

Black bear (*Ursus americanus*)

Size:

When on all fours, male black bears stand about 3 ft. high at the shoulder, and may be up to 6 ft. long. They weigh 250–350 lbs. on average, with some reported at over 600 lbs. Females are considerably smaller, commonly weighing 150–200 lbs.

Signs of their presence:

- Tracks: Somewhat like a person's footprint, with long claw marks. Hind print is about 7" long x 4" wide.
- Scat: Can be variable, depending on what they're eating, but often roughly cylindrical. Somewhat like a dog's scat. May include seeds, plant material, and insect parts.
- Sounds: Adult females and cubs communicate with low moans and squeals. You may hear adults hiss, growl, or pop their teeth at each other—or at a person, if the bear feels threatened or is under stress (at the same time, their ears may be laid back, and the hair on their backs may be raised). If you hear those sounds and see those postures, be careful! (Bears also bellow, whimper, mumble, and grunt, but people usually don't hear those noises.)
- Dens: In the winter, bears den in shallow caves, under brush piles, rotten logs, or blow-downs, in depressions, hollow trees, or culverts. Leaves or grass are sometimes used as bedding. In the summer, during the day, they'll rest in shallow depressions in the forest litter, or sleep in trees.
- "Bear trees." Bears will rub against trees, and will stretch high to claw and bite the tree (4 1/2–6 ft. off the ground). Those high scratchings may be a mark of dominance (see how big I am?). The rubbing could be a form of scent marking, or maybe they're just itchy.
- Claw mark "climbing trails" on trees. These are easy to see on smooth-barked trees like beech and aspen, or on trees that were climbed repeatedly as the bears searched for food. Look for this sign on apple trees, black cherry, and mountain ash, too. Bears will break branches as they climb; this is sometimes mistaken for ice damage.
- While foraging, bears will dig; turn over rocks and logs; and tear open logs, yellowjacket nests, and beehives.
- Trails leading to a food source.
- Flattened areas in corn or grain fields or berry patches.
- Fruit stripped off cherry and apple trees, with possible damage to the branches.
- Scattered garbage around a dumpster or garbage can.

- Bears will sometimes damage buildings or cars if they smell food within.

Diet:

Opportunists. During the spring and summer, they eat mostly plants and insects, especially ants and bees. They'll feed heavily on fruits such as apples, cherries, and raspberries, and on nuts and agricultural crops, often, corn. Bears will also eat amphibians, reptiles, fish, and small mammals, mostly rodents, although they can prey on fawns. In the fall, nuts are a critical food, especially acorns and beechnuts, which provide the fat that will get them through the winter. Bears will eat carrion and garbage. They sometimes kill livestock. They do love honey and will eat the bees, too.

Typical activity patterns:

Social style: Generally solitary, although they'll interact at a food source.

Daily activity: Most active at dawn and dusk, but may be active any time, depending on the season and availability of food.

Hibernator? Well... Bears are not true hibernators, but they do sleep deeply during the winter. The females give birth while they're in this sleepy state. They'll groom and nurse their young—still half-awake—for about four months (perhaps you can relate). During a warm spell, the females will get up and go outside for a short time.

Migrates? No. They will, however, travel great distances in search of food. Males will move hundreds of miles away from their birth site, while females won't.

Where found:

Distribution in NY and the Northeast: Black bears are found throughout North America and are the most numerous of our bear species. New York's population (after the hunting season) is estimated at 6,000 animals and growing. Traditionally, bears have lived in three areas in New York: The Adirondacks, Catskills, and Allegheny regions, which all have large, unbroken forests and little human activity. Their range is expanding. Bears are now found throughout much of New York, excluding Long Island.

Habitat: Most often found in the deep woods, in areas with large tracts of mature hardwoods or mixed forests that include some wetlands, such as swamps, rivers, streams or lakes. They will live in second-growth forests if better habitat is limited. Black bears like areas with thick ground cover and few people but they will venture into farm fields, orchards, and suburban areas.

