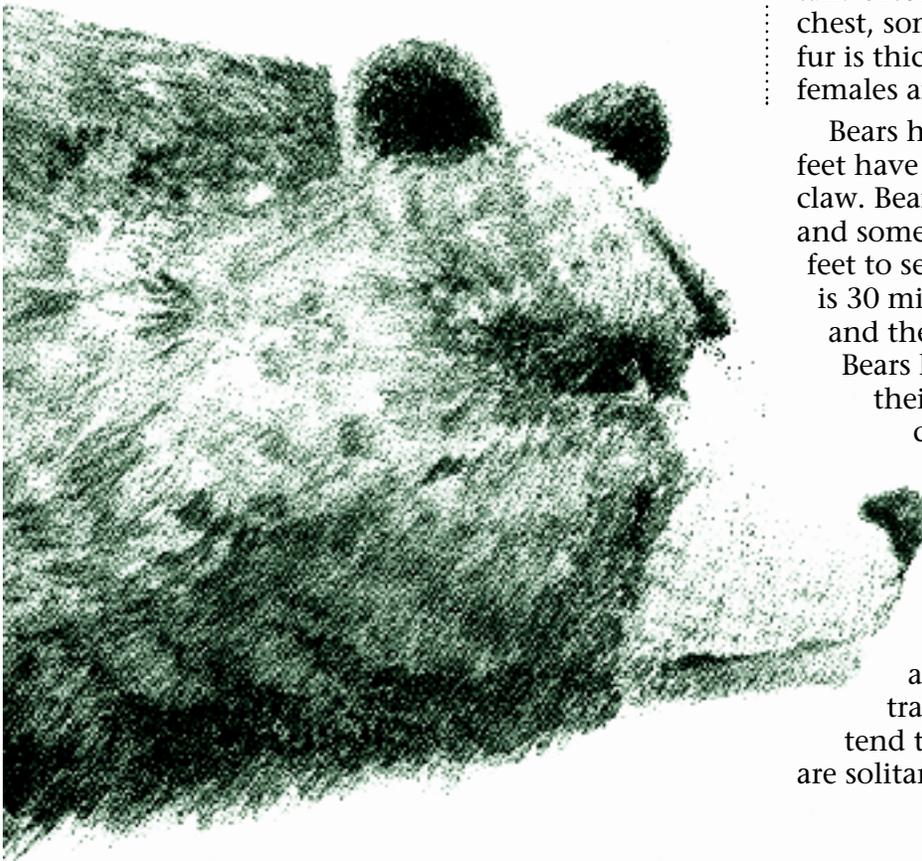


Black Bears

The Black Bear (*Ursus americanus*) is the largest mammal in Maryland. The species ranges through much of forested North America, from Mexico to Alaska and from Florida to northern Canada. In different regions, Black Bears exhibit different activities (breeding, hibernation, etc.), denning times, tolerance of human activity, habitat preferences, home range, reproduction behavior, pelt coloration, size, and weight. This fact sheet explains the characteristics of and management techniques for the Black Bear in the northeastern United States, particularly in Maryland.



Physical Characteristics

Bears are powerfully built animals. Adults are 50 to 85 inches long, including their 3- to 5-inch tails. They stand about 30 inches at the shoulder and weigh from 140 to 400 pounds with rare individuals weighing over 600 pounds. Males, sometimes called boars, tend to be considerably larger and heavier than females (sows).

In other parts of its range, the Black Bear may be cinnamon, brown, or whitish or bluish gray, but Maryland bears are black. The body is glossy black, the muzzle tinged with tan. Often the bear has a white mark on its chest, sometimes in a prominent "V." The fur is thick, long, and fairly soft. Males and females are colored alike.

Bears have a shuffling, flat-footed gait. The feet have five toes, each toe with a curved claw. Bears are extremely agile for their size and sometimes stand erect on their hind feet to see and smell better. Their top speed is 30 miles per hour over a short distance, and they climb easily and swim well. Black Bears have an acute sense of smell, but their vision is poor, and their hearing does not appear to be acute. They occasionally growl or "woof" and, when injured, sob and bawl in human-like voices. Sows communicate to their cubs with low grunts, huffs, and mumbles.

