

To: Natural Resource/Conservation Managers
From: Dr. Jonathan Sleeman, Center Director, USGS National Wildlife Health Center
Title: White-nose syndrome discovered in Kentucky, new counties in Maryland and West Virginia, and Nova Scotia
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White-nose syndrome, a devastating disease of hibernating bats, continues to spread to new locations. Kentucky has recently announced confirmed cases of white-nose syndrome (WNS) in Trigg County; Maryland, which first announced WNS in 2010, has reported that WNS has been confirmed in a third county (Garrett); West Virginia recently announced that bats from the New River Gorge National River area had confirmed cases of WNS; and Nova Scotia, Canada, is reporting bats suspected to have WNS for the first time (in Hants County).

State and federal biologists surveyed Kentucky caves this winter for white-nose syndrome and to assess bat populations. Almost 100 hibernacula were checked throughout Kentucky during the winter. A privately owned cave in Trigg County was one of five revisited by scientists upon confirmation of WNS in Ohio in March 2011. Last year, in February 2010, about 400 little brown bats (*Myotis lucifugus*) were observed in this cave. When biologists revisited the cave in April 2011, around 40 little brown bats were present and over half had visible signs of WNS. One bat was collected and tested at the [Southeastern Cooperative Wildlife Disease Study](#) in Georgia where scientists confirmed presence of the disease using histopathology (microscopic examination of tissues). Gray bats (*M. grisescens*) and Indiana bats (*M. sodalis*), both federally listed endangered species, occupy this cave, but have not been observed to be visibly affected by WNS. Continued observation of bat populations at this site is planned. The [Kentucky Department of Fish and Wildlife Resources](#) issued a [news release](#) about the finding on April 13.

Biologists from the [Maryland Department of Natural Resources](#) have confirmed that WNS has been found in a Garrett County cave that harbors the largest known hibernating population of bats in the state. This is the third site in the state where WNS-infected bats have been documented. Three little brown bats and one tricolored bat submitted to the [USGS National Wildlife Health Center](#) (NWHC) tested positive by histopathological examination. This WNS finding in Garrett County, Maryland, was announced in a [news release](#) on April 14.

At the [New River Gorge National River](#) in West Virginia, a National Park Service wildlife biologist observed abnormally behaving bats flying out of several abandoned mine portals in the park in the middle of the day. Little brown bats from these sites were submitted to the Southeast Cooperative Wildlife Disease Study, where laboratory results confirmed the disease. The [West Virginia Division of Natural Resources](#) had discovered WNS in bats last winter in the counties just east of the park and elsewhere in the state. The National Park Service issued a [news release](#) about the WNS finding on April 18.

Nova Scotia is the fourth Canadian province to discover *Geomyces destructans* on a bat that was observed flying during the daytime near Brooklyn in Hants County. The bat tested positive for DNA from the fungus at the [Canadian Cooperative Wildlife Health Centre](#) (University of Prince Edward Island) by PCR (polymerase chain reaction) analysis. The [Nova Scotia Department of Natural Resources](#) issued their findings in a [news release](#) on April 18. In addition, westward expansion of the disease in Algoma District, Ontario, places the Midwest Great Lakes bat populations at risk for exposure from two fronts.

Trigg County, Kentucky, is now the western-most location where bats have been identified with laboratory-confirmed disease (WNS). Bats in Missouri and Oklahoma have tested positive for DNA from the fungus *Geomyces destructans*, but disease (WNS) has not yet been confirmed at these sites nor has unusual bat mortality been observed. It is important to note the distinction between detecting the disease agent (the fungus, *Geomyces destructans*) versus actual infection of bats with the disease (WNS). Scientists at the NWHC have created documents that describe [case definitions](#) for WNS and the various [sampling methods](#) used to diagnose WNS in bats. New summer submission guidelines will be available soon.

More information on WNS in bats can be found at:

- ❖ U.S. Fish and Wildlife Service: <http://www.fws.gov/whitenosesyndrome/>
- ❖ USGS National Wildlife Health Center:
http://www.nwhc.usgs.gov/disease_information/white-nose_syndrome/
- ❖ 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, Dr. LeAnn White, 608-270-2491, clwhite@usgs.gov, Dr. Thierry Work, 808-792-9520, thierry_work@usgs.gov (Hawaii and Pacific Islands) or Jennifer Bradsby, 608-270-2443, jbradsby@usgs.gov (single mortality events nationwide).

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