

ICON ON ICE:

International Trade and
Management of Polar Bears

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the wildlife trade monitoring network

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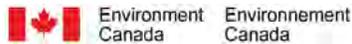
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EXECUTIVE SUMMARY

Polar bears are a charismatic Arctic species and the anticipated effects of climate change on their habitat have gained increasing international attention, making the species a high-profile conservation priority. Changes to the Arctic ecosystem will not only affect polar bears and their habitat, but also the livelihoods of Arctic communities.

Hunting polar bears helps maintain cultural identity and for many Arctic communities it provides a strong link to the environment. As well as contributing to a traditional subsistence economy (e.g. food and clothing) in the Arctic, the polar bear hunt also provides an important source of income through sport hunting activities and the sale of polar bear parts and derivatives. This report examines international trade in polar bear parts and derivatives, and provides recommendations to improve the conservation and management of the global polar bear population into the future.

Polar bears are unevenly distributed throughout the Arctic and are not managed as a single population, but rather as 19 management units. In 2008, the International Union for the Conservation of Nature (IUCN) assessed the species as vulnerable with an overall decreasing global population trend citing a suspected global population reduction of greater than 30% within three generations (45 years) as a result of decline in habitat quality, extent of occurrence and area of occupancy (Schliebe *et al.*, 2008). Since there are variations in the type and extent of sea ice throughout the Arctic, the effects of global climate change will vary regionally. Consequently, the responses of polar

bears will differ between regions and will likely be influenced by ice conditions, availability of prey and hunting pressure. As sea ice melts, polar bears cut off from suitable habitat are more likely to congregate on land. This makes them more vulnerable to novel disturbance, easier to reach by hunters and more likely to come into conflict situations with humans.

Historically, polar bears were hunted using traditional methods occurring at sustainable levels; however, there were concerns over the large numbers of polar bears sport hunted and harvested commercially from the 1700s to the mid-1900s. As a result of the signing of the 1973 *Agreement on the Conservation of Polar bears* and subsequent conservation efforts and actions taken by the range States (Canada, Greenland [Denmark], Norway, Russia and the United States), polar bears are still found in much of their historic range. Polar bears have not been commercially harvested since 1973 and only Canada permits the sport hunting of polar bears. Russia and Norway have not hunted polar bears since 1956 and 1957 respectively. Canada, the United States and Greenland are the only range States that currently allow hunting of polar bears for subsistence purposes. From 2006/2007 to 2010/2011 on average, 735 bears (min 651 to max 813) were killed in a given year from a global population of 20,000 to 25,000 bears. This is approximately three to four percent of the global population.

Range States have significantly improved the management and conservation of polar bears through international and bilateral agreements, increased research and monitoring activities and the establishment of harvest limits and/or quotas. Canada has made significant contributions to polar bear conservation with sound management measures, extensive research and monitoring efforts. Although concerns have been raised on harvest levels in some jurisdictions, authorities are working to address them by adjusting or implementing harvest limits where needed and by monitoring the harvest across the country. In Russia,



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there are ongoing concerns with illegal hunting of polar bears and trade of skins. Until it can be shown that illegal harvest and trade is not a concern, the Russian government will not issue permits for hunting. Greenland has made important contributions to polar bear conservation and maintains an active research program. The introduction of harvest quotas has reduced hunting to more sustainable levels. The United States maintains a large polar bear management and research team and contributes significantly toward understanding polar bear ecology. Voluntary allocations and harvest guidelines established through bilateral agreements are respected in Alaska even though they are not legally binding. Norway continues to be a strong voice for polar bear conservation and precautionary management.

For many Arctic communities, hunting activities are not only aimed at satisfying cultural, social, and nu-

tritional needs, but also the financial needs of families and households. Money earned from the sale of animal products is used to purchase equipment for harvesting activities and to pay for household living expenses. The polar bear hunt is highly regarded and hunters are often seen as role models for the community. The value of a subsistence hunt cannot be determined solely by the monetary value of the animal parts as it would not take into account other aspects of the hunt (food, cultural value and spiritual value). However, in 2009 the estimated annual value of sport hunting in Canada was CAD1.3 million per year (USD1.1 million), while the sale of skins was valued at approximately CAD600,000 (USD489,000). The cost of a single polar bear sport hunt (paid to southern wholesalers [outfitters]) ranges in price from CAD20,000-60,000 (USD 17,598-52,794) depending on the duration of the trip. The value of skins also ranges in value, depending on the size and quality and whether it is a raw or tanned skin or a finished skin rug. The advertised price for a skin rug ranged from CAD4,750 (7 foot rug in 2006) to CAD30,000

