



Black Bear

Ursus americanus



Illustration courtesy of Simon & Schuster

The black bear (Ursus americanus) is the smallest of the three bear species found in North America. It is the only bear found in Vermont. Black bears are members of the order Carnivora, which also includes dogs, cats, weasels and raccoons. Vermont black bears are relatively shy animals and are seldom seen by people. This is an important factor influencing bear distribution, as Vermont bears prefer wild areas with fewer people. Therefore, bears are less likely to approach populated areas. However, during times when natural food supplies are low, bears may be attracted to bird feeders and garbage cans, and can become a nuisance or a potential danger to people.

VERMONT WILDLIFE FACT SHEET

Physical Description

Live weights for adult female black bears in Vermont average between 120 and 180 pounds. A female exceeding 200 pounds is uncommon. In contrast, male black bears are generally larger, weighing 300-400 pounds.

As their name suggests, the coat is usually black, but in the western United States, they may be brown or cinnamon. Some black bears have white chest markings, usually in the shape of a "v." The long, thick fur of the black bear makes it seem larger than it actually is.

The black bear has an excellent sense of smell and hearing. However, the bear's sight is not as well developed.

Life Cycle

Bears become mature at about three and a half years. Black bears give birth ev-

ery other year. The breeding season occurs during June and July. After mating, the fertilized egg does not become placed into the mother's uterus and grow until fall. This process is called "delayed implantation." The egg will begin to grow only if the



Illustration courtesy of
The Mountaineers

female has attained a minimum body weight of 150 pounds. The female's ability to produce cubs

relates directly to fall food supplies. If food supplies are poor prior to denning, the female may not have enough fat reserves to grow a cub, and so no cubs will be born. Inadequate food supplies may also affect fetal development and cub survival. In most years, cub mortality is around 20%, but may be as high as 50% during years of food scarcity. Well-nourished females are much more likely to produce healthier, larger cubs, and in greater numbers.

Cubs are born in late January or early February while the mother is denning. The number of cubs varies from one to five, but the average is two. The cubs weigh only 8 to 10 ounces at birth, and are about the size of a chipmunk. The cubs will remain with the mother until they are about 16 months old. Young females may remain close to their mother's home range, but young males must find their own territory.

VERMONT FISH & WILDLIFE DEPARTMENT

Food Items

Although the black bear belongs to the order Carnivora, it is a true omnivore, eating both plants and animals. Major food sources include seeds and insects, but the black bear is an opportunist and will eat just about anything that crosses its path.

Early spring is the most difficult time of the year for bears. At this time, food is scarce and bears must scavenge intensively to stay alive. Because wetlands green up first, wetland grasses and green, leafy plants have been found to be the primary food of the black bear in the spring. However, these have limited nutritional value, so bears continue to draw from any remaining fat reserves. From the time they emerge from their dens to the end of July, their activities center around forested wetlands, beaver dams, and along streams and riverbanks.

Typically, bears must wait until early to midsummer before regaining an adequate level of nutrition. By early summer, bears have the opportunity to eat a variety of succulent plants such as the roots of the jack-in-the-pulpit and berries that are beginning to become available. Bears may also prey upon young deer and moose at this time, although bears do not actively hunt for these food sources. During this time, no single food source is available in such abundance that bears can concentrate on only one item.

As summer progresses, raspberries, blueberries, and blackberries ripen. If these crops are abundant, bears can at last immerse themselves in a concentrated food source with a high sugar content.



Illustrated by Marty Kotter for the Vermont Fish & Wildlife Department

By late August, bears seek foods with the highest nutritional value. In an effort to store as much energy as possible, they will eat up to 24 hours a day. If beechnuts and acorns are plentiful, bears will move into productive beech and oak stands and consume high quantities of the nuts. Bears may travel many miles to reach fall food supplies and will continue to forage for beechnuts for several weeks.

Other fall foods include cherries, apples, succulent plants, and berries. Bears will also eat available crops of corn and oats, and will commonly raid bee hives.

Habits & Habitat

The best habitat for black bears in Vermont is a mixture of coniferous trees, hardwoods, wetlands, and variation in terrain. Because they need dense cover to escape danger, the wary and elusive black bears prefer rough and wooded habitats. The habitat should also have a good water supply nearby. Coniferous trees provide concealment and protection from severe weather. Stands of beech and oak, along with wetlands, are important feeding areas for bears in Vermont.

Bears are usually silent and travel alone. Exceptions are family groups and breeding adults during the mating season. Family groups typically consist of the adult female and her cubs, which travel with her through their second spring.

Black bears climb trees to eat on ripening fruit and as a means to escape danger. Bears will sit near the trunk of a tree on a large branch and pull other branches towards them to eat the nuts. This eating place looks like a large bird's nest, with all the branches pulled toward the center. Bears climb trees with the use of their claws, and claw marks can usually be seen on the trunk.

Although bears are often thought to hibernate, they are not true hibernators. During true hibernation, body temperature, respiration, and metabolic rates are considerably decreased. A bear's respiration and metabolic rate do decrease during the winter sleep, but its body temperature remains close to normal. Thus a bear in a winter den can be easily aroused within moments, whereas in a true hibernator, it may take several hours.

Food supplies are the most critical factor determining when bears go to den in the fall. When foods are abundant, bears will continue eating throughout the snows of November and into December. When fall foods are scarce, most bears are denned by mid-November.

