Living with Wildlife

Black Bears

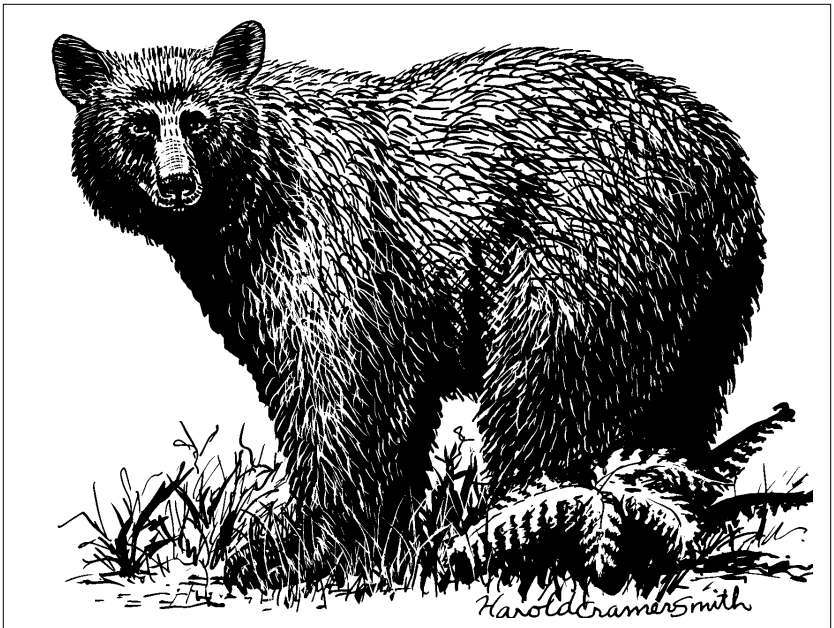

Figure 1. *The American black bear is the most common and widely distributed bear in North America.*

(Washington Department of Fish and Wildlife.)

American black bears (*Ursus americanus,* Fig. 1) are the most common and widely distributed bears in North America. In Washington, black bears live in a diverse array of forested habitats, from coastal rainforests to the dry woodlands of the Cascades' eastern slopes. In general, black bears are strongly associated with forest cover, but they do occasionally use relatively open country, such as clearcuts and the fringes of other open habitat.

The statewide black bear population in Washington likely ranges between 25,000 and 30,000 animals. As human populations encroach on bear habitat, people and bears have greater chances of encountering each other. Bears usually avoid people, but when they do come into close proximity of each other, the bear's strength and surprising speed make it potentially dangerous. Most confrontations with bears are the result of a surprise encounter at close range. All bears should be given plenty of respect and room to retreat without feeling threatened.

Facts about Washington's Black Bears

Food and Feeding Behavior

- Black bears are omnivores. They eat both plants and animals; however, their diet consists mostly of vegetation (Fig. 2).
- In the spring, black bear diets consist mostly of herbaceous plants, from emerging grasses and sedges to horsetail and various flowering plants.
- In summer, bears typically add ants, bees, grubs, and a host of later emerging plants to their diets.
- During late summer and fall, bears typically shift their diets toward tree fruits, berries, and nuts, but they still may consume a variety of plants.
- Fall is a critical season for black bears and they commonly acquire most of their annual fat accumulation at this time. Bears may forage up to 20 hours a day during fall, increasing their body weight by 35 percent in preparation for winter.
- Typically, a small proportion of the black bear's annual diet is made up of animal matter, including insects, mice, voles, ground squirrels, fawns and elk calves, eggs, carrion (animal carcasses), and fish, but their availability varies and is often unpredictable. An occasional bear may take livestock.
- Black bears have adequate senses of sight and hearing, but their keen sense of smell and innate curiosity make them skilled scavengers. They consume carrion when they can find it, and are notorious for taking advantage of human irresponsibility with food, garbage, and bird-feeder management. Bears will eat anything that smells appealing and will help them prepare for their long winter sleep.
- Black bears move in response to the seasonal availability of food, roaming constantly throughout their home range.

