

Bears Use a Familiar Strategy During Cold Winter Months

Written by Kyle Testerman, Wildlife Management Institute

Connecticut's changing seasons are one of the many attractive attributes of living in the state. Green springs, warm summers, colorful autumns, and cold, snowy winters. The state's resident wildlife adjusts to those seasonal changes with a variety of strategies. Black bears are well-known for their seasonally changing diets and activity levels. In spring, wetlands are the perfect place to feed on vegetation, like skunk cabbage. Summers are full of berries, insects, and the season's bounty of fresh leaves and grasses. Autumn is a time of hyperphagia, or "excessive eating", when bears are eating as much as they can before winter; acorns and other hard mast contribute to the bulk of their diet during this season. When winter arrives, bears settle in for their long winter's nap and do not emerge until the spring...right? Well, not quite! Black bears are very adaptable, which has allowed them to occur from Alaska's Arctic to Florida's Everglades, and 38 other states in-between, where winters can vary from long and severe to hot and humid.

Surviving Winter

Black bears use winter dens primarily for two reasons. The first is for pregnant females to have a safe and protected place to give birth to cubs. In Connecticut, this occurs pri-

marily in January. In the den, newborn cubs are about the size of a soda can, but grow fast with their mother's milk. The second reason bears den for winter is due to a decrease in their normal food supply – the vegetation has died and snow is covering the ground. When food supplies are low, it becomes too energetically expensive to stay warm and active all winter. As a result, bears "den up" and experience periods of torpor, or a mild hibernation, where their heart rate, breathing, and metabolism decrease to save energy. A bear's body temperature can even drop about 12° F. While this temperature drop saves energy, it is not such an extreme decrease in temperature that it would take a lot of time and energy for a bear to warm itself back up, which allows it to quickly respond to danger.

The smaller decrease in body temperature is one of the key differences

between bears and true hibernators, like bats and woodchucks. The bear's strategy of only moderately lowering its body temperature is similar to when thermostats are regulated in homes during winter. To save on heating costs, we typically turn the heat down only a few degrees when we are gone for the day, and set it back up to normal when we get home. Returning to the normally set temperature is fairly quick. If the heat was turned off, it would take considerably more time and energy to warm the house back up to a comfortable level. Bears are able to find the right balance between long-term energy savings, the high costs of rewarming, and the ability to become active quickly if necessary.

Effect of Mild Winters

When we experience mild winters in Connecticut, some bears may remain active throughout the season. For example, if there is little snow cover and a plentiful acorn crop from autumn, bears may continue to forage for this high-calorie, natural food source. Anthropogenic (human-related) foods, like garbage, food waste, pet food, and bird seed, can be very abundant in residential areas. Consequently, even when natural foods are plentiful, bears may localize their activity around natural and anthropogenic foods. Active bears will still use a den or multiple dens, coming and going to forage on a local food



During mild winters with little or no snow cover, some bears may remain active. Here, a bear is caught on camera taking down a winter bird feeder.

PHOTO BY KYLE TESTERMAN



A male black bear emerges from a winter den on a sunny, mild afternoon.

source. Therefore, residents should not be too surprised if they continue to see bear activity in their neighborhood during winter.

Be Bear Aware, Even in Winter

Because bears can remain active all year long, people should continue to practice good habits of coexistence, even in colder months. Keeping garbage secure and bird feeders out of reach, as well as keeping dogs on a leash when hiking and checking yards before letting pets outside can reduce potential conflict. Electric fences should remain on and monitored throughout winter to effectively protect property. If a bear gets to your bird feeders, do not put them back up, or the bear may become food-conditioned. Food-conditioned and human-habituated bears are more likely to be around homes looking for food on a regular basis, and may even discover a suitable place to den in a

backyard under a deck, shed, or brush pile. Denning, even for short periods, in such close proximity to homes can lead to property damage and pose potential risks to people, pets, and bears. It is in everyone's best interest to prevent this from happening by removing attractants, like bird feeders and garbage, and sealing up areas under decks and sheds where bears may find shelter. As wildlife continues to adapt to humans and our changing landscape and climate, we too can try to adapt our habits to help reduce conflicts with wildlife.

To learn more about black bears and also report bear sightings, visit www.ct.gov/deep/blackbear. Your sighting reports help the Wildlife Division learn more about Connecticut's bear population by providing an index of bear abundance, distribution, and seasonal activity. Sighting reports also alert us to potential conflicts.



Bear Dens Come in All Shapes and Sizes

Brush piles, slash piles, or fallen trees are the most common dens used by bears in Connecticut. Bears also use rock crevasses and ledges, open ground nests, and hollow trees as dens. Ground nests are usually just a sparse mat of leaves and twigs and are typically located in thick vegetation, such as mountain laurel. Bears are also known to den under decks and sheds in people's backyards.



Female black bear with cub using a hollow tree as a winter den.