

Black Bears



Colorado Division of Wildlife 6060 Broadway, Denver, Colorado 80216 Northeast Region Service Center 303-291-7227 **)** • . .

Wild Neighbors

The Humane Approach to Living with Wildlife

The Humane Society of the United States Washington, D.C.

Edited by John Hadidian Guy R. Hodge John W. Grandy





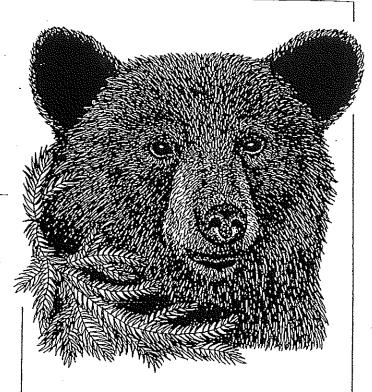
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Black Bears

The black bear lives throughout most of Canada and is widely distributed in the eastern and western parts of the United States.

Human-bear encounters usually occur away from residential areas, in parks or other open spaces. Around homes, bears may pass through to inspect gardens, compost bins, beehives or outdoor barbecues.

The largest bears found in the United States come from Pennsylvania.



IN MANY PARTS OF THE COUNTRY bear sightings are increasing. Part of the reason for this is that the "sub-urbs" are increasingly encompassing wildlife habitat. We infringe on their homes and force the issue of encounters. Some inward migration also occurs, however, where habitat has returned to places previously made so unsuitable for animals that the human residents are unaware wildlife could (or should) even be there.

In New England, for example, forests are returning, as much of the farmland was abandoned after the colonists discovered they could reach far richer soils to the west. Now as much as 70 percent of the land previously cleared and worked for agriculture has reverted back to forest, some of it mature enough to support bears. Traditional conflicts between humans and bears involved agricultural depredation and such time-honored scenarios as bear raids on beet, hives. Assaults on garbage cans can now be added, as well as occasional attempts to establish winter dens under porches and decks and miscellaneous run-ins with domestic pets.

Because they are large and powerful animals, encounters with bears must be taken seriously. While contacts are potentially quite serious, the frequency with which these actually happen is remarkably low. Yet it seems like every encounter with bears receives headline attention in the press. No doubt, more people are bitten, stepped on or injured each year by horses than by bears, yet these events almost never make the news.

Natural History

Classification and Range

The black bear (Ursus americanus) is the most widespread and smallest of the three bears found in North America, with the larger polar (Thalarctos maritimus) and brown (U. arctos spp.) bears much more restricted in their distribution. The grizzly is the best known of a group of closely related brown bears that are among the most formidable carnivores in the world. Fortunately, they tend to shy away from places where people are, and remain more or less restricted to remote natural areas, where they rule. Black bears range completely throughout Canada, the eastern United States and throughout the West, excluding most of the Great Plains and Great Basin areas. In general, the range of black bears follows the range of the older, more mature forests wherever these are, or have been restored.

Reproduction

Bears are slow breeders. Cubs are born in late January or February and remain with the mother for the first two years of life. She does not breed again until they are old enough to survive on their own. Add to this the fact that females do not usually begin breeding until they are between three and five years of age, and it is clear that this animal's reproductive patterns keep its populations lower than many other animals.

Habitat

Bears occupy a variety of habitats in areas where large enough blocks of undisturbed

(by humans) land is available to them. In the East, deciduous woodlands are favored; in the Southwest, chaparral and scrub forests may be used. That bears require fairly large areas to sustain themselves and that they have a general intolerance toward one another (outside of the mother-cub relationship) contribute to the low population densities typical of them. The movements of individuals within their range vary according to the seasonality of preferred foods.

Diet

Many people assume bears are exclusively meat-eaters while, in fact, plant foods make up the bulk of their diet. Ripening fruits, berries and nuts are eaten heavily, but when these are not available the average black bear can be found grazing on leafy or herbaceous vegetation (the way a cow would). The animal material eaten includes insects, occasional small live prey, such as deer fawns, and carrion.

Dens

Dens are occupied during the winter for hibernation. Even in the South most bears enter into some sort of period of dormancy, although it may not last as long nor be as profound as the winter sleep of bears farther north. Rock ledges, brush piles, hollow trees and occasional human-provided dens, such as areas under decks and patios or culvert pipes, are used to take refuge from winter snows.

Public Health

There are no significant diseases or parasites that afflict bears and can be transmitted to humans. *Rabies* does occur in these animals but is so rare that no confirmed exposures of humans are in the record.

Problems and Their Solutions

Problems

Fortunately, bears do not make dens in chimneys or attics. They will den occasionally under decks or porches, especially in summer houses or residences that are used sporadically. They raid gardens and get into trash with a facility that aptly demonstrates their size and power. They also occasionally cause significant damage to beehives.

Solutions

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Tolerance

As with all of the animal issues discussed in this book, tolerance and understanding have a key role to play in how we approach resolving conflicts, even (or maybe especially) with animals as large and formidable as bears. Large animals tend to be potentially more dangerous to people than small ones, admittedly, but they also tend to be less common and tend to need a larger living area, or home range, to sustain them. Thus, for the individual homeowner, an encounter with a bear might be a once-in-a-lifetime event. The animal might be a youngster moving out of its mother's home range, or dispersing to look for a suitable home for itself, or it might be an adult that has come by the house to investigate a smell or sound that attracted its attention. Once it has figured out that the attraction is related to humans, it is likely to head over the mountain and not be seen or heard from again.

Exclusion

Where bears are a serious problem and repeatedly cause depredation on a specific resource (such as a set of beehives), electric fencing is the recommended tool for use as a deterrent (see Chapter 3). Such fencing can also be used to protect campsites, refuse sites and other areas that might attract curious bears.

HABITAT MANAGEMENT

Do not place trash cans outside at night. If trash must be placed out at night, then an investment in a "bear-proof" can is the way to go. A useful publication on this subject is Animal Resistant Garbage Containers (1995, USDA Forest Service publication 9523 1205-SDTDC by Lester Sinclair), published by the U.S. Forest Service and available from the Superintendent of Documents, Government Printing Office.

Stockade enclosures that will hold most bears at bay can also be built. It is important not to try to keep an open compost pile in bear country, especially one in which household refuse is dumped. Enclosed recycling bins are advised if refuse must be stored outside a secure outbuilding. Even ruggedly built bins may be broken into by determined bears, however. Burying compost is not advised because bears will easily dig it up if motivated by enticing odors. Keep grills that are on back decks or close to the house clean and as free of drippings as possible. Preferably, move the grill well away from the house when it is not being used.

MINIMIZING CONTACT

As with other large and potentially dangerous mammals, there are rules about encounters with bears that can help to minimize the possibility of people putting themselves in danger. The rules described here for black bears are, we caution, different from those for dealing with brown or polar bears. These bears are extremely dangerous in close encounters, while black bears are always more likely to withdraw than confront humans, even when surprised. People are usually afraid of bears, and sometimes in thinking that they might be attacked or even eaten,

will react to encounters in ways that actually increase the likelihood of injury.

Never try to approach a bear to drive it off! Shouting, banging objects together, making as much noise as possible and looking as big as possible (by spreading your arms, or better, coat outward) are all effective responses. The key here is to let the bear know you are a human. Running away from a bear is not said to be dangerous, as it is with cougars, because the bear is usually turning in the opposite direction to run itself. Throwing things at the bear and even hitting it in the rump if you can are excellent ways to get it to move off. In the rare instance where a black bear bluff charges, the experts advise standing still. The bear does this only as a warning and invariably turns and moves off after the display.