Den Sites and Resting Sites

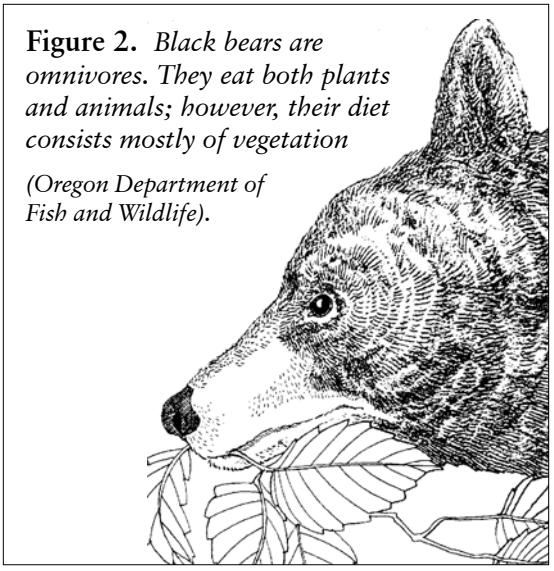

Figure 2. *Black bears are omnivores. They eat both plants and animals; however, their diet consists mostly of vegetation*

(Oregon Department of Fish and Wildlife).

- Black bears den during the winter months (typically from mid October into April) when food is scarce and the weather turns harsh.
- Denning black bears enter a state of torpor, a modified form of hibernation. This drowsy condition allows bears to defend themselves (and their cubs) more effectively should a predator visit the den.
- Bears do not urinate or defecate during denning—they recycle their waste into proteins and other nutrients. By not defecating, bears keep their dens essentially scent-free, protecting them from potential predators like cougars.
- Black bears in coastal areas may remain active throughout the winter, except for pregnant females, which den to give birth to cubs.
- Black bears can take up residence in small dens, some scarcely bigger than a garbage can. Den sites include tree cavities, hollow logs, small caves, and areas beneath large roots, stumps, logs, and rural buildings. They'll occasionally excavate a den in the side of a hill near shrubs or other cover.
- Summer beds are merely concealed places scratched in the ground among dense vegetation, by a rock, or under the branches of a fallen tree. Young bears rest in trees for safety (Fig. 3).

Reproduction and Family Structure

- Female black bears breed for the first time at 3½ to 5½ years of age. Mating takes place in June and July.
- Males compete for the right to breed, and breeding fights between males may be intense. Older males frequently have extensive scars on their heads and necks from fights in previous breeding seasons.
- Following a gestation period of about seven months, females normally give birth to one or two cubs in the winter den during January or February. Females have one litter every other year.
- Bears have a reproductive pattern known as delayed implantation. Following fertilization in early summer, a bear's embryo goes dormant, free-floating in the uterus. After the female dens in late fall, the embryo implants in the uterine wall and development of the fetus proceeds rapidly. Although the total gestation time is approximately seven months, the actual developmental period for the bear fetus is less than three months.
- At six months, cubs are able to locate food, but generally remain with their mother for over a year—usually denning with her during their second winter.
- Parental care is solely the responsibility of females; males sometimes kill and eat cubs.

Figure 3. *Young bears rest in trees for safety*

(Oregon Department of Fish and Wildlife).

Mortality and Longevity

- Other than humans, black bears have few predators—cougars, bobcats, and coyotes attack cubs if given the opportunity. Male bears may eat cubs.
- In the year 2005 hunters harvested 1,333 black bear in Washington.
- Female black bears have the potential to live into their mid 20s. Male black bears do not typically live as long, rarely attaining 20 years of age.

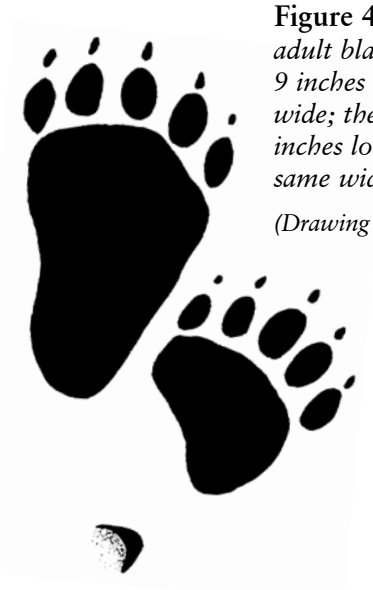

Figure 4. *The hind feet of an adult black bear average 7 to 9 inches long by 3 to 5 inches wide; the front feet are 4 to 5 inches long by nearly the same width.*

(Drawing by Kim A.Cabrera.)

Viewing Black Bears

Except for females with cubs, black bears are usually solitary animals. Depending on their food supply, they move about during the day or night. In late summer and fall, feeding keeps them active throughout the day so they can gain the weight needed for winter. When bears find a human food source, their schedule may change. If they are receiving handouts they can be most active at midday; if they are feeding at dumps or trashcans, they become active at night.

