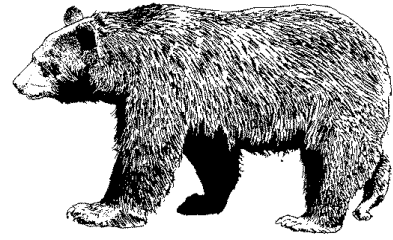


The Bear Facts: A Guide to Black Bears



In recent years, this area has seen an increasing bear population. This increase may be part of the natural process which is allowing bears to reclaim portions of their previously occupied range, or it may be due in part to increasing development, which is causing bears to shift their home ranges away from areas of intense human development. Whatever the reason, we are seeing a steadily increase in the number of bear sightings. These changes have brought more bears into direct contact with humans posing a potential threat to both people and bears.

The purpose of this document is to educate you on the potential problems and conflicts between bears and humans so you can better prevent incidents and handle these type situations as they occur.

First - A Little Natural History

A bear is a bear right? Well not quite. There are two bears native to the continental United States. The American black bear (*Ursus americanus*) and the grizzly bear (*Ursus arctos*). The grizzly bear is found only in the western U.S. (including Alaska) and Canada. The grizzly is considerably larger than the black bear. Typically grizzlies are over 6 ft. long and 3 1/2 ft. tall and can weigh over 850 lbs.

The black bear, is the most common and widespread bear species in North America, and ranges throughout the U.S. Adult black bears are 5-6 ft. long and 2-3 ft. high and can weigh between 100-400 lbs. Its fur is uniform black with a brown or tan muzzle. Not all black bears are black however; a cinnamon phase (reddish color) of black bear is common in many western states. Some bears, particularly young ones, frequently have a white blaze on the underside of their necks.

While the black bear is technically classified as a carnivore, more than 80% of its diet consists of plants! Black bears feeding habits are generally opportunistic, meaning that they will readily eat whatever foods (animal or plant) are easily available to them. In the spring, they feed primarily on grasses, forbs and other plants. Squawroot, a fleshy parasitic plant that grows at the base of oak trees is a favored food at this time.

As spring progresses into early summer, and soft mast foods become available the bears diet switches to berries. Blackberries, serviceberries, blueberries, huckleberries and pin cherries are important summer foods. Bears will also take newborn fawns during late spring and early summer. Insects, including ants, grubs, termites and beetles are also an important part of the bears summer diet. Rotten logs, torn apart by black bears looking for insects, are a common "bear sign" in many of the park's backcountry areas. Summer is also important to the black bear for another reason. Mating occurs from late June through early August.

As fall progresses, soft mast foods become less abundant and bears begin to turn their attention to hard mast-- acorns, hickory nuts and beechnuts. Black bears will also feed heavily on wild grape and black cherries during the autumn months. During good "mast" years, bears can gain weight rapidly-- up to 2 pounds per day. Fall is a crucial time for the black bear, as it must put on weight that they will rely on to see them through the winter.

Black bear complaints typically double during mast failures-- during times of poor acorn crops. During these times bears must wander further to find food, and frequently raid apple orchards and corn crops in their search for alternate food sources.

Winter is a time of extreme cold and limited food. The black bears ability to withstand long periods without food or water makes it physiologically unique from other mammals. Though bears do not hibernate in the true sense of the word, their body temperature decreases, while normal body functions (such as defecation and urination) cease completely. Bears in the east frequently den in hollow trees, sometimes as high as 50 feet above the ground. Typically a den tree has been damaged and broken off by storms, which create an entrance. Bears will also den in rock crevices and in hollowed out areas beneath brush piles, stumps or downed trees. Some bears will also build a "nest" in dense rhododendron and mountain laurel thickets. The nest is usually made by scraping out a depression in the leaves and underbrush.

Not all bears "hibernate". Many male bears are active throughout much of the winter, particularly if the weather is mild. And even "hibernating" bears may become active for short periods of time during the winter months.

