort Sea, Southern Hudson Bay, and Baffin Bay have identified relationships between sea ice decline and various declines in survival, reproduction, and body condition emphasizing the importance of sea ice to vital rates. Body condition similarly declined in Davis Strait

during a period of sea ice loss, but population size was also increasing during this time. However, data are sufficient for only a few subpopulations to determine whether population size also has declined with declining sea ice, and such a decline has only been demonstrated in the Western Hudson Bay subpopulation. In other subpopulations, such as the Northern Beaufort Sea, data suggest that observed sea ice changes have not yet had a negative effect on polar bears. Data are not available for many areas where some of the most significant declines in sea ice have occurred, such as the Kara and Laptev Seas.

While in the short term, relationships between the various effects of climate change (e.g., sea ice loss, changes in biological productivity, changes in trophic structure) and polar bears are likely to vary, long-term subpopulation declines are projected throughout the species' range if sea ice loss continues as forecasted. A 2009 study using resource selection functions applied to general circulation climate models predicted Polar Bear habitat loss of 5% per decade in the polar basin, amounting to 15-22% habitat loss over three generations (based on a generation time of 12-15 years). A 2010 model using Bayesian probability approaches also based on general circulation climate models and combining limited observational data with expert opinion predicted a high likelihood under business-as-usual climate scenarios of Polar Bears becoming extirpated in the seasonal ice and divergent ice ecoregions, where the majority of the population is found, by the middle of the 21st century. If this outcome were realized, it could mean the loss of two thirds of the global population. The model also indicated that if global warming is mitigated, projected declines in polar bear distribution and numbers would be attenuated.

Other factors that may have an impact on recruitment or survival of Polar Bears include toxic contaminants, shipping, tourism, oil and gas exploration, development resource exploration and development and overharvest.

Polar Bears are subject to a range of management measures. At the international level, all range States (including Denmark on behalf of Greenland) are members of the Agreement on the Conservation of Polar Bears, which came into force in 1976. The Contracting Parties (or Range States) met in 1981 and then not again officially until 2009, when they agreed to hold meetings every two years (their third meeting was in 2011). There is also a series of bilateral agreements concerning shared Polar Bear populations. Polar Bears are legally hunted under various restrictions in Canada, Greenland and Alaska (USA). Numbers taken are regulated by quota in some areas and not in others. In Norway and western Russia no hunting is allowed except for that of problem animals and defence kills. Some hunting by native people in the Chukotka (Chukchi) region of the Russian Federation is theoretically allowed under the Agreement between the United States of America and the Russian Federation on the Conservation and Management of the Alaska-Chukotka Polar Bear Population, which came into force in 2007. A quota was established in 2010 and the US is currently working to implement the quota in a phased approach over the next several years. Implementation of the quota in Russia will require introduction of a legal harvest which is contingent on development of adequate monitoring and enforcement mechanisms.

Currently, global legal annual harvest is between 500 and 700 bears. The majority of polar bear harvest in the Arctic is conducted by indigenous peoples for subsistence, cultural, social, and economic purposes. The global legal harvest represents 3-4% of the global population and is generally agreed to be managed to not negatively affect the persistence of most subpopulations at the present. The effects of harvest will depend on the ability of managers to adjust harvest levels with population responses to sea ice loss. It is estimated that some 60-70% of the harvest consists of males. Harvests are managed in some areas to target a 2:1 male to female harvest ratio, but sex selective harvests can be difficult to manage. There have been concerns over harvest rates of two subpopulations shared by Canada and Greenland – Kane Basin and Baffin Bay, but a management agreement was recently established between these two countries and efforts are underway to obtain new scientific data to form the basis of updated management advice. Currently, because of a non-detrimental finding initiated by Greenland, international export of hides from Kane Basin and Baffin Bay is prohibited. There are current concerns regarding harvest levels in Western Hudson Bay and Southern Hudson Bay in Canada. Illegal hunting in the Chukotka region has also been identified as a potential problem, although there are significant challenges to quantifying the number of bears killed annually in this region. Some estimates suggest that current levels exceed the recently identified quota under the US-Russia Agreement.

