Fish and Wildlife Service Awards $800,000 in Grants to Explore Cause, Control of White-Nose Syndrome in Bats

At an event held in conjunction with the Smithsonian Institution’s National Zoo in Washington, DC, the U.S. Fish and Wildlife Service today announced 6 grant awards totaling $800,000 going toward research efforts to explore the cause and control of white-nose syndrome, a wildlife health crisis of unprecedented proportions that has now killed more than a million bats in the Northeast and remains unchecked.

“These grants will provide critical funding to help the Service and our partners find the cause, find a cure and stop the spread of this deadly disease,” said Interior’s Deputy Assistant Secretary for Fish and Wildlife and Parks Jane Lyder. “Bats are an incredibly important component of our nation’s ecosystem, and the loss of even one species could be disastrous for wildlife, agriculture and people.”

One of the bat species currently affected by white-nose syndrome is the endangered Indiana bat. White-nose syndrome has been documented in six counties in Virginia and West Virginia and is now within the range of two additional endangered bat species, the Virginia big-eared bat and gray bat. The Endangered Species Act protects six bat species in the contiguous United States.

Federal and state biologists, academia, researchers and non-governmental partners have been overwhelmed by the unanticipated effects of this wildlife health crisis, but are committed to finding answers before species are lost forever.

The Fish and Wildlife Service provided the grants through the Preventing Extinction program. The Service selected recipients from among 41 grant proposals totaling $4.8 million for research into WNS. “We are very pleased and hopeful about the work funded by these 6 research grants. Our only regret is that we were unable to fund many more of the project proposals that could lead us to answers about what is killing our bats and how to control this devastating problem,” said the Service’s Jeremy Coleman, Ph.D., national white-nose syndrome coordinator.

One of the grants was awarded to the Smithsonian’s National Zoological Park to establish a captive population of the Virginia big-eared bat at the Conservation & Research Center near Front Royal, Virginia. There are only 15,000 Virginia big-eared bats remaining in a few caves in the state.
West Virginia, Virginia, Kentucky and North Carolina. White-nose syndrome has already infected some of the caves in this area, and if it continues, this bat subspecies could likely become extinct. The Conservation & Research Center to the National Zoo has developed a multidisciplinary team of scientists, veterinarians, nutritionists and curators who are working with the U.S. Fish and Wildlife Service and West Virginia Division of Natural Resource to establish this insurance population of Virginia big-eared bats, thereby buying time to determine the cause of, and cure for, this disease. Bats in this population may eventually be needed to re-establish the subspecies in the wild. Virginia big-eared bats have never been kept or bred before in captivity, so lessons learned from this project will be of broad interest to agencies and organizations if white-nose syndrome in wild bat populations makes it necessary to consider captive breeding of other bat species.

The other recipients of the white-nose syndrome funding include the following:

Analyzing Indiana bats to determine their susceptibility.
Sybill K. Amelon, Ph.D., USDA Forest Service, Northern Research Station; Guy Knudsen, Ph.D., University of Idaho; Sara Oyler-McCance, Ph.D., U.S. Geological Survey, Rocky Mountain Center for Conservation Genetics and Systematics; and Lori Eggert, Ph.D., University of Missouri. This project focuses on assessing the impact of white-nose syndrome on the genetic viability of Indiana bats.

Identifying compounds to stop the fungus associated with white-nose syndrome.
Hazel A. Barton, Ph.D., Northern Kentucky University, and Kevin Keel, DVM, Ph.D., University of Georgia. This research is on the propagation and decontamination of white-nose syndrome in the environment.

Examining immunity and body composition in white-nose syndrome affected bats versus bats unaffected.
Thomas H. Kunz, Ph.D., and Michael D. Sorenson, Ph.D.; Center for Ecology and Conservation Biology, Boston University, Massachusetts. This project will focus on Immune function, body composition and genetic correlates of bat white-nose syndrome.

Developing a rapid WNS diagnostic test.
Alison Robbins, MS, DVM, and Donna E. Akiyoshi, Ph.D.; Tufts Cummings School of Veterinary Medicine, Massachusetts. This funding will support the generation of Geomyces destructans specific monoclonal antibodies.

Identifying the genetics of white-nose syndrome affected little brown bats to predict at-risk populations before white-nose syndrome hits.
Deborah D. Iwanowicz, Ph.D., and Tim King, Ph.D.; U.S. Geological Survey, Leetown Science Center, West Virginia. This project will expand our understanding of white-nose syndrome in the Northeastern Vespertilionidae with emphasis on the little brown bat.

Additional information about WNS may be found at http://www.fws.gov/northeast/white_nose.html.

The U.S. Fish and Wildlife Service works with others to conserve, protect, and enhance fish, wildlife, plants, and their habitats for the continuing benefit of the American people. We are
both a leader and a trusted partner in fish and wildlife conservation, known for our scientific excellence, stewardship of lands and natural resources, dedicated professionals, and commitment to public service. For more information about our work and the people who make it happen, visit http://www.fws.gov.