

Hiking in Bear Country

- Let someone know where you are going and when you plan to return.
- Plan your hike to begin during daylight hours and end before nightfall.
- Read trailhead signs. Take special notice of recent bear or mountain lion activity.
- Hike in groups and stay on trails to reduce the chance of sudden encounters.
- Make your presence known to bears! Call out, clap, or sing loudly, especially around streams, on windy days, and in areas of low visibility.
- Keep children close and within sight at all times.

Please Don't Feed Bears or other Wild Animals

- Feeding wildlife can put you and those with you in danger and is harmful to animals. Bears especially should never be allowed to obtain human food or garbage (see "Problem" bears).
- Giving animals food encourages them to frequent roadways and greatly increases the chances of vehicle-animal accidents.
- Feeding animals may entice them to eat foil, plastic, or other wrappings. These may make animals sick, and may even kill them.
- Eating human food can make wild animals malnourished and cause other health problems.
- Feeding by humans disrupts animals' natural movement patterns, makes them more vulnerable to predators and diseases, and may decrease their chances of surviving a severe winter.

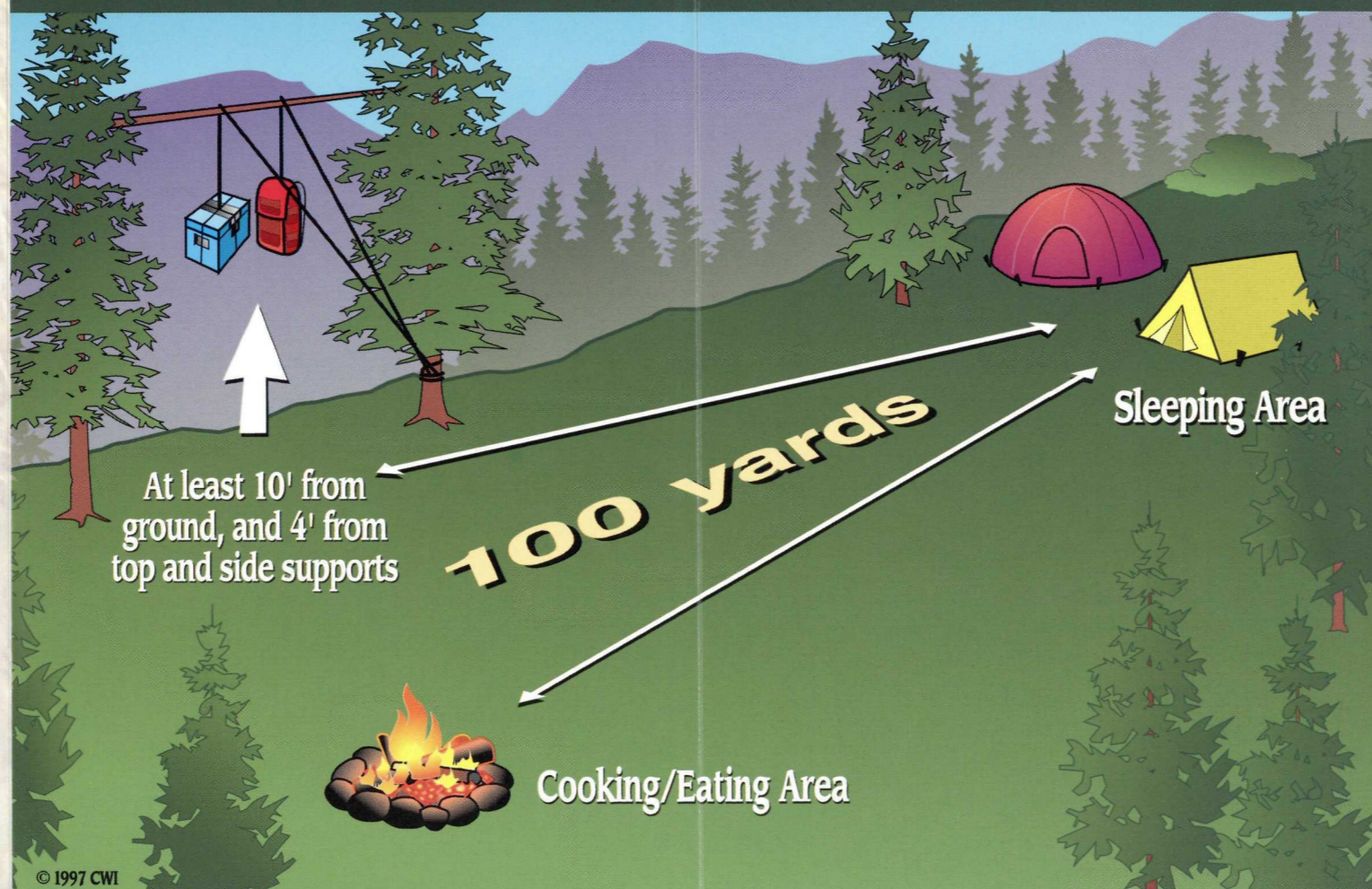
Viewing and Photographing

- Use **binoculars**, spotting scopes and telephoto lenses to view and photograph wild animals.
- View and photograph **from established observation areas** or the trail when hiking.
- Remain at least 100 yards away from bears and 25 yards away from other large animals.

Camping and Food Storage in Bear Country

- Select a campsite away from berry patches, spawning streams, and trails. Use designated camping areas where required.
