

Polar Bears and the Criteria for Listing in CITES Appendix I

BACKGROUND ON CITES

Forty years ago, the Convention on International Trade in Endangered Species (CITES) was formed to ensure that international trade in wild animals and plants does not threaten their survival. The bear family, *Ursidae*, is listed in Appendix II of CITES. This listing provides a modest level of protection for all bear species, requiring exporting countries to make a finding that the exports meet several criteria, including that the specimen was legally obtained and that the export will not be detrimental to the survival of the species in the wild. Over time, seven bear taxa have been transferred to CITES Appendix I as their conservation status deteriorated and/or market demand increased. The Appendix I listing for these taxa provides a higher level of protection, barring trade in the species for commercial purposes and placing “dual controls” over remaining trade (e.g., sport-hunted trophies may be imported as long as the exporting and importing countries issue permits supported by a non-detriment finding).

Supported by Russia, the United States has proposed transferring the polar bear from Appendix II to Appendix I. As explained below, because the polar bear clearly meets the definition of an Appendix I species—it is “affected by trade” and “threatened with extinction”—it should be transferred to Appendix I of CITES.

THE CRITERIA FOR LISTING IN CITES APPENDIX I

The CITES criteria for listing species in the Appendices are intentionally broad, science-based, and focus exclusively on the biological and trade status of species. By design, the criteria are meant to provide a framework for consideration of facts by the CITES Parties. They do not call for an assessment of how a listing will impact a species’ risk of extinction—strict regulation of trade will save some species, while merely reducing a stressor for others.

Pursuant to the Convention, “Appendix I shall include all species threatened with extinction which are or may be affected by trade.” CITES Article II, paragraph 1. CITES Resolution Conf. 9.24 (Rev. CoP15) (“Criteria Resolution”) provides the criteria and definitions to be used to determine if a species is “threatened with extinction” and if it is or may be “affected by trade.”

Affected By Trade

The Convention defines “trade” as “export, re-export, import and introduction from the sea” and “species” as “any species, subspecies, or geographically separate population thereof.” (CITES Article I, subparagraphs (c) and (a).) “Geographically separate populations” may “also refer to populations or subpopulations.” (Resolution Conf. 9.24 (Rev. CoP15) at



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Annex 5 (Definitions, explanations, and guidelines). It is important to note that the term “trade” in the CITES context is not synonymous with the term “commercial trade”; trade in the CITES context is more akin to movement across international borders.

With respect to “affected by trade,” the Criteria Resolution states:

A species “is or may be affected by trade” if:

- i. it is known to be in trade (using the definition of ‘trade’ in Article I of the Convention), and that trade has or may have a detrimental impact on the status of the species; or
- ii. it is suspected to be in trade, or there is demonstrable potential international demand for the species, that may be detrimental to its survival in the wild.

(Resolution Conf. 9.24 (Rev. CoP15) at Annex 5.)

Applying the CITES definitions to polar bears, it is clear that the species is “affected by trade.” There is no dispute that polar bears are known to be in trade (they are exported, re-exported, and imported). It is also clear that trade has or may have a detrimental impact on the status of the species or its populations.

Importantly, trade does *not* have to be the principal threat to the species; it must merely, historically or potentially, have or may have a detrimental impact on the species. Overharvest for trade purposes has already been recognized as a threat to polar bear populations and commercial demand for the species will likely ensure that it remains a threat into the future. Justifying the 2008 classification of polar bears as “vulnerable” on the IUCN Red List, the IUCN noted the “potential risk of over-harvest due to increased quotas, excessive quotas or no quotas” for certain populations. (Schliebe *et al.* (2008)). In December 2008, unsustainable harvest of polar bears in Kane Basin and Baffin Bay led the European Union to ban the import of polar bear specimens derived from these two populations. The Canadian federal government followed suit in 2010, banning polar bear exports from Baffin Bay just prior to the last CITES Conference of the Parties after five years of unsustainable harvest pursuant to quotas set by the Canadian Territory of Nunavut (Peacock *et al.* (2011)).

There is no serious dispute that international trade for commercial purposes is an integral part of polar bear harvest and there is compelling evidence that recent overharvest is driven by the international commercial demand for polar bear parts. For example, in April 2011, CBC News reported that hunters in Quebec killed 12 times the usual number of polar bears they harvest in southern Hudson Bay during the winter (CBC News 2011). According to news reports, Drikus Gissing, Nunavut’s director of wildlife management, said, “Suddenly hunters heard, ‘People will give us money even before we hunt!’” (Macleans 2012). Later, the three jurisdictions that share the southern Hudson Bay population agreed to a joint hunting quota of 60 bears per year, a level most polar bear scientists believe is unsustainable (Marine Mammal Commission 2012).

