

**White Nose Syndrome Liaison Report
to the
NSS President and Board of Directors
March 2, 2013**

Introduction:

The 2013 White Nose Syndrome season unfortunately began with a bang with the first report of the year. Mammoth Cave National Park confirmed WNS (Alex – [link to press release here](#)) in a Northern Long-eared bat (*Myotis Septentrionalis*). Other confirmations have quickly followed from Virginia, Tennessee, and Kentucky. On February 28, Illinois Department of Natural Resources confirmed WNS on Little Brown and Tricolored bats from four separate counties, making that state the 20th to join the infected ranks. Canada's Prince Edward Island reported likely WNS (now confirmed), and North Carolina reported bats flying on the winter landscape. Since first documented in 2006, WNS has now been confirmed in 20 states and 5 Canadian provinces. The fungus *Geomyces destructans*, identified as the cause of the disease, has been confirmed on several bats in two other states. This early activity does not bode well for the rest of this winter and spring.

Progress:

*Several NSS-funded WNS research projects saw their way into publication over the past several months., including one published on line in the NSS Journal of Cave and Karst Studies on the research behind the U.S. Fish and Wildlife decon protocols. The NSS funded Hazel Barton's portion of this study. A large donation to the WNS Rapid Response Fund came from Howe Caverns, so we have a balance to support additional research. We have given out twenty grants to date.

*Attended the North American Society for Bat Research's annual Symposium in October, this year in San Juan, Puerto Rico. As usual, several of the sessions were devoted specifically to WNS, with some twenty presentations and additional posters on the subject. Unlike the national WNS Symposium, which is primarily federal and state agency personnel, NASBR is academically focused, and networking with the researchers is particularly informative. One remarkable presentation showed that in a Connecticut riparian (stream) habitat whose insect population had previously been foraged by Little Brown and Tricolored bats, that vacuum was now being filled by Big Brown bats, and yes, fish. Nature does abhor a vacuum, and while this is just one study, it may mean the doomsday forecasts of impacts on agriculture and forests may need revision.

*Filed formal comments In December for the U.S. Forest Service Region 2 Environmental Assessment on their cave closure order for the Rocky Mountain Region. You may recall that the order was extended this past summer, but with cave access permitted by NSS and CRF members according to the MOUs between USFS and the organizations. The extension will expire again this August, so public comments on the EA were solicited.

*In January, attended the Northeast Bat Working Group annual meeting, this year in Albany, NY. As you might imagine, most – but not all - of the bat work here has been WNS-related for several years. Interestingly, after the massive bat mortalities of a few years ago, we've seen populations stabilized, and some Little Brown colonies are actually showing slow growth. More interesting, perhaps, is that the Big Brown bats are rapidly filling the void left by the Little Browns. Where Little Browns used to be the most numerous maternity colonies on the summer landscape, that is now reversed. Big Browns

are certainly nowhere near as numerous as the Little Browns used to be, but the phenomenon is notable.

*Have been assisting the 2013 NSS Convention planners with WNS decon station advice.

*Have participated in several conference calls and numerous email exchanges with a group of environmental advocates, coordinated by Bat Conservation International, working to secure WNS funding from the Obama Administration and Congress. That's going about as well as the debt ceiling and sequester negotiations. Seriously, it does keep the NSS before policy makers.

*Was the keynote speaker at the opening of a new bat exhibit at the Berkshire Museum, Pittsfield, MA, on January 19. Had the NSS table display and various brochures available for the public, as well. The display was also used by the NSS office staff at a conference this fall, and at the Onandaga Cave Bat Day in Missouri. It is available for lending/shipping with advance notice.

*Continually updated the NSS WNS website with news, published research, links, and public educational materials. Posted frequently on Cave Chat, and responded almost daily to requests from cavers, scientists, media, and the public. Fed Dean Wiseman with periodic news items for posting on the NSS' various social network sites. Monitored the Internet daily for WNS updates.

