

# Redding Garden Club Conservation



## Bats: Heading Toward Extinction

*February, 2012*  
*by Jill Kotch*

We in the Northeast have been following the sad story of bats succumbing to White Nose Syndrome (WNS) for several years. The numbers are way up: As of now, approximately 6.7 MILLION bats have been killed by the fungus, which attacks not the nasal area at all, where a white residue is found, but the wings, causing irritation of the very papery skin between the digits. This causes the bats to wake up from hibernation. Revving up their metabolism consumes the fat reserves needed to survive winter, which most do not. If they survive, the wings are so badly riddled with holes that impair their ability to fly that hunting for food is much harder. Many females are not strong enough to nurse their babies. Fewer bats and many fewer babies means six species of bats are heading toward the endangered list, and maybe toward extinction.

The disease keeps moving further out. Why is this important? Bats eat insects. Insects eat crops. Without bats to keep them under control, farmers will need to use tremendous amounts of pesticides to combat the flourishing insect populations. Think cornfields; think cotton; think of the U.S. economy tanking. Thus far the U.S. Congress has allotted only a few million dollars for research.

Researcher Tom Kunz from Boston University has been studying bats forever. He feels it could be of great benefit for bats to use roost modules that are well-insulated and better able to retain heat, since the fungus cannot survive above 68 degrees F (active bat body temperature is around 100). This would not help the colonies in caves or abandoned mine shafts.

Survivors' wings can heal, but studies must be made to see how the scar tissue affects flight and the navigational sensory organs on hairs on the wings. Oddly, the same fungus is in Europe, and the bats there are not affected by it. Sort of like the childhood diseases brought over to America by colonists which ravaged Native American populations.

The U.S. Fish and Wildlife service has the most up-to-date news about where the fungus has been detected, maps, and information about white nose syndrome: <http://www.fws.gov/whitenosesyndrome/>