- Sleep in a tent, not under the stars. Set up tents at least **100 yards** from your food storage and cooking/eating areas.
- Hang your food, garbage, and all other odorous items at least **10 feet above ground**.
- If a bear approaches your campsite or tent, form a group and retreat to a tree or a place of safety.
- Avoid bringing highly-odorous foods into the back-country. Use dehydrated foods whenever possible, and double-wrap food in ziplock bags.
- Wash your hands thoroughly after cooking food or handling fish. Do not sleep in the same clothes you cook in.
- Bears have a phenomenal sense of smell! Keep your sleeping bag and tent **completely free of food and food odors** and personal products like toothpaste, lotion, and makeup.
- Keep your **flashlight** and **bear pepper spray** readily available in your tent.

CAMPING IN BEAR COUNTRY



Bears of Yellowstone



MILO BURCHAM



TOM & PAT LEESON



CHUCK BARTLEBAUGH

Introduction by
Gen. H. Norman
"The Bear"
Schwarzkopf

Bear Research and Management

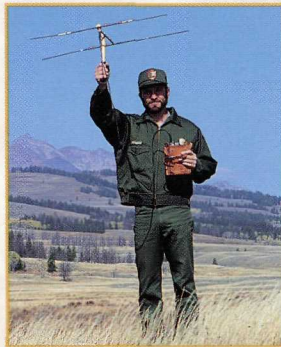
- Grizzly bears range widely, usually avoid people, and live in rugged and remote areas, making it difficult to count them.
- Because grizzlies are “threatened” under the Endangered Species Act, their population size and trend are important to wildlife managers.
- Knowing the population status helps biologists make decisions on matters affecting grizzly bears and assess effects of past management actions.
- Traditional techniques to estimate grizzly bear numbers—aerial surveys, trapping and marking bears, and ground surveys—are expensive and intrusive.

“Fingerprinting” bears using DNA

With a contribution from **Canon USA's Clean Earth Campaign**, Yellowstone biologists are using advances in science and technology to obtain information about black and grizzly bears.