Bears are mainly nocturnal although they sometimes feed and travel by day. Alert and wary, they tend to avoid open areas. Individuals are solitary. Although most bears will run

from a human, a female with cubs should be avoided; on rare occasions she may attack if she feels her young are in danger. The more accustomed to humans bears become (as in a park or a garbage dump), the less likely they are to run away and the greater potential danger they present.

Abundance and Distribution

Historically, Black Bears have been found throughout Maryland. During the early colonial period native forest lands provided an excellent habitat for this wildlife species, but as early colonists cleared the forest, the quality of habitat for bears began to decrease. Uncontrolled timber harvesting, wildfires, and large-scale land clearing for agriculture in the 1800s and early 1900s resulted in shrinking habitat for many of Maryland's forest wildlife species. This habitat loss, combined with indiscriminate killing and minimal protection through conservation laws, resulted in the reduction of many wildlife populations. The Black Bear was eliminated from many parts of the state; by 1850 it remained only in the mountains of western Maryland.

Although there is a resident bear population in the four western Maryland counties (Garrett, Allegany, Washington, and Frederick), the majority of Maryland's resident bear population is located in Garrett and western Allegany counties. Bears have also been observed in Baltimore, Carroll, Harford, Howard, and Montgomery counties. Current research, recorded sightings, and increased bear nuisance reports all indicate a growing bear population in Maryland. The four western counties include 1,415,100 acres or 22.5 percent of the total land area in Maryland. The most recent black bear population estimate was conducted in summer 2000. The population estimate was conducted in Garrett and western Allegany counties. Based on this population estimate and recorded bear observations throughout the state, the Maryland DNR's Wildlife and Heritage Service estimates a statewide bear population of 266 to 437 bears in Maryland.

Life History of the Black Bear

Denning

In winter bears retreat to a den and become dormant. Contrary to popular belief, denning is more dependent upon available food supplies than winter weather patterns. They lapse into and out of deep sleep from which they may be roused. Body temperature is not drastically reduced. Respiration and heart rate may decline noticeably. They do not urinate or defecate while dormant. Bears live off their fat reserves while in the den and lose weight steadily throughout the winter. Bears in poor condition den for shorter periods than those in better shape; if their fat reserves are inadequate, the bears must eat to survive. On warm late winter days, they may emerge to look for food.

Reproduction and Rearing the Young

Bears mate in June and July, occasionally as late as August. It is generally accepted that they are polygamous. The male does not help rear young.

Females give birth to cubs from late December through early February while they are in the winter den. Litter sizes range from one to five cubs with three most frequent in Maryland. Newborns are covered with fine dark hair through which their pink skin shows. They are 6 to 9 inches long and weigh 6 to 12 ounces. Their eyes and ears are closed.

Cubs nurse in the den. After about 4 weeks, their eyes open. They begin to walk at about 60 days, leave the den at 3 months, and are weaned by 7 months. By fall they usually weigh 50 to 100 pounds. Bears traveling in groups in autumn are typically females and their cubs. Playful cubs romp in water and wrestle with their littermates. The female protects them, sending them up trees if danger threatens.

In most cases cubs den with their mothers for their first winter. The family group disbands the following summer when the female is again ready to breed. A female generally raises only one litter every 2 years. Most females breed for the first time when they are 3 1/2 years old.

Biologically, male bears are ready to breed at 1 1/2 to 2 years old, but they usually breed later because of competition from older, more dominant males.

Habitat

In western Maryland bears inhabit wooded country. In spring and summer they frequent openings; in fall they occupy dense regenerating clear cuts and mountain laurel thickets for cover and mixed hardwood forests for food (hard mast). In all seasons bears favor brushy swamps (glades) and mixed hardwood forests, especially where underbrush is thick. Bears range over large areas: a male's average home range covers 25 to 50 square miles; a female's average home range is 15 square miles. Movement is affected by availability of food, breeding activities, and harassment by humans. In some areas bears wear down trails with their travels. Individuals may scar prominent trees with claw and tooth marks; these "bear trees" may mark a territory or signal availability during mating season.

The winter den may be a hollow tree or log, an excavation, a crevice in a rock ledge, a "nest" on top of the ground or under fallen trees or brush, a cavity under a large rock or beneath the roots of a tree; or it may be in a drainage culvert or a depression dug in the ground. Some bears line their dens with bark, grasses, or leaves. Females often select more sheltered sites than males. Males den alone as do pregnant females (they give birth in the den). Females with first-year cubs den with their young.