Adult females give birth to one to three (two is average) cubs during late January/early February. At birth the cubs weigh between 6-10 ounces and measure about 8 inches long. The cub's eyes are born closed, but generally open within 25-30 days after birth. By the time the sow and cubs emerge from the den in late March or early April the cubs will weigh about 5 pounds. The cubs are normally weaned by August. Mother and cubs stay together throughout the first year. By the end of their first summer, the cubs will weigh about 55 pounds. In early winter, the sow and cubs will den up together (the sow will not mate and will not have a new litter). The next spring, after the yearlings and sow emerge from "hibernation", the sow will usually chase the young away, as she begins to prepare for another mating season. A female black bear gives birth to new cubs every other year. The yearling cubs may stay together for a while or may separate and go their own way. Bears normally reach sexual maturity at 3 1/2 years.

Home ranges of black bears can vary in size depending upon age and sex of the animal and population density. An adult male's home range is typically 15 square miles (for comparison, Rock Castle Gorge is approximately 6 square miles in size), while an adult female's home range averages approximately 10 square miles. Ranges of both sexes usually overlap; however, male and female bears rarely interact except during the breeding season.

Looking for Bears

Black bears are notoriously shy, secretive creatures. So if you go for a hike expecting to see one, you will probably be disappointed. Bears are primarily nocturnal-- they are more active after dark, though, it is not uncommon to see them up and about during the day.

Does that mean you can't go out and look for them? No, in fact finding "bear sign" -- evidence of a bear's presence in an area, is relatively easy if you are a little observant. Among some of the things to look for include:

- ✓ tracks left in muddy areas adjacent to streams and wetlands
- ✓ bear scat (which frequently resembles horse droppings except with partially digested berries and other vegetation);
- ✓ stumps and logs ripped open by bears in search of beetles and other insects;
- ✓ claw marks in trees that bears have climbed or marked to show the boundaries of their territory;
- ✓ overturned rocks or diggings;
- ✓ long black hairs stuck in the bark or sap of trees that they have rubbed against, chewed on or clawed.

Bear Safety: So You Have Seen A Bear. Now What?

An adult bear can reach weights of more than 400 pounds, making it easily the largest mammal in our eastern forests! Does this mean you should fear them every time you step into the woods? Yes and no. Most bear encounters in the wild are fleeting, a bear crossing the road in front of a passing motorist or a bear running across the trail in front of you. However, black bears are wild and their behavior sometimes unpredictable. The black bears size, strength and speed demand respect. Although extremely rare, attacks on humans have occurred, inflicting serious injuries and death. Treat bear encounters with extreme caution.

Avoid and stay clear of a sow bear with cubs. She will do anything to protect them if she thinks they are threatened. Keep in mind that, even if you don't see her, she is seldom far away. Cubs are cute, but you if approach them or show interest in them, you do so at your own risk! If you see a sow and cubs, turn back and leave the area; hike elsewhere.

ENCOUNTERS ALONG THE TRAIL-- If you see a bear in the distance, quiet observation is probably best, do not approach it. Remain watchful. If your presence causes the bear to change its behavior (stops feeding, changes its travel direction)-- **YOU'RE TOO CLOSE.** Being too close may also promote aggressive behavior from the bear such as running toward you, making loud noises, or swatting the ground. The bear is demanding more space. Don't run, the bear may give chase, and as a bear is capable of running at speeds of 35 mph you can't outrun it. Back-up slowly and try to put distance between you and the bear. The bear will probably do the same.

If a bear persistently follows or approaches you, typically without vocalizing, or paw swatting, try changing your direction. If the bear continues to follow you, stand your ground. If the bear gets closer, begin talking loudly or shouting at it. Act aggressively and try to intimidate the bear. Act together as a group if you have companions. Make yourselves look as large as possible (for example move to higher ground). Throw non-food objects such as a stout stick if you have one. Don't run and don't turn away from the bear. Don't leave food for the bear; this encourages further problems.

Most injuries from black bear are minor and result from a bear attempting to get at people's food. If the bear's behavior indicates that it is after your food and you're physically attacked, separate yourself from the food and slowly back away. If the bear shows no interest in your food and you're physically attacked, fight back aggressively with any available object-- the bear may consider you as prey!

