

Black Bears

Overview



Figure 1. Black bear (*Ursus americanus*). Photo by Scott E. Hygnstrom.

Habitat Modification

Sanitation, including bear-proof containers, removal or securing of bird feeders, and rapid burial of dead livestock

Cultural Modifications

Ban bear feeding

Fence livestock, particularly during birthing; remove carcasses

Locate camp sites in areas of low bear activity

Exclusion

Cable restraints

Other Methods

Chemical immobilization (permits required)

Heavy woven-wire or electric fences exclude bears from apiaries, cabins, dumpsters, landfills, and other high-value properties

Store food in bear-proof structures or on elevated platforms

Frightening

Install night lights and human effigies

Blaring music, pyrotechnics, and guard dogs may provide temporary relief from damage

Repellents

Capsaicin spray

Toxicants

None registered

Fumigants

None registered

Shooting

Black bears are a game animal in Alabama with no open season. Contact your local Wildlife and Freshwater Fisheries office to report a nuisance bear.

Trapping

Culvert and barrel traps

Avoiding Human-Bear Conflicts

Be familiar with safety precautions when camping or travelling in bear country. Never feed bears.

Objectives

1. Explain key elements about bear biology important for their control.
2. Effectively communicate control options to clients.
4. Describe how avoid bear damage.
5. Identify various risks involved with controlling bears.

Species Profile

Identification

Name

Black bear (*Ursus americanus*)

Description

Black bears are the only bear that naturally occupy Alabama (Figure 1). They are also the smallest and most widely distributed North American bear. Two subspecies of black bears occur in Alabama. They are massive, strongly built animals. Black bears east of the Mississippi are predominantly black, but in the Rocky Mountains and westward various shades of brown, cinnamon, and blond are common. The head is moderately sized with a straight profile and tapering nose. The ears are relatively small, rounded, and erect. The tail is short (3 to 6 inches) and inconspicuous. Each foot has five curved claws about 1 inch long that are non-retractable. Bears walk with a shuffling gait but can be quite agile and quick when necessary. They can run up to 35 miles per hour for short distances. They are adept at climbing trees and swimming.

It is important to be able to distinguish between black bears and grizzly bears (also called brown bears). Guard hairs of grizzlies have whitish or silvery tips, giving it a frosted or “grizzly” appearance. Grizzly bears have a pronounced

hump over the shoulder, a shortened, often dished face, relatively small ears, and long claws (Figure 2).

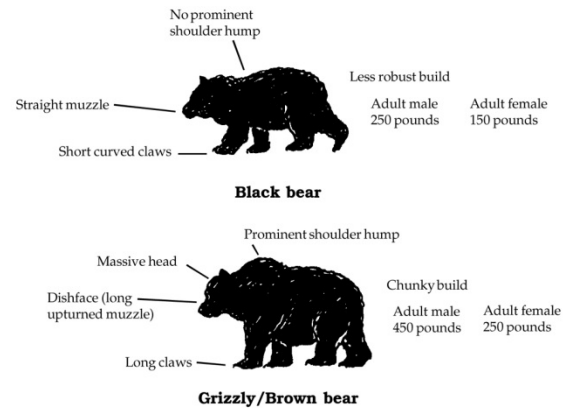


Figure 2. Distinctions between black and grizzly bears. Image by PCWD.

Size

Adult black bears typically weigh 100 to 400 pounds and measure from 4 to 6 feet long. Some adult males attain weights of over 600 pounds.

Voice

Bears normally are silent when travelling. They emit grunts with young and will blow and click their teeth when upset. Louder and staggered grunts are used by females to threaten unwanted males. Moans are uttered when they are fearful and in a subordinate role.

Tracks and Signs

Bear tracks are recognized easily by their shape and size (Figure 3). The tracks are dimorphic with the front foot rarely showing the heel. Front feet average 4½ inches in length and 4 inches in width. Rear feet are 6 7/8 inches by 3½.

Black bear scat varies in color and consistency due to their diet. Well-formed scat averages $2\frac{1}{2}$ inches in diameter and 5 to 12 inches long.

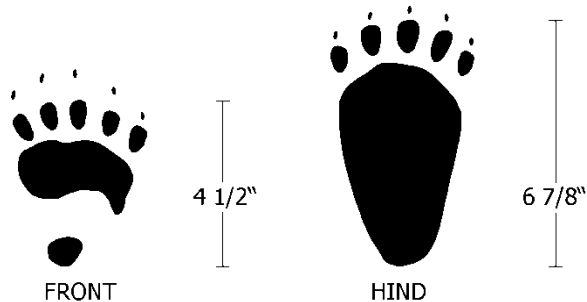


Figure 2. Black bear tracks. Image by Dee Ebbeka.

