

# Polar Bears



**A**

The polar bear is the largest land-living carnivore. Adult males can measure more than 2.70 metres in length and weigh between 350 and 650 kilograms. The bear's body and neck are long and the head is narrow and long, with small rounded ears.

The polar bear's coat, which covers it completely except for the nose and footpads, is superbly adapted to Arctic environments. Along with a thick layer of body fat, the water-repellent coat protects the bear from cold air and water. The fur is 95 per cent efficient in converting the sun's rays into usable heat. Surprisingly, the fur has no white pigment; it is the reflection of the sun that causes the fur to appear white.

**B**

Polar bear populations can be found in northern Canada, Greenland, Norway and Russia, and there have been reports that polar bear tracks have been found as far north as the North Pole. The five-million-square-mile range of the polar bear circles the Arctic, and contains stretches of open water where its primary food – seals – are easily caught.

Polar bears live on the annual Arctic sea ice, which provides a platform from which they can hunt. But as the edge of the ice moves further north during summer, bears must either follow it, or become stranded on land until the fall.

**C**

Between late April and mid-July, polar bears hunt seals by breaking into their dens in the sea ice. The dens are not visible from above, but seeing

is less important than smelling to a polar bear. With their good sense of smell, polar bears can detect the breathing holes of seals in their dens beneath the snow and ice. Easy access to food in this period is critical, particularly for pregnant females. As the southern edge of the arctic ice cap melts in summer, polar bears can become stranded on land. They then have to live off body fat stored from hunting in the spring and winter.

Polar bears also prey upon harp seals, as well as young walruses and beluga whales, narwhal, fish and seabirds and their eggs.

**D**

Polar bears breed in late March, April and May. The males actively seek out females by following their tracks on sea ice. They remain with the female for a short time, then leave in search of another female.

In winter, the female gives birth to twins, which stay warm in their mother's thick fur. She no longer feeds and instead lives off her stored fat throughout the winter. Her milk, high in fat content, enables the cubs to keep warm and grow rapidly before leaving the dark den in March or April.

Short trips are made to and from the den for several days, as the cubs get used to the outside temperatures. Then the family leaves and makes its way to the sea ice, where the mother feeds and protects her cubs. The family returns to the den the next winter and remains together during the following spring and summer.

**E**

With about 22,000 polar bears living in the wild, the species is not currently endangered, but its future is far from certain.

In 1973 Canada, the United States, Denmark, Norway and the former USSR signed the International Agreement on the Conservation of Polar Bears and their Habitat. This agreement restricts the hunting of polar bears and directs each nation to protect their habitats. However, it does not protect the bears against the biggest man-made threat: global warming.

As a result of global warming, sea ice in the Arctic is melting earlier and forming later each year. Ongoing research funded by the World Wildlife Fund (WWF) is finding that polar bears are left with less time on the ice to hunt for food. If current warming trends continue, scientists believe that polar bears may disappear within 100 years.