ERRANT BEARS

Young bears dispersing from the area in which they were born and in search of a suitable home for themselves sometimes find themselves in suburbia without a good idea of how to get out. Frequently enough this leads to a perceived crisis, in which the bear climbs a tree, a telephone pole or anything it can reach to get away from people, who only gather in larger crowds as word spreads of the curiosity. Confusion and uncertainty, coupled with inexperience and a misconception of the threat such an animal poses, can often lead to fatal consequences for the bear. This does not have to happen if a little foresight and planning are applied to make sure that qualified and properly equipped wildlife professionals orveterinary assistance can be called upon. Leaving the bear alone and giving it the opportunity to move off by itself is always the preferred solution. Tranquilization and removal of the trespassing bear can save a life, or it can take one, because this procedure is always a high risk for the bear. In forced situ-

ations, however, removal may be the best solution to protect both humans and the bear.

Repellents

The pepper repellent that is marketed for repelling human attackers has also been used to repel bears. Much tested in parks where panhandling bears are a problem, the spray has been generally proven to work and to be effective at chasing bears from campgrounds. The smarter bears, however, learn the effective range (usually about 10 to 12 feet) and stand just beyond that when they encounter humans whom they suspect of intending to use the spray on them.

A Last Word

It is possible that human-bear encounters will become more frequent in the future. People are increasingly entering bear habitat, and bears are returning to places from which they had been previously displaced. As serious as encounters between people and bears might be, the solution to conflicts will not be to manage bear populations through hunting or deliberate actions intended to lower population density.

Additional Sources

Kolenosky, G. B., and S. M. Strathearn. 1987. "Black Bear." In M. Novak, J. A. Baker, M. E. Obbard, and B. Malloch (eds.), Wild Furbearer Management and Conservation in North America. Ontario: Ministry of Natural Resources. 443-54.

Pelton, M. E. 1982. "Black Bear." In J. A. Chapman and G. A. Feldhamer (eds.). Wild Mammals of North America.
Baltimore: Johns Hopkins University Press. 504–14.

<u>RETAILER LIST</u> (Local retailers who carry or can order bear-resistant trash containers). This is a partial list only; please call your local retailer to see if a bear-resistant trash can or container is in stock or can be special ordered for you.

A& A Trading Post 175 W Kiowa Ave Elizabeth, CO (303) 646-9366 Parker Ace Hardware 11402 S Parker Rd Parker, CO (303) 841-3230 United Building Centers 600 Sawmill Rd, P.O Box 3526, Durango, CO (970) 259-0340

Ace Hardware 561 Lone Pine Dr Estes Park, CO (970) 586-8656 True Value 461 E Wonderview Ave Estes Park, CO (970) 586-3496 McGuckin Hardware 2525 Arapahoe Boulder, CO (303) 443-1822

Big John's Building 1210 Devereux Rd Glenwood Springs, CO (970) 945-1252

Glenwood True Value 1525 Grand Ave Glenwood Springs, CO (970) 945-9453

Ace Hardware 74 Hwy 119 South Nederland, CO (303) 258-3132 Sanders True Value 160 6th St Silverthorne, CO (970) 262-1338

Big Tool Box 8080 S Holly St Littleton, CO (303) 779-8822 Ted's Hardware 4100 Ute Hwy Lyons, CO (303) 823-6531

BMC West 38005 Hwy 82 Aspen, CO (970) 925-4262 The Hardware Showbarn Center Evergreen, CO (303) 674-3345

Foxworth-Galbrath Colorado Springs, CO True Value 2959 W. US Hwy 40 Steamboat Springs, CO (970) 879-8014

The Division of Wildlife provides this information as a service. No claims are made regarding the listed Bear-Resistant Trash Containers, Manufacturers and Retailers in Colorado. Updated July, 2004 Colorado Division of Wildlife, Information & Education, Northeast Region 303/291-7366 or 291-7328

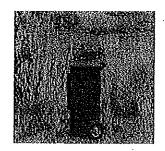
Bear-Resistant Trash Containers - COLORADO MANUFACTURERS & RESOURCES

Bears are very resourceful and strong. No trash can is 100% effective at keeping out wildlife. Do not attract bears to your property by improper trash storage. Keep your trash storage area as clean as possible: any smells will attract bears, whether or not they can reach your trash!

BearProof, Inc.

234 S. Golden Drive Silt, CO 81652 (970) 309-2460 Bill Neil www.BearProofInc.com

All metal food & trash lockers for 32 & 95 gal containers. Metal curbside rollaway containers, powder coated.



Colorado Correctional Industries

East Canon Complex - Bldg 97 Box 1600 Canon City, CO 81215-1600 Contact: Jack (719) 269-4540 www.cijvp.com

Numerous models available. Powder coated. HC accessible. 95 gal steel cart rolls to curb.



Solid Waste Systems ++

7855 East Lark Drive Parker, CO 80138 Owner: Brandon Mauk (303) 840-3390 www.bearproofsystems.com

Tested and Certified Against Grizzlies. 64 & 94 gal Poly Residential Curbside Containers, Front Load, Rear Load & More.



Bear Resistant Trash Containers

The simplest option for protecting your trash from bears and other wildlife is to keep it inside until the morning of trash pickup. This can include storing in a garage or sturdy shed. Other options would include sturdier, bear resistant trash containers and enclosures. Some suppliers of bear resistant trash containers are listed below. Bear resistant enclosures can be built or purchased at most hardware stores (ex. JOBOX). Homeowners may want to contact their trash company regarding container choices for availability and truck compatibility.

Solid Waste Systems
Clyde Mauk 303-840-3390, 800-944-7973
Single family, 95 gallon wheeled cart with special hasp lock.
\$90 each, plus delivery. Delivery charge depends on quantity ordered.

Western Container 888-424-0244 Plastic 95 gallon drum, thick sides, screw on lid. Quoted \$142.50.

May Manufacturing 303-423-6200 3 cubic yard dumpster. Quoted \$673.

Bear Proof Trash Can Lids

J.W. Reffel Metals Foundry 2650 S. Tejon St. Englewood, CO 80110

Contact: Ronda Krening Phone: (303) 934-5679 Fax: (303) 935-6325

- > Lids must be ordered in quantity of 25
- > It is OK to divide orders up among several agencies
- ➤ Come in black or brown
- > With or without the word "REFUSE" on them
- > Trash can lids will be made so that the inside diameter will be 24" (Fits a 55 gallon drum)

If your area considers an order, please contact Matt Cox at Jefferson County Open Space (303) 271-5984 or mcox@co.jefferson.co.us, as they are also looking to order some trash can lids.

bears/food

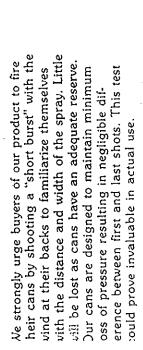
There is a new bear-resistant container for backpackers. It was bear-proof in tests but a few wild bears, habituated to human foods, have gained entry. The device is called URSACK and can be reviewed, ordered etc. at www.ursack.com

For containers in vehicles, best advice is to keep all items covered with a tarp (visual barrier) and don't take highly odorous foods (i.e what the cooking shows call aromatics and we call herbs and spices). A major problem with camp trailers and slide-in campers is the residual odors in grease in the venting systems. Owners rarely clean the vents, fans, etc over the stoves. These are usually the point of initial attack. So, we might want to remind the RV crowd of this.

If you really want bear proof, you can buy clean barrels in 30 gal and 55 gal size that have metal lids and a metal band which locks the lid on. They work. Ice chest fit inside, as do most food containers. Such containers should be standard in areas with chronic bear problems. I routinely store my food in such containers when in camp.

It is far easier to prevent bad behavior than to rectify said behavior.

Also: we should be clear that no system is 100%. Our goal should be major reduction, not elimination.



DESIGNED TO BE USED WITH ONE HAND When ordering holster or can, indicate right or left

Place forefinger through hole in handle with thumb o Arm

on orange safety clip curl. Vith thumb pull safety

slip straight back and off.

Depress red actuator tab or burst of spray.



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Boulder, CO 80302

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RED ACTUATOR TAB

Mountain Miser, Ltd.