General Biology, Reproduction, and Behavior

Black bears are powerful animals that have few natural enemies. They are remarkably tolerant of humans. Interactions between people and black bears are usually benign. When surprised or protecting cubs, a black bear will threaten the intruder by laying back its ears, uttering a series of huffs, chopping its jaws, and stamping its feet. This may be followed by a charge, but in most instances it is only a bluff, as the bear will advance only a few yards before stopping. Few cases exist in which a black bear has charged and attacked a human. Usually, people are unaware that bears are in the vicinity. Most bears avoid people, except individuals that have learned to associate food with people. Food conditioning occurs most often at garbage dumps, campgrounds, and sites where people regularly feed bears, which is illegal in most states. Habituated, food-conditioned bears pose the greatest threat to humans. Wildlife managers often say, “A fed bear is a dead bear.”

Reproduction

Black bears breed during the summer, usually in late June or early July. Males travel extensively in search of receptive females. Both sexes are promiscuous. Fighting occurs between rival males and between males and unreceptive females. Dominant females may suppress breeding activities of subordinate females. After mating, the fertilized egg does not implant immediately, but remains unattached in the uterus until fall. Females in good condition usually produce 2 or 3 cubs that weigh 7 to 12 ounces at birth; urban bears have litters of up to 5 cubs. Females give birth between late December and early February while they are denning.

After giving birth, the sow may continue her winter sleep while the cubs are awake and nursing. Lactating females do not come into estrus, so females generally breed only every other year. Only the females care for young. Males will kill and eat cubs if they have the opportunity. Cubs are weaned in late summer but usually remain close to the female throughout their first year. This social unit breaks up when the female comes into her next estrus. After the breeding season, females and their yearlings may travel together for a few weeks. Black bears become sexually mature about $3\frac{1}{2}$ years of age, but some females may not breed until their fourth year or later.

Seasonal Behavior

Black bears typically are nocturnal, although occasionally they are active during the day. In the South, black bears tend to be active year-round; in northern areas, black bears undergo a period of semi-hibernation during winter. Bears spend this period of dormancy in dens (e.g.,

hollow logs, windfalls, brush piles, caves, and holes dug into the ground). Bears in northern areas may remain in their dens for 5 to 7 months, foregoing food, water, and elimination.

Species Range

Black bears historically ranged throughout most of North America except for the desert southwest and the treeless barrens of northern Canada. They still occupy much of their original range with the exception of the Great Plains, the Midwestern states, and parts of the eastern and southern coastal states (Figure 4). Black bear and grizzly bear distributions overlap in the Rocky Mountains, Western Canada, and Alaska.

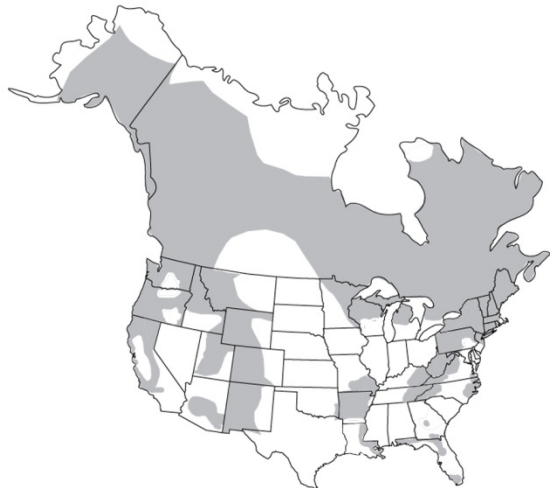


Figure 4. Range of the black bear in North America. Image by Stephen M. Vantassel.

In North America, densities of black bear range from 0.3 to 3.4 bears per square mile. Densities are highest in the Pacific Northwest because of the high diversity of habitats and long foraging season. The home range of black bears is dependent on the type and quality of the habitat and the sex and age of the bear. In mountainous regions bears encounter a variety

of habitats by moving up or down in elevation. Where the terrain is flatter bears typically range more widely in search of food, water, cover, and space. Most adult females have well-defined home ranges that vary from 6 to 19 square miles. Ranges of adult males usually are several times larger.

Habitat

Black bears frequent heavily forested areas, including large swamps and mountainous regions. Mixed hardwood forests interspersed with streams and swamps are typical habitats. Highest population growth rates are achieved in eastern deciduous forests where an abundance and variety of foods exist. Black bears also can forage in urban areas. Black bears depend on forests for their food, water, cover, and space.