Territory and home range: The home range of males is up to 100 sq. miles. Females stay close to where they were born, with a home range as small as 15 sq. miles.

Breeding habits:

Pair bonding style: Polygamous.

Breeding dates: May–June, sometimes extending into July, August, or even September.

Litter size: 2–3 cubs. Females usually have cubs every other year.

Birth period: Late January–early February. They give birth in their winter dens.

Weaning dates: At about 7 months old (late August to early September).

Amount of time young remain with parents beyond weaning date: They'll den with their mother their first winter. The family stays together until the spring, when the female's ready to mate again, usually in June.

Common nuisance situations:

Time of year: Any time of year, but problems usually peak in June through September.

What are they doing?

Most complaints are associated with their feeding.

- Bears eat bird seed and destroy feeders, especially in the early spring and late fall. They may enter porches seeking stored bird seed.
- Raid dumpsters, garbage cans, coolers, tents, camps, and picnic tables looking for an easy meal. This is commonly seen at campgrounds and resorts throughout the summer and early fall.
- At restaurants, bears will raid dumpsters, garbage cans, and the containers that hold cooking grease. This is also most typical during the summer and fall.
- Will sometimes eat corn and grain, and may cause additional damage to the field while they're feeding. Sometimes, this damage may make it hard to harvest the crop.
- Eat fruits, such as cherries and apples.
- Occasionally attack domestic livestock or poultry. This doesn't happen often in New York.

De-bunking myths about bears:

- Bears are not true hibernators, as we mentioned. True hibernators, like bats and woodchucks, do not wake up until spring. Bears will lose about a quarter of their body weight during the winter. During their deep sleep, their body temperature drops about 7° and their heart rate by about 50 percent.
- Bear dens are much smaller than most people

think—only about 2 ft. high by 5 1/2 ft. long, which is smaller than a bunk bed.

- Bears don't often reuse their dens.
- Playing dead will not deter an attack by a black bear. This defense is meant to be used with grizzly bears.

Legal status in New York:

Big game species with set season.

From ECL 11-0521: "1. The department may direct any environmental conservation officer, or issue a permit to any person, to take any wildlife at any time whenever it becomes a nuisance, destructive to public or private property or a threat to public health or welfare, provided, however, that where such wildlife is a bear, no such permit shall be issued except upon proof of damage to such property or threat to public health or safety presented to the department. Upon presentation of such proof, the department may issue a permit authorizing the use of trained tracking dogs pursuant to section 11-0928 of this article, and, if the department has determined that no other alternative is feasible, a separate permit to take the bear. Wildlife so taken shall be disposed of as the department may direct."

From ECL 11-0523: "2. Any bear killing or worrying livestock on land occupied or cultivated, or destroying an apiary thereon, may be taken or killed, at any time, by shooting or device to entrap or entice on such land, by the owner, lessee or occupant thereof, or any member of the owner's, lessee's or occupant's immediate family or by any person employed by such owner, lessee or occupant. The owner or occupant of such lands shall promptly notify the nearest environmental conservation officer and deliver to such officer the carcass of any bear killed pursuant to this subdivision. The environmental conservation officer shall dispose of the carcass as the department may direct."

Best practices

Most black bears avoid people unless they learn to associate people with food. This usually happens around dumpsters, garbage cans, campgrounds, or places where people feed bears (often, at restaurants). Bears who have developed this habit pose the greatest threat to people. The conditions need to be changed. To do that, think with your nose. This means:

Manage the garbage:

- Use bear-proof garbage containers, or place regular cans in bear-proof storage facilities. Garages (with closed doors) are safer than porches, for example.
- Use plastic bags inside garbage cans to help hide odors. Putting camphor disks (available from some drug stores), mothballs, air fresheners, disinfectant, or an ammonia-soaked rag in the can may also mask food odors.
- Remove garbage regularly. Bears especially like grease, fat, bacon, and other meats.
- Don't burn garbage because that makes it more attractive to bears.
- Clean garbage, compost, and recycling containers frequently with ammonia, bleach, or disinfectant.
- Keep the site clean.
- Clean old refrigerators and other insulated containers that are left outside.
- Do not leave dirty diapers or diaper pails outside.

