The Case of Polar Bears Conservation informed by Climate Models and the Potential Similar Case of Emperor Penguins

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*Submitted by Delegation of China*

***Summary:***

This Information Paper aims to put forward 2 articles respectively on the case of Polar Bears conservation informed by climate models and the potential case of emperor penguin, which extracted from the website of “Polar Bear Science: past and present”[[1]](#footnote-1), which could be used as reference materials to facilitate the consideration of Antarctic Special Protected Species issues and particularly the emperor penguin designation. In 2006, the IUCN up-listed Polar bears from “Least Concern” to “Vulnerable” to extinction in the IUCN Red List informed by climate model, which predicted that the number of Polar Bears would decline by more than 30% over the next 45years, despite the Polar Bears population had recovered in 1980s and maintained stable thereafter. This decision was the first time such designation had ever been made that changed the way the IUCN assessed species risk, and led to mass confusion for the general public, who falsely assume polar bear numbers had already declined by a huge amount. In fact, the Polar bear numbers are now the highest they’ve been over the past 60 years. Recently, the IUCN is petitioned to up-list the Emperor Penguin from “Near Threatened” to “Vulnerable” informed by climate model as its population kept increase in recent decades, and the ATCM and CEP is proposed to list the species as Antarctic Specially Protected Species.

**Background**

The following 2 articles extracted from the website of “Polar Bear Science: past and present” could be used as reference material for the consideration of Antarctic Specially Protected Species issues, particularly the designation of emperor penguins. Both Articles are written by Susan Crockford, former adjunct professor at the University of Victoria, British Columbia and also zoologist with more than 35 years’ experience, including published work on the Holocene history of Arctic animals[[2]](#footnote-2).

**1. How are polar bears doing 15 years after the IUCN declared them ‘vulnerable’ to extinction?[[3]](#footnote-3)**

In 1982, the polar bears were listed as “vulnerable” in the IUCN Red List. When it became clear that the polar bear numbers had recovered substantially, the IUCN changed the status of polar bears to “lower risk” (now known as ‘least concern’) in 1996 and remained there for 10 years.

In 2005, the Polar Bear Specialist Group (PBSG) of the IUCN recommended to the IUCN that polar bears be up-listed back to “Vulnerable” on the basis of population declines expected to follow from modelled sea ice loss due to expectations of global warming. In May 2006, the IUCN reported that the polar Bear among 530 species be added to the list of endangered species, based on the opinion of scientists, informed by climate models, that their numbers would decline by more than 30% over the next 45 years.

However, the truth is that polar bear numbers are the highest they have been in about 60 years as of today. The Article observed none positive effect on the bears from being listed by the IUCN, as they were already well protected by national laws and international treaties put in place before 2006, such as the 1973 International Treaty to protect polar bears from unregulated hunting. The concern for future polar bear survival was always about predicted low sea ice levels in the future but even after 15 years of moderately low summer sea ice (about 40% less than 1979) we have not yet seen any species-wide effects that can be attributed conclusively to climate change.

**2. Emperor penguin numbers rise as biologists petition for IUCN Red List upgrade[[4]](#footnote-4)**

The author also provided the case of the potential up-list of emperor penguins in the IUCN Red List also with the use of climate model, despite of an actual increase in the population of emperor penguins.

The 2 Articles and the information about the author down loaded from the website into PDF can be found in the attachments.

1. See the website: <https://polarbearscience.com/>, latest visit on April 22, 2022. [↑](#footnote-ref-1)
2. See the website: <https://polarbearscience.com/about-2/> , latest visit on April 22, 2022. [↑](#footnote-ref-2)
3. See the website: <https://polarbearscience.com/2021/05/10/how-are-polar-bears-doing-15-years-after-the-iucn-declared-them-vulnerable-to-extinction/>, latest visit on April 22, 2022. [↑](#footnote-ref-3)
4. See the website: <https://polarbearscience.com/2020/08/06/emperor-penguin-numbers-rise-as-biologists-petition-for-iucn-red-list-upgrade/>, latest visit on April 22, 2022. [↑](#footnote-ref-4)