

Threatened Species of the Arctic

Polar Bear

Fact File

Scientific Name: *Ursus maritimus*

Scientists believe that *Ursus maritimus*, the “sea bear”, evolved about 200 000 years ago from its brown bear ancestors. Polar bears live in the Arctic Regions and know no boundaries. They pad across the ice from Russia to Alaska, from Canada to Greenland and over to Norway’s Svalbard Archipelago. Polar bears are the world’s largest land predator, feeding primarily on seals. The male polar bear weighs up to 750 kilograms and the female weighs from 150 kilograms to 225 kilograms.

Check Out

Polar Bears Alive:

► www.polarbearsalive.org

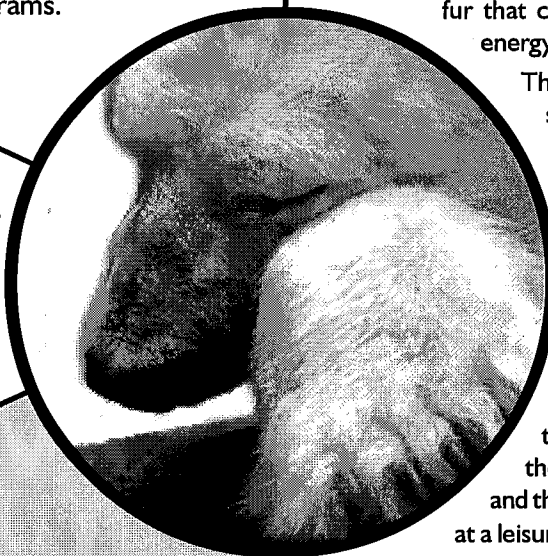
Polar Bear Tracker:

► [www.panda.org/](http://www.panda.org/about_wwf/where_we_work/arctic/polar_bear/index.cfm)

[about_wwf/](http://www.panda.org/about_wwf/where_we_work/arctic/polar_bear/index.cfm)

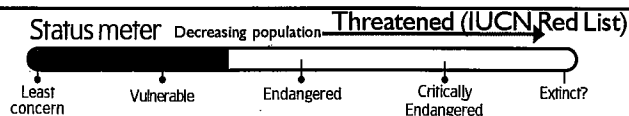
[where_we_work/arctic/](http://www.panda.org/about_wwf/where_we_work/arctic/polar_bear/index.cfm)

[polar_bear/index.cfm](http://www.panda.org/about_wwf/where_we_work/arctic/polar_bear/index.cfm)



Conservation of the Polar Bear

As polar bears are a threatened species, an International Agreement on the Conservation of Polar Bears was signed by the United States, Russia, Canada, Norway and Denmark in 1973. This agreement supported research and recognised the need for cooperative management of the polar bear. The natives of each country are allowed to kill a quota of bears but are restricted to what they can do with the skins and other bear products. Each country involved has different regulations, with Norway completely protecting the polar bear and Canada allowing the natives to hunt with snowmobiles and high-powered rifles. There are organisations like Polar Bears Alive devoted to educating people about the polar bear and protecting them from being hunted unfairly.



Special Adaptations

The polar bear has many adaptations to both its marine environment and to the very cold conditions in which it lives. Winter temperatures in the Arctic often plunge to -40°C or -50°C and can stay that way for days or even weeks.

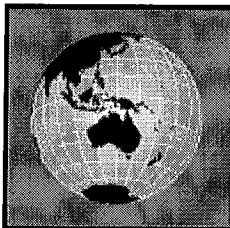
The polar bear has a thick layer of blubber up to 11 centimetres thick, which provides excellent insulation and keeps the body temperature at approximately 37°C , which is average for mammals. They also have two layers of fur that consist of hairs that conduct solar energy to their heat-absorbing skin.

The polar bear’s compact ears and small tail also help heat loss. On bitterly cold days with fierce winds, polar bears dig out a shelter in a snow bank and curl up in a ball to wait out the storm. When curled up in a ball, the bears sometimes cover their muzzle with one of their thickly covered paws. Polar bears actually have more problems with overheating than they do with the cold. Even in very cold conditions they quickly overheat when they run and this is why they generally walk around at a leisurely pace.

Polar bears are considered to be marine mammals and are excellent swimmers. They have been known to swim up to 35 kilometres without a rest. They even have forepaws that are partially webbed. These features and the massive size of their paws (up to 30 centimetres in diameter), help the polar bear swim efficiently. When a polar bear emerges from the water it shakes its fur like a dog and also wrings water from its fur by dragging itself across the ice. They have excellent underwater vision and can spot food up to eight metres away.

Bear Talk

Polar bears communicate with each other through a combination of body language and vocalisations. A deep growl serves as a warning or to defend a food source. They also like to play, communicating this by wagging their head from side to side or standing on their hind legs with their front paws hanging by their side. Among polar bears, hissing, snorting, a lowered head and ears laid back all signify aggression. A “chuffing” sound is a response to stress and mother polar bears scold their cubs with a low growl or a soft cuff.



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A Polar Bear Polaroid

Activity

SPECIES SNAPSHOT

Find a snapshot image of a polar bear on the Internet. Print it out and stick it in the space below. Complete the report using the Fact File page and your own library research.

Scientific name: _____

Common name: _____

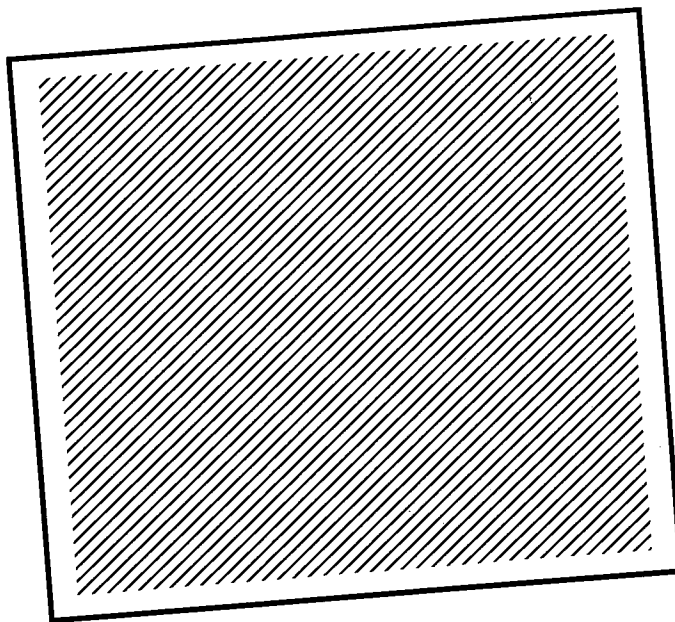
Range and habitat: _____

Special adaptations: _____

Communication methods: _____

Threats to survival: _____

Programmes in place for preserving the polar bear species: _____



WebQuester Challenge: Polar Puzzler

Surf around the Polar Bears Alive website and find out the five main threats to polar bear survival. ► www.polarbearsalive.org

List them below.

- _____
- _____
- _____
- _____
- _____