(10 foot rug in 2010) and in recent years the value has increased (e.g. CAD6,200 for an 8 foot skin rug in 2006 to a value of CAD12,000 in 2010). International trade in polar bear parts and derivatives is regulated by the *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (CITES). The polar bear was listed in Appendix II in 1975, which requires issuance of CITES export permits for trade crossing international borders. However, before a CITES export permit can be issued, polar bear range States must prove that international trade is not detrimental to the conservation of the species in the wild. This is known as a non-detriment finding (NDF). In 2008, Greenland issued a negative NDF (indicating that trade might not be sustainable) for all polar bears in Greenland and in 2009 Canada issued a negative NDF for all polar bears from the Baffin Bay management unit. Until a positive NDF (indicating that trade is sustainable) can be made, international trade from these particular areas is generally prohibited. Other legislations, such as the European Union Wildlife Trade Regulations (EU WTR), the United States *Ma-*



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rine Mammal Protection Act (US MMPA) and the US Endangered Species Act (US ESA) have restricted imports of polar bears and their parts from some areas. Since 2008, imports of polar bears from the Canadian management units of Baffin Bay and Kane Basin into the EU has been temporarily restricted and imports of any polar bears into the United States have been prohibited unless permitted under specific circumstances with issuance of permits.

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CITES trade data are the only comprehensive international trade data available for polar bears. The data provide an overview of international trade in polar bears and their parts and derivatives, but the data cannot provide an estimate of actual number of polar bears represented in international trade. Much of the data are based on information from permits issued, not from permits used. International trade is represented by a variety of commodities, such as specimens, claws, carvings, skulls, and skins. For many of these commodities it is impossible to determine the number of polar bears represented by this trade. For example, one polar bear could be the source of any number of scientific specimens (blood samples, hairs, teeth for aging), up to 20 claws, a skull and a skin. Only two commodities, full skins and skulls, can reliably be used to make inferences on the impact of international trade. Based on the 2005 to 2009 export data on full skins, fewer than 400 polar bears were represented in international trade in a given year. If international trade were the primary incentive for harvest, the majority of polar bears harvested could be expected to be represented in international trade. However, that does not appear to be the case, considering that 700 to 800 polar bears are legally hunted each year. Increases of full skins exported in previous years appear to be in correlation with changes in regulatory actions (US MMPA and the ESA).

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. Market dynamics may be shifting due to: an increase in the demand for skins cause by increased protection status; Arctic communities compensating for loss of revenue from other activities; improved marketing of Canadian skins; and increased market demand in China and Russia which cannot be met by increased

numbers of skins, therefore driving prices up. Although the value of skins has increased in recent years, and demand for skins has increased in some years (notably from China), the total number of skins exported from 2005 to 2009 did not increase significantly.

Trends in international trade are influenced by specific commodities and their purposes. The numbers of specimens, hair and teeth traded for scientific purposes has greatly influenced the total volume of items in international trade, with notable increases in some years. The increasing research efforts on polar bears and projected effects of climate change and collaboration across states likely increased trade for scientific purposes. The majority of scientific samples are taken from live sedated polar bears. Scientific samples clearly provide valuable information on the status and health of polar bears, information which is important for adaptive management of the species.

All polar bear range States agree that the biggest threat to polar bears is climate change and its impact on their habitat. Polar bears are generally well-managed and illegal hunting of polar bears does not appear to be a concern for most polar bear range States. According to the available data, legal international trade in polar bear parts and derivatives does not currently appear to be a significant threat to the species. The total number of items traded internationally increased during the years 2001 to 2009, which could mistakenly be interpreted to indicate that the numbers of polar bears being hunted for trade was also increasing. However, the numbers of full skins and skulls (the most valuable parts of a polar bear for commercial purposes) remained relatively constant throughout the same period of time. The increase in the number of items in international trade in recent years, specifically from 2006 to 2009, is greatly attributable to a legal (and desired) activity: scientific trade of specimens (most often blood and tissue samples), hair and teeth being sent across borders for the purpose of research.



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Prohibiting international trade will not eliminate the harvest because the harvest is primarily for subsistence purposes. However, because polar bear skins have increased in value recently, combined with the likelihood that polar bears might become scarcer due to climate change, the demand for and price of skins will face upward pressure over the long-term. More consistent reporting of trade data and improved analysis and monitoring of trade in the species will be necessary to ensure international trade does not become a significant threat in the future.

Polar bears will be subjected to multiple stressors (threats) that vary from region to region—affecting each management unit in different ways and over differing time scales. The impact on polar bears will be dependent on the health of the management unit and the resilience of the region. Since each management unit responds to different realities on the ground, adaptive frameworks are required that rapidly assess new information to ensure that harvest and trade will not detrimentally impact the conservation of the species. If management units decline to low numbers, efforts can be adjusted accordingly and directed at recovering local populations to ensure harvest levels, where allowed and sustainable, are tied to specific and logical management targets.



