

## United States Department of the Interior



## FISH AND WILDLIFE SERVICE 300 Westgate Center Drive Hadley, MA 01035-9589

FEB 13 2012

In Reply Refer To: FWS/R5/ES-TE/050543

Peter Youngbaer White-Nose Syndrome Liaison National Speleological Society 2813 Cave Avenue Huntsville, Alabama 35810-4431

Dear Mr. Youngbaer:

Director Dan Ashe asked that I respond on his behalf to your January 24, 2012, letter regarding the recently revised estimate of bat deaths from white-nose syndrome (WNS). I want to thank you and your organization for your continued partnership to address this devastating disease. We recognize the contributions of the National Speleological Society (NSS) in the scientific study, exploration, and conservation of caves and karst resources, and understand the continued interest of your organization in maintaining access to caves.

The Service is coordinating the national response to WNS, and is committed to using sound science in its decision-making and to providing the public with information of the highest possible quality. Maintaining scientific excellence extends to all Service endeavors, including our handling of the response to WNS.

Accurately determining the number of bats that have been lost to WNS is difficult given the relative lack of available data for common bat species, and the vast number of caves and abandoned mines that are not regularly surveyed. The devastating effects of WNS over the past 5 years have, unfortunately, made it clear that our knowledge of bat populations in North America is not ideal for responding to an unforeseen disease outbreak. Given this situation, we must rely on the best available published data and the knowledge of experts who know the affected resources. We are fortunate to have a wealth of bat expertise in the eastern U.S., and many dedicated biologists who are an active part of the national response effort.

Our national WNS coordinator, Dr. Jeremy Coleman, recently released a statement on our website (www.fws.gov/WhiteNoseSyndrome) that provides details about the methodology employed to develop the recent mortality estimates. In January 2012, the Service convened a group of approximately 20 bat experts from state and Federal agencies and academic institutions to revise the bat mortality estimate. This group used two approaches to revise the estimate. First, they combined the number of known losses of bats across 10 states, then used professional judgment to deduce an estimate of the true amount of bat mortality. The second method involved estimating the total bat population in affected states based on published estimates of bat populations by species. Published observed decline rates (i.e., G. Turner *et al.* 2011, "A five-year assessment of mortality and geographic spread of white-nose syndrome in North

American bats and a look to the future." Bat Research News 52:13-27) were then used to estimate losses by species, which were then tallied. Lastly, in consultation with Canadian partners, bat losses were estimated for affected provinces using comparable bat densities from bordering states.

A sub-group of these scientists is working on a manuscript for publication that will provide a further level of detail regarding the mortality estimate. We do not yet have a publication date.

We look forward to the outcome of this peer review process, and for now feel strongly that our current estimate is derived from the best available information and professional input. This estimate replaces the previous one from 2009, when fewer states had experienced the mass mortality that has come to characterize this disease. An estimate of total bat mortality is not intended to predict the spread or the trajectory of the disease, but rather is an attempt to capture the magnitude of the losses bats have suffered from WNS.

Significant questions remain in the WNS investigation. In your letter, you highlighted many of the research questions that have been identified as priorities through the national WNS response effort. These questions are detailed in the national plan published in May 2011, in the research we have funded since 2008, and by the priorities identified by the national working groups for funding in fiscal year 2012 and beyond. Additionally, we are working on improving our capacity to monitor bat populations and track the impacts of WNS, and other threats, at the national and international scale.

I appreciate your continued dedication to addressing WNS. If the NSS and its scientists and members have additional data and analysis that would be useful for refining the population and mortality estimates, I would invite you to work with Dr. Coleman to share this information. If you have further questions or comments, please do not hesitate to call Dr. Coleman at 413-253-8223.

Sincerely,

Wendi Weber Regional Director