

Committee : YOUNG ENVIRONMENTAL

Topic : The question of the effects of climate change on polar bears.

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Summary :

Climate change is the main cause why the sea levels are rising and oceans are becoming warmer. Longer, more intense droughts threaten crops, wildlife and freshwater supplies. From polar bears in the Arctic to marine turtles off the coast of Africa, our planet's diversity of life is at risk from the changing climate. Global warming is likely to be the greatest cause of species extinctions this century. The IPCC says a 1.5°C average rise may put 20-30% of species at risk of extinction. If the planet warms by more than 2°C, most ecosystems will struggle. Many of the world's threatened species live in areas that will be severely affected by climate change. Polar bears are the poster child for the impacts of climate change on species, and justifiably so. To date, global warming has been most pronounced in the Arctic, and this trend is projected to continue. Because of melting sea ice, it is likely that more polar bears will soon starve, warns a new study that discovered the large carnivores need to eat 60 percent more than anyone had realized.



Definition of key terms :

Climate change is the catch-all term for the shift in worldwide weather phenomena associated with an increase in global average temperatures. It's real and temperatures have been going up around the world for many decades. The effects of anthropogenic (human-caused) climate change range from more frequent and severe droughts to snowstorms and extreme winter weather in temperate regions as a result of warming Arctic weather fronts.

The polar bear (*Ursus maritimus*) is a hypercarnivorous bear whose native range lies largely within the Arctic Circle, encompassing the Arctic Ocean, its surrounding seas and surrounding land masses. It is a large bear and although it is the sister species of the brown bear, it has evolved to occupy a narrower ecological niche, with many body characteristics adapted for cold temperatures, for moving across snow, ice and open water, and for hunting seals, which make up most of its diet. Although most polar bears are born on land, they spend

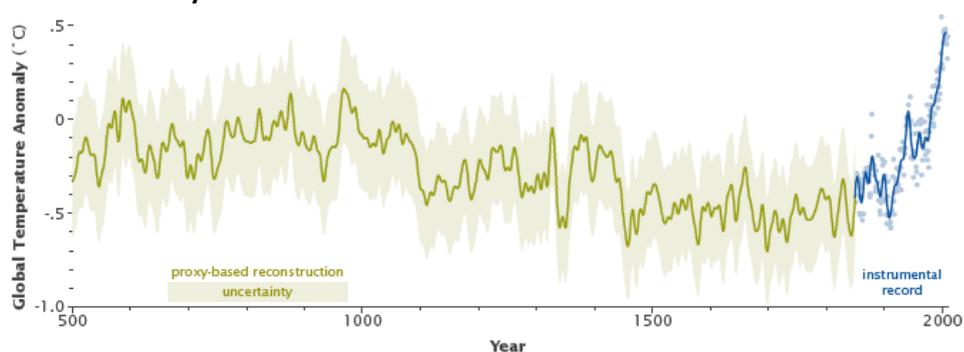
most of their time on the sea ice. Polar bears hunt their preferred food of seals from the edge of sea ice.

Polar bears extinction : because of expected habitat loss caused by climate change, the polar bear is classified as a vulnerable species.

Global warming is a phenomenon of climate change characterized by a general increase in average temperatures of the Earth, which modifies the weather balances and ecosystems for a long time. It is directly linked to the increase of greenhouse gases in our atmosphere, worsening the greenhouse effect.

Background Information :

- As the Earth moved out of ice ages over the past million years, the global temperature rose a total of 4 to 7 degrees Celsius over about 5,000 years. In the past century alone, the temperature has climbed 0.7 degrees Celsius. Earth will warm between 2 and 6 degrees Celsius in the next century. The predicted rate of warming for the next century is at least 20 times faster. This rate of change is extremely unusual.



- Today's study, published in Ecological Applications, analyzed data on polar bears in northeast Alaska and the Northwest Territories and documented a 40 percent population loss between 2001-2010 from 1,500 to 900 bears.



Major Countries and Organizations Involved :

Countries : Australia, Italy, The Dead Sea, Russia, Alaska, Denmark, Norway, Russia, the United States, and Canada

Organizations : World Wildlife Fund, Earth First!, Greenpeace, Intergovernmental Panel on Climate Change, National Geographic Society, Polar Bear International,

Previous attempts to solve the issue :

1. In the recent years, a lot of websites have been created to encourage people to be more environmental friendly and to help the polar bears. For instance, Polar Bear International created a site where they give advice to

people on how to help with very easy solutions for someone to follow.

2. A lot of environmental organization encourage people to make donations for poplar's bear good.

Possible solutions :

1. *Urge countries in the world to reduce their dependency on the non-renewable natural resources by developing eco-friendly technologies and materials and renewable energy resources;*
2. *Request all Parties to the Kyoto Protocol to ratify and implement the Doha Amendment to the Kyoto Protocol as a matter of urgency;*



Bibliography :

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