Eliminate other enticing food sources:

- If people are feeding bears, persuade them to stop. It's dangerous—and illegal!
- Don't feed birds during the spring and summer. Suet, bird seed, and the sweet liquid placed in hummingbird feeders all attract bears.
- Remove livestock carcasses from the site.
- Pick and remove all fruit from trees that are located near buildings.
- Don't feed pets outside. Even an empty dish can attract a bear.
- Keep livestock in buildings and pens, especially during the birthing seasons. If possible, those pens should be located away from woods and areas that provide good cover for bears.
- When camping, store food and organic wastes in bear-proof containers, on elevated platforms ("bear poles"), or in an airtight container that's suspended on a rope between two tall trees that are downwind of your camp site. Bear poles should be 15–20 feet above ground. The pole should be at least 6" wide. Wrap a 4-foot band of galvanized sheet metal around the pole at a height of 6–7 feet above ground.
- Plant vulnerable crops (corn, oats, fruit) away from woods and areas that provide good bear cover.

Don't create a scent trail to a vulnerable area:

- Turn off kitchen exhaust fans that vent to the outside when they're not in use. Make sure the vent screen is cleaned regularly.
- Don't eat or cook in your tent. Wash your hands

before you handle any of your gear. Clean everything that touched food, such as dirty dishes and pots. Keep anything that might smell good to a bear far away from your tent. If you can, store food in a bear-proof container, or suspended between two trees, or in your car's trunk. Some bears will break into cars and tear through the back seat to get into the trunk.

- Remove the grease can from gas and charcoal grills after every use, and turn the grill on "high" for several minutes after you're done cooking.
- Cover barbeque grills with aluminum foil before cooking, then dispose of the foil properly.
- Clean barbeque pits and grills thoroughly with an ammonia-based cleaner before leaving them outside.

Protect vulnerable areas and vulnerable buildings:

- Remove brush and cover around homes, corrals, and livestock pens, creating a 50-yard barrier.
- Electric fences work well to protect a specific site, such as an apiary, cabin, or landfill. Several factors influence the choice of material and design, including the size of the vulnerable area, the amount of bear activity, and local laws.
- If building in an area that's prone to bear damage, use strong construction materials. Solid frame construction, $\frac{3}{4}$ " plywood, strong, tight shutters, strong, tight doors, and steel plates will keep bears out.
- Locate camp sites and hiking trails in areas that aren't used much by bears.
- Clear hiking trails so you can see 50 yards down the trail.

Frighten them away from a site:

First, a caution: if a bear shows any aggressive behaviors—growling, hissing, popping its teeth, or if its ears are laid back and the hair on its back is raised—DO NOT attempt to harrass it and DO NOT approach the bear! It might attack. If the bear's aggressive, back off. (See the next section for information about what to do if you're attacked by a black bear.) If the bear is not aggressive:

- A combination of frightening techniques (noises and visual deterrents) may convince the bears to leave the area. As always, your chance of success increases if the techniques are used together and in an unpredictable fashion.
- The Critter Gitter® scare device, which combines noise and flashing lights, works well.

- Visual scare devices: night lights, strobe lights, and scarecrows will work.
- Frightening noises: propane cannons, loud music, air sirens, crackers, boat horns, banging on pots, and shouting will usually scare bears away.
- Guard dogs may be able to keep bear out of fenced areas, but few dogs are a match for a bear in a fight.
- Dogs can be used to chase bears away from an area in which they've caused problems (with a DEC permit, or during the dog training season). This is a special case—dogs cannot be used for bear hunting. This can be a very effective way to persuade bears to leave an area. Contact the DEC for a list of licensed dog handlers.
- For NWCOs with a commercial pesticide applicator license: Bear BeGone,[®] a device that looks like a plastic barrel, dispenses pepper spray when the bear enters the can and pulls the baited trigger.