- DNA-fingerprinting and real-time location testing of grizzlies through a Satellite Global Positioning System (GPS) are being used to monitor bears and their activities.
- Knowing numbers of bears over time allows

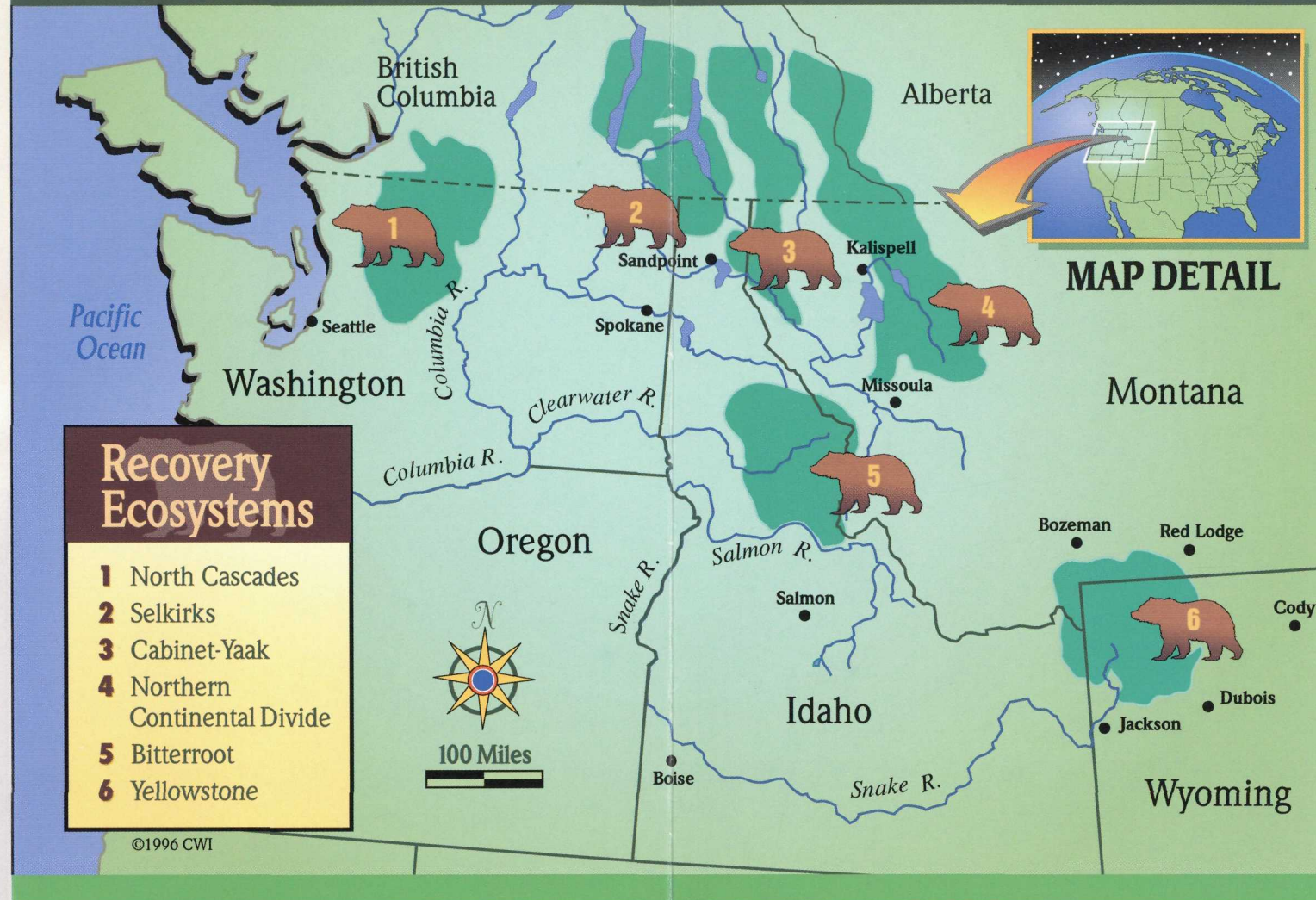
biologists to determine if actions are needed to keep bear numbers at healthy levels.



- Tissues contain vital biological information.
- In the past, hair samples of sufficient size for analysis could only be collected during capture.

- Biologists try to capture and handle bears as little as possible, and recent advances are enabling them to do just that.
- New “DNA-fingerprinting” techniques use tiny samples—a single hair—to identify and provide information about individual bears.
- DNA-analysis will enable biologists to count bears and determine relationships among them.

