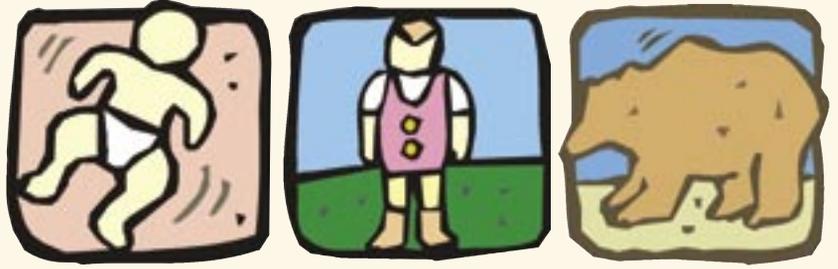


Bearly Born



Objectives

Children will compare similarities and differences between the growth of black bears and humans.

Method

Children compute and graph differences between people and black bears at various stages of maturity.

Age

Most appropriate for grades 5-8

Materials

Pencil and drawing paper

What to do

1. Ask your children some questions about black bears to get them thinking and see what they know already. Ask them to guess how much a cub might weigh when it is born. Every child can write down a guess on a piece of paper. Ask for their ideas about how long mother bears are pregnant, what baby bears eat when they are born, how much bears weigh when they are a year old, how many brothers and sisters a bear might have, how much they weigh when full grown, and how long they live.

2. Ask your children to read the Nature Notes on the opposite page.

3. Look at and discuss the graph on the opposite page comparing the growth rate of male and female bears.

4. With you children, discuss and jot down the average weight of humans at the same age as the information shows for black bears. Trace the graph at right on a piece of paper and ask your children to graph

the weights of bears and humans at the various ages.

4. Ask the students to compute the following, and include their results with their graph and drawing:

a. How much weight did the black bear gain at each interval; that is, from birth to four months, four months to one year, etc.?

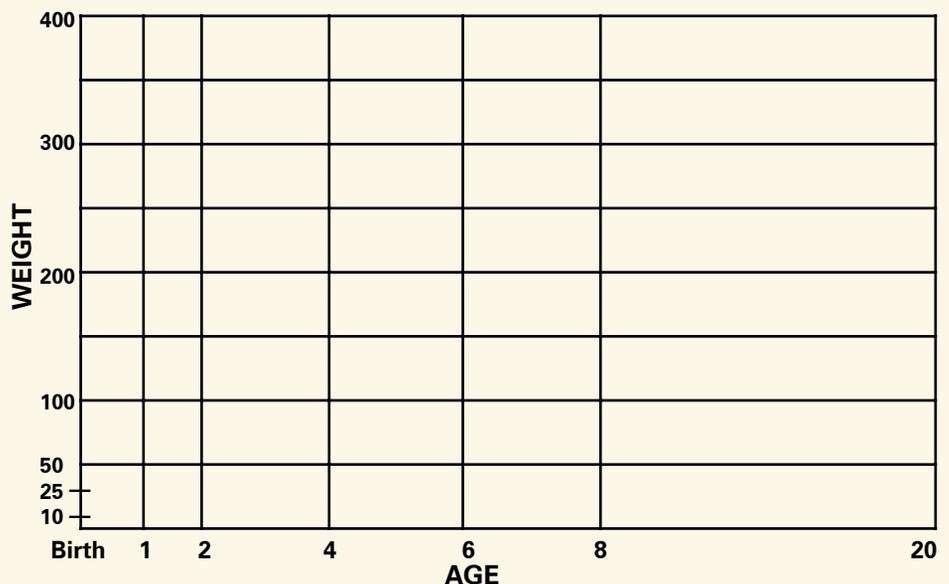
b. How much weight did you gain during the same intervals?

c. How many times more weight did the bear gain during each period?

5. As a closing discussion, ask the children to comment on similarities and differences between bears and people. (Similarities: both are mammals, have hair (fur), the young drink milk, are warm-blooded, breathe with lungs.) Ask the children to identify similarities in basic survival needs of bear cubs and babies.

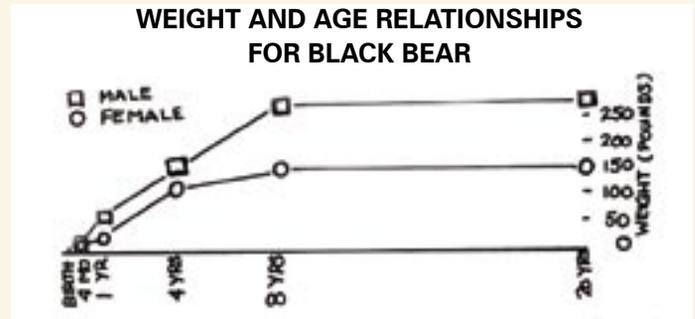


Mike Bender / USFWS Photo



The graph on the right illustrates the growth patterns between male and female black bears. Note how the bears are somewhat similar in size until they reach about four years old. Then the male growth pattern increases dramatically, while the female levels off.

This activity was adapted from Project WILD (Council for Environmental Education). For more information, contact the Project WILD Coordinator at 304-558-2771.



NATURE NOTES: Bear Cubs And Their Families

The black bear can be found in the United States, Canada and Alaska. In the east, the black bear inhabits forests and swamps. In the west, the black bear roams chiefly in mountainous areas. Black bears are primarily nocturnal but occasionally roam around during the mid-day.

A black bear's life span averages 20 to 25 years. Longevity and survival of the black bear depend upon the availability of a suitable habitat and its ability to avoid humans. An adult female bear is called a sow. An adult male bear is called a boar. A baby bear is called a cub. When a sow becomes sexually mature between 2 and 3 years old, she is capable of breeding and may have one to four cubs. Contrasted with human fetal development of about 9 months, the sow is pregnant for about 7 months.

The sow has her cub or cubs in the shelter or den where she spends the winter months. On average, a female black bear will have two cubs. The sow does not have a litter every year but every other year. At birth, a young cub weighs about 8 ounces – about the size of a

guinea pig. Bear cubs stay in the den with their mother until they are able to move around very actively, usually until late April or early May.

Bear and humans are classified as mammals, which means that both are warm-blooded, nourish their young with milk, and are covered with varying amounts of hair. Bear cubs survive solely on their mother's milk for the first few months of life. Cubs nurse while in the den and for a short time after leaving the den in early spring. By the time berries ripen and grasses are plentiful, the cubs have learned to climb and can eat the available food sources.

Soon the cubs will need to hunt and gather food for themselves without the help of the sow. At about 18 months of age, the cubs must go out searching for their own home range. The sow will allow the female cubs to stay within her home range. The male cubs, however, must find a territory to claim as their own.

Black bears are omnivores, which means they eat both plant and animal material. In early spring, they tend to eat wetland

plants, grasses, insects and occasionally carrion (dead animals) or the protein-rich maggots found near the carrion. In late spring and early summer, bears feed on berries, grubs and forbs (broad-leaved plants). In late summer and early fall, bears



Jeff Haijenga

feed mostly on nuts and acorns. In the fall season, bears must add much fat to their bodies in order to survive the winter months in their dens.

Cub growth will vary throughout the country.

When black bear cubs reach one year of age, the female cubs weigh 30 to 50 pounds and the males weigh 50 to 70 pounds. A mature female bear weighs 150 to 185 pounds, and a male bear weighs about 275 pounds.