Englewood, CO 80110

209 West Hampden

(303) 761-7070

Replace orange safety clip by pushing firmly with humb until audible" snap" is heard. To Disarm

Check to see if safety is completely in place. No gap should be visible between actuator handle and safety

Antidote: Flush with soap (Dawn) and/or water or milk



Bushwacker Backpack & Supply Co., Inc. P.O. Box 4721 : Missoula, Montana 59806 (406) 728-6241



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COUNTER ASSAU REPETERN



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DR. CHARLES JONKEL
DIRECTOR
BORDER GRIZZLY PROJECT
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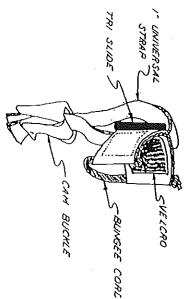
COUNTER ASSAULT was

developed by William Pounds with the cooperation of the Border Grizzly Project, University of Montana, in order to deter bears in a nontoxic, nonlethal manner.

Capsaicin, a red-pepper derivative, is the main ingredient in **COUNTER ASSAULT**. The capsaicin affects the upper respiratory system, triggering an innate response. It uses a sophisticated dispersal system, producing an atomized shotgun blast.

to be an effective, lightweight repellent that can easily be carried on the belt of a hunter, fisherman or backpacker. Keep in mind there is no substitute for common sense. **COUNTER ASSAULT** is a safeguard and not a cure while in bear country.

Also available "Quick Draw Holster"



The holster attaches **COUNTER ASSAULT** to belts or backpack straps.
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For more information see the following articles in:

Canoe, JULY 1989
Field and Stream, JUNE 1987
National Geographic, FEB. 1986
Sierra, MARCH / APRIL 1986
Outdoor Photographer, SEPT. 1986
Outdoor Life, DEC. 1985
Backpacker, JULY 1985

5/24/2002 Division of Wildlife

DROUGHT COULD INCREASE BEAR ENCOUNTERS - TAKE PRECAUTIONS NOW

This year's drought could reduce the food supply for Colorado's bears, increasing the likelihood they'll search for a meal near people. Wildlife officers and biologists say that makes it more important that ever to remove attractants.

The drought Colorado is experiencing could mean less natural food for bears, and increase the chance they'll venture into towns, backyards and campsites looking for an easy meal. Bear encounters have begun earlier than usual this year, which Division of Wildlife biologists and officers say makes it even more important for people to remove trash and other bear attractants.

"If bears don't have their normal summer forage because of the drought, they'll start looking in other places," said John Ellenberger, the Division of Wildlife's big game coordinator. "Bears know where they can get handouts such as trash, and if there isn't anything to hold them in the high country in the way of natural forage, bears who have learned about garbage will go right back to it."

"We're seeing a few problems already, and we're betting by mid-July we're going to start seeing serious numbers of bears in some areas that have had bear problems in the past," Ellenberger said. "Of course, all that could change if the monsoons kick in and we get a lot of rain. But right now, it doesn't look good."

Bears hibernate from November to March, and gorge themselves during the summer and fall to get through the winter. They are omnivores and will eat just about anything, although about 90 percent of their natural diet is made up of nutritious plants - especially nuts, berries and grasses.

"It's so dry, we may get an acorn and berry crop, but not as much as normal," Ellenberger said. "Also, from about mid-June until about mid-August, bears rely on a lot of green plants for food; they virtually graze like a cow. But a lot of the succulent forbs that they prefer are in places so dry right now that we're not getting green-up of anything."

One bit of good news is that the late freezes the state has seen the past few years, when record numbers of bear encounters were logged, haven't occurred this year.

"While we did have a hard freeze in the Grand Junction area just before Mother's Day, it seems that the buds on a lot of the oak brush and mountain shrub types that produce berries hadn't emerged enough yet where they were vulnerable," Ellenberger said.

Jerry Apker, a Division biologist in Monte Vista, said if there are no major freezes, bears would still have natural food sources, though there will be less of them.

"As summer progresses, bears will seek their normal food sources, but these will be reduced because of the drought, and bears will continue to pursue human food sources as long as they exist," Apker said. "But those bears that found human food last year will be in search of it again this year."

Bears leave their dens in March, and if their food sources are significantly reduced because of the weather, they will be in a state of starvation until more comes along, Apker said. This makes them even more likely to probe food sources created by humans, and those that found food before will return to see if it's still there.

"Nonlethal control on bears that aren't aggressive will help, as long as the food source is gone," Apker said.

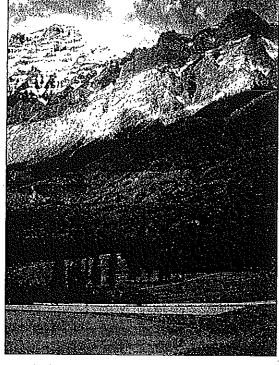
In 2000, a late spring freeze devastated the oak brush that produces acorns, bushes that produce chokecherries and other fruit that bears typically depend on over a portion of the Western Slope and the northern Front Range. In 2001, the southern Front Range experienced similar conditions.

Black bears are naturally wary of humans, and in normal food years, that wariness keeps them away from people. In dry years like this year, when natural forage is in short supply, bears lose their wariness and the number of conflicts with humans increases dramatically along with the amount of property damage caused by bears.

But with bears, an ounce of prevention is worth 300 pounds of cure.

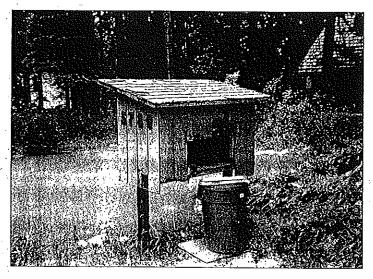
Rural Living has its advantages

Bears are at their most destructive in the spring, after hibernation, and in the fall when food is scarce. Peace of mind and security are now available to protect your home, children and pets from scavenging or nuisance animals. McClintock Metal is the U.S. manufacturer of the Hid-A-Bag® Bear-Proof Trash Receptacles and the Hyd-A-Meal™ campground food storage lockers. Hid-A-Bags and Hyd-A-Meals are an integral key in bear management programs with U.S. Forestry, and State and National Parks. These products may be found in such diverse locations as Great Smoky Mountains, Glacier, Big Bend and Denali National Parks. McClintock Metal is proud to announce the newest tool in wildlife management - the Bear-ier Animal-Proof Trash Enclosure for residential use. The A-Frame design permits quick and easy trash disposal by the homeowner and equal ease in



unloading by the hauling contractor. While roomy enough for two standard size trash cans, the overall appearance is unobtrusive and blends well with most architectural styles.

. . . AND ITS DISADVANTAGES.



Marauding animals looking for food will now go elsewhere when they discover there is no 'free lunch' at your home. Fish and Game officials, wildlife biologists, forestry and park managers all report that when bears are denied trash as a food source they will move on in their search for food. Preventing bears and other wildlife from eating garbage is one of the best ways to ensure the continuation of the species by forcing the bears to forage for their natural diet in their habitat. As development moves farther into remote locations the Bear-ier will become a welcome addition in managing the balance between man and nature.

Manufactured by:

McClintock Metal Fabricators, Inc.

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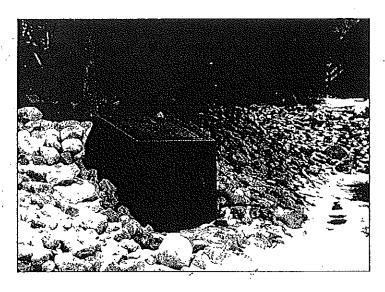
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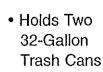
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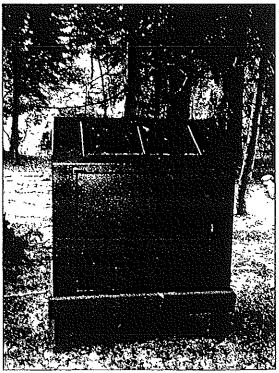




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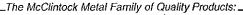




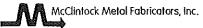
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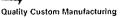
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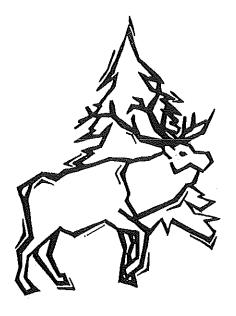












Quick Facts...