YELLOWSTONE IS “GRIZ” COUNTRY



CHUCK BARTLEBAUGH

Human food causes serious problems

- If a bear eats human food or garbage even once, it may associate humans with food.
- Bears that obtain human food and lose their natural fear of humans are dangerous, often letting people get too close and appearing tame.
- These “habituated” bears may become reliant on human food, or food-conditioned. They often become aggressive trying to get food or garbage.
- Damaging vehicles, approaching people, or tearing into tents is typical of food-conditioned bears.
- A food-conditioned bear’s behavior can easily turn from annoying humans to endangering their lives.

“Problem” bears

- A habituated or food-conditioned bear is considered a “problem” bear, subject to management actions.
- Park personnel often decide to move the bear away.
- After trapping, the bear is released in a remote site far from people. However, bears have an incredible ability to find their way back—and usually do.
- Bears that continue seeking human food may be moved again. If this doesn’t work, or the bear is threatening people, Park personnel “remove” it.
- “Removing” usually means killing the bear.

Help keep bears safe and wild

- Store food and garbage so bears cannot obtain it. Remember that allowing bears to get human food endangers both bears and people.
- Please set a good example and tell others why it is important to keep all human food and garbage away from bears.

Scent stations

- Biologists will string barbed-wire at “scent stations,” backcountry sites that use odors to attract black and grizzly bears.
- Barbed-wire traps hairs as bears brush against it.
- Scent stations are inexpensive, easy to set up and monitor, safer for bears and humans than previous methods of hair collection, and will make systematic analysis of bear-DNA possible.

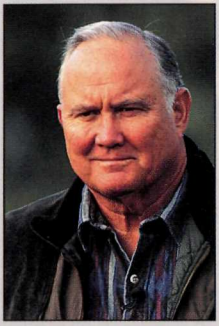
What is grizzly bear recovery?

- Since grizzlies are listed as threatened, federal and state agencies work to “recover” grizzly bear populations in the lower 48 states.

- “Recover” means actively protecting bears and their critical habitat, and taking other steps so populations become viable, self-sustaining, and no longer in need of ESA protection.

Bear management in Yellowstone

- Promoting an environment of safe coexistence between bears and humans mainly involves educating and managing people.
- Bears in the Park are wild animals and live long and healthy lives without any help from humans.
- Problems arise when people interfere with bears’ natural habits, especially related to food. Bears are always looking for an “easy meal” since they go without food up to six months while denning.



Gen. H. Norman "The Bear" Schwarzkopf

National Spokesperson for Grizzly Bear Education and Conservation Campaign

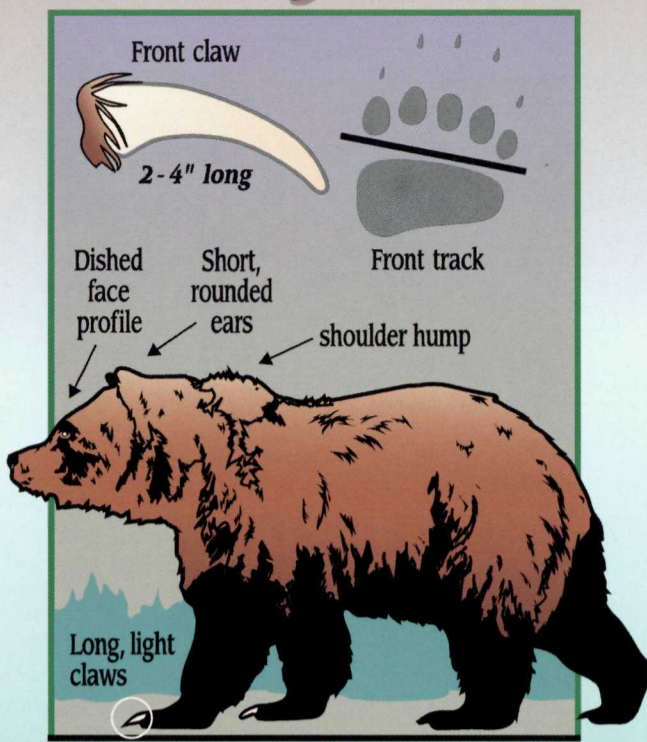
Yellowstone National Park is one of the few places in the lower 48 states that is home to both black bears and grizzly bears. Bears have always held a special place in my heart. They are intelligent, curious, and possess highly-developed senses of smell and navigation.