Black bears should be treated with respect and safely observed from a distance of at least 100 yards. This is especially important with females accompanied by offspring, as mother bears are very protective of their young.

Tracks

All black bear prints usually show five digits (Fig. 4). The toes form a rough semicircle in front of each foot, with the middle toe being the longest. Front foot tracks have small footpads, whereas hind foot tracks characteristically show an extended footpad, resembling a human foot. The claw marks are about ½ inch in front of the toe pads, but often the claw marks do not show in a track.

Droppings

When plants, insects, and animal carcasses make up most of a bear's diet, its droppings are cylindrical and typically deposited in a coiled form, sometimes in individual segments. Segments are 2 to 3 inches long and 1¼ to 1½ inches in diameter. Bits of hair, fur, bone, insect parts, and plant fibers distinguish these droppings from human feces, as does the large size of the deposit. Color ranges from dark brown to black, and when grasses are being heavily eaten droppings are often green. When fruits and berries are in season, droppings assume a moist, "cowpie" form and seeds are visible.

Bear Trees

Black bears commonly leave a variety of marks on trees. Because young bears often climb trees, trees in high bear density habitats will show the telltale claw marks and hairs indicating that a bear has previously climbed the tree.

On young conifers, particularly Douglas-fir trees, bears will rip strips of bark off with their teeth to reach insects or the sweet-tasting sap found inside (Fig. 5). The bear's teeth leave long vertical grooves in the sapwood and large strips of bark are found around the bases of trees they peel. These marks are typically made from April to July, but the results may be seen all year. This foraging activity is common in tree plantations where large stands of trees are similarly aged and of a single species.

A bear may also rub its back against a tree or other object. Rubbing is a favorite summer pastime among black bears, relieving the torment of parasites and loosening their thick, matted winter coat. Good scratching trees may be used repeatedly for several years, and are easily identified by the large amounts of long black or brown fur caught in the bark and sap. Rough-barked trees often serve as rubbing posts.

It has been debated whether bears mark trees to convey social information akin to territorial marking in other carnivores. Such marks are most easily seen on smooth-barked species of trees—alder, aspen, birch, and white pine—on which tooth and claw marks will contrast most visibly, but any live or dead standing trees may be heavily chewed. Human structures such as utility poles, footbridges, and even outbuildings may also be chewed.

Feeding Areas

Rotting logs and stumps are commonly turned over and torn apart to get at fat-rich grubs, ants, termites, worms, and spiders. A bear will also knock the top of an anthill or beehive off to get to the insects.

Black bears may break off entire limbs of fruiting trees, such as apple and chokecherry, to reach the fruit. Huckleberries and other fruiting shrubs may show signs of being crushed under a bear's feet. Bears may also dig for the starchy roots of some plants, to excavate seed caches of squirrels and mice, and to capture mice, voles, and ground squirrels. Evidence of digging ranges from well-defined holes to large areas that appear to have been rototilled.

Figure 5. *Marks on trees made by black bears vary from claw marks left by climbing to peeling and biting left when larger bears (generally females) feed on insects and sap found under the bark.*

(Oregon Department of Fish and Wildlife.)

Bear Encounters

Bears tend to avoid humans. However, ***human-habituated bears*** are bears that, because of prolonged exposure to people, have lost their natural fear or wariness around people. ***Human-food-conditioned bears*** are those that associate people with food. Such bears can become aggressive in their pursuit of a meal.

Do everything you can to avoid an encounter with any bear. Prevention is the best advice.

If you are recreating in bear country, always remember: Never travel alone, keep small children near you at all times, and always make your presence known—simply talking will do the trick. Most experts recommend carrying pepper spray when recreating in areas of high bear density. A pepper spray that has a pepper content between 1.3 and 2 percent can be an effective deterrent to an aggressive bear if it is sprayed directly into the bear's face within 6 to 10 feet.

Here are tips should you come in close contact with a bear:

- Stop, remain calm, and assess the situation. If the bear seems unaware of you, move away quietly when it's not looking in your direction. Continue to observe the animal as you retreat, watching for changes in its behavior.
- If a bear walks toward you, identify yourself as a human by standing up, waving your hands above your head, and talking to the bear in a low voice. (Don't use the word bear because a human-food-conditioned bear might associate "bear" with food . . . people feeding bears often say "here bear."
- Don't throw anything at the bear and avoid direct eye contact, which the bear could interpret as a threat or a challenge.