Avoid placing beeyards near areas frequently used by bears.

Electric fences effectively prevent black bear damage to beehives and are relatively inexpensive and easy to install.

The Colorado Division of Wildlife compensates beekeepers for bear damage and assists with damage prevention.

Colorado State University Cooperative Extension

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WILDLIFE

Managing bear damage to beehives

no 6.519

by L.E. Meadows, W.F. Andelt, T.D.I. Beck1

In Colorado, beekeeping generated \$1.8 million in 1996 through the sale of honey. In addition, bees provide a valuable service to agriculture and homeowners by pollinating crops and gardens.

Locate beeyards in a protected area near water and flowering crops or wild flowers. Mountain meadows and agricultural lands along the foothills meet these criteria, and most Colorado beeyards are located along the Front Range and in the western part of the state.

The majority of Colorado's black bears (*Ursus americanus*) live in western Colorado. Black bears require forested areas to find adequate food, water and cover.

The typical bear diet consists of forbs, berries, nuts, insects and carrion. To build fat reserves for winter hibernation, bears feed heavily on berries and nuts in late summer and early fall. When these foods are in short supply, as in drought years or in areas where human development has encroached on their habitat, bears may turn to other sources of food such as honey and bee brood.

Economic Effects of Bear Damage

The amount of black bear damage to beehives in Colorado varies each year, possibly reflecting fluctuations in food supply.

For example, in 1988 11 damage claims totaling \$5,700 were filed with the Colorado Division of Wildlife (CDOW). The following year Colorado had an unusually dry summer, and CDOW received 31 claims worth \$30,100. In 1990, adequate moisture provided sufficient natural food, and claims decreased to 12 and \$12,100. During 1996, natural food for bears was again scarce, and CDOW paid \$35,000 in claims.

Identifying Bear Damage

Signs of black bear foraging in beeyards include broken and scattered frames, and supers bearing tooth or claw marks. Tracks and dark scat about $1\,3/8$ inches in diameter and containing berries and other vegetation may also be found in the area. A path may be noticeable if the bear has been feeding at the same beeyard for several nights.

Damage Control Methods

Black bear damage to beehives has a relatively minor impact on the overall beekeeping industry. Bears can, however, cause significant damage to individual beeyards.

Once a bear develops a taste for honey and bee brood, it will likely continue to raid beeyards and methods to dissuade it become less effective. Therefore, it is important to prevent bear damage before it begins.

Most Successful Control Methods:

Hive location is effective and inexpensive. Avoid placing beeyards near areas frequently used by bears, and near forest edges and other cover.

Solar-charged or 110 volt electric fencing is one of the most effective methods to reduce black bear damage.

Least Successful Control Methods:

Elevated platforms are effective but generally impractical.

Some aversive conditioning techniques have been successful but they are difficult to employ.

Trapping and relocating bears is expensive and suitable release sites are difficult to find.

Beeyard Location

Avoid placing beeyards near areas frequently used by bears, such as berry patches, garbage dumps, heavily forested areas, riparian corridors, ravines, forested ridges and game trails. Bear use of an area can change depending on season, food availability and human disturbance. For example, during August and September black bears intensely forage on ripening nuts and berries in oakbrush habitat along the lower foothills of southcentral and southwestern Colorado. To avoid bear damage, remove beehives from this habitat before the bears arrive. If you are unsure about bear patterns in your area, contact your regional CDOW office for more information.

Bears prefer to stay where they have adequate cover. Placing beeyards in the open, away from forest edges and other cover, may discourage bears from approaching. One study found that beeyards located less than 300 feet from forest edges received an average of 4.5 visits from bears, whereas those located more than 300 feet away received an average of 1.9 bear visits. The study also found that beeyards located within 300 feet of a ravine received over twice as many bear visits as those located more than 300 feet from it.

Electric Fences

Solar-charged or 110 volt electric fencing is one of the most effective methods to reduce black bear damage. An electric fence must be well grounded, sufficiently charged at all times, and maintained on a regular basis.

Maintenance includes clipping or applying herbicide to vegetation growing under the fence and ground mat, recharging the battery, and checking wire voltage with a voltmeter. If proper maintenance or constant electrification is not possible, remove the fence immediately. Once a bear penetrates a fence, it will likely challenge fences in the future.

Permanent and semi-permanent electric fences can be made from multiple strands of electric wire or woven wire attached to wood, steel or fiberglass posts. An electric or solar charger, an energizer and a battery are required to charge the fence. One example of an effective permanent electric fence measures 50 feet x 50 feet (often smaller) and costs approximately \$1,200 (Figures 1 and 2).

CDOW has successfully used two designs for **temporary electric fences**. A temporary 30 x 42 foot electric fence can hold 32 colonies and costs approximately \$300 (Figure 3). A woven-wire electric fence is built with nine steel T-posts driven vertically into the ground (Figure 4). If the soil is sandy or soft and wet, substitute wooden posts in the corners.

Put 1 1/2 inch PVC pipe over the steel posts as an insulator. Secure 32-inch high woven wire 6 to 8 inches above the ground outside the enclosure. Use a loop of baling wire at the top and bottom of the wire to attach it to the PVC pipe. Four strands of high tensile wire, spaced at 6, 16, 28 and 40 inches above the ground, can be used instead of woven wire (Figure 5). Place an energizer cut-off switch on one of the posts to allow easier access to the hives. However, it may encourage tampering with the hives.

Other temporary fences can be constructed with electroplastic netting, electrified twine or hot tape attached to posts or trees. Costs range from \$200 for fences using hot tape to \$750 for electroplastic netting. Effectiveness often reflects price.

Key features of fence design are strand spacing, energizer type and grounding effectiveness. Wire strands on a permanent fence should be no more than 8 inches apart, and no more than 12 inches apart on a temporary fence. For both types, the bottom wire should be no more than 8 inches above the ground. The top wire does not need to be more than 3 1/2 feet high.

Temporary Woven-Wire Electric Fence

Materials for a Temporary Woven-Wire Electric Fence

- 1 Solar charger and a 5.5 watt solar panel
- 1 Interstate PC1270 jell cell battery
- 15 ft Insulated cable
- 3 Insulated gate handles
- 9 1 1/2 inch x 4 foot PVC pipes
- 150 ft 32 inch wide light
 (about 18 gauge)
 woven wire with
 square mesh and wire
 spacing ranging from
 2 inches on the
 bottom to 5 inches on
- 9 6 1/2 foot steel "T" posts
- 150 ft 36 inch wide chicken wire
- 40 Metal tent stakes or home-made no. 9 wire pins
- 1 6 foot by 1/2 inch ground rod and clamp

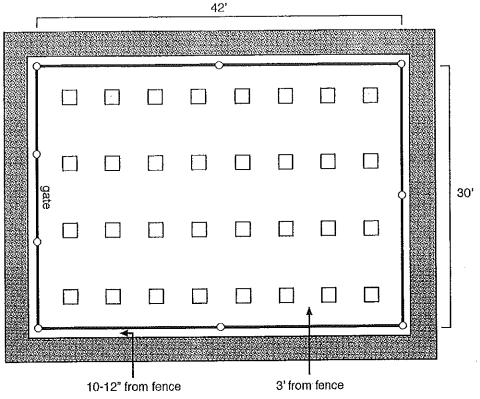
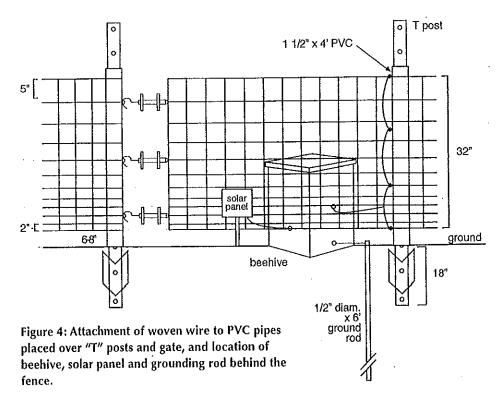


Figure 3: A temporary woven-wire electric fence and a temporary high-tensile electric fence designed to protect beehives from bears, showing spacing of posts and the position of beehives and chicken wire grounding apron relative to the woven-wire electric fence. Another "T" post is added to each of the longer sides of the temporary high-tensile electric fence.