Quotas are set against a backdrop of soaring demand for polar bear skins. Polar bear hides sold at Fur Harvesters Auction Inc. in Canada in 2012 for more than double the prices obtained in 2007 (Figure 1). Maximum hide prices increased from USD 6,100 in 2007 to USD 12,514 in 2012. Average hide prices increased from USD 2,079 in 2007 to USD 5,211 in 2012. The number of polar bear hides offered at auctions in Canada tripled between 2007 and 2012, from 40 hides offered to 150 hides offered (Figure 2). While it may not be possible to link specific quotas and harvests to international commercial demand, there is no evidence that harvest decisions are immune to the market forces that inform rational economic decision making.

Given the above, the evidence shows that polar bears are or may be “affected by trade.”

Threatened With Extinction

With respect to “threatened with extinction,” the Criteria Resolution states:

A species is considered to be threatened with extinction if it meets, or is likely to meet, at least one of the following criteria.

- A. The wild population is small, and is characterized by at least one of the following:
 - i. an observed, inferred or projected decline in the number of individuals or the area and quality of habitat;
 - ii. each subpopulation being very small;
 - iii. a majority of individuals being concentrated geographically during one or more life-history phases;
 - iv. large short-term fluctuations in population size; or
 - v. a high vulnerability to either intrinsic or extrinsic factors.
- B. The wild population has a restricted area of distribution and is characterized by at least one of the following:
 - i. fragmentation or occurrence at very few locations;
 - ii. large fluctuations in the area of distribution or the number of subpopulations;
 - iii. a high vulnerability to either intrinsic or extrinsic factors; or
 - iv. an observed, inferred or projected decrease in any one of the following:
 - the area of distribution;
 - the area of habitat;
 - the number of subpopulations;
 - the number of individuals;
 - the quality of habitat; or
 - the recruitment.

C. A marked decline in the population size in the wild, which has been either:

- i. observed as ongoing or as having occurred in the past (but with a potential to resume); or
- ii. inferred or projected on the basis of any one of the following:
 - a decrease in area of habitat;
 - a decrease in quality of habitat;
 - levels or patterns of exploitation;
 - a high vulnerability to either intrinsic or extrinsic factors; or
 - a decreasing recruitment.

Resolution Conf. 9.24 (Rev. CoP15) at Annex 1 (Biological criteria for Appendix I) (emphasis in original).

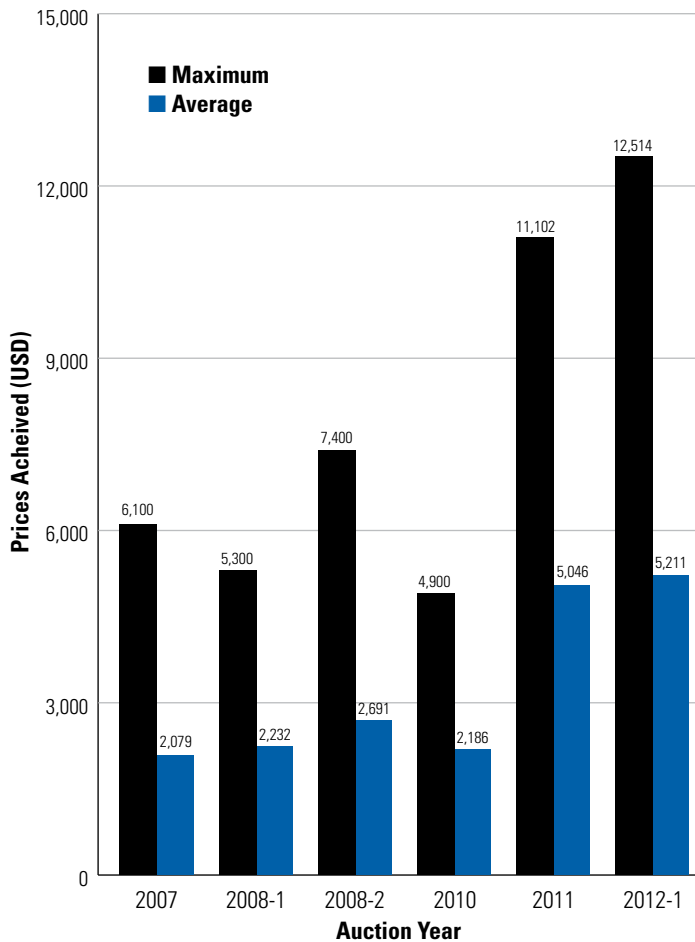
Applying the CITES criteria to polar bears, it is clear that the species “meets or is likely to meet” criterion C because there is an “inferred or projected” population decline due

to “a decrease in area of habitat”, “a decrease in quality of habitat”, “levels or patterns of exploitation”, “a high vulnerability to either intrinsic or extrinsic factors” and “a decreasing recruitment.” Each of these factors has been demonstrated to be occurring in some populations of polar bears, and is projected to occur in other populations in the future. For example, polar bears are characterized by a high vulnerability to an extrinsic factor—global warming. This fact alone when combined with polar bear’s marked projected decline in the population size in the wild compels a finding that polar bears are “threatened with extinction.”

