

**White Nose Syndrome Liaison Report
to the
NSS President and Board of Directors
September 24, 2012**

Introduction: Since my last report for the BOG and the Convention, most WNS news has been on the management side of things. The biggest development here was in U.S. Forest Service Region 2, where access to caves was given to members of the NSS and CRF, while extending the regional cave closure order. As WNS is a disease of hibernating bats, as expected we've not heard any news of additional spreading during this time. Research continues on WNS, with a published study on some bats changing their roosting behavior to increase their resistance offering hope that regional extinction may be delayed or avoided for the Little Brown bat. Other projects are ongoing, including cave microclimate studies to determine predictability of WNS spread, and one looking at potential biological controls. The Nature Conservancy's artificial hibernaculum in Tennessee is readying to attract and receive bats this winter in the hope of providing a cleanable roost that could mitigate against the fungus. Finally, a study on the economic and social impacts of cave closures was released, using Monongahela National Forest as the case study.

Progress:

- Access to caves on National Forest lands in U. S. Forest Service Region 2 was granted to NSS and CRF members, consistent with activities under the Memorandum of Understanding between the NSS and USFS and CRF and USFS. As WNS Liaison, I worked over many months with Derek Bristol, Colorado Cave Survey, who was the point person in discussions with USFS in Region 2. The advice and support of the BOG and NSS Legal Counsel were very helpful, and the fact the NSS had recently completed the new MOU with USFS help set the table. Further, a successful Colorado Convention, with no WNS, a high-profile decon station, and good cave visitation experiences were extremely important in evolving caver/agency relationships. While the cave and mine closure order was extended another year, this access has opened caves up again for exploration and other activities. A simple, on-line application form and post-trip report form has already seen quite a bit of use. Cavers report that the process seems to be working well. Indeed, one positive development has been that multiple caves and periods of time, as opposed to single dates and single caves, have been approved. Unfortunately, a total winter ban continues, whether the caves are used by bats or not. Part of this problem is that USFS does not have good knowledge of its own inventory or resources, and the hope is that the approved visits can help build the data base to justify re-opening non-bat caves year-round.
- Awarded two more WNS Rapid Response Fund grants: "**The role of oxidative stress in the development of white-nose syndrome,**" submitted by Marianne Moore, PhD., Bucknell University, and "**Effects of temperature on germination of Geomyces destructans from WNS-affected regions of the United States,**" by Marcia Lee, DVM et al, University of Miami, Ohio . This depleted our available funds, and the status of the fund should be discussed by the BOG (see Problems below).
- Followed up on VAR letters to Monongahela NF and USFS Region 8, both of which extended their closure orders. Region 8, in its response sent by Dennis Krusak, encouraged proposals from the caving community for projects within the region, where before they wouldn't entertain anything. Monongahela says its closure extension is temporary, pending doing the

environmental assessments it says it didn't have time to accomplish. With the Monongahela economic and social impact study just released, VAR cavers should be pushing for those meetings to take place.

- Jennifer Foote participated as the NSS representative in the first conference call meeting of the U. S. Fish and Wildlife Service's WNS Stakeholder Group on Sept. 20. This group was created by the USFWS WNS Steering Committee and chartered last winter, but is just getting off the ground. It is ostensibly intended to provide a forum for non-governmental entities to participate in management decisions.
- Continued to update 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.

Problems:

- The NSS' WNS Rapid Response Fund is out of money. The last two grants we awarded depleted the fund. We've now awarded twenty grants over four plus years, totaling over \$115,000. This fund was created by the Board of Governors, which should discuss the merits of continuing or discontinuing it. It may be that its original purpose has played out, and it may also be that the membership's willingness to donate to it in any significant way has passed. With federal funding having become available for research, and also the National Science Foundation, the "Rapid Response" function may no longer be necessary. The NSS does have other grant programs, and we could direct people to them, although they have generally not been able to provide the level of funding we have through the RRF. I would appreciate a BOG discussion and guidance on this subject as I will be attending the NASBR conference at the end of October and speaking with researchers, who continue to inquire. I've turned down two requests so far in recent weeks.
- The USFWS decon protocols were thrown for a loop when another federal agency raised issues about off-label use of pesticides. Under FIFRA, the Federal Insecticide, Fungicide, and Rodenticide Act, an interpretation was made that certain chemicals in the decon protocols, such as Lysol, were being used to kill a "pest," (read: *Geomyces destructans*), and it was thus illegal for another federal agency to recommend this off-label use. Now, we know from the lab researchers that it is effective in killing G.d., but they can't recommend it. This occurred the week of the NSS Convention, and USFWS quickly scrambled to issue revised protocols. If you read them now, the new, hot water treatment predominates. However, this has been further complicated 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. Inquiries have been made, but there is no resolution at this time.
- The initial USFWS caving advisory remains unchanged.
- Congressional funding is stalled with budgetary (and other) gridlock until after the election.

Plans:

- Attend the North American Symposium on Bat Research October 24-27, in San Juan, PR.
- 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.
- Work with NSS IT people to reorganize and update the NSS website. This should take a higher

priority in the coming months, as the current website is very busy visually, and not as user-friendly as it could be. We have delayed doing this pending other NSS IT developments, but I hope we can get to it soon. This is a carry-over from my last report.

- 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:

With the fall bat swarming season upon us, the big question will be to what extent WNS will continue to spread. It's fair to say most of the WNS researchers do not expect it to stop, but they are still struggling to accurately predict the disease. Species differentiation, species adaptation, species range, cave micro-climate variances, geographic and climate differences, and evolution of the fungus itself are all variables.

With the relative success of re-opening caves in U.S. Forest Service Region 2, the NSS and its members should become much more active at the local and regional level in engaging land managers (agencies). Doors are beginning to open, but cavers must walk through them with proposals that are mutually beneficial.

While research scientists may be years away from any realistic treatments for WNS – if ever – we can expect management activities to continue. Cavers must be engaged to provide expertise on many levels for the conservation betterment of all of caves' resources, including bats, and to protect not only access to caves for visitation, but to protect the caves themselves.

Peter Youngbaer, Liaison (16161RE)
3606 East Hill Road
Plainfield, VT 05667-9547
802-272-3802 (cell)
wnsliaison@caves.org