- If you cannot safely move away from the bear or the bear continues toward you, scare it away by clapping your hands, stomping your feet, yelling, and staring the animal in the eyes. If you are in a group, stand shoulder-to shoulder and raise and wave your arms to appear intimidating. The more it persists the more aggressive your response should be. If you have pepper spray, use it.
- **Don't run from the bear** unless safety is very near and you are absolutely certain you can reach it (knowing that bears can run 35 mph). Climbing a tree is generally not recommended as an escape from an aggressive black bear, as black bears are adept climbers and may follow you up a tree (Fig. 6).

Figure 6. *Climbing a tree is generally not recommended as an escape from an aggressive black bear, as black bears are adept climbers and may follow you up a tree.*

Bear Attacks

In the unlikely event a black bear attacks you (where actual contact is made), **fight back** aggressively using your hands, feet, legs, and any object you can reach. Aim for the eyes or spray pepper spray into the bear's face.

Preventing Conflicts

State wildlife offices receive hundreds of black bear complaints each year regarding urban sightings, property damage, attacks on livestock, and bear/human confrontations.

The number one reason for conflict, (95% of the calls to offices) are the result of irresponsibility on the part of people: Access to trash, pet food, bird feeders, and improper storage of food while camping make up the majority of the calls.

Secondarily, young bears (especially young males) are not tolerated by adult bears and they wander into areas occupied by humans. Food may also be scarce in some years—a late spring and poor forage conditions may be followed by a poor berry crop, causing bears to seek food where they ordinarily would not.

If you live in areas where black bears are seen, use the following management strategies around your property to prevent conflicts:

Don't feed bears. Often people leave food out for bears so they can take pictures of them or show them to visiting friends. Over 90 percent of bear/human conflicts result from bears being conditioned to associate food with humans. A wild bear can become permanently food-conditioned after only one handout experience. The sad reality is that these bears will likely die, being killed by someone protecting their property, or by a wildlife manager having to remove a potentially dangerous bear.

Manage your garbage. Bears will expend a great amount of time and energy digging under, breaking down, or crawling over barriers to get food, including garbage. If you have a pickup service, put garbage out shortly before the truck arrives—not the night before. If you're leaving several days before pickup, haul your garbage to a dump. If necessary, frequently haul your garbage to a dumpsite to avoid odors.

Keep garbage cans with tight-fitting lids in a shed, garage, or fenced area. Spray garbage cans and dumpsters regularly with disinfectants to reduce odors. Keep fish parts and meat waste in your freezer until they can be disposed of properly.

If bears are common in your area, consider investing in a commercially available bear-proof garbage container. Ask a local public park about availability or search the Internet for vendors.

Only plant material should be placed in compost bins.

Remove other attractants. Remove bird feeders (suet and seed feeders), which allow residue to build up on the ground below them, from early March through November. Bring in hummingbird feeders at night. (Better yet: plant and bird-friendly landscape and don't use feeders.) Harvest orchard fruit from trees regularly (rotting fruit left on the ground is a powerful bear attractant). If you have bear problems and do not use your fruit trees, consider removing them. Do not feed pets outside. Clean barbecue grills after each use. Wash the grill or burn off smells, food residue, and grease; store the equipment in a shed or garage and keep the door closed. If you can smell your barbecue then it is not clean enough. Avoid the use of outdoor refrigerators—they will attract bears.

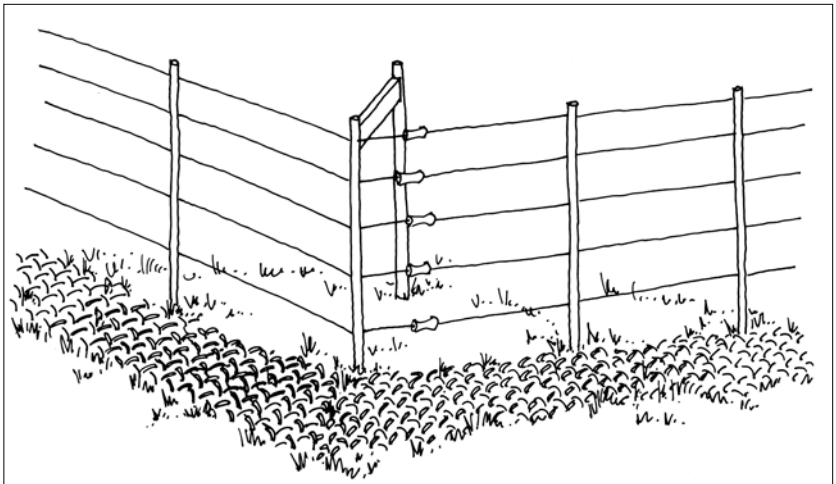

Figure 7. *An electric fence designed to keep bears out of an area. A five-wire electric fence has been effective at keeping adult bears and their cubs out. If necessary, a 2-foot wide underground apron of chain-link fencing or steel mesh can be staked down and attached to the fence to keep bears from digging under the fence. If wood or other heavy-duty corner stakes are not used, the corner posts will need to be carefully braced.*

(Drawing by Jenifer Rees.)

