



Conservation through research and education

Quick Facts about Polar Bears

Where do polar bears live?

Polar bears range throughout the circumpolar north in areas where they can hunt seals at open leads. The five "polar bear nations" in which the bears are found include the U.S. (Alaska), Canada, Russia, Denmark (Greenland), and Norway. Polar bears do not live in the southern hemisphere.

How many polar bears are there?

No adequate census exists on which to base a worldwide population estimate, but biologists use a working figure of 20,000 to 25,000 bears with about 60% of those living in Canada. Polar Bears International (PBI) has initiated a major research effort called the "Polar Population Project" to help scientists obtain accurate data on the world's polar bears.

Are polar bears endangered?

Scientists predict that, if current warming trends continue in the Arctic, two-thirds of the world's polar bears could disappear by 2050. At the most recent meeting of the IUCN Polar Bear Specialist Group (held in Seattle in 2005), the world's leading polar bear scientists reported that of the 19 subpopulations of polar bears, five were declining, five were stable, two were increasing, and seven had insufficient data to make a determination. The group reclassified the polar bear as vulnerable on the IUCN World Conservation Union's "Red List of Threatened Species," noting that the species could become extinct due to sea ice changes. Polar bears depend on the sea ice to hunt, breed, and give birth to their young.

Individual countries with polar bears have reclassified the species due to concerns about shrinking sea ice habitat. Canada and Russia both list the polar bear as "a species of concern." The U.S. Fish and Wildlife Service has proposed that polar bears be added to the Threatened Species list under the U.S. Endangered Species Act. The agency was scheduled to make a final decision on this in January 2008, but has twice postponed its response.

The major threat to the polar bear is loss of sea ice due to climate change. Other threats include pollution, poaching, and industrial disturbances. Hunting could become a threat if populations are not well managed.

What is the polar bear's scientific name?

Ursus maritimus or the "sea bear." Its closest relative is the brown bear.

How big are polar bears?

Adult male polar bears measure 2.5 to three meters (eight to 10 feet) tall. They weigh 250 to 770 kilograms (550 to 1,700 pounds). Adult female bears are smaller. They measure 1.8 to 2.5 meters (six to eight feet) tall and weigh 90 to 320 kilograms (200 to 700 pounds). The largest polar bear ever recorded was a male weighing 2,209 pounds.

What adaptations have polar bears made to their environment?

Polar bears are perfectly adapted to survive in the harsh conditions of the Arctic, where winter temperatures can plunge to -45 °C (-50 °F). Two layers of fur provide the bears with such good insulation that they experience almost no heat loss. In addition, they are protected with a layer of blubber that can measure 11.5 cm (4.5 inches) thick. Compact ears and a small tail also prevent heat loss. Polar bears are so well protected from the cold that they have more problems with overheating than they do from the cold. Even in very cold weather, they quickly overheat when they try to run.

Other adaptations include small bumps called papillae that keep their feet from slipping on ice; strong, powerful claws that enable them to catch seals; and a nose powerful enough to detect prey that is miles away.

What do polar bears eat?

Seals are the polar bear's primary prey, particularly the ringed seal and, sometimes, the bearded seal. When hunting is good, polar bears will typically eat only the fat and leave the rest of the carcass for scavengers including arctic foxes, ravens, and younger bears.

Polar bears also sometimes kill and eat both walrus and beluga whales. They have been known to hunt short-legged reindeer and sometimes snack on other foods including birds, bird eggs, kelp, and beached whales. On Norway's Svalbard Islands, polar bears were once found feasting on a 350-year-old bowhead whale carcass that was uncovered by a retreating glacier.

What is the polar bear's place in the food chain?

Polar bears top the food chain in the Arctic. They help keep the balance of nature by preventing an overpopulation of seals.

What is a polar bear's life span?

In the wild, polar bears live an average of 15 to 18 years, although biologists have tagged a few bears in their early 30s. In captivity, they may live until their mid- to late 30s. One zoo bear in London lived to be 41.

How many cubs does a female bear have?

There are usually two cubs in a litter. Female polar bears have their first set of cubs between the ages of four and eight (most frequently at age five or six). Polar bears have the one of the slowest reproductive rates of any mammal, with females typically producing five litters in their lifetime. An underweight female polar bear will not give birth, which is the main reason why polar bear numbers are dropping in stressed populations.

When and where are the cubs born?

Polar bear cubs are born in snow dens called maternity dens. In the late fall, a female polar bear will dig a den after feeding heavily in April or May. Most choose den sites in snowdrifts along mountain slopes or along hills near the sea ice. Some dig their dens in snow drifts out on the sea ice.

What do the cubs look like?

At birth, the cubs are 30 to 35 centimeters (12 to 14 inches) long and weigh little more than half a kilogram (about a pound). They are blind, toothless, and covered with short, soft fur. They are completely dependent on their mother for warmth and food.

When does the family emerge from the den?

The cubs are born in November or December and remain in the den until March or April. During that time, the mother does not eat, drink, or defecate. The cubs grow rapidly while they are in the den, thanks to the calories in their mother's rich milk, which has a fat content of roughly 31%.

How long do the cubs remain with their mother?

Polar bears cubs normally stay with their mother until they are 2 1/2 years old, although some bears in the Hudson Bay area wean their young at age 1 1/2. During the time that the cubs are with their mother, they must learn how to hunt and survive in one of the Earth's harshest environments.

Do polar bears hibernate?

Polar bears do not hibernate in the true sense of the word. True hibernators experience a marked drop in heart rate and a body temperature that plunges to nearly 0 C (32 F). Polar bears do not enter a state of deep hibernation; instead they undergo "walking hibernation." Only pregnant female bears enter a den. They do so in the fall and give birth to their cubs in November or December. The bear family will remain in the den until March or April.

Are there different populations of polar bears?

Scientists recognize 19 distinct populations of polar bears, but no subspecies.

Does the polar bear have any enemies?

Only humans and, on rare occasions, other polar bears. Climate change is the biggest threat that the bears face.