

CRITTERS OF THE MONTH: Bats—Help DFW Locate Summer Bat Colonies

Because Massachusetts and other northeastern states have lost thousands of bats due to a fungal infection on bat called White-Nose Syndrome, the Division of Fisheries and Wildlife (DFW) is asking for reports from property owners with a summer colony of 10 or more bats. Please provide the location (street address), type of structure where the bats reside, number of bats in the colony, and your contact information by calling (508) 389-6360 or emailing mass.wildlife@state.ma.us.

Bat mortality rates are at an alarmingly high level in Massachusetts and other northeastern states. Surveys in Massachusetts caves and mines conducted by biologists from the Division of Fisheries and Wildlife (MassWildlife) and the U.S. Fish and Wildlife Service in February and March of 2009 have shown dramatic rates of mortality; perhaps as high as 98 percent. The state's largest hibernacula normally contained 8,000-10,000 hibernating bats in winter, but over the winters of 2008/2009 and 2009/2010, nearly all the bats died. Biologists are attributing this die-off to White-Nose Syndrome (WNS), a disease characterized by a white, crusting fungus on their muzzles and other parts of their bodies. Biologists from state and federal agencies and other conservation organizations across the country are trying to find a way to protect bats from this deadly fungus. Efforts are underway to understand how this fungus is spreading and killing bats. The WNS fungus has just recently been described as a new species of cold-loving fungus, but why it has suddenly become a problem is unknown.

Ecologically, high bat mortality is a major concern to biologists because most types of bats raise only one pup per year. It would take decades for a bat population to rebound after a large die-off. Concerns have also been expressed about the agricultural and economic impacts of these die-offs. Bats are important predators of mosquitoes and other insects. In a recently published paper in *Science*, estimates suggest that a single Little Brown Bat can consume 4-8 grams of insects each night during the active season. When extrapolated to the one million bats estimated to have died from WNS, between 660 and 1320 metric tons of insects, including pest species, are no longer being consumed.

With summer's hot, humid weather here, some Bay State homeowners may discover bats in their homes. Attics are the most common portion of a house in which bats roost and raise their young. After a few hot summer days, an attic may become too warm for the bats, forcing them out and sometimes into people's living quarters as they search for cooler places to roost. What's a homeowner to do?

Fortunately, a single bat flying in a room can usually be dealt with quite easily. Open an outside window or door in the room where the bat is located and close off the rest of the room from the house. It's usually only a matter of a few minutes of circling before the bat locates the open window and leaves the house. Bats do not attack people or fly into people's hair.

If a bat has landed, assist it out of the house (wearing gloves) in the following ways: For a bat on a curtain, place a jar, coffee can or small box over the bat, carefully working the animal into the container, and cover it. A bat on the floor can be covered with a towel. Another method is to simply pick up the bat and release it outdoors. Don't handle a bat with bare hands, use gloves but avoid cotton gloves. Whatever method is used, don't be surprised if the bat squeaks loudly when handled. Take the bat outdoors and release it. If anyone has had direct contact with a bat or if a bat is found in a room with a sleeping person, the bat should be safely captured but not released. Contact local health officials for assistance in evaluating potential rabies risk and submitting the bat to the Department of Public Health for rabies testing.

Little Brown Bats and Big Brown Bats are the most likely species to be found in buildings. In some cases, with small numbers of bats, people don't mind their presence and concentrate on blocking holes and cracks leading into the human living quarters. Where there is a large colony in house walls, biologists recommend that homeowners wait to initiate eviction proceedings until the first week of August through November. Waiting to evict the colony allows time for young bats to mature and leave the house on their own. Otherwise only the adults will be evicted, leaving the young pups to die and creating a smelly attic.

Learn about the different kinds of bats in Massachusetts, how to evict bats safely, and how to live with them using information from www.mass.gov/dfwele/dfw/wildlife/living/living_with_bats.htm. A booklet, *A Homeowner's Guide to Bats*, is also available from MassWildlife offices. To receive a hard copy of the booklet by mail, send a self-addressed, \$1.50 stamped 6-inch by 9-inch envelope to: "Bat Booklet", DFW, 1 Rabbit Hill Rd, Westborough, MA, 01581.