



# Hoosier National Forest Highlights



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## **White-nose Syndrome in Eastern Bat Species**

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White-nosed syndrome (WNS) has killed more than a million bats in states from Vermont to West Virginia and has had mortality rates in excess of 90 percent in some bat hibernacula. The most obvious symptom of this problem is the presence of a white fungus around the nose of some affected bats. The fungus can also occur on the wings or tail membranes of bats. This is a concern to us due to population densities of bat species that are found in southern Indiana, particularly the federally endangered Indiana bat.

### **What is WNS?**

This affliction was first documented at four sites in eastern New York in the winter of 2006-07. WNS has rapidly spread to multiple sites throughout the northeast. Researchers associate WNS with a newly identified fungus (*Geomyces destructans*) that thrives in the cold and humid conditions characteristic of the caves and mines used by bats. The fungus could be responsible for the bat deaths, or it could be secondary to the cause. Bats affected with WNS do not always have obvious fungal growth, but they may display abnormal behavior within and outside of their hibernacula (caves and mines where bats hibernate during the winter).

### **Where has WNS been found?**

Biologists and cavers have documented WNS in New Hampshire, Massachusetts, Connecticut, Vermont, New York, New Jersey, Pennsylvania, West Virginia and Virginia. There have been no occurrences in Indiana to date. White-nose syndrome is expected to spread to adjacent states over time.

### **Cave closures on the Forest.**

On April 24, 2009, the Hoosier National Forest's Regional Office in Milwaukee, Wisconsin issued an emergency closure order for all caves in eastern region forests. This included closing the Hoosier's caves to all visitors. It is believed that WNS is predominately spread from bat to bat. To hypothetically slow the spread of WNS, the closure was to limit any potential transfer of the fungus from one cave to another (if people were also capable of spreading the fungus). In the meantime, research is being completed to gain as much information as possible for future actions.

**What should you do if you find dead or dying bats in winter or early spring, or if you observe bats with signs of WNS?**

Contact your state wildlife agency, or file an electronic report in those states that offer this service. E-mail U.S. Fish and Wildlife Service biologists at [WhiteNoseBats@fws.gov](mailto:WhiteNoseBats@fws.gov) or contact your nearest Service field office (find locations at <http://www.fws.gov/northeast/offices.html>) to report potential WNS observations.

There have been no reported human illnesses attributable to WNS. We are still learning about WNS, but we know of no risk to humans from contact with WNS-affected bats.

### **Did you know?**

The U.S. Fish & Wildlife Service has an excellent website that is up to date with current WNS findings, pictures, and protocols for cavers. For more information, go to [http://www.fws.gov/northeast/white\\_nose.html#](http://www.fws.gov/northeast/white_nose.html#). For information regarding the Hoosier National Forest cave closures, go to [http://www.fs.fed.us/r9/hoosier/docs/current\\_conditions.htm](http://www.fs.fed.us/r9/hoosier/docs/current_conditions.htm).

### **Contact Information**

For additional information about the Hoosier's cave resources, contact Steve Harriss, at 812-275-5987.



Bats with White-nose Syndrome.

First photograph from the US Fish and Wildlife Service.

Second photograph by Alan Hicks-New York State Department of Environmental Conservation.