All bears that live in Yellowstone are wild. Each of us shares the responsibility for the current and future welfare of bears. Please share these stewardship guidelines with others so bears will be here for future generations to enjoy.

Gen. H. Norman Schwarzkopf
U.S. Army, Retired

For more information about the Grizzly Bear Education and Conservation Campaign, contact: Center for Wildlife Information, P.O. Box 8289, Missoula, Montana 59807 USA 406/523-7750

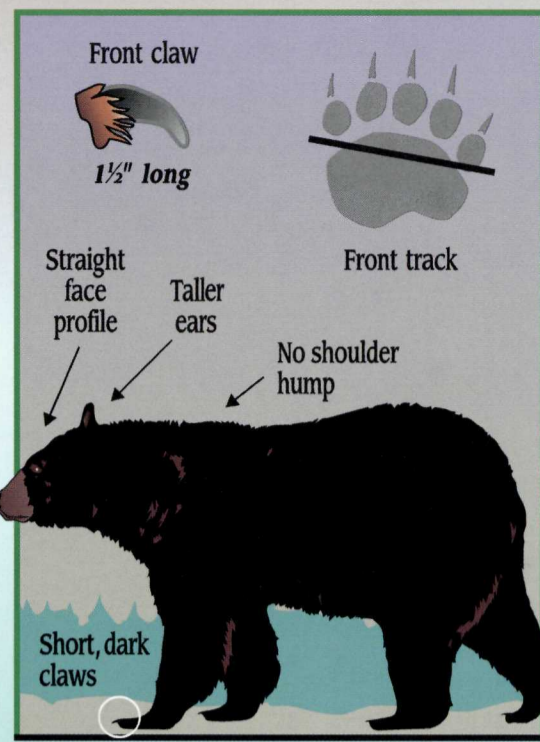
Grizzly Bear



General characteristics

- Bears are **intelligent**, curious, and have excellent memories, especially about food sources.
- Bears use their **acute sense of smell** for information about the world around them.
- Contrary to old tales, bears' **eyesight** is good. Bears also have color vision.
- Like dogs, bears hear high pitches. **Their hearing is excellent**, though less relied upon than their sense of smell.
- Bears can **run downhill and uphill** at speeds exceeding 35 mph—faster than Olympic sprinters.
- **Standing up** allows a bear to get more information from its senses of smell, sight, and hearing.
- Size, body weight and color varies from habitat to habitat.

Black Bear



Food habits

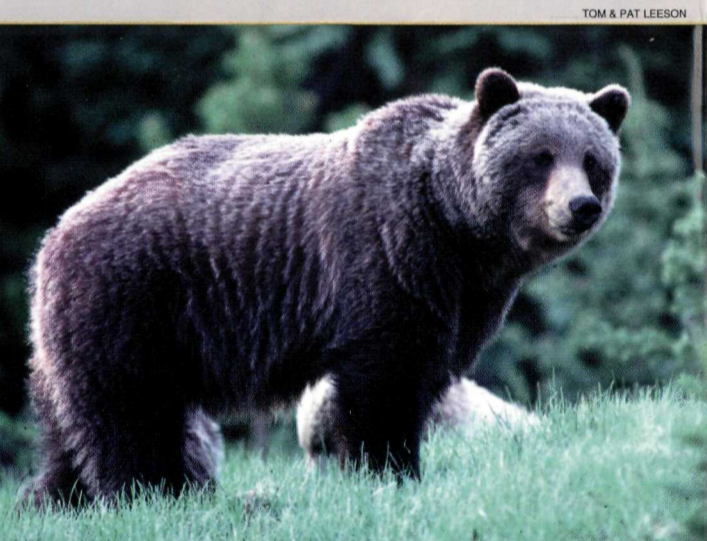
- Bears have plenty to eat! **Do not feed bears!**
- Bears are **omnivores**. In Yellowstone, up to 60% of their diet includes insects, rodents, fish, elk, moose and bison. Plants and berries make up 40%.
- Food sources include:
 - **Spring:** winter-killed elk and bison, elk calves, ants, grasses, clover, dandelion, and other plants.
 - **Summer:** thistle, fireweed, bistort, mushrooms, roots, wild berries, and spawning cutthroat trout are added to their diet. Toward fall bears will feed on dense groups of moths in rocky high-elevation areas.
 - **Fall:** white bark pine nuts, plants, berries, and ants. Bull elk injured or killed in rutting may also be a food source.

