

**Senate Committee on Appropriations
Subcommittee on Interior, Environment, and Related Agencies**

Testimony Regarding FY 2011 Funding to Address the Bat Disease White-Nose Syndrome

*Submitted by Nina Fascione, Executive Director, Bat Conservation International,
on behalf of the undersigned organizations and researchers*

May 14, 2010

On behalf of the undersigned organizations and researchers, with over 4 million combined supporters, we submit the following testimony requesting an additional \$5 million in designated federal funding to support research and management on white-nose syndrome (WNS) in FY 2011. We also encourage approval of the pending appropriations requests from the U.S. Fish and Wildlife Service (FWS) and the U.S. Geological Survey (USGS). This funding is urgently needed to understand the cause, transmission and control of WNS and to reduce the impacts of this devastating wildlife disease.

WNS is an infectious disease that has already killed more than one million bats throughout the eastern United States. The disease is named for a newly described fungus that grows on the noses (and sometimes wings, ears and tails) of affected bats. Hibernating bats affected by WNS experience some or all of the following symptoms: 1) frequent arousals during hibernation, leading to depleted fat reserves and starvation; 2) suppressed immune system; 3) damage or scarring of the wings; and 4) abnormal behavior (for example, bats emerge too soon from hibernation and are often seen flying around in midwinter, which usually means they will freeze or starve to death).

The unprecedented mortality associated with WNS has caused the most precipitous wildlife decline in the past century in North America, with significant ecological and economic consequences throughout the U.S. In the northeastern U.S., where WNS was first discovered in 2006, mortality rates of nearly 100 percent are reported for some bat colonies. Over the past two years, this disease has spread rapidly beyond the Northeast. This past winter, the WNS-associated fungus has been documented in Maryland, Delaware, Tennessee and Missouri. WNS has already killed thousands of endangered Indiana bats and now threatens some of the largest hibernating populations of endangered gray bats, Virginia big-eared bats and Ozark big-eared bats. Ultimately, more than half (25 of 46) of bat species in the continental U.S. are at risk.

Bats play a critical role in maintaining the balance of nature. They are primary predators of vast numbers of insects, including pests that annually cost American farmers and foresters billions of dollars. Additionally, the droppings of bats that live in caves support unique ecosystems, including microorganisms that potentially could provide invaluable resources for detoxifying industrial wastes and producing safer pesticides and antibiotics. Loss of bats would have serious, potentially irreversible consequences, both ecologically and economically.

In June 2009, bat expert Dr. Thomas Kunz of Boston University presented testimony to Congress that outlined a need for WNS funding in excess of \$45 million dollars over a five-year period, with \$17 million in the first year. This was developed through extensive collaboration among scientists and wildlife managers deeply concerned about the consequences of WNS. Congress appropriated \$1.9 million for WNS in the FY2010 U.S. Fish and Wildlife Recovery of Listed Species program. Of these

appropriated funds, FWS distributed \$1 million to WNS research, \$450,000 to state WNS response activities and \$450,000 to FWS WNS coordination efforts.

Since October 2009, when Congress appropriated this funding, the WNS-associated fungus has been found in four additional states (Delaware, Maryland, Tennessee and Missouri) as well the Canadian provinces of Ontario and Quebec. WNS is now within 100 miles of the crown jewel of the National Park System's cave parks: Mammoth Cave National Park. And it has crossed the Mississippi River into the American Midwest (Figure 1). This past winter, at least 36 additional U.S. counties and 8 Canadian counties were infected, and WNS now occurs within the range of two additional endangered species (the Virginia big-eared bat and gray bat). A cave used by the largest hibernating colony of Virginia big-eared bats (in Pendleton County, WV) has been diagnosed with WNS, and we expect the largest caves used by gray bats to be impacted within the next year. At the current rate of spread, WNS will very likely be within range of the endangered Ozark big-eared bat within one year.

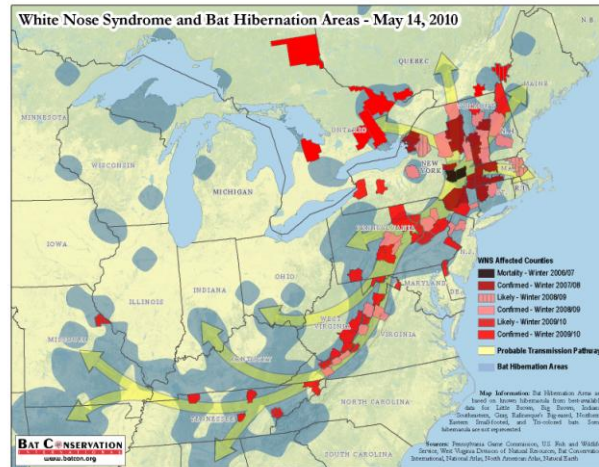


Figure 1. Map showing the current distribution and predicted spread of WNS across the Eastern U.S. Red areas depict counties where WNS has been detected as of May 2010. Blue areas show regions in the U.S. where major hibernating colonies are present. Yellow arrows indicate probable transmission routes as the fungal infection spreads across the U.S.

In addition to the significant risk WNS poses to federally-listed endangered species, the little brown bat, a relatively common and widespread species in the U.S., could decline to the point that it warrants listing as threatened or endangered. Already this year, the Center for Biological Diversity has petitioned for endangered species listing of two bat species (Northern long-eared bat and Eastern small-footed bat) due to threats posed by WNS and other factors.