The Polar Bear was included in Appendix II in 1975. Polar Bear products are in trade. The range of different products and units of measure used in records makes it difficult to relate trade data to number of Polar Bears in trade. However, it is believed that exports in the period 2005-2009 represented between 300 and 400 Polar Bears per year, most exported from Canada. The overall volume of reported trade has changed relatively little in the past 25 years. Greenland introduced a voluntary temporary ban on export of Polar Bear products in 2007 and in 2009 Canada issued a negative non-detriment finding for all Polar Bears from the Baffin Bay management unit. In the US polar bear parts may only be used for traditional handicrafts, and commercial trade in polar bear skins or skulls is prohibited.

Analysis: Regarding the biological criteria for inclusion in Appendix I set out in *Resolution Conf. 9.24 (Rev. CoP15)*, the global population of Polar Bears (ca 20 000) would not appear to be small, following the guidelines for the definition of a small population set out in Annex 5 to the Resolution, which suggests a figure of less than 5000 is an appropriate guideline of what might constitute a small wild population. The Polar Bear's area of distribution extends over several million square kilometres and is clearly not restricted. The Polar Bear's population has not undergone a marked decline in the recent past, nor is there any evidence that the current size of the Polar Bear population represents a marked decline from a (hypothesized) historical baseline. There is general agreement that the Polar Bear population is currently declining, but the rate of decline is believed slow, as evinced by the lack of change in overall population estimates in the past decade. It would appear therefore that current rate of decline does not meet the definition of a marked ongoing decline as elaborated in Annexes 1 and 5 to *Resolution Conf. 9.24 (Rev. CoP15)*, which suggest a general guideline for such a decline as 50% or more over 10 years or three generations, whichever is the longer.

Annex 1 of *Resolution Conf. 9.24 (Rev. CoP15)* also refers to a marked decline in the population size in the wild projected on the basis of any one of a number of factors. Annex 5 of the Resolution notes that projection involves extrapolation to infer likely future values. The numerical guidelines in Annex 5 to *Resolution Conf. 9.24 (Rev. CoP15)* do not explicitly address projected future declines and give no indication as to how such declines might be assessed within the context of the criteria. Any future changes in the Polar Bear population remain conjectural. Based on changing habitat conditions brought about by human-induced climate change, at least one model predicts major declines of Polar Bear populations by the middle of the 21st century; others predict less marked changes. The basis for the current IUCN Red List Categorization of the species as Vulnerable (published in 2008), taking all available information into account, was a view that the most likely decline over the next three generations (taken as 45 years) would be more than 30% but less than 50% (as the latter in this case would have led to a categorization of Endangered under criterion A2 of the IUCN Red List Categories and Criteria ver 3.1). If it assumed that the guideline figures in Annex 5 to *Resolution Conf. 9.24 (Rev. CoP15)* for a marked recent rate of decline could also be applied to a projected future decline, then on this basis, the Polar Bear would not appear to meet the biological criteria for inclusion in Appendix I.

Supporting Statement (SS)	Additional information
Canada, Greenland (Denmark), Norway, Russian Federation, United States of America.	<u>Range</u>
Vulnerable A3c.	<u>IUCN Global Category</u> Assessed 2008 (ver. 3.1).