Temporary Woven-Wire-Electric Fence



Temporary High-Tensile Electric Fence

Materials for a Temporary High-Tensile Electric Wire Fence

- 1 Solar charger and a 5.5 watt solar panel
- 1 Interstate PC1270 jell cell battery
- 15 ft Insulated cable
- 4 Insulated gate handles
- 4 Heavy duty tension springs
- 4 In-line strainers (wire tighteners)
- 600 ft 17 gauge high-tensile wire
- 11 6 1/2 foot steel "T" posts
- 48 "T" post insulators
- 150 ft 36-inch wide chicken wire
- 40 Metal tent stakes or home-made no. 9 wire pins
- 1 6 foot by 1/2 inch ground rod and clamp

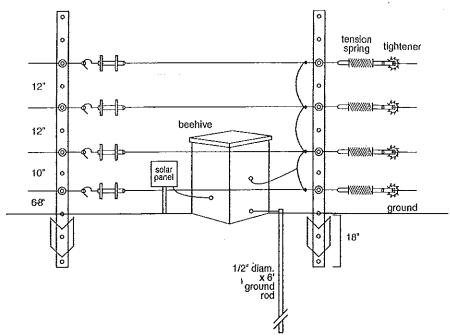


Figure 5: Spacing of electric high-tensile wires and gate, and location of beehive, solar panel and grounding rod behind the fence.

Materials for Permanent Electric Fence

- New Zealand style 12 volt energizer
- 1 85 amp-hour deep-cycle battery
- 1 20-watt solar panel
- 1 Lightning arrestor
- 13 9 foot x 6 inch wood corner posts (CCA treated)
- 8 9 foot x 4 inch wood top rails (CCA treated)
- 7 foot x 1.2 inch fiberglass line posts
- 1 1,500 foot coil 12 1/2 gauge high-tensile wire
- 70 ft 1 x 19 galvanized aircraft cable
- 100 ft 12 1/2 gauge insulated wire
- 100 ft Insulated tubing
- 7 Heavy-duty gate handles
- 7 In-line strainers (ratchettype)
- 7 In-line tension springs
- 1 bag 12 1/2 gauge compression sleeves
- 1 box 3-4 Nicotap sleeves
- 20 10 inch x 3/8 inch Hbrace pins
- 5 lbs 2 inch zinc barbed staples
- 240 ft 36-inch wide chicken wire
- 40 Metal tent stakes or homemade no. 9 wire pins
- 1 6 foot x 1/2 inch ground rod and clamp

Permanent High-Tensile Electric Fence

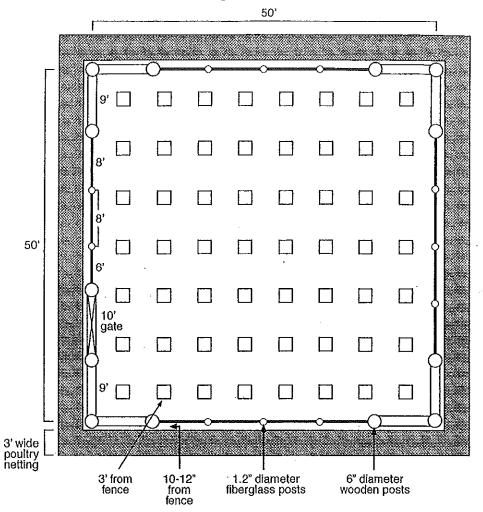


Figure 1: A permanent high-tensile electric wire fence designed to protect beehives from bears, showing spacing of posts and the position of beehives and chicken wire grounding apron relative to the fence.

Permanent High-Tensile Electric Fence

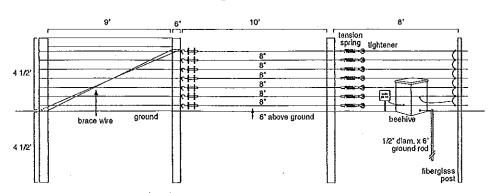


Figure 2: Spacing of wires and gate, and location of beehive, solar panel and grounding rod behind the fence.

Assistance

Colorado Division of Wildlife provides monetary compensation for black bear damage as well as funding for prevention. They prefer to fund prevention rather than compensation. For more information, contact a regional CDOW office:

Northeast Region Service Center, 317 W. Prospect St., Ft. Collins, CO 80526. (970) 484-2836.

West Region Service Center, 711 Independent Ave., Grand Junction, CO 81505. (970) 248-7175.

Southeast Region Service Center, 2126 N. Weber St., Colorado Springs, CO 80907. (719) 473-2945.

or

State Director, USDA/APHIS Wildlife Services, 12345 W. Alameda Pkwy, Suite 210, Lakewood, CO 80228. (303) 969-5775. A New Zealand style energizer provides a stronger shock (at least 4,000 to 5,000 volts is needed) than a strip grazing energizer. It also decreases maintenance by reducing the need to clip vegetation growing under the fence. Ground the energizer by connecting it with a wire and a ground connector clamp to a half-inch by 6-foot rod driven into the ground.

A chicken wire mat 3 feet wide can be placed around the perimeter of the fence to ensure that the bear is grounded when it touches the fence. Connect the chicken wire to the grounding rod and pin it to the ground to prevent wind from blowing it into the fence. The chicken wire mat is difficult to pick up if beehives are moved frequently or if a lot of vegetation grows through it. Under these conditions, as well as when livestock are present, the mat can be omitted.

To protect the energizer and battery from theft and from damage by animals, place them inside the fence. To provide additional protection against theft, put them in a hive body modified to exclude bees. Place active hive bodies above the one containing the electronic equipment.

Although bears seldom break through a properly constructed and maintained fence, some failures have occurred when hives were placed close to the fence. Therefore, locate beenives at least 3 feet from the fence.

Beekeepers who qualify for damage payments and submit the necessary request form can receive fencing materials from CDOW at no cost. A district wildlife manager can request electric fencing materials for beehives that are placed in vulnerable areas.

Elevated Platforms

Elevated platforms are effective at eliminating bear damage to beehives, but generally are impractical because they are expensive, relatively immobile, and present difficulties when working with the colonies. Platforms can be wood or steel and should raise the colonies at least 8 feet above the ground. Black bears are excellent climbers, so install a 2-foot overhang around the edges of the platform.

Aversive Conditioning

Aversive conditioning involves associating a negative experience with a food, area or event to develop future avoidance. Lithium chloride, a taste aversion chemical, has been added to honey, broodcomb or honeycomb in an attempt to create an aversion to beehives by causing temporary sickness when eaten. This technique generally has not been effective.

A second method involves wildlife agency personnel capturing bears near beeyards with leg-hold snares and then tranquilizing, handling and releasing them at the capture site. The theory is that this treatment will cause the bears to avoid the area in the future. This technique is difficult to employ but has been moderately successful in the past. One study found that only nine of 63 bears captured and released at a beeyard were recaptured after causing additional beehive damage.

Trapping and Removal

When preventive methods fail, it may be necessary to trap the bear and remove it from the area. This often involves relocating the animal to an area where it is less likely to cause further damage.