What to do if you encounter a black bear:

- In New York, black bears rarely behave aggressively toward people but there have been fatal attacks. Be alert.
- If a wild bear approaches a person in a remote area, consider that a sign of aggression. (The same behavior from a bear that's used to people and is often fed illegally would not be considered aggressive.)
- Back off slowly. Watch out for cubs.
- DO NOT climb a tree or run away.
- You can usually frighten a bear away by making a lot of noise. Shout, clap your hands, throw objects, bang on pots, use a siren or boat horn, or rev an engine. Just don't go so far that the bear feels threatened enough to attack! Bears are pretty good at telling when someone is scared. If they realize you're scared, you can't easily bluff them.

What to do if you're attacked by a black bear:

- Immediately call for help if you can: call the DEC, local law enforcement, forest rangers.
- Fight back with all you've got. Hit the bear with rocks, sticks, your fists, or feet. Yell. Wave your arms and flap coats. If there's more than one person, stay together. If the bear is biting or mauling you, shoot it.
- DO NOT climb a tree or run away.
- DO NOT play dead—that seldom works with black bears.
- As soon as you can, slowly back away from the bear. Avoid the bear and any cubs.

- If the attack stops but the bear follows you, or you meet up with it again, wave your arms, flap your coats, yell, throw rocks and sticks and try to frighten the bear away.
- Pepper spray is effective when there's a close encounter with a black bear (its range is usually less than 30 feet). The active ingredient is capsaicin.

Trapping strategies:

Live traps:

- A NWCO would only trap a bear under the conditions specified in 11-0523 (see previous page) unless you have a special permit.
- Culvert trap: This is the most common trap used to capture bears. It's another variety of cage trap, although obviously much, much bigger than the kind you'd set to catch a woodchuck. A large culvert pipe is placed on a trailer or stand. Inside the pipe is a baited trigger, which closes the door. Culvert traps are very heavy, so they're hard to move and can't be used everywhere. They're also dangerous. Do not set one by yourself. Some have doors that weigh over 100 lbs. and can crush a person. Post warning signs to keep people away from the trap.
- After the bear is trapped, the handler may use nonlethal harassment techniques, such as shooting the bear with rubber buckshot, to stress the bear (contact your local DEC office to find out if you'd need a permit for this harassment technique). This training is called "aversive conditioning." Same idea as shouting "NO!" to make a dog upset when it's done something wrong. If it works, this conditioning should persuade the bear to avoid this area.
- Dart guns with drugs (barbiturates) can be used to help capture and handle bears. This is a complicated and risky technique best restricted to those with extensive training, experience, and skill. (You also need a license and protocol to use restricted drugs.) This isn't a great method to try with a free-ranging bear, but it can work in certain situations, such as when a bear's up on a telephone pole or tree. Of course, you have to be very careful during the entire process. Consider the location. A partially drugged bear wandering around a neighborhood is not a good thing. It's much better to trap the animal, or restrain it in some other fashion, before attempting to drug it. You'll need many people to help move the bear once it's drugged. And then, what do you do with the bear? A NWCO cannot release a bear.

Preferred killing methods:

- Shooting, using a 20-gauge or larger shotgun with a slug, or a center fire rifle (25-caliber or larger), or a pistol. Target the head, if no rabies testing is required, or the heart/lungs.
- Lethal injection of barbiturate

Control strategies that don't work particularly well, or aren't legal in New York:

- Although legal in some states, "bear traps," which are foothold traps that are larger than $5\frac{3}{4}$ ", are not legal in New York.
- Cable restraints are not legal for bear in New York.
- You cannot use fireworks to frighten bears in New York.