Problems:

*WNS continues to spread, and no management techniques or scientific interventions have been found to prevent it.

*Cavers are still puzzled by the USFWS decon protocols and the further complications raised by Petzl's Tips for Protecting Your Equipment, which recommends washing certain items (helmets, etc.) at 30 degrees C, vs the 50 degrees C it takes to decontaminate. Petzl replied, underscoring their temperature guidance. Your WNS Ad Hoc Liaison Committee has been discussing what the NSS should be telling its members, and whether, for example, there may be any legal liability for continuing to urge compliance with the USFWS protocols from a safety perspective. Further inquiries will be made of the USFWS' committee responsible for the protocols themselves.

*The initial USFWS caving advisory from March, 2009, still remains outdated and unchanged.

*While Jennifer Foote was appointed by President Shrewsbury to represent the NSS on the USFWS national stakeholder group, that group has had only one conference call meeting since last May.

*Congressional funding is stalled. Specifically, some base level funding for WNS research and oversight is established in several agency budgets, and continues at some level with each Continuing Resolution passed by Congress. However, the looming sequester could impact that.

*Cave closure orders continue on various public lands. Of most concern are the blanket orders under the jurisdiction of the U.S. Forest Service (Regions 8 and 9), the U.S. Fish and Wildlife Service (Fern Cave and the Wildlife Refuge System, and several major caving states.

Plans:

*Prepare a WNS article for the Conservation issue of the NSS News.

*Continue to encourage NSS members, grottos, regions, and affiliated organizations to actively participate in cave and bat monitoring with state and federal agencies. This is a mutually beneficial relationship, and can help with broader cave conservation goals and support the NSS' targeted versus blanket closure strategy.

*Present a WNS talk in Hamden, CT, March 9, sponsored by the Central Connecticut Grotto.

*Attend the annual USFWS WNS Symposium May 14-17, set for Boise, Idaho.

*A repeat from last two reports, but we do need to work with NSS IT people to reorganize and update the NSS website.

*Continue keeping the BOG advised of breaking WNS developments.

*Continue to update the content of the WNS web page with Breaking News, Research posts, and Outreach and Education materials

Conclusion:

The major activity over the coming months will be monitoring the progress of the disease spread. This will have an impact on research and management decisions throughout the country, although the specific regional impact will vary, depending on whether WNS has already impacted the area, is at the leading edge of the disease, or in areas far from the currently-affected areas.

Appendix:

Hellhole 2013: This past weekend (February 23) was the biennial bat survey at Hellhole, West Virginia. Although I did not accompany this trip, I've heard from several who were there, including West Virginia DNR's Craig Stihler.

First, the good news - the Virginia Big-eared bats continue to be unaffected by WNS. This has been consistent over several years, so there's definitely something about this species that is protecting them.

Now the bad news. This cave had over 110,000 bats in 2008. When we went in 2011, it was partly due to a large number of bats flying on the winter landscape. Indeed, over 40,000 Little Browns had perished, and the rest of the population was obviously highly affected. In contrast, the Indiana bat population had little (less than 2%) visible infection, and the population had grown by some 5,000 bats to over 18,000.

Things are worse. The Little Browns declined another 36,000 bats and only a little over 2,000 remained. Perhaps more significantly for what may occur elsewhere, the Indiana bats are also significantly down, with the estimated loss at 15,000, down to only about 3,000.

Personally, I think this Indiana bat news is most important. While it took longer for the Indianas to be affected, this doesn't bode well for their populations in states like Kentucky and Indiana, two of the major I-bat states. Both of these states has shown leading edge WNS data, but may now be fully involved. Certainly, the early rush of reports from Kentucky this winter is not good.

2013 is a biennial Indiana bat survey year, and all the major I-bat hibernacula will be surveyed. I wish I could say I have some optimism about their status, but I don't. I think the next several months of winter and spring reporting will be busy, and the news will not be good.

Bottom line, for anyone who still thinks WNS has abated, and that mass mortalities aren't occurring, this news should correct that perception.

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