Relocating bears is expensive and it is difficult to find suitable release sites. Relocated bears often create problems at their new locations and occasionally return to their capture site and cause further damage. When relocation is not a viable option, the bear is destroyed.

Trapping and removal must be done in cooperation with local wildlife agency personnel after other control methods have failed to reduce bear damage.



Colorado Bear Awareness Week is May 6 - 12

Colorado Division of Wildlife

May, 2001

Bears in Colorado

The American Black Bear is the most common type of bear in the United States. There are an estimated 330,000 black bears in the United States — about one-third of these are in Alaska. There are about 8,000 to 12,000 black bears in Colorado. In some states, the number of black bears is dwindling and the species is protected, but in Colorado we have a healthy population of black bears. If you live or hike in the foothills and mountains, you may see a black bear sometime.

Black bears are the only remaining species of bear known in Colorado. They are one of the largest mammals in the state. Despite their name, black bears can be brown, black, blonde or cinnamon-colored.

Early native Americans both respected and hunted bears, which play an important part in their culture and religion. Pioneers who settled in Colorado were often afraid of grizzly bears and would pay trappers and bounty hunters to keep them away from towns and settlements.

Colorado was still home to both the mighty grizzly bear and the gentler black bear until the 1970s. The last grizzly bear seen in Colorado was killed by a man (in self-defense) in the San Juan mountains in 1979. That grizzly bear is on display at the Denver Museum of Nature and Science as part of the "Edge of the Wild" exhibit.



The Bear Facts

Size: Adult males (boars) can weigh from 200 to 400 pounds. Female adults (sows) weigh an average of 175 pounds but can weigh much more. Newborn cubs weigh eight to 12 ounces at birth.

Young bears may weigh 75-100 pounds at a year old.

Reproduction: Black bears mate in May/June, but the fertilized egg doesn't start developing until approximately November. Cubs are born in the den in late January, in a litter that usually has twin cubs, although there can be three or four in a litter.

Hibernation: Black bears hibernate for several months in the winter. This is an energy-saving process developed to allow bears to survive long periods when there is not enough food available. The bear will find a cave; dig a den; or hole up in a dense brush pile, hollow log or tree cavity. An internal clock in bears tells them when to come out. This developed over thousands of years so the bear emerges at the time when the first plants are greening in the spring. In Colorado, black bears emerge mid-April to late-May.

Food & Habitat: The black bear eats mainly nuts, berries, insects, larvae, honey, and carrion. Bears also sometimes attack livestock and can damage beehives. Eating a variety of foods seems to be more important to general health than eating any one type of food. The black bear requires water and habitat suitable for den sites.

Although bears are often pictured as sleeping in caves, black bears in Colorado will create a den in any quiet, dark and secure place, such as a crevice or outcropping of rock.

Bears in Outer Space?

While we don't know of any plans to have bears sent to outer space, scientists are studying black bears to help HUMANS stay in outer space longer. When bears are hibernating — entering a period of deep sleep over the winter months — they do not seem to lose muscle tissue during this time, and emerge in the spring able to move around. In contrast, people who do not move for months usually find they have lost muscle tissue and must work very hard to rebuild their strength. Researchers in Colorado are visiting bears in their dens to take tests to discover

how the bears "stay fit" without exercising.

1

Hungry As a Bear?

Black bears live along the front range and mountains and are often found near people's homes, as well as in lesspopulated areas. As more people move into Colorado, black bears and humans often call the same places home and may live quite close to each other.

Black bears find food with their advanced sense of smell. While mainly vegetarian, they like to eat many things: berries, nuts, insects and plants. They will eat carrion (dead animals) when they find it, but they rarely kill other animals. If black bears smell birdseed, pet food, fallen fruit, barbecue grills or trash, they will work hard to find the source.

People can help avoid conflicts with black bears by keeping all foods and trash out of sight, smell and reach.

Black bears are strong, curious, intelligent - and unpredictable. When you are living or camping in bear country, be bear aware.

> Respect wildlife and our shared habitat.

During summer and late fall months, when bears are storing fat for the winter, a bear can eat as much as

20,000 calories a day! This is as much as 2,500 cups of blueberries or 100 cups of nuts!

When bears can find lots of natural foods, such as nuts, acorns, serviceberries, chokecherries, seeds and carrion to munch, all is well.

When they find pet food, birdfeeders and trash, bears can get into big trouble! Help bears by keeping your food and trash stored safely away in a closed area - if bears can smell food, they will find creative ways to reach it!

Famous Bears: Smokey Bear

Have you ever heard the saying, "Only YOU can prevent forest fires?" This saying was written to help teach people about fire safety. In 1944, the Forest Service and War Advertising Campaign introduced a cartoon bear as the symbol to promote the prevention of accidental forest fires. Some say he was modeled after the appealing forest animals in the Walt Disney movie "Bambi."

Then, in 1950 in New Mexico, a real bear cub found himself in a forest surrounded by flames. To escape the fire burning around him, he climbed up in a tree. By the time the fire fighters found the scared and hungry cub, the Lincoln National Forest was charred and blackened.

The firefighters, park forest rangers and the warden were so moved by this little cub that they named him Smokey. They put him on a plane and sent him to the National Zoo in Washington, D.C. to live after he recovered.

In the town of Capitan, New Mexico, near where this bear had been found, people erected a museum to honor him. The museum still exists today.

Is Smokey Bear that bear cub? It's hard to say for sure. But, certainly this Smokey carries on the spirit of that little bear cub -- to protect forests and keep them safe from the kind of fire that destroyed a forest and made so many animals homeless so long ago. In 1994, the Smokey campaign celebrated its 50th anniversary of communicating Smokey Bear's message,

"Only YOU can prevent forest fires!"

Fire cycles are part of a healthy forest system and managers may allow natural fires or even plan man-made fires called "prescribed burns" to clear the forest floor of accumulated needles, ground fuels and branches. After a fire, there can be an increase grass and forbs, providing better forage for woodland animals. But accidental fires are NEVER a good idea.

Some of Smokey's tips for camping safely are:

- ♦ If you find a lighter or matches, give them to an adult.
- Always keep a bucket of water and shovel near a campfire.
- Never leave a campfire unattended.
- ♦Be sure you build a fire in a safe clearing away from brush that could catch on fire.
- ♦ It's best to use a campfire site that has been used before, but if you are going to make your own, plan to return the area to natural condition when you are done.
- ♦ Dig a pit away from overhanging branches.
- ♦ Circle the fire pit with rocks.
- Stack extra wood upwind and away from fire.
 - ♦ Watch for official signs telling about the level of fire danger — if it's risky, don't light a fire today.



The Real **Teddy Bear** Story

In November, 1902, the President of the United States was Theodore "Teddy" Rooseveit.

An avid outdoorsman and hunter, President: Roosevelt took a break from politics to go on a bear hunt.



President Theodore Roosevelt in 1898

When he refused to shoot a small bear cub in a tree, the Washington Post newspaper ran a

cartoon of the president and the bear. Soon, a small toy company began making stuffed bears called "Teddy" bears, after the President's nickname. Nearly a hundred years later; most people in the United States still call a child's stuffed toy bear, "Teddy Bear."

Bears of the World

There are EIGHT kinds of bears in the world.

Asiatic black bears are found in southern Asia, Pakistan, India and China, northern Indochina, former eastern Soviet Union, Korea and Japan. They are nicknamed "moon bears."

American black bears are found in North America: in 32 states of the United States, all provinces and territories of Canada except Prince Edward Island, and northern Mexico. In North America, brown bears (including grizzlies) can be

found in western Canada, Alaska, Wyoming, Montana, Idaho and Washington State. In Europe. they live in Russia and small populations in France, Norway, Sweden, Spain, Italy, and Greece, Other remnant populations can be found in India, Pakistan, Japan, Korea, China, Mongolia, Syria, Iraq, Iran and Turkey.