Supporting Statement (SS)	Additional information
Biological criteria for inclusion in Appendix I	
<p><u>A) Small wild population</u> (i) Population or habitat decline; (ii) small sub-populations; (iii) concentrated geographically during one or more life-history phases; (iv) large population fluctuations; (v) high vulnerability</p> <p>20 000-25 000 in 19 putative populations, with a 20th population possibly occurring in the central polar basin.</p>	<p><i>Considerable overlap between putative populations exists and the genetic differences between them are small (Schliebe et al., 2008).</i></p>
<p><u>B) Restricted area of distribution</u> (i) Fragmented or localised population; (ii) large fluctuations in distribution or sub-populations; (iii) high vulnerability; (iv) decrease in distribution, population, area or quality of habitat, or recruitment</p> <p>Distributed throughout the circumpolar basin.</p>	<p><i>In Canada extent of occurrence estimated at 8.7 million km² and area of occupancy at 5.6 million km² (COSEWIC, 2008).</i></p>
<p><u>C) Decline in number of wild individual</u> (i) Ongoing or historic decline; (ii) inferred or projected decline due to decreasing area or quality of habitat, levels of exploitation, high vulnerability, or decreasing recruitment</p> <p>There are presently believed to be between 20 000 and 25 000 polar bears in 19 putative populations. While the overall population size estimate has varied little over the past 15 years, individual population estimates have become more precise. In 1993, for example, the total population estimate was 21 470–28 370 individuals. A 20th polar bear population may occur in the central polar basin.</p> <p>Over the years, however, the current trend or status of the 19 subpopulations, as evaluated by the PBSG, in general has deteriorated. In 1993, for example, 13 subpopulations were reported as stable or stationary, while 2 were characterized as decreasing or possibly decreasing. By 2010 1 subpopulation was characterized as increasing or possibly increasing, 3 as stable or stationary, 8 as decreasing or possibly decreasing, and 7 as unknown or data deficient.</p> <p>Especially troubling is the lack of current polar bear population data. Only 8 of the 19</p>	<p><i>Overall population estimates have remained relatively unchanged for over 30 years. IUCN Mammal Red Data Book (Thornback and Jenkins, 1982) gave a range of 18 500 to 27 000 in total and quoted an estimate from 1972 of around 20 000, derived by summing regional estimates. Trend at the time of writing was believed stable or increasing.</i></p> <p><i>It is difficult to assess global population levels earlier than this because the quality of information was generally poor. Various attempts were made, based on surveys of more or less limited areas, including: extrapolation from aerial surveys along the coast of Alaska in the 1950s, leading to a global estimate of 17 000–19 000 bears; extrapolation from aerial surveys in the Russian Arctic in the 1960s leading to a global estimate of 11 000–14 000; extrapolation from den counts in Russia resulting in a global estimate of 5000–10 000 in the 1960s (Uspenski, 1979).</i></p> <p><i>The PBSG indicates that only 8 of 19 subpopulations had sufficient data to determine population status as of 2009. Since 2007 there have been published or reported updates of the status of several of populations, including the Northern Beaufort (Stirling et al. 2011), Western Hudson Bay (Regehr et al. 2007; Atkinson et al. 2012), Baffin Bay (Peacock et al. 2012), Foxe Basin (Garshelis et al. 2012) and Davis Strait (Peacock et al. in prep). The Southern Hudson Bay, Viscount Melville, and Kane Basin populations are also currently being updated. The PBSG has not updated their status table since 2009.</i></p>

Supporting Statement (SS)	Additional information
<p>subpopulations have been surveyed and evaluated by the PBSG since 2000 (no published updates since 2007). Of the remaining 11 subpopulations, 4 have not been surveyed ever (no date or unknown), while another 7 have not been evaluated since the 1990s.</p> <p>In 2008, the IUCN listed the polar bear as Vulnerable citing criterion A3c based on a suspected population reduction of >30% within three generations (45 years) due to decline in area of occupancy, extent of occurrence and habitat quality. Some experts have concluded that polar bears will not survive due to the complete loss of summer sea-ice.</p>	<p><i>Durner et al. (2009) derived a projection of Polar Bear habitat loss in the polar basin of 5% per decade using resource selection functions applied to general circulation climate models. Assuming a generation time of 12-15 years, this would equate to habitat loss of 15-22% over three generations. This excluded any potential loss in southeastern Canadian populations including Hudson Bay.</i></p> <p><i>Recent observations document a faster than previously forecast decline in summer sea ice with the largest retreat on record occurring in summer 2012 (Wang and Overland, 2012, and see National Snow and Ice Data Center website at NSIDC.org).</i></p> <p><i>Amstrup et al. (2008, 2010, also cited in the SS) developed a model using Bayesian probability approaches based on general circulation climate models and combining limited data (relating declining habitats to population status) with expert opinion. This predicted a high likelihood under business-as-usual climate scenarios of Polar Bears becoming extirpated in the seasonal ice and divergent ice ecoregions, where the majority of the population is found, by the middle of the 20th century. The model also indicated that, with climate mitigation measures, predicted declines in Polar Bear distribution and numbers were avoidable.</i></p> <p><i>Current IUCN Red List Assessment (Schliebe et al., 2008), based on assessment made in 2005) notes overall population trend as declining and states: "There is little doubt that Polar Bears will have a lesser area of occupancy (AOO), extent of occurrence (EOO) and habitat quality in the future. However, no direct relation exists between these measures and the abundance of Polar Bears. While some have speculated that Polar Bears might become extinct within 100 years from now, which would indicate a population decrease of >50% in 45 years based on a precautionary approach due to data uncertainty. A more realistic evaluation of the risk involved in the assessment makes it fair to suspect population reduction of >30%." Polar Bear generation time is generally taken as 15 years but lower values have been observed.</i></p>

Trade criteria for inclusion in Appendix I

The species is or may be affected by trade

During the period 2001–2010 (UNEP-WCMC 2012), a total of 6,798 relatively large polar bear items were reported as gross exports by the several range States, as follows: 4,114 Skins (60.5%), 1,441 Skulls, 867 Trophies, 294 Bodies, and 82 Live Bears.