Denning Cover

Dens for hibernating bears are quite variable throughout their range. Sites include rock piles, excavations, hollow trees, brush piles, and even human structures. Sometimes dens are lined with grass and leaves.

Food Habits

Black bears are omnivorous, foraging on a wide variety of plants and animals. Their diet typically is determined by the seasonal availability of food. Typical foods include grasses, berries, nuts, tubers, inner bark, insects, small mammals, eggs, carrion, and garbage (Figure 5). Food shortages occur occasionally in northern bear ranges when summer and fall mast crops (berries and nuts) fail. During such years, bears become bolder and travel more widely in their search for food. Human encounters with bears are more

frequent during such years, as are complaints of crop damage and livestock losses.



Figure 5. Black bear feeding on trash. Image provided by Gary R. Goff.

Legal Status

Black bears are protected by laws and regulations wherever they exist.

Safety

Preventing Bear Attacks. Black and grizzly bears have great strength and agility and will defend themselves, their young, and their territories if they feel threatened. Know the differences between black and grizzly bears. Knowledge and alertness can help avoid hazardous encounters with bears. Animals are unpredictable and bears can inflict serious injury. Never feed or approach a bear.

To avoid a bear encounter, stay alert and think ahead. Always hike in a group and talk or make noise while hiking. Most bears will leave the vicinity if they are aware of the presence of humans. Making noise may not be effective in dense brush or near rushing water. Be especially alert when traveling into the wind because bears may not pick up your scent and may be unaware of your approach. Stay in the

open and avoid sources of food, such as berry patches and carcasses. Bears may feel threatened if surprised. Watch for bear sign such as fresh tracks, digging, and scats (droppings). Detour around the area if bears or fresh sign are observed.

NEVER approach a bear cub. Adult female black bears are very defensive and may be aggressive, making threatening gestures (laying ears back, huffing, chopping jaws, stomping feet) and possibly making bluff charges. Black bears rarely attack humans but they have a tolerance range which, when encroached upon, may trigger an attack. Keep a distance of at least 100 yards between you and bears and keep constant watch. Try to put trees and other large objects between you and the bear. Clap your hands or yell to alert bears of your presence.

Bears are omnivores, eating both vegetable and animal matter; do not encourage them by leaving food or garbage around camp. When bears associate food with humans, they often lose their fear of humans and are attracted to campsites. Food-conditioned bears are very dangerous.

In established campgrounds, keep your campsite clean, and lock food in bear proof containers. Do not leave dirty utensils around the campsite. Do not cook, eat, or store food in tents. After eating, place garbage in bear-proof containers provided by the campground.

In the backcountry, establish camp away from animal or walking trails and near large, sparsely branched trees. Choose another area if fresh bear sign is present. Cache food away from your tent, preferably suspended from a tree 100 yards downwind. Hang food from a strong

branch at least 15 feet high and 8 feet from the trunk of the tree. Use bear-proof or airtight containers for storing food and other attractants. Freeze-dried foods are light-weight and relatively odor-free. Pack out all noncombustible garbage instead of burying it. Bears can easily smell and dig up food and garbage, and the attracted bear may become a threat to the next group of hikers. Always have radio communication and emergency transportation available for remote base or work camps in case of accidents or medical emergencies.

Do not take dogs into the backcountry. The sight or smell of a dog may attract a bear and provoke an attack. Most dogs are no match for a bear. When in trouble, the dog may run to the owner with the bear in pursuit. Trained guard dogs are an exception and may be useful in detecting and chasing bears from the immediate area.

Bear Confrontations. If a bear is seen at a distance, make a wide detour. Keep upwind if possible so the bear can pick up human scent and recognize human presence. Clap your hands or yell to alert bears of your presence. If a detour or retreat is not possible, wait until the bear moves from the path. Always leave an escape route and never harass a bear.

If a bear is encountered at close range, keep calm and assess the situation. A bear rearing on its hind legs is not always aggressive. If it moves its head from side to side it may only be trying to pick up scent and focus its weak eyes. Remain still and speak in low tones. This may indicate to the animal that there is no threat. Bears that show the profile of their body and watch you from the corner of their eye may be

posturing for a possible attack. Assess the surroundings before taking action. No method of handling an aggressive bear is guaranteed to save lives.

Do not run. Most bears can run as fast as a racehorse, covering 30 to 40 feet per second. Quick, jerky movements can trigger an attack. If an aggressive bear is met in a wooded area, speak softly and back slowly toward a tree. Climb at least 8 feet up the tree. Most black bears are agile climbers, so a tree offers limited safety, but you can defend yourself in a tree with branches or a boot heel. Adult grizzly bears do not climb but large ones can reach up to 10 feet.

