

# **THE BEARS OF ALASKA**

Authored by

Dawn Hlavacek  
Dan Hart

Prepared by

**THE AMERICAN BALD EAGLE FOUNDATION**  
Dr. Dan Hart, Executive Director  
P. O. Box 049  
Haines, Alaska 99827

September 5, 2000

## THE BLACK BEAR (*Ursus americanus*)



Black Bear

Photo courtesy of Bob Adkins Photography

The **Black Bear** (*Ursus americanus*) is found in 49 of the 50 states, only Hawaii lacks having black bears. Black bears prefer forests, swamps, and alpine areas to call home. It is the smallest of North American bears and is usually only about 29" at the shoulder and about 5 feet from nose to tail. While the average male black bear weighs about 300 pounds, females are smaller and may only weigh about 200 pounds. Exceptions to the average do occur with some rare males reaching 800 pounds in parts of Pennsylvania. The average life expectancy of black bears varies from 10 to 14 years, depending on where they make their home. Black bears range from sea level all the way up to alpine levels of 4,000-6,000 feet above sea level. In Alaska and Canada, black bear come in a variety of colors other than black. While black is by far the most common, cinnamon colored bears, blue (glacier) colored bears, and blonde colored bears are also found. The most remarkable color variation of all the black bears however, is the "Kermode" or "spirit" bear of British Columbia. These bear only make up about 10% of the black bear population on Princess Royale and Kermode Island just off the coast of Terrace, BC. Most people are shocked to find out these bears are white in color, not albino, but white. Black bear are differentiated from brown bear by the absence of a large shoulder hump, a canine shaped face and snout, very steeply curved and short claws, and by being much smaller. Black bear eat just about anything they can find but prefer

berries and fish above other foods and are known to favor carrion over live food. Black bears usually reach sexual maturity between their 3<sup>rd</sup> and 6<sup>th</sup> years of life. Like both the brown and polar bear, black bear utilize what is known as “delayed implantation.” This phenomenon ensures the survival and health of the female bear. When she becomes impregnated, the fertilized egg does not immediately attach itself to the uterine wall. When denning time arrives the body’s internal evaluation system checks to see if the female bear has adequate fat reserves to survive a pregnancy and feed her young cubs. If fat levels are adequate, then the egg will implant itself and usually in January, twins will be born; although, cubs can number as many as 4 or as few as 1. If fat levels are too low, the egg will spontaneously abort and allow the bear to survive and mate again the following year. Cubs usually only stay with their mother for one year before striking out on their own. While the black bear is the smallest of all North American bears, it accounts for more human injuries and fatalities than any other bear. This is because the black bear is much more adaptable to human cohabitation in their territory; therefore, many more people come into contact with black bear in parks, wooded areas, and home-sites. Unfortunately, many humans still view black bears as those cute, cuddly, bears seen on television, rather than the predators they actually are.

#### THE ALASKAN BROWN BEAR (*Ursus arctos*)



Alaskan Brown Bear, Brooks River  
Photo courtesy of Denali Photographic Enterprises

The **Brown Bear or Grizzly Bear (*Ursus arctos*)** is found all over Alaska, parts of Canada,

Asia, and Europe and is occasionally found in the western lower 48 states. The brown bear prefers mountain forests and tundra areas but is also very fond of coastal areas where salmon routinely spawn. Brown bear average 6-7 feet from nose to tail; however, extremely large males can be over 8 feet in length and stand over 9 feet tall. Average weights for male and female brown bears respectively are 700-1000 pounds and 500-700 pounds. Since the brown bear and grizzly bear are the same genetic species they appear essentially identical with one major difference; brown bear are approximately twice the size of grizzly bear. On Kodiak Island in the early part of the 20<sup>th</sup> century, an extremely large male brown bear tipped the scales at 1,800 pounds; the largest grizzly bear rarely exceeds 850-900 pounds. This is due to the fact that brown bear are coastal bear and begin consuming salmon in their first year of life. Grizzly bear, by comparison, are interior bears and eat little or no salmon. The extremely high fat and protein diet of the brown bear contrasts dramatically with that of the grizzly which consumes primarily grasses, sedges, ground squirrels, berries, and occasionally a moose calf. A special variant of the brown bear lives on Kodiak Island and although it is still a brown bear, there is some genetic variation. Therefore, it is classified as **Ursus arctos middendorffi**. Scientists believe modern day polar bears are derived from an evolutionary split of pre-historic brown bears about 100,000 years ago. It is believed that brown bear crossed the Bering Sea land bridge into North America about 30,000 years ago. A few thousand years later the brown bear on Kodiak island began to differ slightly from their mainland cousins, this variation was brought about by isolation and evolutionary changes associated with living on Kodiak Island. This evolution has been very successful, the Kodiak brown bear is the largest of all the North American brown bear. Brown bear normally live into their 20s and have been known to live as long as 34 years in the wild and up to 40 years in captivity. Just like the black bear, brown bear come in a multitude of color variations. While the brownish-tan mixed color is the most common, it is not unusual to find brown bears ranging from nearly black (sable colored) to nearly white. All brown and grizzly bears have several distinctive identifying features; a large shoulder hump, a dish shaped or concave shaped face, and long (up to 6") shallow curved claws. Brown bear females reach sexual maturity by age 5 and although males do likewise they are rarely successful at mating before 8-10 years of age because of competition by much larger, more mature males. Brown bears also exhibit "delayed implantation," but when pregnancy is successful the female will usually deliver twins in the spring; however, triplets are not uncommon. Brown bear cubs will usually remain with their mother for 2-2 ½ years before leaving. Large males will often try to kill cubs to stimulate the female and bring her into estrous. This is nature's way of practicing the old adage "survival of the fittest."