Managers, biologists, Arctic communities and conservation organizations may have differing opinions or different methods for achieving and measuring success or failure. However, they do share a common goal: to conserve polar bears. Conservation success should not be measured by the level or number of legislative protections a species has, but rather by a lack of need to have such mechanisms. It could be argued that once a species merits a new protective designation (such as being listed in CITES Appendix I), then current conservation efforts have actually failed. It is critical, therefore, that all interested parties work together and pool their resources to have a greater impact on conservation. Cooperation, collaboration and commitment are needed by all to ensure success and secure the future for polar bears. Successful management will result in a population that is healthy, stable, and resilient to threats and a resource to local communities.

Key recommendations

- Polar bear range States should take appropriate action to ensure that population and harvest monitoring is adequate to adaptively manage harvest in accordance with sound conservation practices based on the best available scientific data. This will help ensure that threats on the species (including impacts of climate changes) are taken into account to ensure that harvest remain within sustainable limits.
- TRAFFIC encourages interested stakeholders and/or range States to develop a study on the supply chain and consumer demand dynamics for polar bear parts and derivatives with analysis on key consumer markets such as China or the Commonwealth of Independent States. Such a study could help determine market drivers, evidence of illegal trade and indications of poaching activities in range States.
- Exporting and consuming countries should collaborate on efforts to develop consistent methods for elucidating and addressing illegal trade in polar bear products. This would assist Parties to comply with CITES and support efforts to conserve polar bears. Such methods could include sharing law enforcement intelligence information arising from illegal trade and poaching cases where this involves transnational crime. Existing mechanisms such as the Interpol Ecomessage and European Union Trade in Wildlife Information eXchange (EU-TWIX) could be used.
- Any range State that permits the trade of polar bear skins, trophies or skulls should develop a mandatory and modern tracking system (such as use of pit tags or microchips inserted in polar bear skins or mounted trophies) to track and identify their movements. Alternatively, range States could consider developing a documentation scheme to help identify and track the source of skins in international trade (e.g. a certification program).

- An updated and circumpolar socioeconomic study on the importance of trade in Arctic species (including polar bears) would provide useful information to facilitate dialogue and insight into the potential effects of restricting hunting and trade. This study could involve a review of:
 - ▶ the impact of the US ESA listing of polar bears on markets and livelihoods, and how Arctic communities are offsetting the loss of revenue;
 - ▶ the impact of the proposal to list polar bears in CITES Appendix I at CITES CoP15 (Qatar, 2010), on the demand and value of polar bear products;
 - ▶ the impact of the European Union Scientific Review Group (EU SRG) negative opinions under the EU WTR, which prohibit the import of polar bear products into the EU from particular polar bear management units.
- A range State workshop on international trade in Arctic species could help to facilitate information sharing and discussion on issues related to trade, and recommend solutions.
- Awareness campaigns should be developed in Russia and other Commonwealth of Independent States countries to inform rural communities and urban markets on the possible conservation implications of illegal hunting and trade of polar bears.
- The inconsistencies in CITES trade reporting are not specific to polar bears: they apply to all taxa listed by CITES. Therefore, any changes and improvements to the reporting of the data would require the agreement, participation and commitment of the signatory Parties. However, the polar bear range States could take a proactive stance as a signal to the CITES Parties by improving their monitoring and reporting of CITES trade data for this high-profile species. This could be facilitated by: development and agreement on definitions for the purpose of transaction codes; reporting trade data for the actual items traded rather than on permits issued; and by following the guidelines for the preparations and submission of CITES annual reports. This would provide more consistent reporting of data and improve the analysis and monitoring of trade in the species.
- Polar bear range States should consider submitting additional information when inputting trade data in their CITES annual reports (e.g. parts derived from live or dead animal, the year of harvest). They could add a separate code as supplementary information, to provide information on the harvest. This could be a hunting tag code or number, or a new code created to protect confidentiality. The code would allow tracking of products coming from individual polar bears. For instance, the claws, skin, and skull of one polar bear would all be associated with the same hunting tag, so all of these items would have the same code. The code could also indicate the year of harvest. All of this would provide a more accurate estimate of the number of bears in trade.
- Range States should review existing domestic and international policies, laws and agreements to ensure compliance, and to ensure that adequate penalties or means to prosecute violations exist.
- Management authorities and Arctic communities in each range State should consider implementing programs that promote local management of bear-human conflicts, including local polar bear patrols and reduction of food attractants. The development of community outreach and/or awareness programs focused on improved reporting of polar bear sightings and human-bear conflicts could help underscore the benefits of reporting incidents (e.g. reporting of problem bears can provide managers with justification to provide resources such as bear-proof bins).