

PRESENT

POLAR BEAR

TAXONOMY

Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Carnivora
Family: Ursidae
Genus: *Ursus*
Species: *U. maritimus*

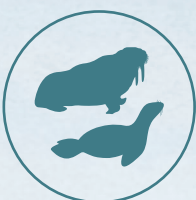
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Conservation status
• IUCN – VU
(Vulnerable)
• NOM 059 – N/A



Distribution: Arctic Circle: Canada, United States (Alaska), Russian Federation, Norway and Greenland.



Diet: Carnivore. Feeds mainly on seals but occasionally hunts larger animals like walruses and belugas.



Predators: It has no natural predators; rare cases of cannibalism have been recorded.



Reproduction: Viviparous. Females reach sexual maturity between 4 and 5 years of age, while males at 6 years.



Gestation period lasts
8 months



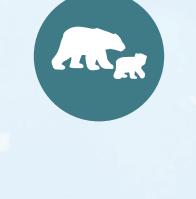
Cubs weigh
600 grams at birth.



Litters are made up of
2 cubs, rarely 3.



Family units stay inside the den until cubs reach
8 y 10 kilograms.



Cubs will stay with their mother for
2 to 3 years.

BEHAVIOR

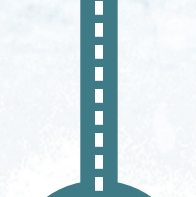
The polar bear's life cycle depends on the Arctic ice where they hunt, reproduce, give birth and take care of their cubs.



Spends
50% of its time hunting.



30 km
Average distance it can walk in one day.



>3,000 kilometers
Distance it can walk in a month.

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SOURCES:
• Davis, R. W., & Pagano, A. M. (Eds.). (2021). Ethology and Behavioral Ecology of Sea Otters and Polar Bears. Ethology and Behavioral Ecology of Marine Mammals.
• Regehr, E. V., et al. (2016). Conservation status of polar bears (*Ursus maritimus*) in relation to projected sea ice declines. Biol. Lett. 12: 20160556. <http://dx.doi.org/10.1098/rsbl.2016.0556>
• Stirling, I. (2009). Polar Bear. Encyclopedia of Marine Mammals, 888–890. doi:10.1016/b978-0-12-373553-9.00204-2

Ursus maritimus

The polar bear is the largest species of bear in the world and the only one that depends on the ocean to survive, so this is why it is considered a marine mammal. Its life depends on the seasonal ice forming around the Arctic Circle. Given this dependency, the polar bear has become a symbol of the fight against climate change.

ANATOMY

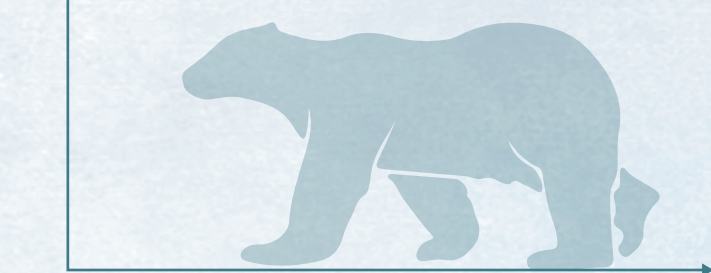
It walks on four legs but can stand on its hind legs when fighting.



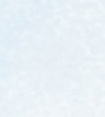
Average size in males:
2-2.50 meters in length



Average size in females:
1.80-2 meters in length

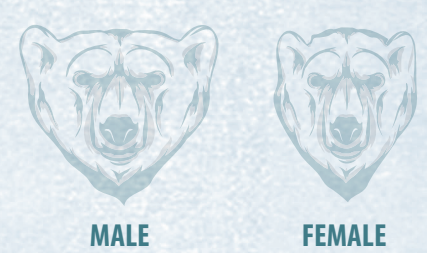


Average weight in males:
400-650 kilograms



Average weight in females:
200-350 kilograms
Pregnant females can weight up to 500 kg.

Sexual dimorphism:
The male's head is larger with its ears more separated than in females.



EARS ARE SMALL AND ROUNDED

Flat skull with eyes located higher than in other bear species.

DISTRIBUTION

Throughout the Arctic circle; most commonly on the ice sheet that forms over the continental platform.



19 subpopulations distributed in 5 countries: United States, Canada, Russia, Norway and Greenland.

22,000-31,000 individuals
Size of the population worldwide according to the IUCN (2015)

Eyesight:

Eyes are small and have a third eyelid that protects them from the elements and allows it to see underwater.



Large nasal passages with turbinates that give it a superior sense of smell.

1 kilometer
Distance at which they can detect their prey.



It is capable of digesting
98% of the fat it consumes.

CONSERVATION TIMELINE



1774: *Ursus maritimus* is described for the first time by John Phipps.



1965: The United States, Canada, Russia, Norway and Greenland assess the impacts of hunting on the polar bear population.



1972: Commercial hunting is banned in the Marine Mammal Act.



1973: The five countries where polar bears live signed the Agreement on the Conservation of Polar Bears.



1976: The Agreement comes into effect.



1992: *U. maritimus* was included in Appendix II of CITES.



2008: The United States lists the species in its Endangered Species Act.



2015: The Circumpolar Action Plan was signed and the IUCN classifies *U. maritimus* as vulnerable.

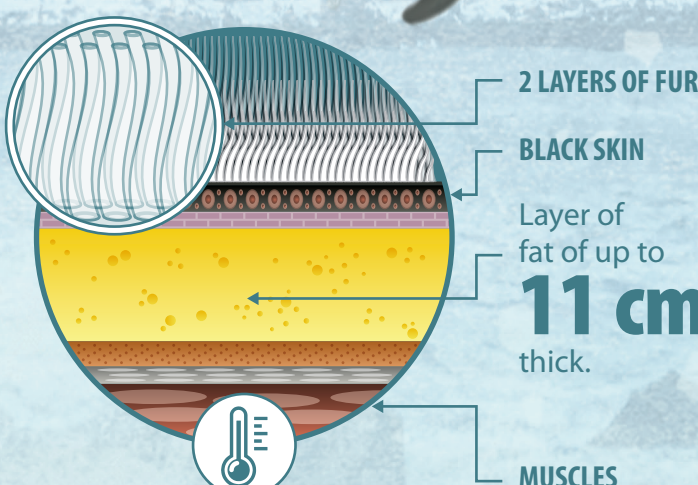
7-12 cm
length of tail

The liver stores high concentrations of vitamin A.

COLOR

Although it looks white, its skin is black and each hair is transparent and hollow so heat is absorbed and stored.

-40° to -46 °C
temperature range it has adapted to survive.



2 LAYERS OF FUR
BLACK SKIN
Layer of fat of up to
11 cm thick.
MUSCLES

5 cm
average length of its claws. These are curvier compared to other bears.



30 cm
diameter.

THREATS



Climate change:
Increased heat has caused ice in the Arctic to melt faster or simply not form.



Loss of habitat
is forcing polar bears to search for food near or in human settlements.



Marine pollution:
it bioaccumulates toxins and pollutants.