

## What's Killing the Bats?

In 2006 a caver photographed hibernating bats with a strange white substance on their muzzles in a hibernacula (cave where bats hibernate in winter) west of Albany and noticed several dead ones. Since then, more than a million dead bats have been found in and around caves and mines from New Hampshire to Tennessee. In some hibernacula, 90 to 100 percent were dying. Most seemed to have the unknown white substance on their bodies.



Afflicted bats have a powdery white coating on their snouts with patches of the powdery stuff scattered about on other body parts such as their wings, back, and legs. The appearance is like a plant sparsely coated with powdery mildew. The culprit may be a fungus, and a cold-loving one named *Geomyces destructans* has been identified as at least one of potential pathogens.

Affected bats appear to use up stored fat which is designed to provide them with the energy needed to hibernate over winter without eating. The bats run out of energy, wake up, and fly about, including outside the caves, trying to find insects to eat. Talk about a snowball's chance in hell.

Unfortunately, despite research to find the source of this condition, the cause of the bat deaths remains unknown. Cave-hibernating bats seem to be ones affected, and at least eleven different species of bats in 16 states (including New York) have been identified with the disease. Affected species living on/around Keuka Lake include the big brown bat, little brown bat, eastern small-footed bat, and northern long-eared bat. An endangered bat, the Indiana bat is also affected, but there are no known hibernacula of Indiana bats around Keuka Lake. Bat numbers are way down around Keuka Lake; observers are lucky to spot one per evening flying over the lake.

### Things to do to help reduce the spread of the disease:

- Stay out of caves and mines where bats are known - or suspected - to hibernate (hibernacula) in all states.
- Honor cave closures and gated caves.
- Stay out of all hibernacula when bats are hibernating (winter).
- Report unusual bat behavior to the New York State Department of Environmental Conservation, including bats flying during the day in winter when they should be hibernating. Bats unable to fly or struggling to get off the ground would also be unusual (but they could also be rabid so do not handle such bats).

Only time will tell if researchers will come up with a cause and a cure (imagine giving shots to wild bats!), or the bats will develop resistance, or if the population crashes will continue, possibly leading to eventual extinction of one or more bat species. Fortunately, we still had the swallows and martins hawking mosquitoes over the Lake—mosquito numbers did not seem to be up this summer in spite of the bat decline.

