

National Wildlife Health Center Wildlife Health Bulletin 2016-09

Bat Submission Guidelines for White-Nose Syndrome Investigations and Update on Surveillance for *Pseudogymnoascus destructans*

To: Natural Resource/Conservation Managers

From: Dr. Jonathan Sleeman, Center Director, USGS National Wildlife Health Center

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The USGS National Wildlife Health Center (NWHC) has updated the <u>Bat Submission Guidelines for White-Nose Syndrome (WNS) Surveillance in 2016/2017</u>. These guidelines are posted on the NWHC <u>WNS Web page</u> and replace all previous NWHC bat submission criteria. Included are reference charts and a WNS Management Area map to assist submitters to identify priority species and to collect appropriate samples for submission to a diagnostic laboratory. These guidelines support the surveillance objectives of the <u>WNS National Plan</u> for identifying new geographic locations and bat species impacted by *Pseudogymnoascus destructans (Pd)* and WNS.

We also call your attention to two relevant documents that have been established by the WNS Diagnostic Working Group: Current <u>Case Definitions for WNS</u> and <u>Laboratory Biosafety Guidelines</u> for safe handling of materials that potentially harbor *Pd*. Guidance on acceptable methods for euthanasia for diagnostic evaluation of WNS in bats is available upon request.

To confirm WNS in new areas or on bat species not previously known to be infected histopathological evaluation is required. Thus, please collect and submit carcasses or wing biopsy samples collected under UV illumination. For best diagnostic interpretation, whole carcasses are preferable to wing biopsies. For more details, please refer to the Submission Guidelines.

NWHC advises delaying entry into bat hibernacula to conduct surveys until mid- to late-winter as fungal infections of hibernating bats generally become more readily detectable as the season progresses. However, please note that disturbing hibernating bats may cause unintended mortality in otherwise healthy bat populations. As an alternative to entering hibernacula, observation of increased bat activity near the entrance of a hibernaculum during the hibernation season can be indicative of WNS.

For information on *Pd* surveillance guidelines during spring emergence or to discuss swab-based sampling please contact Anne Ballmann (aballmann@usgs.gov) at 608-270-2445.

Update on National Surveillance for Pseudogymnoascus destructans

NWHC continues to assist State, Federal, and Tribal partners with surveillance for *Pd*, the fungus that causes WNS. Both active and passive surveillance methods are encouraged to expediently detect spread of *Pd* into new geographic areas and to identify new bat species susceptible to WNS. NWHC provides sampling kits for swabbing bats and their surrounding environment to State, Federal, and Tribal wildlife agencies nationwide for active surveillance efforts and to address specific research priorities identified by partners in conjunction with the White-Nose Syndrome National Plan. NWHC additionally compiles information on bat species diversity, number of bats present, site accessibility, and distance to nearest *Pd*-contaminated site for all hibernacula surveyed to assess the contribution of various parameters to presence of *Pd*.

Since winter 2013/2014, swab-based samples from more than 3,900 hibernating bats, representing 16 North American species, and over 1,300 environmental substrates from 214 hibernacula in 30 states, have been collected and analyzed. This has resulted in detection of Pd at 83 hibernacula in 14 states, including 28 sites where no physical or behavioral evidence of WNS was observed in the bat population. Additionally, approximately 350 bats that were not associated with a known hibernaculum have been sampled. This included bats that were actively trapped at summer roosts or on the landscape, and sick or dead bats reported by citizens to state wildlife agencies or public health laboratories. From this sample set, Pd was identified on 21 bats from 10 different locations in five states. Overall, nearly 95% of all detections of Pd have originated from samples collected from bats rather than from environmental substrates.

For more information about the interagency response to WNS please visit: http://www.whitenosesyndrome.org/

New USGS Fact Sheet on WNS available online: WNS in North American Bats—USGS Updates

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/.

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.

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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.