Wildlife Damage Management Fact Sheet Series

Black Bear

Paul D. Curtis and Meredith L. Gore

Cornell Cooperative Extension, Wildlife Damage Management Program

The American black bear (Ursus americanus) inhabits 40 states in the United States ranging from Alaska south to Mexico. Of the eight species of bear, the black bear is the only one found in the eastern United States. Population estimates nationwide totaled about 750,000 animals in 2004. Black bears are intelligent, adaptable, and opportunitistic. Over the past century, much of the eastern landscape has returned to forest and most black bear populations east of the Mississippi have increased. These increasing black bear populations often overlap suburban and rural development and human-black bear conflicts are becoming more common.

General Biology

Black bears occur throughout New York State, with core populations residing in three primary ranges. The Adirondack and Catskill black bear ranges include the area in and around the Adirondack and Catskill Forest Preserves (Figure 1). The Allegany black bear range is in southwestern New York along the border of Pennsylvania. Numerous bears are found outside of New York's primary ranges. Transient bears, mostly young males, can be encountered in almost every county of New York State.

Black bears are generally solitary animals, with the exception of adult females with cubs. The average adult male (boar) weighs approximately 300 pounds and the average adult

female (sow) weighs approximately 160 pounds. When standing on all four feet, black bears are less than 39 inches in height at the shoulder, and are seldom more than 78 inches long from tip of nose to the tip of the tail. Black bears come in different color phases, ranging from all black to brown or cinnamon. The hair around the black bear's muzzle is short and generally brown in color. Many black bears have a white chest blaze which is often in the shape of a V. They have small eyes, rounded ears, a long snout, large body, and curved nonretractable claws.



Bears are usually most active for a few hours around sunrise and again around sunset. They are mostly inactive during the day, and bed down for the night an hour or two after sunset. They are excellent swimmers; and can run up to 30 mph for short periods of time. Black bears see in color and have relatively good vision close-up. Their hearing exceeds human frequency ranges, and their sense of smell is excellent.

Black bears are not true hibernators but exhibit a dormant period during the winter. Typically, female bears enter a den during October or November, and males enter their dens in November or December. Black bears enter dens after a period of extensive eating and weight gain, or hyperphagia. Except for newborn cubs, bears do not eat, drink, urinate or defecate during the denning period. During this time. their body temperature may drop 7 degrees, and they may lose up to a quarter of their body weight. Males leave their dens in March or April. Females leave their dens later than males, sometimes as late as May.

Female black bears generally become sexually mature at between two to five years of age. Males become sexually mature at four to six years of age. Bears are polygamous and breeding occurs from late May until as late as September with primary breeding activity taking place from June through August. Litter size varies from one to five, but two or three are most common in New York. Black bear cubs are born in the dens during late January or February, and range in weight from a ½ to 1lb at birth. Cubs may be weaned at seven

months, but remain with their mother for up to eighteen months. Cubs den with their mothers during their second winter and disperse as yearlings during their second spring or summer. In New York, adult female bears usually breed every other year.

In the wild, black bears may live to 21-33 years. The average age of a New York bear is about 5 years. The average age in the population is believed to be higher. Principle sources of mortality for adult black bears include vehicle strikes, harvest, and nuisance kills, both legal and illegal. Yearling bears and cubs occasionally die from malnutrition or predation. Very few bears die of disease.



Management Status

Black bears may be harvested during open hunting seasons in New York and 26 other states. In New York during 2004, the minimum bear

population (post-harvest) was estimated at 7,000 animals. These population estimates include 4,000-5,000 bears in the Adirondack range, 1,000-1,500 in the Catskill range, 500-1,000 for the Allegany range, and 100-300 bears outside of these three core areas.

Habitat and Food Habits

A home range is the principal area inhabited by an animal. Black bear home ranges may overlap with other bears, and the home range size varies significantly with available resources and age of the animal. Typically, adult females have home ranges of approximately 1-15 square miles, and adult males 8-60 square miles. Black bears have been known to travel 50 miles or less in New York to return to their home range if relocated.

Black bears live in a variety of terrestrial habitats, based on season and abundance of food resources. Black bears are normally found in forested areas, but they are highly adaptable. They live in both arid and moist forests, from sea level to over 6,560 feet. Due to changes in land use and reforestation, New York's bear habitat has improved and significantly increased in area during the last 100 years.

Black bears are opportunitistic omnivores, meaning they will consume a diversity of plants, animals, and insects. In New York, a black bear's diet is approximately 80% plants. Forests serve as important sources of hard and soft mast, including acorns, hickory nuts, beechnuts, various fruits and berries (e.g., blueberry) and a diversity of insects (e.g., ants and grubs). Wetlands provide an important early spring food source with skunk cabbage, grasses, sedges, and tubers. Agricultural crops (e.g., corn, honey) also comprise a portion of some black bears' diets.

Description of Damage

Agriculture

Black bears frequently are attracted to agricultural activities, both large and small. Apiary damage includes hives being knocked over, frames being damaged or broken, and honeycombs and larvae being consumed and destroyed. Damage to corn fields may be extensive with large areas of crops being completely flattened. This type of damage occurs primarily during early fall months.

Residential

The nature of forested landscapes and human settlement patterns in New York have created a land mosaic such that black bears are increasingly entering human communities and causing damage to, or threatening, personal property. While black bear attacks on humans are extremely rare in New York, greater frequencies of human-bear interactions leads to increasing safety concerns. In August 2002 an infant was fatally wounded by a black bear in Southeastern New York. It remains the only documented bear-related human fatality in New York. Defensive attacks on household pets and predatory events on livestock occur at a low rate.