Occasionally, bears will bluff by charging within a few yards of a person; sometimes they charge and veer away at the last second. If you are charged, attempt to stand your ground. The bear may perceive you as a greater threat than it is willing to tackle and may leave the area.

Black bears are less formidable than grizzly bears, and may be frightened if you act aggressively toward the animal. Do not play dead if a black bear is stalking you or appears to consider you as prey. Use sticks, rocks, frying pans, or whatever is available to frighten the animal away. As a last resort, when attacked by a grizzly bear, passively resist by playing dead. Drop to the ground face down, lift your legs up to your chest, and clasp both hands over the back of your neck. Wearing a pack will shield your body. Brown bears may inflict only minor injuries under these circumstances.

Many people who work in or frequent bear habitat carry weapons for personal protection. Pepper spray can be effective in repelling

aggressive bears but it does not always succeed. Select sprays specifically made for repelling bears. Read the directions carefully and practice BEFORE entering bear country. After spraying the bear, be prepared for a second attack.

If firearms are chosen, consider high-powered rifles (such as a .458 magnum with a 510-grain soft-point bullet or a .375 magnum with a 300-grain soft-point bullet) or shotguns (12-gauge with rifled slugs) are the best choices, followed by large handguns (.44 magnum or 10 mm). Always be well trained in firearm use and safety before attempting to shoot a bear. A wounded bear is more dangerous than a healthy bear. Killing a bear that is attacking a human is justifiable.

Wildlife Diseases

Bears suffer from a variety of internal and external parasites. The parasites of concern for humans include the worm responsible for trichinellosis and the protozoan that causes toxoplasmosis.

Surveys have revealed that a small percentage of bears contract tularemia, brucellosis, and leptospirosis. Relatively few bears have tested positive for rabies.

Damage Prevention and Control Methods

Damage Identification

Damage caused by black bears is diverse, ranging from trampling sweet corn fields and tearing up turf to destroying beehives and (rarely) killing humans. Black bears are noted for nuisance problems such as scavenging in garbage cans, breaking in and demolishing the interiors of cabins, and raiding campsites and food caches. Bears become a nuisance when

they forage in garbage dumps or damage bird feeders.

Black bears are the only animals besides skunks that molest beehives. Evidence of bear damage includes broken and scattered combs and hives with claw and tooth marks. Hair, tracks, scats, and other sign may be found in the immediate area. A bear usually will use the same path to return every night until all of the brood, comb, and honey are eaten.

Damage to Humans

Black bears occasionally threaten human health and safety. Dr. Stephen Herrero documented 500 injuries to humans resulting from encounters with black bears from 1960 to 1980. Of these, 90% were minor injuries (minor bites, scratches, and bruises). Only 23 fatalities due to black bear attacks were recorded from 1900 to 1980. These are remarkably low numbers considering the geographic overlap of human and black bear populations. Ninety percent of all incidents likely were associated with habituated, food-conditioned bears.

Damage to Structures

Black bears can damage homes and vehicles in search of food.

Damage to Animals

Few black bears kill livestock but the behavior, once developed, usually persists. The severity of black bear predation makes solving the problem very important to the individuals who suffer the losses. If bears are suspected, look for deep tooth marks (about ½ inch in diameter) on the neck directly behind the ears. On large animals, look for large claw marks (½ inch between individual marks) on the shoulders and sides.

Bear predation must be distinguished from coyote or dog attacks. Coyotes typically attack the throat region. Dogs chase their prey, often slashing the hind legs and mutilating the animal. Tooth marks on the back of the neck usually are not found on coyote and dog kills. Claw marks are less prominent on coyote or dog kills, if they are present at all.

Different types of livestock behave differently when attacked by bears. Sheep tend to bunch up when approached; three or more will often be killed in a small area. Cattle tend to scatter when a bear approaches; cattle kills usually consist of a single animal. Hogs can evade bears in the open and are killed more often when confined. Horses rarely are killed by bears, but they do get clawed on the sides.

After an animal is killed, black bears will typically open the body cavity and remove the internal organs. The liver and other vital organs are eaten first, followed by the hindquarters. Udders of lactating females also are preferred. When a bear makes a kill, it usually returns to the site at dusk. Bears prefer to feed alone. If an animal is killed in the open, the bear may drag it into the woods or brush and cover the remains with leaves, grass, soil, and forest debris. The bear will periodically return to this cache site to feed on the decomposing carcass.

