



To: Natural Resource/Conservation Managers
From: Jonathan Sleeman, Director, USGS National Wildlife Health Center
Title: Update on White-Nose Syndrome: Tennessee Finding
Date: February 19, 2010

The USGS National Wildlife Health Center (NWHC) continues to investigate bat white-nose syndrome (WNS) in efforts to further understand this disease and the unprecedented mortality among hibernating populations of bats in the Eastern United States. NWHC recently received two tri-colored bats (*Perimyotis subflavus*) suspected to be infected with the fungus *Geomyces destructans*, the likely cause of white-nose syndrome (WNS), from a cave in Sullivan County, Tennessee. The Tennessee Wildlife Resources Agency submitted the carcasses to the NWHC for diagnostic testing, and released news about the preliminary results based on molecular testing (PCR) on February 16, 2010. The diagnosis of WNS has been confirmed by histopathology at NWHC.

The site in Tennessee represents the southernmost location where the fungus has been detected, as well as the first confirmed positive site in the state. The cave is on private land. The nearest previously confirmed WNS positive site is about 55 miles north in Smyth County, Virginia.

State and federal agency biologists and non-governmental organizations are currently monitoring caves in east Tennessee and other portions of the state for signs of WNS. To minimize disturbance to hibernating bats, this monitoring is being coordinated and conducted as part of annual bat population surveys.

A media release from the Tennessee Wildlife Resources Agency, "TWRA Confirms First Cases of White-Nose Syndrome in Tennessee Bats" can be found at <http://news.tennesseeanytime.org/node/4596>

If you observe the following signs in or around wintering bat hibernacula, please report them to your state natural resource agency or the NWHC contacts listed below:

- Bats with white or gray powdery fungus seen around the muzzle, ears, wing/limbs, and/or tail;
- Excessive/unexplained bat mortality at the winter hibernacula;
- Aberrant bat behaviors (bats found on ground inside or outside the hibernaculum, roosting near hibernaculum entrance, increased bat activity outside the hibernaculum during cold weather, delayed arousal from torpor following disturbance).

More information on WNS in bats can be found at:

- ❖ U.S. Fish and Wildlife Service, Northeast Region: http://www.fws.gov/northeast/white_nose.html
- ❖ USGS National Wildlife Health Center: http://www.nwhc.usgs.gov/disease_information/white-nose_syndrome/
WNS Sampling Methods:
http://www.nwhc.usgs.gov/disease_information/white-nose_syndrome/WNS_sample_methods.pdf
- ❖ USGS Fort Collins Science Center: <http://www.fort.usgs.gov/WNS/>

To report or request assistance for wildlife mortality events or health issues, visit

http://www.nwhc.usgs.gov/mortality_events/reporting.jsp or contact Dr. Anne Ballmann, 608-270-2445, aballmann@usgs.gov (Eastern Region), Dr. LeAnn White, 608-270-2491, clwhite@usgs.gov (Central Region), Dr. Krysten Schuler, 608-270-2447, kschuler@usgs.gov (Western Region), or Jennifer Bradsby, 608-270-2443, jbradsby@usgs.gov.

WILDLIFE HEALTH BULLETINS are distributed to natural resource/conservation agencies to provide and promote information exchange about significant wildlife health threats in their geographic region. If you would like to be added to or removed from the mailing list for these bulletins, please contact Gail Moede Rogall at 608-270-2438 or e-mail: gmgall@usgs.gov.