



To: Natural Resource/Conservation Managers
From: Jonathan Sleeman, Director, USGS National Wildlife Health Center
Title: White-Nose Syndrome: New Locations in Canada, Maryland and Tennessee Confirmed
Date: March 25, 2010

The USGS National Wildlife Health Center (NWHC) has confirmed that samples from bats collected at five new locations, three in Ontario, Canada, one in Maryland and a new site in Tennessee are infected with the fungus *Geomyces destructans*, the likely cause of white-nose syndrome (WNS). This is the first time the disease has been documented in Canada and Maryland. Tennessee was only recently added to the list of new states with confirmed cases of WNS in bats (WHB 2010-01), bringing the total number of states that have confirmed WNS to 11.

The Ontario Ministry of Natural Resources (MNR) announced the detection of WNS at three Ontario sites March 23 at: [Current Status of White Nose Syndrome in Ontario](#).

White nose syndrome was confirmed at three sites in Ontario: in the Bancroft-Minden area, in an abandoned mine near Kirkland Lake, Ontario – northeastern Ontario near Quebec border, and at a site near Flesherton, Ontario – southwestern Ontario near Lake Huron. WNS was associated with the death of an unspecified number of little brown and northern long-eared bats at these sites. The Kirkland Lake site is a large jump northward from where WNS was first detected in the Bancroft-Minden area, and the MNR has notified states and provinces that are in close proximity to these sites. The Ministry is continuing to monitor these areas to determine the extent of the mortality. In addition, the MNR is investigating additional sites and working with the Canadian Cooperative Wildlife Health Centre (CCWHC) to monitor sites where bats hibernate, and this work will continue until the end of the hibernation season in May. The MNR is asking the public not to enter non-commercial caves and abandoned mines where bats may be present to help curb the spread of WNS; not to touch bats, whether living or dead, as a small percentage carry rabies; and to report unusual bat deaths to the CCWHC.

The Maryland Department of Natural Resources announced the detection of WNS on March 18 at: [Bat Disease Found in Western Maryland Cave](#).

Maryland Department of Natural Resources (DNR) biologists confirmed that little brown and northern long-eared bat carcasses collected from a cave near Cumberland on March 5, 2010, were infected with WNS. “This is the first confirmed WNS case in Maryland. DNR will implement a regimen of restricted access and decontamination procedures for all known bat locations,” said DNR Veterinarian Cindy Driscoll. “DNR has also encouraged the owners of the Cumberland cave to prohibit all access to the site.”

Tennessee Dept. of Environment and Conservation announced a second confirmed detection of WNS at: [Dunbar Cave Tested Positive for White Nose Syndrome](#)

Tennessee State Parks announced Dunbar Cave is being closed indefinitely in an effort to take every necessary precaution to isolate the fungus as much as possible in order to protect bat populations at other nearby hibernacula, recognizing that bat-to-bat transmission is still possible. While endangered species of bats are not found in Dunbar Cave, Tennessee is home to populations of endangered Indiana and gray bats, which biologists fear could be potentially devastated by the disease.

NWHC received samples from these sites for diagnostic testing. Molecular testing (PCR) detected the genetic signature of *Geomyces destructans* in both instances. The diagnosis of WNS was confirmed by histopathology at NWHC for the Maryland bats and was confirmed by CCWHC pathologists for the Canadian bats.

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, wings, limbs, and/or tail;
- Excessive/unexplained bat mortality at a hibernation site;
- Aberrant bat behaviors (bats found on ground inside or outside the hibernaculum, bats 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.

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