



# LIVING WITH WILDLIFE

## BATS IN MASSACHUSETTS



Massachusetts has nine species of bats found throughout the state, including Martha's Vineyard and Nantucket. All nine species are protected, with five of the species having endangered status.

### DESCRIPTION

Bats typically have short, soft brown to black fur and darker wings. They are distinguished from other mammals by their wings and their ability to truly fly. Bat's wings have a bone structure similar to the human hand with two thin, flexible skin membranes stretched between four elongated fingers. Bats in Massachusetts have wingspans ranging from 8 to 16 inches and weigh 0.1–1.2 ounces, depending on the species, sex, and time of year.

### LIFE HISTORY

Three of the bat species in Massachusetts—silver-haired bat, eastern red bat, and hoary bat—roost (rest or sleep) in trees or cliff crevices during the summer months. They migrate to warmer areas for the winter months.

Big brown bats remain in Massachusetts throughout the year, roosting in trees or buildings during the summer months, and hibernating in buildings, caves, or mines during the winter.

The remaining five species of bats—little brown bat, northern long-eared bat, Indiana bat, eastern small-footed bat, and tricolored bat—typically roost in forested areas during summer months and hibernate in caves and abandoned mines during the winter. All five species that exclusively spend winters in caves or mines are listed as endangered in Massachusetts. This is due to white-nose syndrome, which is a fungal disease that has spread rapidly and has caused a catastrophic mortality of bats that spend the winter in caves and mines. An estimated 6.7 million bats have died since 2016 due to white-nose syndrome, the most serious wildlife disease epidemic in American history.

### FOOD, HABITS, AND HABITAT

All nine species of bats that live in Massachusetts eat insects. They are active at night and occasionally at dawn and dusk. These bats locate their prey using a type of natural sonar called echolocation. This ability allows them to locate tiny insects and detect objects in complete darkness. In the Boston area alone, an estimated 14–15 tons of insects are consumed each summer by the nearly 50,000 big brown bats that live within the bounds of Route 128. Bats are the greatest nocturnal predators of flying insects.

## TIPS FOR RESIDENTS

Most bats found in buildings during warmer months are either big brown bats or little brown bats. Occasionally, northern long-eared bats may enter buildings, and very rarely tricolored bats will do so. During the winter, big brown bats are the only bats that commonly inhabit buildings.

The presence of any wild animal in a home is an obvious indication that the house is not weather-tight. Finding the site(s) where bats enter the house may be as simple as locating an open chimney flue or cellar hatch, or as difficult as finding a narrow crack between a wall and a chimney or an eave. The attention of a carpenter is often required to repair damaged wood or flashing that allows bats to enter a house.

**EVICTING A BAT FROM YOUR HOME:** If you find a bat flying through your house, do not panic. It will not become tangled in your hair or attack you, although it may flutter by close enough for you to feel the light breeze from its wings. Open windows in the room the bat is trapped in, turn off the lights, and if the room has a door, close it from the rest of the house. Stay in the room to make sure the bat leaves through the window. It may circle the room several times before finding the open window.

**EXCLUDING A BAT COLONY FROM YOUR HOME:** If a bat colony causes a nuisance in your home, discovering the entranceway(s) to the colony is the most important step in solving the problem. The best method for excluding a colony from a building is to seal all possible entrances that are half an inch or larger using good sealing materials, leaving the primary entrance open with a one-way door. One-way doors allow bats to leave the colony, but not reenter. The one-way doors should be left in place for a minimum of five consecutive nights of good weather before being removed and sealing the hole.

All bat species are protected in Massachusetts, therefore attempts to evict a colony can only be made in May after hibernation, or between August 1 and October 15 after the pups have started to fly. If you strive to maintain a weather-tight home by insulating your attic and caulking all exterior cracks and holes as soon as they are detected, your house will likely be both energy-efficient and bat-proof.

**DISEASE AND PUBLIC SAFETY:** Not all bats carry rabies. Roughly 1 in 500–1,000 bats might be infected. Rabies is spread to a person if saliva from an infected bat gets through a person's skin by a bite. If you have to handle a bat, do so with leather gloves or with a thick towel. None of the bats found in Massachusetts can bite through either material. Although uncommon in Massachusetts, histoplasmosis is a respiratory infection that is caused by a fungus found in the droppings of bats and birds. If dust containing the fungal spores is stirred and inhaled, a lung infection may result. Never sweep or vacuum guano (bat droppings) from an attic floor or stir up guano dust unless you are wearing adequate respiratory protection.

## INSTALL BAT HOUSES

One of the best ways you can support bat conservation is by installing an artificial roost, like a bat house. Bat houses provide secure roost sites for bats and give females a safe, warm place to raise their young. Install bat houses in sunny locations, paint them black, caulk all seams, and ensure the interior wood is roughened. Mount bat houses on the sides of buildings, 12–20 feet above the ground and 20–30 feet away from vegetation. Bat houses can be purchased, or you can build your own. Learn more about bats in Massachusetts, including more specific information about safely evicting bats and building bat houses at [mass.gov/bats](http://mass.gov/bats).

Bats are important and valuable mammals in Massachusetts. All nine species of bats are protected in Massachusetts, and five species are listed as endangered under the Massachusetts Endangered Species Act.

**IF YOU ARE EXPERIENCING PROBLEMS WITH BATS OR HAVE QUESTIONS, VISIT [MASS.GOV/BATS](http://MASS.GOV/BATS) OR CONTACT YOUR NEAREST MASSWILDLIFE OFFICE:**

Central Wildlife District, West Boylston: (508) 835-3607  
Connecticut Valley Wildlife District, Belchertown: (413) 323-7632  
Northeast Wildlife District, Ayer: (978) 772-2145  
Southeast Wildlife District, Bourne: (508) 759-3406  
Western Wildlife District, Dalton: (413) 684-1646  
Field Headquarters, Westborough: (508) 389-6300

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