Listing species under the Endangered Species Act is very expensive. According to the Government Accountability Office (GAO-06-463R), the average cost for recovery of an endangered species is \$15.9 million; the highest estimate on record is \$125 million to recover the whooping crane. Bat species affected by WNS have broad geographic distributions and complex life histories, which likely would require even higher recovery costs. The economic consequence of additional bat listings would undoubtedly affect operational costs of a number of industries, including defense, energy, mining, timber, agriculture, construction, transportation, tourism/recreation and others. We believe it makes better economic sense to fund WNS research and prevention now, rather than bear the cost of endangered species recovery for years to come.

The need for support of research, monitoring and management of WNS is substantial, but we recognize that the current economic climate may not allow for funding at previously proposed levels. Nonetheless, the geographic scope and expected ecological and economic consequences of WNS will require a substantial financial response.

With an additional \$5 million in appropriated funds for WNS, resources could be available for research grants targeting control and treatment, disease transmission and spread, population genetics, and other topics critical to our understanding of this devastating disease and how to combat it. Funding could also support much-needed development and implementation of federal and state WNS-response plans, critical data collection, surveillance and monitoring and program administration. Finally, resources could be available to fund public outreach and communication efforts to disseminate information to constituents of states within the impact zone of WNS and those expected to become infected within the next few years.

Congressional support is critical because other funding sources are extremely limited. State budgets have been drastically reduced and federal agencies cannot absorb this cost within their existing resources. We strongly urge Congress to approve the pending appropriations requests from the U.S. Fish and Wildlife Service and the U.S. Geological Survey. A portion of these requested funds will provide some support for WNS research, management and outreach activities, but the FY 2011 federal budget requests will not be sufficient to address this devastating disease. For this reason, we are requesting an additional \$5 million in designated funds for WNS.

Unless additional funding is provided in the FY2011 budget, WNS will continue to spread across the landscape unchecked, killing enormous numbers of North American bats. We desperately need designated support for WNS research, monitoring, management and outreach. Without targeted funds, agencies may be forced to expend their budgets on internal operating costs, leaving little or nothing to truly address the cause and possible cure of WNS. As a result, we may see significant ecological and economic changes that will have a negative impact on America's taxpayers and the U.S. economy, while adding new species to the ranks of endangered and extinct animals.

We appreciate the opportunity to share our position concerning this serious matter, and respectfully ask you to consider our urgent request.

Sincerely yours,

Nina Fascione, Executive Director
Bat Conservation International
Austin, Texas

ORGANIZATIONS

10,000 Birds, NY

Adirondack Council, NY

Allegheny Defense Project, PA

Appalachian Center for the Economy and
the Environment, WV

Appalachian Voices, NC

Bat Conservation International, TX

Bat World Sanctuary, TX

Biodiversity Conservation Alliance, WY

Biodiversity Research Institute, ME

Cary Institute of Ecosystem Studies, NY

Center for Biological Diversity, AZ

Center for North American Bat Research and Conservation, IN
Connecticut Audubon Society, CT
Conservation Northwest, WA
Defenders of Wildlife, DC
Forest Service Employees for Environmental Ethics, OR
Foundation for Deep Ecology, CA
Friends of Blackwater, WV
Global Wildlife Conservation, CA
Green Berkshires, MA
Hilton Pond Center for Piedmont Natural History, SC
Maine Organic Farmer's and Gardener's Association, ME
Massachusetts Forest Watch, MA
Midwest Bat Working Group, IN
National Speleological Society, AL
National Cave and Karst Research Institute, NM
Natural Resources Defense Council, NY
New Jersey Audubon Society, NJ
Northeast Organic Farmers Association: Connecticut
Northeast Organic Farmers Association: Massachusetts
Northeast Organic Farmers Association: New Hampshire
Northeast Organic Farmers Association: New Jersey
Northeast Organic Farmers Association: New York
Northeast Organic Farmers Association: Rhode Island
Northeast Organic Farmers Association: Vermont
North American Symposium for Bat Research
Northeastern Cave Conservancy, NY
Northwest Coalition for Alternatives to Pesticides, OR
Organization for Bat Conservation, MI
Predator Defense, OR
RESTORE: The North Woods, MA
Save the Cumberland, TN
South Carolina Audubon Society, SC
Southeastern Bat Diversity Network, MS

Sweet Water Trust, VT
The Enviro Show, MA
The Lands Council, WA
The Nature Conservancy, Tennessee Chapter, TN
The Northeast Ecological Recovery Society, NY
Sierra Club, DC
The Wildlife Society, MD
Vermont Law School: Environmental and Natural Resources Law Clinic, VT
Walden's Puddle Wildlife Rehabilitation and Education Center, TN
Western Bat Working Group, SD
Western Watersheds Project, UT
Wild Farm Alliance, CA
Wild South, NC
Wildlife Alliance of Maine, ME
Wildlife Conservation Society, DC
Women, Food and Agriculture Network, IA

RESEARCHERS

Hazel Barton, Ph.D., cave biologist, KY
Brad Bergstrom, Ph.D., mammalogist, GA
Angie Doerr, Ph.D., ecologist, CA
Winifred Frick, Ph.D., bat biologist, CA
John Hayes, Ph.D., mammal ecologist, FL
Thomas Kunz, Ph.D., bat ecologist, MA
Gary Kwiecinski, Ph.D., bat biologist, PA
Kathleen LoGiudice, Ph.D., wildlife biologist, NY
Gary McCracken, Ph.D., ecologist, TN
Marianne Moore, Ph.D., bat biologist, MA
Phil Myers, Ph.D., ecologist, MI
DeeAnn Reeder, Ph.D., bat biologist, PA
Fraser Shilling, Ph.D., ecologist, CA
Merlin Tuttle, Ph.D., bat biologist, TX