

# BEAR, POLAR

## RANGE:

Southern edge of the arctic pack ice, circumpolar including northern Canada, Alaska, Greenland, Norway, and Russia.

## HABITAT:

Ice covered waters of the arctic region. Some move on land for the summer.

## SIZE:

One of the largest bears: males average 7-9 feet (may reach 9 feet) with a height of 5 feet at the shoulder. The average weight is 900 lbs and the record weight is 1600 pounds. Females are smaller weighing 400-500 pounds on average.

## LIFE EXPECTANCY:

**Captive:** 25 - 30 years

**Wild:** 20 - 30 years

## REPRODUCTION:

Sexually mature at 4 (female) to 8 (male) years. Mating is usually February or March here at the Louisville Zoo and can occur anytime from March to June in the wild. For several months after mating the female feeds heavily on seals until she weighs almost 900 pounds. Delayed implantation extends the period of pregnancy to 8 months.

Between October and November the pregnant female enters a maternity den hidden by snow in which she will give birth. The young are born from November to January. At birth each cub is blind, a foot long, and weighs about 1 pound. It has a coat of short, sparse hair. A cub of that year is called a "coy". The female stays in the winter den with her cubs for 2-3 months (until March or April). She then emerges with her cubs that now weigh about 16 pounds.

Since she generally fasts 4 - 6 months, a female may lose as much as ½ her body weight when she is denning with her cubs. The cubs stay with their mother until they are at least 10 months old, usually to age two. In the wild females produce litters every 2-4 years. Adult females with cubs avoid adult males who are potential predators of the cubs.

Polar bears do **NOT** hibernate.

## DIET:

The polar bear is the most carnivorous of the bear family.

**Wild:** Seals (especially ringed seals). They also eat fish, seabirds, whale and walrus carrion, as well as grass, lichens, seaweeds, moss, crowberries, bilberries, and cranberries.

**Zoo:** 3 - 4 pounds of fish; 17 pounds canine diet

## BEHAVIOR:

A bear will lie motionless on the ice for hours in wait for its prey. It has been written that the polar bear will cover its telltale black nose with one white paw; however, this has never been documented. Roaming over the ice and through the freezing sea the polar bear makes a kill, eats its fill, and sleeps soundly on the spot, rolled up in a blanket of snow. Then it rises, hungry again, to hunt another seal. It can swim great distances at cruising speeds of six miles per hour.

It can run 25 mph across rough ice, leap six-foot hurdles and climb steep ice cliffs.

Polar bears have an extremely keen sense of smell. It is said a bear can smell a stranded whale covered with snow at a distance of 20 miles.

theZOO  
LOUISVILLE



photo by Don Alexander

|          |                  |
|----------|------------------|
| Order:   | <b>Carnivora</b> |
| Family:  | <b>Ursidae</b>   |
| Genus:   | <b>Ursus</b>     |
| Species: | <b>maritimus</b> |

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Its ability to migrate across hundreds of miles of sea and ice is little understood by scientists. Not only can the bear navigate without the benefit of the sun for months on end, but also may even be able to make indispensable corrections for direction and speed of floating ice. Thus the biological mechanism of this animal is of prime interest.

### **POINTS OF INTEREST:**

Called "Nanook" by the Inuit, polar bears are the largest land-based carnivores in the world. They are protected from the arctic cold with a thick layer of fat, dense, water-repellent fur, and stiff hair on the bottom of their huge snow-shoe-like feet. Their large, rotund body and short rounded ears are designed to conserve heat.

Polar bears are so well insulated that infrared photos typically show no detectable heat – except from their breath. Polar bears have a special network of blood vessels across their shoulders near the surface of their skin, which radiates heat to cool them down in hot weather.

Their keen eyesight, insensitivity to snow blindness and white fur helps them skillfully stalk their prey. Their fur and fat also make them buoyant in water. They can stay submerged for up to 2 minutes.

A polar bear's fur is actually transparent. Each hair is a clear, hollow tube which channels sunlight down to their black skin where the heat is absorbed.

### **STATUS:**

IUCN Red List of Threatened Species – Lower Risk / Conservation Dependent. Lower Risk is determined when a species does not satisfy the criteria for any of the categories Critically Endangered, Endangered, or Vulnerable. Conservation Dependent is allocated when the cessation of the taxa specific conservation program would qualify it for one of the threatened categories within 5 years.

Polar bears exemplify a successful, cooperative international conservation and management effort between 5 countries; Russia, Canada, the U.S.A., Norway and Denmark. The International Agreement on the Conservation of Polar Bears and Their Habitat drafted in 1973 and ratified by Russia, Canada, The U.S.A., Norway, and Denmark, restricts hunting and calls for habitat protection and cooperative research.

Due to increasing human activity in the Arctic, especially hunting, which reduced polar bear numbers to 8-10,000, the Polar Bear Specialist Group was formed in 1965 by the International Union for the Conservation of Nature and Natural Resources.

Since 1972 the U.S. Marine Mammal Protection Act has prohibited hunting, except for native subsistence. The annual worldwide take by indigenous peoples is 100 polar bears. Current polar bear populations are estimated at 25,000 worldwide.

Polar bears are subject to the effects of pollution and disturbance of their habitat (especially the females' denning sites) by Arctic oil exploration.

### **BIBLIOGRAPHY:**

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[www.polarbearsalive.org](http://www.polarbearsalive.org)

[www.cites.org](http://www.cites.org)