Damage to Gardens and Landscapes

Field crops such as corn and oats occasionally are damaged by hungry black bears. Large, localized areas of broken, smashed stalks show where bears have fed in cornfields. Bears eat the entire cob, whereas raccoons strip the ears from the stalks and chew the kernels from the ears. Black bears prefer corn in the milk stage.

Bears can cause extensive damage to trees, especially in second-growth forests, by feeding on the inner bark or by clawing off the bark to leave territorial markings. Black bears damage orchards by breaking down trees and branches in their attempts to reach fruit. They often will return to an orchard nightly once feeding starts. Due to the perennial nature of orchard damage, losses may be economically significant.

Integrated Pest Management

Timing

Bears can be problematic any time they are not hibernating. Harvest time, however, is a particularly difficult time as bears are gaining weight for winter.

Economics of Damage and Control

Black bear damage to the honey industry is a large concern. In 1976, damage to apiaries in the Peace River area of Alberta was estimated at \$757,330 (2010 dollars). Damage incidents in Yosemite National Park were estimated to be as high as \$113,197 in 1975, with \$96,594 resulting from damage to vehicles in which food was stored. In 1998, 1,584 bear incidents were reported, costing more than \$650,000 in damage. Thirty percent of all trees over 6 inches tall were reported to be damaged by black bears on a 3,360 acre parcel in Washington State. In 1987 in Wisconsin, 1 female black bear and her cubs caused an estimated \$66,272 in damage to apple trees during a 2-day period in (2010 dollars). In general, black bears can inflict significant economic damage in localized areas.

Some states pay for damage caused by black bears. In western states, losses caused by black bears usually are less than 10% of total predation losses, although records are not

complete. The extent of claims paid are not high but usually are greater than the license income that state wildlife agencies receive from black bear hunters.

Habitat Modification

Prevention is the best way to control black bear damage. Sanitation and proper garbage management are keys to successful damage management. Store food, organic wastes, and other bear attractants in bear-proof containers. Use garbage cans for nonfood items only and place food waste in bear proof garbage receptacles. Implement regular garbage pickup and practice incineration. Surround dumpster sites at camp grounds with electric fencing. Reduce access to landfills through fencing, and bury refuse daily. Eliminate garbage dumps. Only feed birds during the winter months while bears are denning. In the north, bears are active from April through November.

Place livestock pens and beehives at least 50 yards away from wooded areas and protective cover. Surround them with electric fencing. Confine livestock in buildings and pens, especially during lambing or calving seasons. Remove carcasses from the site and dispose of them by rendering or deep burial.

Plant crops (corn, oats, fruit) away from areas of protective cover. Pick and remove all fruit from orchard trees. Remove protective cover from a radius of 50 yards around occupied buildings and residences. Locate campgrounds, campsites, and hiking trails in areas that are not frequented by bears to minimize human/bear encounters. Avoid seasonal feeding and denning areas and frequently used game trails. Where possible, clear hiking trails to provide a

minimum viewing distance of 50 yards down the trail.

Black bears are strong enough to tear open doors, rip holes in siding, and break glass windows to gain access to food stored inside cabins, tents, and other structures. Use solid frame construction, 3/4-inch plywood sheeting, and strong, tight-fitting shutters and doors. Steel plating is more impervious than wood.

Bear-proof containers (Figure 6) are available for campers in a variety of sizes. They can be used to safely store food and other bear attractants during backpacking trips or other outdoor excursions. In the absence of bear-proof containers, store food in airtight containers and suspend them by rope between two tall trees that are at least 100 yards downwind of your campsite.



Figure 6. Bear-proof trash can. Photo by Stephen M. Vantassel.

Place one or two beehives (Figure 7) on a flat or low-sloping garage roof. Add extra roof braces; two hives full of honey can weigh 800 pounds or more. An innovative technique for beekeepers is to place hives on a fenced (three-strand electric) flatbed trailer (8 x 40 feet). Though expensive, this method makes hives less vulnerable to bear damage and makes moving them very easy.



Figure 7. Hive damaged by a bear. Photo supplied by Paul D. Curtis.

Exclusion

Fencing has proven effective in deterring bears from landfills, apiaries, cabins, and other high-value properties. Fencing, however, is a relatively expensive abatement measure. Consider the extent, duration, and expense of damage when developing a prevention program.