Food

Bears find food mainly by scent. They are opportunistic feeders with a largely vegetarian diet. Common foods are fruit (including large amounts of many kinds of berries), mast (acorns and beechnuts), succulent leaves of forbs, grasses, insects (including eggs and larvae), plant roots, amphibians, reptiles, small mammals, fish, carrion, and garbage. An occasional bear runs afoul of humans by eating corn (often because mast is limited or unavailable); by raiding campers' food; by destroying honeybee colonies (beekeepers with such problems should protect their hives with electric fences); and by preying on

pigs, goats, or sheep. Bears drink water frequently, and in hot weather they wallow in streams. Bears eat heavily in autumn to fatten themselves for winter.

Mortality Factors

Mortality factors for the Maryland Black Bear are primarily highway kills and illegal hunting. Male bears and other predators occasionally kill and eat cubs. Bears are hosts to ticks, fleas, lice and internal parasites, and occasionally die of disease. However, only a few adult bears die of natural mortality because of their size and strength. In the wild a rare individual might live to 25 years.

Managing Black Bears

Shrinking bear habitat is a problem in Maryland and in many other states with established bear populations; however, bears are remarkably adaptable to living close to humans. Human development—including vacation homes, highways, and town and city expansion—cuts into the bear range in Western Maryland. Protecting suitable forest habitats is probably the single best habitat management tool.

The following is a list of management practices that landowners in Western Maryland can initiate to enhance bear habitat and attract bears:

- Restrict and regulate human use of habitat to create undisturbed and undeveloped areas.
- Create a wilderness environment by maintaining large, expansive forested tracts with minimal human impact or development.
- Maintain unique or special habitat features, such as wetlands, rock outcrops, and boulder fields, or rhododendron and mountain laurel thickets.
- Maintain bogs and glades.
- Reforest areas where possible.
- Maintain such hard, mast-producing trees as red oak, white oak and beech, especially on high ridges.
- Fence out cattle, sheep, horses, and other livestock from forests, wetlands, bogs, and glades to control grazing in prime bear habitat.

- Maintain dead and downed woody materials within forests.
- Maintain large trees with cavities for denning and nesting.
- Control chemical pollution from herbicides, pesticides, and insecticides.
- Suppress wildfires.
- Develop and maintain forest openings.

Preventing the development of problem bears is much easier than reversing it, and it is the responsibility of everyone living, working, and traveling in bear country. Bears with little exposure to human activity can be discouraged from seeking human foods on private lands in Western Maryland if landowners follow these guidelines:

- Absolutely no food, including garbage and trash, should be made available to bears at any time. Store garbage and trash securely and neatly and dispose of it frequently.
- Beekeepers should surround their apiaries with an electric fence or place them on an elevated stand.
- Farmers should bring sheep and cattle into close pastures when the animals are giving birth to increase surveillance and discourage bear activity.
- Large- to medium-sized dogs can often deter bears from coming close to occupied buildings, barns, sheds, and storage areas.

The Wildlife and Heritage Service offers assistance to Maryland residents experiencing nuisance bear activity. In an effort to teach citizens how to live with black bears, an extensive information and education program has been initi-

ated in Maryland. Citizens are given advice on how to keep their homes bear-free by reducing the odds of attracting a bear into their neighborhood. Electric fencing material is provided to beekeepers who have problems with bears raiding their apiaries. Dogs are routinely used by landowners to chase bears away from farms where bears are causing agricultural damage. Bears that have become a persistent nuisance may be aversively conditioned. Aversive conditioning is a tool used to modify an individual bear's behavior. Generally, negative feedback is given to the nuisance bear in the form of pain (by the use of nonlethal rubber projectiles, pepper spray, and noisemaking pyrotechnics).

The Maryland DNR Wildlife and Heritage Service goals for black bear management in Maryland are:

1. To manage the black bear as a native wildlife species in Maryland where suitable habitat exists and is compatible with other land uses.
2. To manage the black bear resource for the purpose of providing recreational opportunities for the citizens of Maryland.

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Wildlife Management: Black Bears

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