## THE POLAR BEAR (*Ursus maritimus*)



Polar bear in Hudson Bay  
Photo courtesy of Hart of Alaska

The **Polar Bear (*Ursus maritimus*)** is found in northern coastal areas of North America, all along the circum-polar region, in Greenland, Iceland, Russia, and Canada. It lives on barren rocky shores, ice floes, and arctic region islands. Because of its high fat and protein diet, polar bears are the largest of all North American bears. The largest male ever recorded weighed an astonishing 1,900 pounds. Average size among polar bear males is 800-1000 pounds with females being about 2/3 the size of males. Very little is known about the life expectancy of polar bears but it is hypothesized that they can live perhaps as long as brown bears. Although often called the “great white bear of the north” polar bears are only truly white when very young cubs. Their true color is a yellowish-white combination of fur covering a black skinned animal. The hairs of the polar bear are optically transparent and are thought to help channel light and heat to the underlying black skin where it is absorbed. Polar bears are the absolute king when it comes to insulation and energy efficiency. When viewed with an infrared camera the only heat signature observed is that of the exhaled breath. This explains how polar bears can survive -70 degrees F weather, swim in arctic waters that measure between 29-32 degrees and still stay warm. Polar bears have a number of distinctive features for identification; they have longer necks, much heavier furred paws, and longer legs than their brown bear relatives. Polar bears, unlike the black and brown bear, have a very limited color variation and rarely come in colors that are not some shade of yellowish-white or beige. Polar bears reach sexual maturity around the 6<sup>th</sup> year and the mating or breeding season is

usually between April and June, depending on which arctic region in which the bear resides. Generally males stay out on the ice throughout the year except for the population in Hudson Bay which become land-locked during the summer. Females usually become pregnant every 28-32 months and den up between October and December. Newborn cubs usually arrive between December and January; they will not leave the den until at least late March or early April. Cubs usually remain with their mother for 24-30 months and adult bears may live as long as 30 years in the wild, 40 years in captivity. The favorite foods of the polar bear are ringed and bearded seals; however, they will also eat other mammals, carrion, walrus, sea-lion, and even beluga whales when the opportunity arises. The polar bear does not drink water like other creatures but rather obtains it through it's prey. Polar bears are known to be outstanding swimmers and have frequently been seen swimming in open water many miles from the nearest ice pack or land areas. They can swim faster than the average human can walk; up to 8 or 9 miles per hour, although average speed is about 6 miles per hour. Although polar bears have been hunted for centuries by indigenous peoples for clothing, weapons, and food; great caution must be exercised when consuming polar bear flesh. The polar bear has very high concentrations of vitamin A in its flesh and therefore one must be extremely careful when consuming this meat due to vitamin A's toxicity to humans in large quantities.

### **THINGS MOST BEARS HAVE IN COMMON**

- Extremely small and helpless at birth; often weighing a pound or less
- Powerful jaws and strong, sharp claws
- Exceptional sense of smell, especially the polar bear
- “Delayed implantation,” to ensure survival of the female bear
- “Omnivorous,” will eat almost anything; although, the polar bear has a much higher meat diet than either the black or brown bear
- Usually have twin cubs as opposed to single births
- Are greatly feared and misunderstood by most humans

Bears also exhibit one characteristic that humans have been trying to uncover the mystery of for many years. They have the ability to consume tremendous amounts of fat in their diet without contracting heart disease. Brown and Polar bears can routinely consume over 100 pounds of flesh in a single day, most of which is fat and protein; however, in spite of this large quantity of fat intake, bears do not exhibit heart or vessel disease. If man can uncover the secret of fat metabolism and storage in the bear, he can then have a chance to slow down or stop the largest killer of humans: **CARDIOVASCULAR DISEASE** secondary to high fat intake.

The identification chart on the following page enables one to quickly identify the most characteristic appearances of the Black Bear, Brown & Grizzly Bear, and the Polar Bear.

While this chart is not exhaustive, it is complete enough to allow the average person a quick identification of any bear in question.

**NORTH AMERICAN BEAR IDENTIFICATION CHART**

CHARACTERISTIC	BLACK	BROWN (GRIZZLY)	POLAR
BODY SIZE IN POUNDS	200 - 800	400 - 1800	500 - 1900
FUR COLORS	BLACK, BLONDE CINNAMON, BLUE AND IN RARE CASES - WHITE	CHOCOLATE CINNAMON BLONDE, AND	YELLOWISH WHITE
PRIMARY HABITAT	SWAMPS, WOODS COASTAL AREAS NEAR HUMANS	ALPINE, WOODS, MTN. FOOTHILLS SALMON SPAWN- ING AREAS	ARCTIC
PREFERRED FOODS	FISH & BERRIES, SMALL MAMMALS CARRION	FISH, CARRION, MAMMALS, BERRIES, SEDGES, MOOSE CALVES	SEALS, WALRUS, WHALES, AND SEA LIONS
LIFE EXPECTANCY	8 - 14 YEARS	24 - 28 YEARS	24 - 28 YEARS
ESTIMATED BEAR POPULATION IN ALASKA	100,000	55,000	2,000
ESTIMATED BEAR POPULATION IN THE LOWER 48 STATES	2 MILLION	2,500	0