



**National Wildlife Health Center
Wildlife Health Bulletin 2016-05**

White-Nose Syndrome Updates for the 2015/2016 Surveillance Season

To: Natural Resource/Conservation Managers
From: Dr. Jonathan Sleeman, Center Director, USGS National Wildlife Health Center
Date: July 15, 2016

Ongoing national surveillance efforts confirm that the geographic range of bat white-nose syndrome (WNS) and the causative fungus, *Pseudogymnoascus destructans* (*Pd*), have expanded during 2015/2016. Specifically, *Pd* continued to spread among bats at new hibernacula in eastern Nebraska, eastern Oklahoma, and central Iowa, and WNS was confirmed for the first time in Minnesota where *Pd* has been present since 2012. Although not unexpected because WNS has been long-present in New England, WNS was also confirmed for the first time in Rhode Island. As previously reported in a [Wildlife Health Bulletin](#) from April 2016, scientists at the National Wildlife Health Center (NWHC) confirmed WNS in a western subspecies of little brown bat (*Myotis lucifugus alascensis*) from King County, Washington. The area where this bat was found is approximately 1,300 miles from the previous westernmost detection of *Pd*.

Following this initial detection of *Pd* and WNS in Washington state, scientists from the NWHC, the [Washington Department of Fish and Wildlife](#), and other state and federal agencies have been working to identify strategies suitable for facilitating additional disease surveillance in the western U.S. to better define prevalence and geographic range of *Pd*. These strategies included testing nonlethal samples collected from hibernating and post-emergent bats, sediment and environmental swab samples collected from bat hibernacula, guano samples collected from post-emergent bats, and screening of bat carcasses that were previously submitted to State Health Department Laboratories for rabies testing. Despite the known presence of *Pd* in Washington, all samples collected from live bats and from environmental and guano samples were negative for *Pd*. However, a single silver-haired bat (*Lasiurus noctivagans*) submitted to the Washington Department of Health (WDOH) for rabies testing and subsequently transferred to the NWHC was positive for *Pd* by molecular testing (real-time PCR). This bat was originally collected during the same month and in the same county as the Washington bat with previously confirmed WNS. Histological analysis indicated that this second *Pd*-positive bat from Washington lacked lesions indicative of WNS. However, detection of *Pd* on this silver-haired bat by PCR is consistent with previous reports for this species in the eastern U.S. and suggests that silver-haired bats may be a carrier of the fungal pathogen. Overall, 34 bats submitted to the WDOH between November 2015 and June 2016 were received by the NWHC, and one bat from this group (the silver-haired bat described above) tested positive for *Pd*. An additional 65 bats submitted to the WDOH during winter 2014/2015 were also tested and all were negative for *Pd*.

The arrival of WNS to western North America represents a significant change in the geographic distribution of this disease and in the previously established pattern of fungal spread in North America. It also presents new challenges for conducting WNS surveillance. For example, it can be difficult and impractical in many areas of the western U.S. to collect non-lethal samples during winter and spring from bat species and hibernacula most likely to harbor *Pd*. In such areas, screening bat carcasses opportunistically found on the landscape during winter and spring, including those submitted to State Health Department Laboratories for rabies testing, for presence of *Pd* is recommended. Where feasible, continued non-lethal surveillance when

Pd prevalence is highest (*i.e.*, during winter and spring) is highly encouraged in states at the edge of known *Pd* distribution and in all other western states. Active surveillance for *Pd* on bats during other times of the year (*i.e.*, during summer and fall) is discouraged because of low likelihood for detection.

The NWHC provides diagnostic and epidemiological assistance to investigate unusual bat mortality events throughout the year. Recent detection of WNS in Washington illustrates the ongoing importance of investigating wildlife mortality events as part of a comprehensive wildlife disease surveillance strategy, and we encourage wildlife managers to report unusual bat mortality or bats displaying clinical signs suggestive of WNS to the NWHC for further investigation. We can also answer questions about designing WNS surveillance and response plans relevant to your state, and with testing samples collected as part of opportunistic or targeted surveillance efforts in accordance with the national *Pd* surveillance strategy. Tribal, state, and federal agencies who have questions about ongoing surveillance efforts or who may wish to participate should contact Anne Ballmann (608-270-2445, aballmann@usgs.gov).

For current bat submission guidelines from the NWHC, click [here](#).

Please visit www.whitenosesyndrome.org for more information about the national multi-agency WNS response effort.

Disease Investigation Services

To request diagnostic services or report wildlife mortality, please contact the NWHC at **608-270-2480** or by email at NWHC-epi@usgs.gov, and a field epidemiologist will be available to discuss the case. To report wildlife mortality events in Hawaii or Pacific Island territories, please contact the Honolulu Field Station at 808-792-9520 or email Thierry Work at thierry_work@usgs.gov. Further information can be found at <http://www.nwhc.usgs.gov/services/>. See also the [Wildlife Mortality Reporting and Diagnostic Services Request Worksheet](#).

If you have any questions or concerns regarding the scientific and technical services we provide, please do not hesitate to contact NWHC Director Jonathan Sleeman at 608-270-2401, jsleeman@usgs.gov.

To see past Wildlife Health Bulletins, click [here](#).

WILDLIFE HEALTH BULLETINS are distributed to natural resource/conservation agencies to provide and promote information exchange about significant wildlife health threats. 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: nwhc-outreach@usgs.gov.