Numerous fence designs have been used with varying degrees of success. Electric fence chargers increase effectiveness. Depending on the amount of bear pressure, use an electric polytape portable fence (Figure 8), or a welded-wire permanent fence (Figure 9). One person can easily and quickly install this fence. It is economical and dependable for low to moderate bear pressures. The fence consists of

four strands of electric polytape that are attached to posts with insulators. Materials required for this fence include:

- One 200-yard roll of polytape
- 12 4-foot fence rods (5/16-inch diameter)
- 48 insulators or clips
- Four gate handles
- One 12-volt fence charger
- One 12-volt deep cycle battery
- Herbicides

To install: Drive in four corner posts 1 foot deep and attach a guy wire. Clip vegetation in a 15-inch-wide strip under the fence and apply herbicide. Attach insulators on the inside of corner posts and stretch the electroplastic wire from the four posts at intervals of 6, 16, 26, and 36 inches from ground level. Hand-tighten the polytape and join the ends with four square knots. Drive in the remaining posts at 12-foot intervals, attach insulators (on the outside of line posts), and insert polytape.

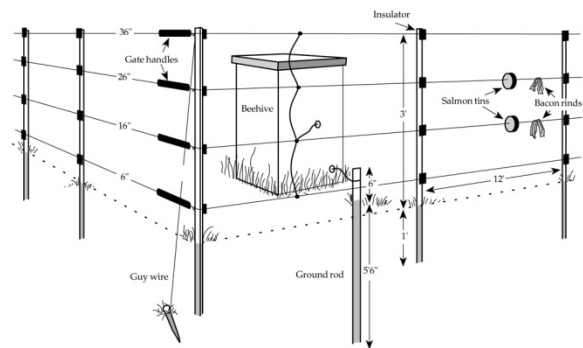


Figure 8. Electric polytape portable fence. Image by PCWD.

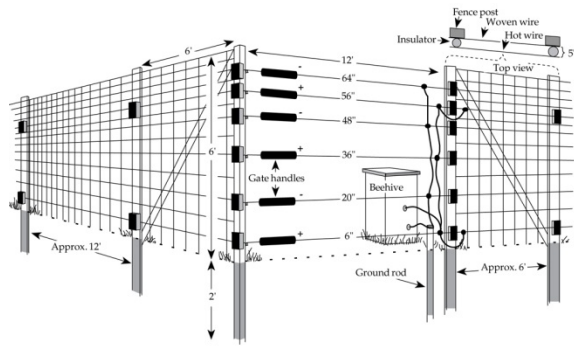


Figure 9. Woven-wire permanent fence. Image by PCWD.

The following fence, best used under high bear pressure, is the most durable and expensive barrier. It can be installed by two people in 8 hours. The fence consists of heavy, 5-foot woven wire, supported by wooden posts, ringed by two additional electrified wires. Materials required for this fence include:

- One 50-yard roll of 6-inch square mesh, 5-foot woven wire
- One 150-yard roll of high-tensile (14-gauge) smooth wire
- 24 8-foot treated wooden posts
- 40 Porcelain strain-insulators (screw-in types)
- One 2-pound box of 1½-inch fence staples
- 6 gate handles
- One 12-volt fence charger
- One 12-volt deep cycle battery
- Herbicides

To install: Set posts 6 to 12 feet apart in 2-foot-deep holes. Align four corner posts at 5° angles from the vertical. Brace corner and gate posts from the inside with posts set at 45° angles. Clip a 15-inch-wide strip clear of vegetation under the fence and apply herbicide. Place one length of welded wire vertically into position and staple the end to a corner post. Pull the entire

length of wire taut with a vehicle and staple the welded wire to the line posts. Continue until all sides, except the gate opening, are fenced. Fasten 2 strands of high-tensile wire to insulators positioned 5 inches away from the welded wire, at intervals of 6 and 56 inches above ground level.

For a 12-foot gate opening, attach 3 strands of high-tensile wire to insulators on the gateposts. Space the wires at intervals of 6, 36, and 56 inches above ground level. Connect them to the two strands previously strung around the fence. These wires will be connected to the positive fence charger terminal. Attach three more wires to gatepost insulators at intervals of 20, 48, and 64 inches above ground level. These three wires will be connected together and to the ground rod. Fit insulated gate handles to the free ends of all six gate wires.

Fence Energizing System and Maintenance. To energize the fences, use a 110-volt outlet or 12-volt deep cell (marine) battery connected to a high-output fence charger. Place the fence charger and battery in a case or empty beehive to protect them against weather and theft. Drive a ground rod 5 to 7 feet into the ground, preferably into moist soil. Connect the ground terminal of the charger to the ground rod with a wire and ground clamp. Connect the positive fence terminal to the fence with a short piece of fence wire. Use connectors to ensure good contact. Electric fences must deliver an effective shock to repel bears. Bears can be lured into licking or sniffing the wire by attaching attractants (salmon or tuna tins and bacon rinds) to the fence. Grounding may be increased, especially in dry, sandy soil, by laying grounded chicken wire around the outside perimeter of the electric fence.