Hibernation

- Bears hibernate because of a **decreased food** supply, not an inability to stay warm.
- Dens are used **during winter hibernation**. Bears sleep outside, not in dens or caves, from spring through fall.
- Bears den from October or November to April or May.
- Males emerge from their dens first each season and females with cubs emerge last.
- Fat put on during fall is metabolized while in the den—bears **do not eat**, drink, urinate, or defecate for up to six months!
- Up to **30%** of body weight is lost while denning.
- **Heart rate** drops from 40-50 beats/min. during summer to 8-10 beats/min. in the den.
- Body **temperature** drops only a few degrees during denning. Unlike rodents, bears can be easily aroused from their winter sleep.
- Grizzly bears usually excavate their own dens, while black bears more often locate a natural cavity, such as a rock crevice or hollow tree.
- **Dens are often lined** with leaves, grass, spruce or fir boughs, or pine needles.

Reproduction

- Breeding season is mid-May to early-July, with **mating** mainly occurring during June.
- **Delayed implantation** keeps fertilized eggs from beginning development into embryos until around the start of denning season.
- If female bears do not attain **sufficient body fat or weight**, their embryos will not develop.
- Cubs are born in January or February. **Litter size** is usually two, but ranges from one to four cubs.
- **Play is important** to cubs for social and physical development, and probably just plain fun!
- **Subadult females** tend to stay within part of their mother's home range, while **males** usually leave their mother's range completely.
- **Cubs stay with their mother** for one to three years.



TOM & PAT LEESON

Grizzly Bear

Ursus arctos horribilis

Physical characteristics

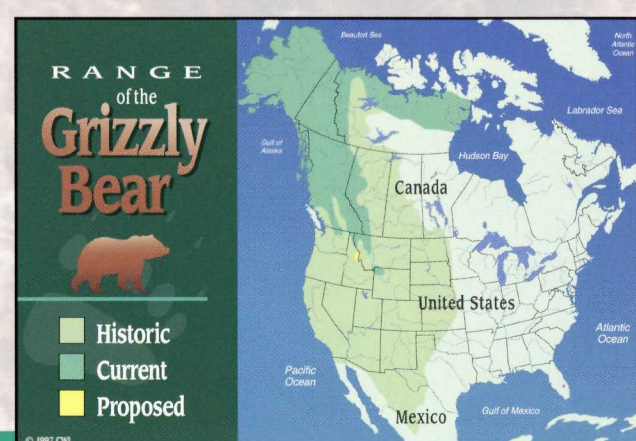
- **Color** varies from blond to black. Often medium-to dark-brown legs, hump, and underside with light-tipped (grizzled) fur on head, face, and upper body.
- Average **weight** is 500 pounds for males and 350 for females. Males may weigh up to 800 pounds.
- **Height** is 3½ - 4 feet at shoulder when on all fours, and 6 - 7 feet when standing upright.
- Distinctive **shoulder hump** is actually muscle mass that enables powerful digging.
- A dished-in **profile** between eyes and end of snout helps distinguish grizzlies from black bears.
- **Ears** are round and proportionately small.
- **Front claws** are 2-4 inches long, usually cream colored, slightly curved, and good for digging. Claw marks are usually visible in tracks.