The critical factor here is the projected marked decline in the polar bear population size in the wild. The Criteria Resolution defines “decline” as “a reduction in the abundance, or area of distribution or area of habitat of a species. The assessment of decline by reference to area of habitat may be more appropriate where there are intrinsic difficulties in measuring the number of individuals.” (Resolution Conf. 9.24 (Rev. CoP15) at Annex 5.)

Figure 1: Polar bear hide prices (USD) achieved at Fur Harvesters Auction, Inc., Canada, 2007-2012

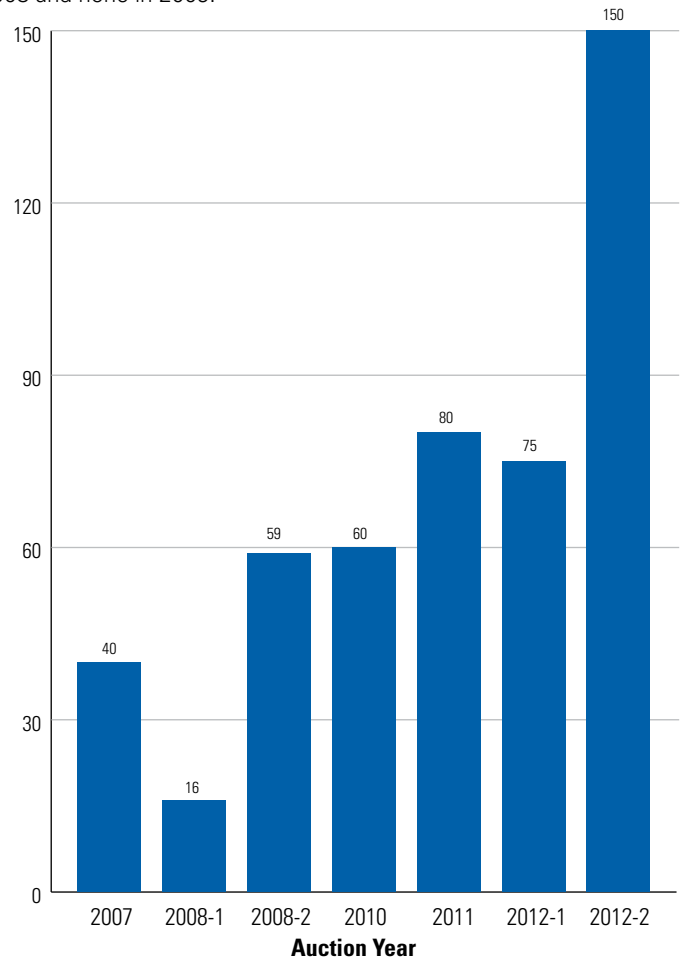
Note that there were two auctions that offered polar bear hides in 2008 and none in 2009.



Source: Polar bear hide prices (USD) achieved at Fur Harvesters Auction, Inc., Canada, 2007-2012. Note that there were two auctions that offered polar bear hides in 2008 and none in 2009. Sources: Fur Harvesters Auction Inc. 2012; CBC News 2011; Nunatsiq News 2012; Macleans 2012.

Figure 2: Number of polar bear hides offered at auction in Canada, 2007-2012

Note that there were two auctions that offered polar bear hides in 2008 and none in 2009.



Source: Number of polar bear hides offered at auction in Canada, 2007-2012. Note that there were two auctions that offered polar bear hides in 2008 and none in 2009. Sources: Fur Harvesters Auction Inc. 2012; CBC News 2011; Nunatsiq News 2012; Macleans 2012.

In 2008, the IUCN/SSC PBSG “suspected a population reduction of more than 30 percent within three generations (45 years) due to decline in area of occupancy (AOO), extent of occurrence (EOO) and habitat quality.” (Schliebe *et al.* (2008)). Modeling conducted by the United States Geological Survey found that decline in sea ice is expected to lead to extirpation of more than two-thirds of the world’s polar bear population within the next 45 years, or three generations (Amstrup *et al.* (2007)). Yet since these and similar findings, observed sea ice loss has far outstripped that predicted by most modeling (Stirling and Derocher 2012).

In addition, the scientific literature continues to document the relationship between decreased sea ice extent (including the timing of sea ice breakup) and declining polar bear body condition, size, and survival. (See, e.g., Rode *et al.* (2012); Stirling and Derocher (2012); Molnár *et al.* (2011); Regehr *et al.* (2010); Rode *et al.* (2010).)

In light of the above, polar bears are characterized by a projected marked decline in population size in the wild based on estimated decreases in area of habitat, quality of habitat, and a high vulnerability to extrinsic factors. As such, polar bears are “threatened with extinction” pursuant to the CITES biological criteria.

“Threatened with extinction” and “affected by trade,” polar bears meet the CITES criteria for listing on Appendix I.



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