The den is commonly a brush pile. It may also be a pocket or cave in rocky ledges; a hollow in a large tree or a fallen log; a sheltered depression or cavity dug out at the base of a log, tree, or upturned root; or even a simple hole dug into a hillside.

Male bears den up almost anywhere. Females, however, are more particular, selecting protected sites and lining them with stripped bark, leaves, grasses, ferns, or moss.

Abundance

By examining the sex, age, and reproductive history from hundreds of bears each year, wildlife biologists conservatively estimate that the bear population in Vermont is ap-

proximately 3,000 to 3,500 animals. The highest numbers of bears can be found in the center spine of the Green Mountains, from Massachusetts to Canada, and in the northeastern part of Vermont.

History

Before European settlers arrived, most of Vermont was dense forestland, providing ideal bear habitat. However, by the 1850s, almost 75% of Vermont's land area was cleared for farmland. Consequently, bears were at their lowest population level at that time.

From the 1850s to the present, land use changed drastically. The once-abundant pastures and fields slowly reverted to woodlands, and today over 80% of Vermont is once again forested. As a result, the quality of Vermont's black bear habitat has greatly improved.

Resource Utilization

Since people first lived in family groups and settled in village communities, they hunted and utilized animals for food and for other reasons. The hunter was viewed and respected as a valuable contributor to the community and society. Whole villages would turn out to greet hunters returning home from the hunt. This system was based on mutual respect—respect for people, respect for the animals hunted, and respect for the environment



or land. People utilized the harvested animals to the greatest extent possible. In Vermont today, we still observe and honor these basic principles.

Bears taken by hunters in the fall in Vermont are utilized as food. In fact, most years over 10,000 pounds of boneless Vermont bear meat is harvested. When asked why they hunt bears, bear hunters state they hunt in order to obtain meat for personal consumption. More than 65% of successful hunters share the bear meat with friends, relatives, and others in their communities at game dinners or church suppers. People use the skinned pelts of bears for rugs, wall hangings, and to make garments. People also make jewelry from the claws and bones, while others use bear fat for waterproofing leather or cooking.

Thus, regulated hunting and utilization of bears allows for a variety of benefits to the people of Vermont. Hunting and using bears in many ways under regulated conditions is called "sustainable use." Bears

are therefore recognized as an important renewable resource. This is ecologically sound in that regulated hunting does not threaten the bear population, nor does it require changing the landscape of Vermont's forests. Some people call this part of a "working landscape."

Management Efforts

In 1941, the black bear was elevated to the status of a big game animal and received protection under Vermont's laws. The techniques of black bear harvesting were further regulated by banning trapping in 1967, controlling the use of hunting dogs, outlawing baiting, and prohibiting the shooting of bears at dumps in 1972.

Because of improvements in habitat and through management efforts, Vermont's black bears have made a strong comeback. Their numbers are higher today than they have been in 200 years.

Current Management Efforts

Close monitoring and management of Vermont's black bear population is necessary to ensure it remains healthy and abundant in the future. The principle concern for their future relates to their habitat. Major concerns include development and varying production of their critical wild foods, such as acorns and beechnuts.



Vermont's black bear management program has four components:

1. Educating the public,
2. Protecting bear habitat,
3. Regulating harvest and utilization, and
4. Responding to animal damage and public safety issues.

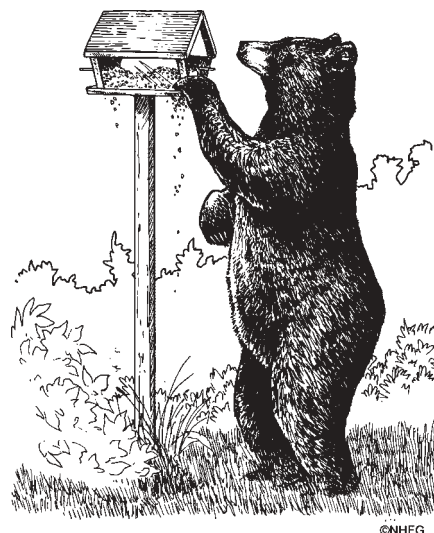
Biologists work with developers, conservation commissions, and land trusts to conserve important bear habitats, including bear-scarred beech stands, wetlands, and travel corridors.

The number of bears taken by hunters each year is regulated so that the bear population remains healthy and stable. The methods of regulation include altering season lengths and timing, bag limits, and methods of harvesting. These hunting regulations are made by wildlife officials who oversee the health of the bear population. Bear hunting is regulated with over 26

Vermont laws, and are enforced in the field by trained state Game Wardens.

Bears are excellent indicators of other wildlife species that need large tracts of contiguous forests. If we can keep bears in our environment, we can also keep many other species of wildlife in Vermont. The greatest threat to Vermont's bear population is the fragmentation of large connected blocks of forestland. Forests can be broken up by highways, residential and resort development, and suburban sprawl. Such uses of the land threaten bear populations by restricting the large-ranging animal to smaller blocks of habitat, which lowers their ability to reach critical foods. Diverse forestland habitat with limited human disturbance is the key to maintaining healthy bear populations.

*Illustration courtesy of the
New Hampshire Fish & Game Department*



"There are some who can live without wild things; and some who cannot."

—Aldo Leopold

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