By range State during the same 2001–2010 period 5,386 (79.2%) of the 6,798 relatively large polar bear items were exported by Canada, 827 by Greenland, 327 by Norway, 176 by Denmark (Denmark + Greenland = 1,003 items), 76 by the Russian Federation, and 6 by the United States (Table 3).

For many commodities in trade, particularly specimens used in scientific research, it is impossible to determine the number of polar bears represented by reported trade. Only two commodities, full skins and skulls, can be used to make inferences on the impact of international trade. Based on the 2005 to 2009 export data on full skins, between 300 and 400 polar bears were represented in international trade in a given year, out of a total legal harvest of 700-800. There has been a shift in market dynamics in recent years including increased value of skins and rising demand for skins in some importing countries such as Russia and China. There has also been a change in the purposes for export, with a reduction of exports for hunting trophies and an increase of exports for commercial trade and personal purposes. However, the

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<p>In terms of whole polar bears (combining skins and trophies), about 400–500 polar bears are traded annually. While gross exports were relatively steady at 527–831 items or individuals annually during the period 2001–2006, gross exports have declined steadily from 1333 to 307 items or individuals annually beginning in 2007 and ending in 2010.</p>	<p><i>total number of skins exported for commercial trade from 2005 to 2009 exhibited no trend and in Canada ranged from 71-195 per year. Gross exports of polar bear products varied over the last 25 years in response to variation in demand for polar bear parts, such as scientific specimens, rather than commercially traded items.</i></p> <p><i>Detailed discussion of trade in Polar Bears is provided in Shadbolt et al. (2012).</i></p> <p><i>There have been reports that CITES certificates accompanying polar bear hides brought legally from Canada are then used in Russia to sell items from polar bears harvested illegally in the Russian Arctic, where harvest is banned. Prices for hides in such shops have increased significantly which raises concerns that high prices could motivate additional illegal killing of polar bears in Russia. Unknown but notable numbers of skins from polar bears illegally harvested in the Russian Arctic are also being illegally brought to Ukraine and sold via the internet (PBSG in litt., 2012).</i></p>

Other information

Threats

Habitat loss (see above).

The available scientific and commercial information indicates that harvest, increased bear-human interaction levels, defense-of-life take, illegal take, and take associated with scientific research live-capture programs are occurring for several populations. Loss of habitat will likely exacerbate the effects of utilization and trade in several populations. In addition, Polar Bear mortality from harvest and negative bear-human interactions may in the future approach unsustainable levels for several populations, especially those experiencing nutritional stress or declining population numbers as a consequence of habitat change.

The available scientific information indicates that disease and predation (including intra-specific predation) do not threaten the species throughout its range but may become more important in future as the effects of global warming are felt. Contaminant concentrations are not presently thought to have population level effects on most Polar Bear populations. Increased exposure to contaminants, however, has the potential to operate in concert with other factors to lower recruitment and survival rates.

In response to public concerns about potential harvest and trade impacts in Canada, the Nunavut Wildlife Management Board in 2011 invited the PBSG to comment on a proposal to increase the total allowable harvest for the Western Hudson Bay (WH) polar bear subpopulation in the Nunavut Settlement Area. The proposal to increase the harvest from 8 bears to 21 bears for the 2011–2012 harvest season was based in large measure on Inuit Traditional Knowledge. In summary, the PBSG opposed

The PBSG (2009) stated: 'the greatest challenge to conservation of Polar Bears is ecological change in the Arctic resulting from climatic warming. Declines in the extent of the sea ice have accelerated since the last meeting of the group in 2005, with unprecedented sea ice retreats in 2007 and 2008. The PBSG confirmed its earlier conclusion that unabated global warming will ultimately threaten Polar Bears everywhere. The PBSG also recognized that threats to Polar Bears will occur at different rates and times across their range although warming induced habitat degradation and loss are already negatively affecting Polar Bears in some parts of their range. Subpopulations of Polar Bears face different combinations of human threats. The PBSG recommends that jurisdictions take into account the variation in threats facing Polar Bears.' The largest summer sea ice retreat on record occurred in 2012 (see www.nsidc.org).