Common activities, such as improperly storing refuse, feeding birds and other wildlife, cooking food outdoors, feeding domestic animals in outdoor locations and growing gardens, set the stage for bear-human conflicts. Damage to garbage cans and birdfeeders are by far the two most common types of residential damage. Damage to garbage cans, sheds, birdfeeders, grills, compost, gardens, livestock or pet pens, garage doors, screens and windows all occur in New York.

Laws and Regulations

New York's Environmental Conservation Law (ECL) Subdivision 8 of Section 11-0903 gives The New York State Department of Environmental Conservation the authority to regulate intentional and incidental feeding of black bears. Bear feeding is prohibited within 500 ft. of buildings, roads, playgrounds, dumpsters, and campsites. Bear feeding also is prohibited during any bear hunting season and the nine days prior to any bear hunting season. Black bear are classified as a game animal and may be killed by persons holding valid big game license in designated hunting zones during legal hunting seasons.

Lethal Control

The New York State Department of Environmental Conservation, under ECL section 11-0521, may issue permits for lethal control of bears causing certain types of agricultural damage. Permits to destroy bears causing damage to crops (e.g., corn) damage to fish hatcheries, or damage to fruit trees may be issued by New York State Department of **Environmental Conservation wildlife** staff. These permits are issued on a case by case basis when staff determines it to be warranted. A black bear can be destroyed by a landowner if livestock is killed (cats and dogs are not considered livestock) or for apiary damage, without a permit pursuant to ECL section 11-0523.

Preventing Residential Damage

Preventing residential damage caused by black bears begins with good housekeeping. Simple things a resident can do include:

- Keep garbage cans clean and sanitary at all times, and store inside if possible;
- Use bear-resistant garbage containers;
- If a garbage collection company is used, curb garbage in a resistant canister the morning of pickup;

- Feed birds during winter months ONLY;
- Seasonally remove food attractants, such as birdseed and suet;
- Bring hummingbird feeders inside at night;
- Feed pets inside;
- Keep barbecue pits and grills clean, consider using aluminum foil to capture grease and dispose of promptly after use;
- Don't store diapers or diaper pails outside;
- Use electric fencing around compost bins and family gardens;
- If you burn garbage, only burn non-food paper products;
- Enclose animals in buildings at night or surround with electric fence;
- Eliminate on-farm garbage dumps and compost carcasses properly;
- Encourage hunting in problem areas.

Bears in your backyard

Black bears in New York exhibit a natural instinct to avoid people. However, bears that learn to associate people with the availability of human food and garbage can learn to overcome their fear of people. The presence of black bears feeding on human foods and garbage creates the potential for unsafe interactions between bears and people. Bears feeding on garbage or feeling trapped near or in buildings may exhibit defensive behaviors that present human safety concerns. Bear social structure includes a number of dominant/subordinate relationships and when humans inadvertently assume the subordinate role, a nuisance situation can escalate into an unsafe human-bear interaction.

Many people believe that problematic interactions with bears will stop if wildlife managers simply "take the bear someplace else."
Unfortunately, moving a bear may not be an effective way to stop problem interactions. Black bears have an excellent homing ability and they may readily return to the location from which they were removed or they may continue their bad habits elsewhere. If you encounter a black bear:

- Don't panic;
- Let the bear know you're there by making noise, clap hands, vell:
- Don't approach the bear;
- Slowly back away, do not run;
- Allow an escape route for the bear:
- Leave bears in trees alone;
- Remove pets, children from the area.

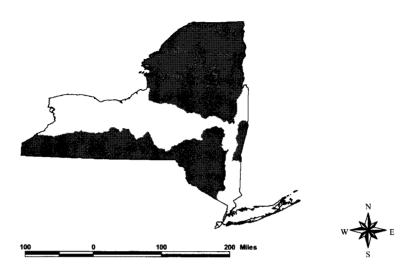
Learning to prevent nuisance bear situations from starting or from getting out of hand may reduce threats to both the bears and to humans. Removing attractants is the single most important way to reduce the potential for conflict.

Selected References

Minnesota Department of Natural Resources. 1992. Bear Country: Learning to Live with Bears. Information and Education, Department of Natural Resources, St. Paul, Minnesota.

New York State Department of Environmental Conservation. 2002. Standard Operating Procedures Manual. Albany, New York.

Robinson, S.A., J. A. Parkhurst, J.E. Cardoza. 1993. Co-existing with black bears in Massachusetts. University of Massachusetts Cooperative Extension System, Amherst, Massachusetts.



Primary black bear range in New York State shown in grey.

Cornell Cooperative Extension

Helping You Put Knowledge to Work

This publication is issued to further Cooperative Extension work mandated by acts of Congress of May 8 and June 30, 1914. It was produced with the cooperation of the U.S. Department of Agriculture; Cornell Cooperative Extension; and College of Agriculture and Life Sciences, College of Human Ecology, and College of Veterinary Medicine at Cornell University. Cornell Cooperative Extension provides equal program and employment opportunities. Helene Dillard, Director.

Alternative formats of this publication are available on request to persons with disabilities who cannot use the printed format. For information call or write the Office of the Director, Cornell Cooperative Extension, 365 Roberts Hall, Ithaca, NY 14853 (607) 255-2237

This information is presented with the understanding that no product discrimination is intended and no endorsement of any product mentioned or criticism of unnamed products is implied.

Additional copies of this and many other publications may be purchased from:

RESOURCE CENTER P.O. Box 3884 Ithaca, NY 14852-3884

Phone: 607-255-2080 Fax:607-255-9946

E-mail: resctr@cornell.edu.

Or shop at our online bookstore:

www.cce.cornell.edu/store

A free catalog of Cornell Cooperative Extension publications and audiovisuals is available from the same address, or from any Cornell Cooperative Extension Association office.