

The Grizzly Bear

Taxonomy

class: mammalia

order: carnivora

family: ursidae

genus & species: *Ursus arctos horribilis*

Physical Appearance



The length of an average adult grizzly is between 6.6 to 9.2 feet. The male weighs 350 to 975lbs, and the female weighs 175 to 450lbs. The bears with access to salmon are heavier than the others! The heavier the female, the better are her chances of having cubs. The heavier the male, the better are his chances to breed successfully with a female.

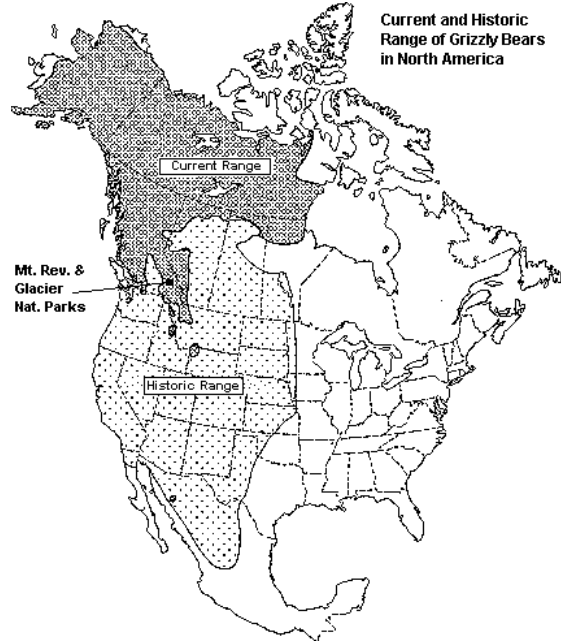
Grizzlies are generally covered with brown, cinnamon, gray, or black fur. The tips of fur are lighter in color, giving it a grizzled effect!

Communication

The Grizzlies communicate vocally with snorts, growls, roars. They also use body language to indicate their size and status

Home Range and Habitat

The Grizzlies were once found all over the US and Canada. Now they can be located in Canada's British Columbia, Alberta, Yukon, and the Northwest Territories, and a few US states including Alaska, Idaho, Wyoming, Washington, and Montana. Their habitats range from 10 to 380 square miles. They prefer residing in the inland, away from major bodies of water. They can be found at varying elevations from well above timber or shrub lines to the river valleys far below. Forested land or shrub-covered areas are favorable and are used for escaping.



Estimated Population

- ~1200 in US
- ~317000 in Alaska
- ~25000 in Canada

Life Span

The bears can live up to 25 to 30 years old!

Diet



Grizzlies are omnivores; they eat everything! 75% of their diet is vegetable matter: grass, roots, berries, and whitebark pine nuts! The rest is animal matter: ground squirrels, fish, insects, and rodents. During spring months they catch newborns of larger species such as

deer, elk, moose, and bison. Some Grizzlies congregate along rivers when salmon migrate upstream to spawn.

During the summer months in the Yellowstone area, army cutworm moths drink nectar in the early morning and cluster on surrounding rocks during the day. The Grizzlies can consume 10000 to 20000 moths in a day!

Mating

The mating season for the Grizzlies is between early May and mid June. The female Grizzlies are able to reproduce between the age of 4.5 and 10, and they usually reproduce once every 3 to 5 years. Although the peak mating time is mid June, the embryos do not begin to develop until winter hibernation! During summer, the mother has to accumulate sufficient fat for her and the cubs. The mother's body weight eventually determines the number of cubs she is going to have.

Cubs



Cubs are born between the end of January and early March. They weigh less than a pound when they are just born, and can gain weight quickly in spring. However, approximately 50% of the cubs die from starvation, accidents, diseases, predation and infanticide.

The mother bears remain with their young for 1.5 to 3.5 years. Unlike the father bears who do not help and care for their cubs, the mother bears are attentive parents. They discipline their cubs, and often defend them to the death.

Summer

Male Grizzlies leave their dens in March or April. Female Grizzlies and their newborn cubs leave their dens last, depending on the climate and the bears' physiological conditions. The cubs have to be fed by their mother until the middle of their first or second summer. After they left the den, the bears travel to lower elevations to look for food. During summer, the adults may consumer more than 50lbs of food per day and gain 3 to 6 pounds of fat per day!

Winter

The Grizzlies begin to move to higher elevation in October and November. They will go to remote mountain slopes with insulating winter snows, and dig their dens on the south-facing slope of the mountain. The bears will stay in their dens for five to six months!

When they hibernate, the bears' heart rate and body temperature decrease. The Grizzlies are considered as light hibernators because they can easily be awakened during hibernation! Bats and ground squirrels are known as deep hibernators because they do not wake up until summer.

Endangered Status

Human settlement and urbanization since the 1800 has changed and destroyed the Grizzly habitat. The Grizzlies were eliminated from human habitat because they were seen as threats to human and livestock. They were hunted, trapped, and poisoned for their fur or as food. Finally, they were under the protection of the US Endangered Species Act in 1975.

In British Columbia, the development of railways, highways, and roads in the past 30 years have had a major impact on the Grizzly population. More bears were killed in car accidents. Another issue concerning Grizzly mortality is how the grizzlies get killed when they enter human properties. Conservation Officers and persons who concern for their own safety and property have killed many Grizzlies.

Research and Monitoring

In Canada, the West Slopes Bear Research Project is currently researching and monitoring the Grizzly Bears. The participants of this project include Parks Canada, Columbia Basin Fish & Wildlife Compensation Program, the BC Ministry of Environment, Lands and Parks, BC Ministry of Forests, the University of Alberta, the University of British Columbia, the University of Calgary, and the Friends of Mount Revelstoke and Glacier.

Radio telemetry and DNA fingerprinting techniques were used to assess population characteristics, habitat, and movement of the Grizzlies. The area of interest is located in the upper Columbia River near Golden, BC. It includes national parks (Glacier, Yoho, and Kootenay), commercial forests, urban, and rural settlement.

The researchers capture the bears, attach radio collars, and release them back to their habitat. The radio collars are used for tracking and locating bears. Approximately 25 collared bears are tracked weekly by low flying aircrafts.

DNA fingerprinting technology can identify individual bears from a drop of blood or few strands of hair. This method can be used to trace lineage of bears within a population and

to study the bears' social structure. In a 3-year census, the team has collected 4500 hair samples to identify species, sex, and other information for individual bears.

Warning to Campers

Do not feed, approach, surprise at close range or get between a Grizzly Bear and its food or cubs!

Firmly seal up food and place it out of the bears' reach because they break into unattended vehicles if they smell food!

Grizzlies will attack human when they think they are in danger!

If charged by a grizzly, stand your ground!

If attacked, lie flat on your stomach and play dead!

Resources

National Geographic official website

http://www.nationalgeographic.com/kids/creature_feature/0010/brownbears2.html

Brown/Grizzly Bear Facts

http://www.bear.org/Grizzly/Grizzly_Brown_Bear_Facts.html

The Chaffee Zoological Gardens of Fresno

<http://www.chaffeezoo.org/animals/grizzlyBear.html>

The National Wildlife Federation

<http://www.nwf.org/wildlife/grizzlybear/>

The Columbia Mountain Institute of Applied Ecology

<http://www.cmiae.org/grizzlyinfo.htm>

eNature.com

<http://www.enature.com/fieldguide/showspeciesRECNUM.asp?recnum=MA0516>

Brother Bear from movies.com

http://movies.go.com/movies/B/brotherbear_2003/