Check the fence voltage each week at a distance from the fence charger; it should yield at least 3,000 volts. To protect against voltage loss, keep the battery and fence charger dry and their connections free of corrosion. Make certain all connections are secure and check for faulty insulators (arcing between wire and post). Clip vegetation beneath the fence. Each month, check the fence tension and replace baits with new salmon tins and bacon rinds. Always recharge the batteries during the day so that the fence is energized at night.

Frightening Devices

Black bears can be frightened from an area (such as buildings, livestock corrals, orchards) by the extended use of night lights, strobe lights, loud music, pyrotechnics, exploder canons, scarecrows, Critter Gitters (motion and heat activated audio-visual frightening device), and trained guard dogs. The position of such frightening devices should be changed frequently. Over a period of time, animals usually become habituated to scare devices and human activity, too. At this point, scare devices are ineffective and human safety becomes a concern.

Black bears are occasionally encountered in the backcountry on trails or at campsites. They can usually be frightened away by shouting, clapping hands, throwing objects, clanging pots and pans, and by chasing.

Aversive conditioning utilizes unpleasant experiences to “punish” and educate bears to stop certain behaviors such as visiting landfills or getting too close to urban areas. Tactics include the use of cracker shells, 12-gauge plastic slugs, gel filled paint balls, bean bags, or 38-mm rubber bullets. Aim for the large muscle

mass in the hind quarters. Avoid the neck and front shoulders to minimize the risk of hitting and damaging an eye. Firearm safety training is recommended.

Determine the motivation of offending bears. Habituated, food-conditioned bears can be very dangerous. Aggressive behavior toward a black bear should not be carried so far as to threaten the bear and elicit an attack.

Repellents

Capsaicin or concentrated red pepper spray has been tested and used effectively on black bears. The spray range on most products is less than 30 feet , so capsaicin is only effective in close encounters. Capsaicin spray may become more popular where use of firearms is limited.

Toxicants

No toxicants are registered for bear control.

Fumigants

No fumigants are registered for bear control.

Shooting

Black bears are a game animal in Alabama with no open season. Contact your local Wildlife and Freshwater Fisheries office to report a nuisance bear. Shooting is effective, but often a last resort in dealing with a problem black bear. Permits are required in Alabama as well as most other states and provinces to shoot bears out of season. To increase the probability of removing the problem bear, shooting should be done at the site where damage has occurred. Baiting bears is illegal in many states and should only be used to remove nuisance bears. Permits are required for baiting bears in most states. Bears are most easily attracted to bait from dusk to

dark. Place bait in the damaged area where there are safe shooting conditions and clear visibility. Use large, well-anchored carcass baits or heavy containers filled with rancid meat scraps, fat drippings, and rotten fruit or vegetables. Establish a stand roughly 100 yards downwind from the bait and wait for the bear to appear. Strive for a quick kill, using a rifle of .30 caliber or larger. The animal must be relinquished to wildlife authorities in most states and provinces.

Hunting Dogs. Some states allow the use of dogs to hunt bears. Guides and professional hunters with bear dogs can be called for help. Place the dogs on the track of the problem bear. Often the dogs will be able to track and tree the bear, allowing it to be killed and thus solving the bear problem.

Trapping

Cage

Culvert and Barrel Traps. Trapping black bears in culvert or barrel traps is highly effective and convenient (Figure 10). Set one or two culvert traps in the area where the bear is causing a problem. Post warning signs on and in the vicinity of the trap. Use bait to lure the bear into the trap. Successful bait includes decaying fish, beaver carcasses, livestock offal, fruit, candy, molasses, and honey. When the trap door falls, the bear is safely held without a need for dangerous handling or transfer. Bears can be immobilized, released at another site, or destroyed if necessary.



Figure 10. Culvert trap for bears. Photo provided by Paul D. Curtis.

Cable Restraints

Cable Restraints. A variety of cable restraints are available for capturing bears. The Aldrich-type cable restraint (Figure 11) is used extensively by USDA-APHIS-Wildlife Services and state wildlife agency personnel to catch problem bears. This method is safe when used correctly and allows for the release of nontarget animals. Bears captured in this manner can be tranquilized, released, translocated, or destroyed. Use baits as described previously to attract bears.