Giant pandas live only in the mountain ranges in

Western China.

Polar bears are found in Greenland, Norway, the former Soviet Union, Canada and Alaska.

Sloth bears are found in India, Bangladesh, Nepal, Bhutan and Sri Lanka. Spectacled bears are found in Venezuela. Bolivia, Colombia, Ecuador and Peru. Sun bears are found in southeast Asia; India, Burma, southern China, Laos, Vietnam, Thailand, Malaysia, and Indonesia.

What kind of bears are found in Australia?

If you answered Koalas - you are wrong! Koalas are in the marsupial family. There are no native bear species in Australia or in Africa.

Speedy Wildlife Facts

Did you know that a beaver can swim up to 5 miles per hour using its webbed hind feet?

On land, the Beaver just waddles around, but in the water it can really move quickly!

Bears look big and slow, but they can run very fast. Black bears can race up to 25 miles per hour.

Mountain lions are

sprinters, not long-distance runners. When they do run, they sprint at 40 to 45 miles per hour. Instead of speed, they

rely on the element of surprise when hunting.

Pronghorn antelope are known for their

n miles per

the fastest

speed nearly 60 hour! This makes them mammal in North America and the second fastest animal in the world. Do you know which animal is fastest? (See answer below.)

For short distances, people can run about 15 miles per hour. Olympic athletes have been timed as fast as 25 miles per hour in sprints. A person who can run a mile in four minutes is considered very, very fast!



Speedy Animal Answer: The cheetah can run 70 miles per hour. Cheetahs are found in the wild in Africa.

Want more information? Contact the Division of Wildlife 6060 Broadway, Denver CO 80216 (303) 297-1192 Denver (970) 472-4300 Fort Collins

3

Living and Camping in Bear Country

If you live in the foothills and mountains in Colorado, you live in bear country. Or, if you hike and camp in Colorado, chances are you've visited places where black bears live, too.

Often, black bears can share the same space with people without conflict, provided that people take extra care not to attract bears close to homes and campsites by leaving food and goodies out. You may have had a bear walk right through your backyard or near you when hiking and never known it!

At home:

Keep your yard and property clean. Store food, including

pet food and birdseed, in airtight containers inside a garage or secure building. If you feed pets outside, bring their bowls inside when they are done.

garbage

Be sure your
is out of sight and
bears. Use bearproof containers and don't put out

trash until nearly time for pickup. Keep barbecue grills clean of all smells, such as grease and barbecue sauces.

If you have fruit trees or berry bushes, remember that fallen and ripe fruit can attract bears.

Usually, if a bear doesn't find abundant food near your home, it will move on to a new location.

When camping:

Keep your camp clean.

Store food and other scented items (such as lotion and shampoo) in airtight containers away from your campsite. Pack out your trash when you leave -don't bury it in the ground.

Have your sleeping site away from the place where you cook food to avoid attracting bears to your tent. Don't keep any food in your tent.

Overnight, careful campers take the precaution of hanging all food in a cooler, suspended between two young trees - at least 10 feet off the ground!

Bears like their food fast and easy — if you make it hard to smell and hard to reach, they will go elsewhere to find something to eat.

For more about black bears, contact the Division of Wildlife for a copy of "Living with Wildlife in Bear Country" or visit www.protectwildlife.org





can run pretty fast. But humans must admire bears' athletic qualities, since so many sports teams are named after BEARS.

— How many others can YOU name?





Pro Basketball: Vancouver Grizzlies

> Pro Baseball: Chicago Cubs

Pro Hockey: Boston Bruins

What to do if you meet a bear?

All wildlife is unpredictable, and there are no definite rules about what to do if you meet a bear. Almost always, the bear will detect you first and leave the area.

Black bear attacks are very rare. However, if you do meet a bear, try to give it room to leave — back away slowly if you can and give it lots of space.

Stay Calm. As you back away, talk out loud so the bear isn't surprised you are there. Don't run or make sudden

movements.

Speak softly. This may reassure the bear that no harm is meant to it. Try not to show fear. Leave cubs alone. Coming between animal babies and their parents is *never* a good idea. If you see a cub, try to move away from it — be alert, other cubs may be nearby.

Use your common sense - the bear will be using all of its senses, tool Remember, bears have good eyesight and a great sense of smell. If a bear stands up on its hind legs, it may be trying to detect smells in the air. Once it identifies you, it may try to leave the area. If you are attacked - fight back! People have

driven away bears using rocks, sticks, tools, backpacks and even their bare hands. Most bears aren't looking for trouble -

they'd rather run than fight.

Golorado Divisian of Wildlife
6060 Broadway, Denver, QO 80216
(303) 297-1192
317 West Prospect, Fort Collins 80526
(970) 472-4300



NERO 5/01



Dusk was settling in as Mary, a mother of three children, was busily preparing school lunches for the next day. Suddenly she was startled by a crash on the patio behind the garage. Muttering out loud, "That dang dog is in our garbage again," Mary grabbed a broom from the closet. "I'm going to scare the heck out of him this time."

Silently slipping out a side garage door, she tiptoed toward the back of the house intent on swatting the neighbor's black labrador that regularly made a pest of himself getting into garbage cans. Turning the corner, she spotted the despicable dog. With his head pushed deep into the garbage can, his big, black rear-end was raised up — a perfect target. As he obliviously scavenged food from the container, Mary wore a broad smile as she walked up behind him. Finally she'd caught him in the act! Intent on giving that "dang dog a lesson-he'll-never-forget," she swung the broom with all her might. Sound-

ing like a home run hit from a Colorado Rockies pinch hitter, the broom smacked the interloper's backside with a resounding

WHAAP!



Article & Photos By

Trouble in Paradise

Paper and trash exploded skyward as the trash can skipped across the concrete patio. Swapping ends, the black form lashed back at its attacker with a wide, swatting paw. Instead of sending the black lab running, Mary stood paralyzed with fear facing angry gold eyes and snarling white teeth. The eyes were not of the garbage-grubbing labrador, but of a black bear! No question. It was a scare-of-a-lifetime moment . . . for Mary! While perhaps not in as dramatic fashion, more and more Coloradans are experiencing these "Oh, no!" moments with black bears. Why?

Colorado has a protracted history of bear and people confrontations. Historically they were confined to the rural areas of Colorado, principally involving bears and livestock — typically sheep. Sheep characteristically try to steer clear of bears, but bears aren't quite as accommodating. When a bruin got real hungry or somehow figured out that wading into a band of sheep and killing several of them makes a pretty easy and delectable meal, it obviously got the attention of wildlife officials. Laws warranting removal of renegade bears passed easily and for years sufficed to deal with the occasional depredating bear.

Then Colorado was discovered as the "Western Paradise," particularly rural areas of the state along the Front Range. First came small ranches, then subdivisions. In the period of time between entering its winter den and emerging in spring, bears frequently discovered several houses had been built in what had been its traditional range. Tens of thousands of homes emerged in traditional bear habitat or in the midst of long-established travel corridors. Increased confrontations were inevitable.

Bear problems regularly occur along the entire Front Range from Colorado Springs north, and south from Colorado City to Rye and Pueblo. Not to be left out, troubles occur in the Greenhorn and Trinidad area, Durango and Pagosa Springs. Vail, Glenwood Springs and Aspen have, in some respects, been a hub for much of the problems.

Beyond eradication of habitat, bear confrontations are spurred by two factors: lack of customary food sources and increased enticements by humans.