Behavior

- Usually **more aggressive** than black bears.
- Females protect cubs aggressively.
- **Cubs:** - weigh about one pound at birth - often stay with their mother 2½ years
- **Day beds** in dense vegetation, especially forests, are used to rest and escape summer's heat.
- Mostly active during dusk and dawn, although **grizzly bears can be active any time of day**.
- **Strength** is exceptional. They routinely roll huge rocks and logs looking for food.
- Grizzlies' **powerful digging ability** lets them
 - feed on roots, bulbs, and rodents
 - dig dens on steep mountain slopes

Distribution

- More than **50,000 grizzlies once ranged** from the Mississippi River to the Pacific ocean and from Canada to central Mexico, occupying plains, forests, mountains, beaches, and wetlands.
- **Fewer than 1,100 grizzlies exist today** in the contiguous 48 states, in areas representing **less than 2%** of their former range.
- In the **lower 48 states**, grizzly bears are found in Montana, Wyoming, Idaho, and Washington.
- In 1975 the grizzly was listed as **threatened** and received protection under the Endangered Species Act of 1973.



National Park Foundation

Black Bear

Ursus americanus

Physical characteristics

- Black, brown, blond, cinnamon, or rust in **color**. Black with a light brown snout is the most common coloration in Yellowstone.
- Average **weight** in Yellowstone is 100-300 pounds, with males usually larger than females.
- **Height** is 2½ - 3 feet at the shoulder when standing on all fours and 5 feet standing upright.
- Rump is higher than front shoulders.
- Face **profile** is straight; muzzle is relatively long.
- **Ears** may be long and prominent.
- **Front claws** are less than 2 inches long, usually dark colored, sharp, curved, and good for climbing. Claw marks do not always show in tracks.

Behavior

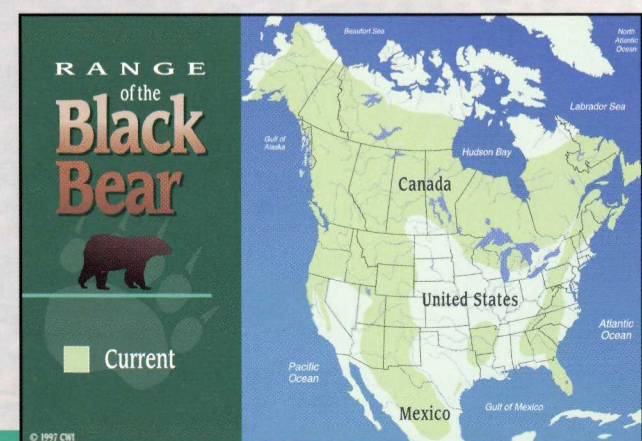
- Usually **less aggressive** than grizzlies.
- **Cubs:** - weigh about one-half pound at birth - stay with their mother up to 1½ years
- Black bears often den in open spaces under tree roots and rocks at low to middle elevations.
- Active mainly during dusk to dawn, but may be **active any time of day or night**.
- **Excellent tree-climbing ability** is used
 - to escape predators and other bears
 - to feed on nuts and fruit in trees



MILO BURCHAM

Distribution

- Black bears once **ranged widely** — from the Atlantic to the Pacific oceans and from the tree line in the northern Arctic to northern Mexico.
- Currently **exist in 75% of their former range**, and are not listed as threatened as are grizzlies.
- Have shown **more ability to live near people** than have grizzly bears; some live in forest habitats not far from cities.
- **Primarily forest creatures**, black bears rarely travel far from the shelter of trees.
- Black bears frequent areas of mixed woodland and small meadows up to the sub-alpine zone.
- Black bears are returning to many forested areas near major cities.
- Black bears' habitat overlaps with grizzly bears.



National Park Service

Center For Wildlife Information

Canon U.S.A.'s Clean Earth Campaign