ENCOUNTERS WHILE CAMPING-- The best way to avoid bears is not to attract them. The majority of bear encounters in campgrounds are the result of inadequate storage of foods and other attractants (i.e. toothpaste, soap, etc.). In order to prevent bear encounters in campgrounds and picnic areas:

- ✓ Keep tents and sleeping bags free of food odors; do not store food, garbage or other attractants in them.
- ✓ Food should not ever be left unattended. Food, including coolers and ice chests and other attractants should be stored in your vehicle, preferably in the trunk. If provided use bear food storage lockers to safely store food and other attractants.
- ✓ A clean camp is essential to reducing problems. Pick up food scraps and garbage around your site. Food and garbage should not be burned in the grill. These items leave odors that will attract bears into your campsite.
- ✓ Garbage should be deposited in bear-proof trashcans or dumpsters. Do not place garbage outside of a trashcan or dumpster and do not stuff garbage cans to overflowing.
- ✓ Keep pets tied up and if in a vehicle or camper. Do not leave pets unattended at a campsite.

If a bear enters your campsite, pack up your food and trash. If necessary, try to scare the animal away by talking loudly or shouting at it, by banging pots together or even throwing nonfood objects. **Do not however**, throw food at the bear, this encourages further problems. If the bear is persistent, move away slowly to your vehicle or another secure area.

Managing Bears & People

Most bear problems are people problems. Bears frequently travel great distances in search of food, which they need in order to survive and reproduce. Despite numerous warnings in National and State Parks of "**Do Not Feed the Bears,**" many park visitors continue to lure bears in for a quick photograph using scrapes of food. Unfortunately, bears are creatures of habit. Once fed a dangerous cycle begins. Bears learn that they will be fed if they approach a human. They quickly lose their fear of humans and become bolder. Bears soon become panhandlers, passing this learned behavior down to their cubs. Stressed by crowds, startled by shutters and camera flashes, and taunted by others, the bear lashes out.

However, personal injury and property damage is not they only result. These incidences take a toll on the bear as well. In the Great Smoky Mountains National Park, researchers have found that panhandler bears have a lifespan up to 50% shorter than wild bears. Having lost their fear of humans, bears are attracted to roadsides, where they are more likely to be hit by cars and are more susceptible to poaching.

In search of food, bears sometimes ingest dangerous items. In their rush to rip open garbage bags, bears frequently ingest shards of glass, pull tabs from soda cans, and pieces of plastic which can cause bears to choke to death or the items to become lodged in the stomach of the bear.

What You Can Do:

- ✓ Learn all you can about bears and their life history (see the attached bibliography for sources of additional information).
- ✓ Do not leave garbage, food, pet food, bird food/feeders or anything out that may attract a bear.
- ✓ Safeguard storage sheds and buildings as well, by not storing items that may attract bears (Food/ Pet Food).
- ✓ Assure outside grills are cleaned after use and, or stored.
- ✓ Put garbage out the day of garbage pick-up in, preferably, non-pliable receptacles.
- ✓ Always utilize proper food and garbage storage procedures.

KEEP YOUR NEIGHBORS ADVISED OF BEAR SIGHTINGS AND ENCOUNTERS !!

References and Sources for Additional Information on Black Bears:

Ahearn, D. (no date). Bear manners: getting along in the backcountry.

Available on line at <http://patc.simplenet.com/bear_man.html>

Brown, Gary. 1996. Safe Travel in Bear Country: Safe Camping, Hiking, Fishing and More. Lyons & Buford, Publishers. New York, NY. 146 pp.

Herrero, Stephen. 1985. Bear attacks: their causes and avoidance. Lyons & Buford Publishers, New York, NY. 287 pp.

National Park Service. Great Smoky Mountains National Park North Carolina and Tennessee (Handbook 112). 1981. Division of Publications, U.S. Department Of the Interior, Washington, D.C. 126 pp.

Rennicke, J. 1991. The Smoky Mountain black bear: spirit of the hills. Great Smoky Mountain Natural History Association. 59 pp.

Rogers, Lynn L. 1992. Watchable Wildlife: The Black Bear. U.S. Forest Service, North Central Forest Experimental Station available at <http://www.ncrs.fs.fed.us/epubs/pdf/wwbear.pdf>

Stokes, D & L. Stokes. 1986. A guide to animal tracking and behavior. Little, Brown and Company, New York, NY. pp 300-309.

Virginia Department of Game & Inland Fisheries. 2001. Draft Virginia Black Bear Management Plan. Available at <http://www.dgif.state.va.us/>.

Virginia Department of Game & Inland Fisheries. 1995. Virginia Wildlife. Vol. 56, No. 9. 34 pp.