A number of studies have identified relationships between sea ice conditions and metrics other than population size (such as survival, reproduction, body condition, and access to denning habitats; Regehr et al. 2007, 2009; Rode et al. 2010, 2012; Derocher et al. 2011; Durner et al. 2009, Ovsyanikov 2012, Peacock et al. 2012). On June 26th 2012, the Nunavut Wildlife Management Board (NWMB) invited the IUCN/SSC Polar Bear Specialist Group (PBSG), to comment on the proposal by the Government of Nunavut's Department of Environment (GN) to increase the total allowable harvest (TAH) for the Western Hudson Bay (WH) polar bear subpopulation, in the Nunavut Settlement Area, to 24 rather than have it revert back to 8 for the 2012-2013 harvest season. In fact, last year's quota, which was actually 38 (17 to 'pay back' over harvests in previous years plus 21 to be used in 2011-12), was a one year increase that ended 30 June 2012. That increase was opposed at the time by the

Supporting Statement (SS)	Additional information
<p>the proposed increase (Vongraven 2011). Despite this position, on October 28, 2011, Nunavut made the decision to increase the total allowable harvest in WH from 8 to 21 bears.</p>	<p><i>PBSG. On July 1st, the TAH would technically have reverted back to 8. The PBSG strongly opposed the proposed increase (Vongraven, in litt. to Kusugak, 2012).</i></p> <p><i>Polar Bear harvest is male-biased (60-70% of the take) (PBSG, 2009). Some concern has been expressed that excessive take of males could lead to an impairment in recruitment due to an Allee effect (Molnár et al., 2008), although such impairment has yet to be demonstrated in a wild population of Polar Bears.</i></p>

Conservation, management and legislation

Detailed information on national management is provided in the supporting statement.

Recognizing the high likelihood of overharvesting shared polar bear populations due to communication and cooperation issues, several range States have initiated joint management and research agreements to limit actual or potential negative harvest and trade impacts:

- Agreement between the Government of the United States of America and the Government of the Russian Federation on the Conservation and Management of the Alaska-Chukotka Polar Bear Population.—This 2000 agreement between the United States and the Russian Federation seeks to enhance the polar bear population the Alaska-Chukotka polar bear population (Chukchi Sea). A quota was set in June 2010 but will not be implemented until 2013.
- Inuvialuit-Inupiat Polar Bear Management Agreement in the Southern Beaufort Sea.—This 1988 agreement between the United States and Canada seeks to enhance the polar bear population of Southern Beaufort Sea.
- Memorandum of Understanding between the Government of Canada, the Government of Nunavut, and the Government of Greenland for the Conservation and Management of Polar Bear Populations.—This 2008 agreement between Canada, Nunavut, and Greenland seeks to enhance polar bear populations in Kane Bay and Baffin Bay.

Unless otherwise referenced, the following information (much of which is also in the supporting statement), is derived from the website of the IUCN Polar Bear Specialist Group.

*Within **Canada**, the authority for the management of Polar Bears lies with the seven provincial and territorial jurisdictions in which they occur. While the governments of the Provinces and Territories have the authority for management, the decision-making process for some is shared with Aboriginal management boards (e.g. Nunavut Wildlife Management Board) as part of the settlement of land claims. In most Canadian jurisdictions, hunting seasons, quotas, and protection of family groups have been legislated; however, only Manitoba prohibits the hunting of Polar Bears. Although Ontario and Québec have no enforced quotas, only native people may hunt Polar Bears. Over 80% of the hunting of Polar Bears in Canada occurs in Nunavut and the Northwest Territories, where management agreements and/or memoranda of understanding have been developed with local communities to ensure that all human-caused mortality is sustainable (but see Threats above). Programmes to monitor and analyze the annual human-caused mortality of Polar Bears are in place in all jurisdictions.*

Inuvialuit-Inupiat Polar Bear Management is not legally binding in the U.S., but is in Canada (i.e., the quotas are enforceable in the Northwest Territories) (PBSG in litt 2012).

