

National Wildlife Health Center Wildlife Health Bulletin 2016-04

White-Nose Syndrome Confirmed in Washington State

- To: Natural Resource/Conservation Managers
- From: Dr. Jonathan Sleeman, Center Director, USGS National Wildlife Health Center

Date: April 18, 2016

White nose syndrome (WNS), a devastating disease of hibernating bats, has now been confirmed in the northwestern United States. A single, western subspecies of little brown bat (*Myotis lucifugus*) from King County, Washington, was found by a hiker in mid-March and taken to Progressive Animal Welfare Society (PAWS), a local wildlife rehabilitation center and animal shelter. The bat displayed clinical signs suggestive of WNS and died within several days of admittance to PAWS. The carcass was then submitted by the Washington Department of Fish and Wildlife (WDFW) to the USGS National Wildlife Health Center (NWHC) for examination. At NWHC, the bat was confirmed to be infected with *Pseudogymnoascus destructans* (*Pd*), the fungus that causes WNS. The bat additionally had histopathological lesions consistent with WNS, and the species identity of the bat was confirmed by genetic analysis. This discovery was made public on March 31, 2016, in a joint <u>news release</u> by the WDFW, the U.S. Fish and Wildlife Service, and the USGS. The location where this bat was found is approximately 1,300 miles from the previous westernmost detection of *Pd*. This new detection represents a significant change in the geographic distribution of WNS and to the previously established pattern of fungal spread in North America. White-nose syndrome has now been confirmed in 28 states and five Canadian provinces (WNS map). As this detection represents a large geographic jump in the spread of *Pd*, genetic analyses are underway to determine the origin of the fungal pathogen isolated from the Washington bat.

The <u>White-Nose Syndrome National Plan</u> was published in 2011 as part of a multi-agency effort to respond to this devastating disease of bats, and surveillance plans for WNS have been implemented at both state and national levels. Since 2013, NWHC has coordinated, in accordance with the National Plan, a swab-based surveillance project of national scope. We are currently working with WDFW and other federal agencies to assist with additional active surveillance in Washington State to determine prevalence and geographic range of *Pd*. The recent detection of WNS in Washington additionally illustrates the importance of wildlife mortality investigation 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.

The NWHC's updated criteria for submission of bats from western states for diagnostic evaluation is attached to this bulletin. Additionally, preventing accidental human-assisted movement of *Pd* remains essential for preventing further spread of WNS. Please see the following links for more information:

- <u>Cave Access Advisory: Recommendations for managing access to subterranean bat roosts to reduce the</u>
 <u>impacts of WNS in bats</u>
- Decontamination Protocols
- WDFW Fact Sheet about Bat WNS

Disease Investigation Services:

To request diagnostic services or report wildlife mortality, please contact the NWHC at **608-270-2480** or by email at <u>NWHC-epi@usgs.gov</u>, 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 <u>thierry_work@usgs.gov</u>. Further information can be found at <u>http://www.nwhc.usgs.gov/services/</u>.

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, <u>jsleeman@usgs.gov</u>.

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: nwt.ewendow.org

NWHC Submission Criteria for Bats from Washington, Oregon, California, Idaho, Montana, Wyoming, Nevada, Utah, Colorado, Arizona, and New Mexico

- Single or multiple bats (*Myotis* sp., *Parastrellus* sp., *Eptesicus* sp., *Corynorhinus* sp.) reported sick or dead within a localized area over a one- to two-week time period through mid-June that exhibit one or more signs associated with white-nose syndrome (WNS):
 - White or gray powdery fungus seen around the muzzle, ears, wings, limbs, or tail of bats;
 - Bats exhibiting yellow-orange fluorescence on hairless skin under long-wave UV light;
 - Excessive or unexplained mortality or population decline at a winter hibernaculum;
 - Delayed arousal from torpor following disturbance;
 - Aberrant behaviors (found on ground inside or outside a hibernaculum, roosting near hibernaculum entrance, increased bat activity outside a hibernaculum or premature return to summer roost during freezing weather);
 - Thin body condition or dehydrated appearance (wrinkled and flaky appearance of furless areas);
 - Moderate to severe wing damage, including membrane thinning, depigmentation, stickiness, holes, tears, or flaky appearance on bats found outside of a hibernaculum or at a summer roost.
- All hibernating bat species (*Myotis* sp., *Parastrellus* sp., *Eptesicus* sp., *Corynorhinus* sp.) submitted to public health laboratories for rabies testing between April and mid-June 2016.
- Any hibernating bat species (*Myotis* sp., *Parastrellus* sp., *Eptesicus* sp., *Corynorhinus* sp.) collected between April and mid-June 2016 that was admitted to a rehabilitation facility, that died or was euthanized within 72 hours following admission, that exhibited signs associated with WNS (see above), or developed moderate to severe wing damage within one to two weeks following admission. Only bats receiving supportive care alone (i.e., no antifungal treatments) will be accepted for examination by NWHC.
- Species other than those listed above, or those collected after mid-June that have suspicious clinical signs or potential exposure to *Pseudogymnoascus destructans* may be considered for diagnostic testing on an individual basis.

Note: If rabies exposure is a concern, we advise that the bat be submitted directly to your state's public health laboratory for rabies testing. If rabies testing is negative, these bats can then be swabbed for *Pd* or submitted to NWHC for WNS evaluation.

Submission criteria will continue to be updated as needed, depending on diagnostic testing capacities and additional findings in western states.