Bears are creatures of habit. For centuries sows have taught their cubs to forage for certain foods at certain times of year. Emerging from their winter den, black bears gravitate to areas that green-up first, and then move up in elevation as grasses and vegetation flourish with warmer weather in the high country. Fall again lures them to lower elevations when traditional foods like acorns from gamble oak brush, chokecherries and ser-



Preventing Bear Conflicts

- Keep all food in the house, including pet food. If you feed your pets outside, pick up the food dish after feeding your pet.
- If you live in a high bear density area and want to feed birds or squirrels, take your feeders in every night and when you're going to be away from the house for any length of time. Better yet, don't feed birds. Birds typically drop a high percentage of seeds onto the ground, which can lure in hungry bears.
- Barbecues and other outdoor cooking devices should be thoroughly cleaned after each use and stored away in a secure building after use.
- Don't leave food unattended on a patio or deck.
 The same for simply placing food in a cooler and leaving it on the deck. Unattended coolers, even locking ones, offer little resistance to a hungry black bear.
- Avoid using scented candles, toiletries and other attractants. If used, make sure that windows to the areas are secure and closed.
- All garbage should be disposed in bear-secure containers if outside, or have containers stored in an outbuilding until collection.
- Ideally, livestock including horses, cows and sheep should be fed in a barn. If fed outside, all excess food, especially grains should be picked up and placed in a secure storage area. Store all grains, cake, etc. in a secure outbuilding.
- Pick fruit before it ripens; pick up fruit that falls to the ground.
- Don't leave food, trash, air-fresheners, coolers or scented products in your car.
- Keep your doors, windows and garage doors closed, even when you're home.

viceberries ripen. Again these food sources mature at different times prompting the bears to follow the ripening food up in elevation. Fall foraging is critical. Research indicates much of the body weight necessary to survive winter hibernation must come from high-sugar and high-fat content foods.

Fall food failures, occurring typically because of late spring frosts that kill the blooms of berry and oak bushes, create cataclysmic conditions for bears. With the time clock ticking down until hibernation, obsessed by hunger and instinctively knowing that if they don't get enough to eat they'll perish, bears begin searching for any food that will sustain them. And they forgo their natural wariness of humans.

Jerry Apker, Colorado Division of Wildlife carnivore specialist, puts it simply, "Theré is a direct correlation between fall food failure and bear conflicts. Bears are naturally wary of people, but when faced with hunger and impending hibernation, they may overcome wariness and will be drawn to any food source available. Under normal conditions some bears seek human food sources, but they're atypical. Most black bears attempt to avoid humans . . . unless motivated by hunger.

"Fall food failure conditions are when you'll find bears on people's decks, in their garbage or even scouring through barbecues. Almost anything goes for a bear hungry enough," says Apker.

Humans living in bear country are an integral part of the problem. Most commonly we unknowingly entice bears to visit us. We dispose of garbage in easily accessible containers, feed our pets outdoors, lure birds into our yards with feeders, and grow succulent fruit in our gardens and yards. Then there are those who intentionally lure bears in with food. How and why a bear is attracted to the food matters little; the situation creates prob-

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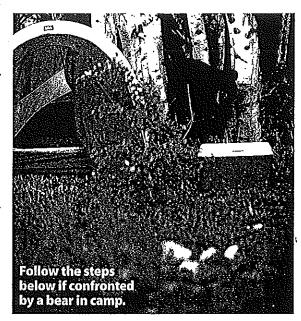
lems. "It may be cute the first time a bear comes into the yard or onto the deck for food. When they do it a second, third and fourth time, it becomes less entertaining and more threatening" says Apker.

Apker puts it bluntly. "Bear experts universally tell you a fed bear is a dead bear," meaning that bears developing a taste for human food exponentially increase their chances of being killed, either by accident (vehicle collisions) or by being shot by hunters or wildlife officials.

That premise was validated in 2007. Early frosts devastated berry and acorn crops; drought parched vegetation in several parts of Colorado. Division of Wildlife agents constantly responded to bears foraging pet foods, destroying bird feeders, even breaking into storage areas. A total of 1,033 bears were killed in Colorado in 2007 as compared to 570 in 2005, a year with good berry and acorn crops. Hunters took 615. Nonhunter mortality (shot by DOW, landowners, federal animal control or killed by other means, e.g. vehicle collisions) was 418 (approximately 40 percent) of the bears killed in 2007 as compared to 121 (21 percent) in 2005.

Another common premise shared by wildlife specialists is that habituated bears are potentially the most dangerous kind of bear. A'bear that has lost its natural wariness of humans is one you don't want to meet. As the above statistics suggest, bears lured by humans are frequently euthanized as problem bears. In Aspen in 2007 according to The Aspen Times, "13 bears were euthanized, 24 relocated and four cubs were taken to a rehabilitation center." One bear broke into a house and charged a community safety officer after she'd shot the bear with a beanbag gun, intended to scare the bear away.

Humans often promote bear conflicts, but we hold critical keys to minimizing bear problems. Apker lauds Vail as a model program for both regulation and enforcement of community statutes to minimize bear confrontations. "Vail passed stringent ordinances that regulate garbage containers, storage of pet



If Confronted by a Black Bear

- Stand still, stay calm and let the bear identify you and leave. Talk in a normal tone of voice. Give the bear an escape route.
- · Never run or climb a tree.
- If you see cubs, but not the adult, the sow is nearby. Back out of the area and leave immediately ... no matter how cute the cubs appear.
- Often a black bear will stand up on its hind legs; it's trying to figure out what you are. Wave your arms slowly, talk in a normal voice. If it begins huffing or popping its jaws, it's warning you to give it space. Do it by backing away slowly.
- Bear spray (high concentrated pepper spray) should be carried whenever afield in bear country. Some people living in high concentration black bear country have canisters of bear spray immediately accessible in their homes.
- If confronted by an aggressive black bear, if available, use pepper spray when the bear approaches you within 30-40 feet. If you don't have pepper spray, stand your ground, yell, wave your arms, and throw rocks in the direction of the bear. Don't run; that prompts a predator-prey response.
- If attacked, fight back! Black bears that attack are intent on killing. Use anything at your disposal, a pen, trekking pole, rocks ... even your fists.
- If you encounter an aggressive bear, once safely away from the area, contact the nearest Colorado Division of Wildlife office with specifics of the encounter:

food and any other items that might attract bears. Most importantly, they strictly enforce the ordinances, giving out stringent penalties to anyone violating the regulations. Their problems have been minuscule, especially compared to other communities with no laws, or those with unenforced ordinances. Vail shows that strictly enforced laws work!"

Colorado's tourist population, peaking during the summer and fall months, creates an additional conundrum for communities and wildlife specialists. "Someone from New York City might find a bear cute and the highlight of their week-long trip to Colorado," said Apker. "And they're more likely to feed the bear just to get a good photo or so they can watch it." Resort owners must deal with the problem bear after the guest departs, as do the neighbors living near the resort. That bear expects food. "To prevent feeding and attracting bears, communities must monitor and educate both residents and guests alike. It's a huge challenge," says Apker.

Beyond relying on communities to educate populations on the problem, Colorado's Division of Wildlife has instituted its own education programs in areas experiencing high bear/human conflicts. "We've had town hall meetings, created handouts and other materials intended to educate people on both the problem and how to avoid it," says Apker. "The Southeast Region created an excellent DVD that supplemented their educational program for residents and resort owners. It's been a very valuable tool.

"Essentially we're trying to protect the bears and people," says Apker. "There will always be some kind of bear/human interaction in Colorado; people and bears now live in the same ecosystems. The major confrontations follow predicable patterns when traditional food sources fail to produce. Certainly some bears for whatever reason go for the easiest food available; they are opportunists. What people need to understand is that they can reduce, or virtually eliminate those opportunities for most bears. If that happens, bear/human conflicts will be minimal."

Staring into the eyes of a black bear at a distance measured in feet not yards is not for the faint-of-heart. Few Coloradoans or visitors to Colorado want that experience. Bears too, hate such encounters with humans. But, bears will do what bears do. They must go where the food is. The solution seems pretty simple. Avoid conflict; become bear aware.

Tim Christie is a freelance author and photographer. He is a long-time contributor to Colorado Outdoors. This article is copyrighted by the author.

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