In addition, the Government of Nunavut has implemented a phased-in quota reduction for the Baffin Bay subpopulation until the on-going research results can be evaluated, and the population status can be re-assessed for sustainable harvest levels (PBSG, in litt. 2012).

In 2011 the Polar Bear, on the recommendation of the Minister of the Environment, was added to Schedule 1 of the 2004 Species at Risk Act (SARA) as a species of special concern. Under SARA, the listing of a species as special concern in Schedule 1 requires the preparation of a management plan to prevent listed species from becoming endangered or threatened (<http://www.sararegistry.gc.ca>).

Supporting Statement (SS)	Additional information
	<p><i>Harvest of polar bears in Greenland was undertaken without quotas until 2006, when the Government of Greenland introduced quotas. National regulations for Polar bear management are fixed by law in Executive Order no. 21 of 22 September 2005 on the Protection and Hunting of Polar Bears. The Government of Greenland sets annual quotas taking into account international agreements, biological advice provided by Greenland Institute of Natural Resources, harvest statistics, and Consultations with the Hunting Council. The quota is divided between relevant Municipalities by the Department of Fisheries, Hunting & Agriculture in consultation with the Hunting Council, and they are set for three years. During the three years of regulations, the quotas have been reduced to ensure sustainable harvest. The quotas for polar bear are mandatory, and are enforced by a double-reporting system. In 1985 Greenland obtained authority to issue CITES permits. Early 2007, the CITES Management Authority requested a NDF (non-detrimental finding) for the polar bear, and the result was negative. After this Greenland introduced a voluntary temporary ban on export of Polar bear products which has remained in place to date.</i></p> <p><i>In 2009, Greenland, Canada and Nunavut signed a Memorandum of Understanding for the conservation of the Baffin Bay and Kane Basin subpopulations. In October 2011 it was reported that the Commission set up under the agreement had met twice to date (Ottawa 2010, Ilulissat 2010), and had approved a monitoring plan that was currently being implemented. Once new population abundance and demographic data are available, expected in 2013, the Commission would be in a position to formulate updated advice to manage harvest for these two subpopulations to ensure long-term viability (Anon., 2011).</i></p> <p><i>Polar Bears are fully protected in Norway and can only be killed in defence of life or property.</i></p> <p><i>The Polar Bear was totally protected in Russia (USSR) in 1957. The only permitted take of Polar Bears is catching cubs for public zoos and circuses.</i></p> <p><i>The Agreement between the Government of the USA and the Government of the Russian Federation on the conservation and management of the Alaska-Chukotka Polar Bear acknowledges the possibility of renewing a limited subsistence take of Polar Bears by native people of Chukotka (Russia). However, currently a complete ban on hunting of polar bears in Russia has been maintained. Monitoring and enforcement plans would be needed to legalize subsistence harvest by native people in Chukotka.</i></p> <p><i>Under the 1972 Marine Mammal Protection Act of 1972 (MMPA) hunting of Polar Bears in the USA is prohibited except by coastal-dwelling Alaska Natives for subsistence and handicraft purposes, provided the take is not wasteful. Under the MMPA, harvests quotas are not set unless Polar Bear populations are defined as</i></p>

Supporting Statement (SS)	Additional information
	<p><i>“depleted” (below optimum sustainable population level). The U.S. Fish and Wildlife Service has primary responsibility for harvest management, and works cooperatively with Alaska Native user groups (e.g., the Alaska Nanuuq Commission, North Slope Borough) to cooperatively address harvest issues under existing user group agreements. In addition, international coordination is required for harvest management since both the southern Beaufort Sea stock (SBS) and the Chukchi/Bering seas stock (CS) are shared with Canada and Russia respectively. In 1988 the Inupiat of Alaska and Inuvialuit of Canada developed and implemented an Inupiat-Inuvialuit (I-I) conservation agreement for the SBS population. The Agreement was re-negotiated, and signed again in 1999. It establishes sustainable harvest limits and allocates quotas (which are reviewed annually) between the jurisdictions. It is not legally binding but has resulted in greater involvement by user groups in harvest management and conservation, as well as harvest levels generally remaining sustainable, although the reduction in estimated size of the SBS population is likely to necessitate reduction of harvest levels.</i></p>
<u>Similar species</u>	
	<p><i>Polar Bears are very distinctive.</i></p>

Reviewers: E. Cooper, IUCN Polar Bear Specialist Group (Sub-committee on CITES CoP16 proposal).

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