Protect livestock and bees. Place livestock pens and beehives at least 150 feet away from wooded areas and protective cover. Confine livestock in buildings and pens, especially during lambing or calving seasons. Livestock food also attracts bears and must be kept in a secure barn or shed behind closed doors. If bears are allowed access to livestock food, they may learn to feed on livestock. Immediately bury any carcasses or remove them from the site.

Install fences and other barriers. Electric fencing can be used where raids on orchards, livestock, beehives, and other areas are frequent (Fig. 7). Electric fencing only works, however, if it is operating **before** conflicts occur. Bears will go right through electric fencing once they are food-conditioned and know that food is available.

Bears can be lured into licking or sniffing the electrified wire by rubbing molasses, bacon grease, or peanut butter on the fence. (See "Deer" in this series for additional information on electric fences.)

Traditional wire fencing can also be used as a barrier. Use heavy chain-link or woven-wire fencing at least 6 feet high. Install 24-inch long wood or metal bar extensions at an outward angle to the top of the fence with two strands of barbed wire running on top. If necessary, a 2-foot wide underground apron of chain-link fencing or steel mesh can be staked down and attached to the fence to keep bears from digging under the fence.

Bears can be dissuaded from climbing a tree by attaching 4-foot long, 1 x 4 inch boards with 2-inch long wood screws screwed all the way through them every 6 inches. (To prevent the board from splitting, drill pilot holes.) Attach at least four boards around the trunk of the tree using strong wire.

Use temporary scare tactics. Bears can be temporarily frightened from a building, livestock corral, orchard, and similar places by the use of a night light or strobe light hooked up to a motion detector on a tripod, loud music, or exploder cannons. The location of frightening devices should be changed every other day. Even so, over a period of time, bears will become accustomed to them. At this point, scare devices are ineffective and human safety can become a concern.

Professional Assistance

Wildlife offices throughout Washington respond to bear sightings when there is a threat to public safety or property. A sighting or the presence of a bear does not constitute a threat to property or public safety. Typically, no attempt will be made by a wildlife agency staff to remove, relocate, or destroy the animal.

Problem bears can be live trapped by specially trained wildlife professionals and moved to more remote areas; however, such removals are expensive, time consuming, and seldom effective. (Once a bear has tasted human food

or garbage, it will remember the source and return again and again—bears have been known to return over 100 miles to a human food source after having been relocated.) Using tranquilizing drugs on bears to facilitate removal is not without risks to bears and humans.

When other methods have failed, lethal removal of problem animals may be the only alternative.

Contact your local wildlife office for additional information and, in the case of an immediate emergency, call 911 or any local law enforcement office, such as the state patrol.

Public Health Concerns

Bears are not considered a significant source of infectious diseases that can be transmitted to humans or domestic animals. However, humans can become infected with trichinosis by eating undercooked bear meat.

Legal Status

The black bear is classified as a game animal (WAC 232-12-007). A hunting license and open season are required to hunt black bears. A property owner or the owner's immediate family, employee, or tenant may kill a bear on that property if it is damaging crops or domestic animals. You must notify your local Department of Fish and Wildlife (WDFW) office immediately after taking a black bear in these situations (RCW 77.36.030).

The killing of a black bear in self-defense, or defense of another, should be reasonable and justified. A person taking such action must have reasonable belief that the bear poses a threat of serious physical harm, that this harm is imminent, and the action is the only reasonable available means to prevent that harm.

Any bear that is killed, whether under the direct authority of RCW 77.36.030, or for the protection of a person, remains the property of the state and must be turned over to WDFW.

Because bears' legal status, hunting restrictions, and other information change, contact your local wildlife office for updates.

Adapted from "Living with Wildlife in the Pacific Northwest" (see http://wdfw.wa.gov/wlm/living.htm)

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Washington Department of FISH and WILDLIFE