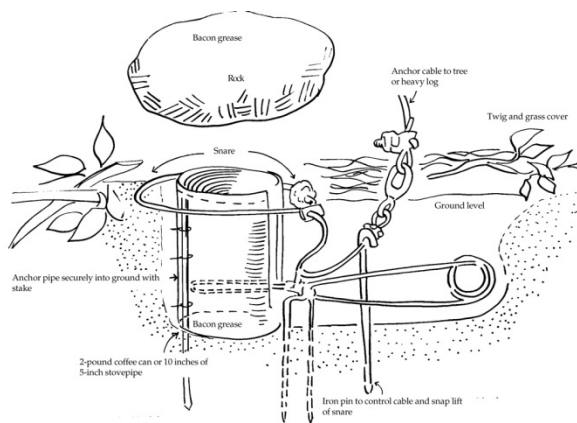


Figure 11. Aldrich cable restraint for black bears. Image by PCWD.

The tools required for the pipe set include an Aldrich cable restraint complete with the spring throw arm, a 9-inch long, 5-inch diameter piece of stove pipe, iron pin, hammer, and shovel. Cut a 1-inch slot, 6½ inches long, down one side of the pipe. Place the pipe in a hole dug 9 inches into the ground. Cut a groove in the ground to accommodate the spring throw arm so that the pan will extend through the slot into the center of the pipe. The top of the pipe should be level with the ground surface. Anchor the pipe securely to the ground, where possible, by attaching it to spikes or a stake driven into the ground inside the can. Bears will try to pull the pipe out of the ground if it gives. The spring throw arm should be placed with the pan extending into the pipe slot 6 inches down from the top of the pipe. Pack soil around the pipe 1 inch from the top. Leave the pipe slot open and the spring uncovered. Loop the cable around the pipe, leaving ½ inch of slack. Place the cable over the hood on the spring throw arm, then spike the cable to the ground in back of the throw arm. The cable is spiked to keep it flush to the ground so that it will not unhook or spring up prematurely. Cover the cable loop with soil to the top of the pipe. Anchor the cable

securely to a tree at least 8 inches in diameter. Cover the spring throw arm and pipe slot with grass and leaves.

Place some boughs and brush around the set to direct the bear into the pipe. The slot in the pipe and the spring throw arm should be at the back of the set. The bear can approach the set from either side or the front. Melt bacon into the bottom of the pipe and drop a small piece in. The bacon should not lie on the pan. Other bait or scent, such as a fish-scented rag, may be used. Place a 15 to 20-pound rock over the top of the pipe. Melt bacon grease on the top of it or rub it on. The rock will serve to prevent humans, birds, nontarget wild animals, and livestock from being caught in the snare.

A bear will approach the set and proceed to lick the grease off the rock. It will roll the rock from the top of the pipe and try to reach the bait with its mouth. When this fails, it will use a front foot, which will then be caught in the snare. The bear will try to reach the bait first with its mouth and may spring the set if the pan is not placed the required 6 inches below the top of the pipe.

The MB15 Bear Foot Snare offers another option for foot-snaring bears (Figure 12).



Figure 12. M15 Bear Foot Snare. Photo by Wildlife Control Supplies, LLC.

Other Methods

Chemical capture of bears is effective in removing bears without killing them. The drugs are highly restricted and their use requires a team of people experienced and capable of monitoring and moving tranquilized bears.

Disposition

Relocation

Relocation is discouraged unless the situation involves a rescue.

Translocation

Translocation of problem bears has a mixed record of success. Trapped bears that are released should first be transported at least 50 miles, preferably across a substantial geographic barrier such as a large river, swamp, or mountain range, and released in a remote area. Some bears have returned from as far as 120 miles from their release sites. Occasionally, food-conditioned bears will be repeat offenders. A problem bear should be released

only once. If it causes subsequent problems it should be destroyed. Translocation is often combined with aversive conditioning. Bears transported and released from culvert traps are shot with rubber buckshot and gel scram paintballs.

Euthanasia

Bears can be euthanized by shooting or lethal injection.

Disclaimer

Implementation of wildlife damage management involves risks. Readers are advised to implement the safety information provided in the first volume of the National Wildlife Control Training Program. Some control methods mentioned in this document may not be legal in your location. Wildlife control providers must consult relevant authorities before instituting any wildlife control action.

Resources and Acknowledgments

Web Resources

ICWDM.org

http://www.mass.gov/dfwele/dfw/wildlife/facts/mammals/bear/black_bear_home.htm

http://www.tpwd.state.tx.us/publications/pwd_pubs/media/pwd_bk_w7000_0013_louisiana_black_bear.pdf

Range map adapted from NatureServe, September, 2007.

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