

Endangered Species



Unidentified Ailment Threatens Bat Populations

Concerns raised for endangered Indiana bats

Hibernating bats in New York and Vermont, including endangered Indiana bats which are also found in North Carolina, are dying at an alarming rate, and we don't know why. The dead bats are apparently infected by a fungus which often forms white tufts on the bats' muzzles, giving the name white nose syndrome, or WNS. In addition to the white muzzle, dead bats appear to have used up their winter fat stores and have congregated much closer to cave entrances than usual. Researchers are trying to determine if the fungus itself is responsible for the deaths or if its presence is symptomatic of another problem.

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If you should observe a hibernating bat with a white muzzle or other odd white, fungus-like patches, please follow the interim guidelines:

- Do not touch any bats (living or dead), especially those with a white muzzle/nose.
- If you have a camera with you, please take a few photographs of the potentially affected bat(s).
- Exit the cave immediately, avoiding contact with other bats, and please do not enter any other caves prior to decontaminating your clothing and gear.
- Decontaminate your clothing and all caving equipment following the WNS decontamination procedures provided below.
- Contact your state fish and wildlife agency or your nearest U.S. Fish and Wildlife Service Field Office to report your potential WNS observations.
- Please report any dead bats found outdoors or any unusual numbers of bats outside during cold weather, especially near a cave or mine where bats hibernate.

White-Nose Syndrome Decontamination Procedures

The Service asks that cavers please follow these procedures for decontamination. The caving community can help in the effort to control white-nose syndrome by encouraging all cavers to adopt these precautions. This may be important in preventing what could be a continent-wide spread of a previously unidentified pathogen to all caves and mines, and all our cave-dwelling bat populations.

- Remove your caving gear when you get to the vehicle and put it in a closed plastic/garbage bag to prevent contamination of the interior or trunk.
- Wash caving clothes using hot water, detergent and a normal bleach cycle.
- Dry the clothes thoroughly and dry them at hot temperatures.
- Scrape the dirt from boots and soak them in a 10% bleach solution (1 part chlorine bleach, 9 parts water) – soak porous boots longer than nonporous boots.

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- Do not forget to wash or soak cave packs and to thoroughly clean helmets/lights with a 10% bleach solution or a similarly effective disinfectant.
- Sunlight can also kill many things that live in dark places.

Responding to this unprecedented die-off of thousands of bats in New York, biologists and researchers from around the country are working to identify a fungus found on hibernating bats, and to assess the threat to bat populations nationwide. The disease, dubbed white-nose syndrome because of the presence of a white fungus around the muzzles of some affected bats, is a major concern to the bat conservation community.

White-nose syndrome was first detected at caves and mines in New York last winter, where it is believed to be associated with the deaths of approximately 8,000 to 11,000 bats. This winter the disease has again been found at the previously infected New York sites, and has spread to several other sites.

Although the fungus is believed to be associated with the die-off, it is unknown if it contributed to the deaths or whether it is a symptom of another problem.

Because it is not known how the disease spreads, cavers in New York and Vermont have been asked to avoid entering caves and mines until more information is available. No impacts to humans have been reported to date.

Wildlife managers are concerned about the outbreak because bats congregate by the thousands in caves and mines to hibernate during winter months. This behavior increases the potential that the disease will spread among hibernating bats. In addition, hibernating bats disperse in spring and migrate, sometimes hundreds of miles away, to spend the summer.

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Most bats affected to date are little brown bats, but the fungus has also been found on endangered Indiana bats, raising concerns about the impacts on a species already at risk. Other affected bat species include the eastern pipistrelle and the northern long-eared bat.

Indiana bats, protected by the federal Endangered Species Act, as well as state laws, range across much of the eastern United States. Indiana supports the largest hibernating population of the species. About 238,000 Indiana bats, approximately 46 percent of the total population, winter in Indiana caves. Another 15 states have populations of hibernating Indiana bats.

What is the U.S. Fish and Wildlife Service doing to help?

The focus of current efforts among conservation agencies and organizations is on determining the cause of bat deaths. Until the cause is known, it is not possible to determine how the ailment is spread and evaluate possible treatments. The Service is in close communication with the affected states where biologists are investigating the geographic extent of the outbreaks and collecting samples of affected bats. Several university and government laboratories are coordinating their efforts to analyze samples to help determine the cause of the bat deaths. Private laboratories have also offered assistance.

In addition, the Service is developing a geographic database to track the location of affected sites, and collect information on each site, such as the number of bats affected. This information will be critical in tracking the extent and spread of white-nose syndrome and in coordinating research efforts.

Message to Cavers

The Service applauds the caving community's strong conservation ethic and long-time support of bat conservation efforts, and we ask for your continued cooperation and assistance as we address white-nose syndrome. We request that cavers continue to observe all existing seasonal cave closures at known Indiana bat hibernacula, and when possible, to avoid caves or passages of caves containing large hibernating populations of

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any bat species. The Service is not encouraging individual cavers or caving groups to systematically search for bats with WNS in caves or mines.

For further more information on WNS and guidelines to prevent its spread, visit the WNS web pages of either the Northeast (http://www.fws.gov/northeast/white_nose.html) or Midwest (<http://www.fws.gov/midwest/Endangered/mammals/inba/BatAilment.html>) region.