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Plan to help keep bats from dying out

By ROBERT M. COOK

U.S. Fish and Wildlife Service officials are working on a plan to help states deal with a disease that has killed millions of bats, though conservationists say the agency also needs to push for \$10 million in funding as part of its efforts.

According to the Center for Biological Diversity in Richmond, Vt., the disease, white nose syndrome, has wiped out an estimated 1.5 million bats and killed off the entire bat population in some locations.

It has rapidly spread from the Albany, N.Y., area, where it first appeared in caves in the winter of 2006 and 2007, to nine states from New Hampshire to West Virginia. It is expected to show up in bat caves this winter in Kentucky, Tennessee and other Midwestern and Southern states, and biologists think it may reach the West Coast within two to three years.

"White nose syndrome is like a house on fire," said Mollie Matteson, a spokeswoman with the center's Northeast office. "People have been throwing buckets of water on it, and calling 911, but it's taken a long time for the fire trucks to get there. We're grateful, but we hope it's not too late."

The U.S. Fish and Wildlife Service's draft plan can be viewed at www.fws.gov/northeast/white_nose.html.

Agency officials said last week that they hope to finalize the plan by late fall, before the syndrome starts showing up in new sites this winter.

Matteson said the hope is to implement the plan by midwinter, and it will include protocols for states to follow to mitigate the impact of the disease.

The final plan will address research, containment and monitoring for the disease, along with measures for recovery of stricken bat species, she said.

The center, along with several other groups, have for months been calling on Congress and Interior Secretary Ken Salazar to take action, Matteson said.

This spring and summer, members of Congress hosted three hearings on the syndrome, but the House did not approve funding to fight it, and the Senate appropriated only \$500,000 for monitoring. Biologists outside the Fish and Wildlife Service have said a minimum of \$5 million to \$10 million was needed just to address the current extent of the crisis, and more would be needed as the illness spread.

"Getting a plan written is an enormous step forward. Next it has to be implemented, and it needs money. Otherwise, it'll just be a way to pass time as the bats disappear," Matteson said.



Courtesy photo A little brown bat infected with white nose syndrome pictured in October 2008 in New York state.

She said the longer it takes to appropriate the right amount of money, the more likely it will be the country will lose more bats.

"There's enormous concern that we're going to lose a lot more," she said. "In the Northeast, we have virtually no little brown bats left."

Emily Brunkhurst, a New Hampshire Fish and Game biologist, said the federal plan will only spread awareness, though that's needed to get enough funding to continue researching the disease.

"It's a great thing because we really need national attention for this," Brunkhurst said.

If Congress approves more funding, it will let researchers look at treatment strategies as well as causes, she said.

Researchers also continue to look at how the fungus is transmitted, Brunkhurst said. Researchers want

to know whether bats are transmitting the fungus from bat to bat, acquiring it from insects they're eating or getting it from humans who enter caves.

Brunkhurst said she's still concerned that if something is not done to stop the disease and help bats recover, the state's ecology will suffer.

Bats eat thousands of pounds of agricultural pests and nuisance species like mosquitoes every summer. She said the state's food production and timber industries could be affected.

She said the disease is affecting five species of bats in New Hampshire, and biologists have not been able to estimate how great an ecological impact their loss would create.

A bat colony in Peterborough has been nearly wiped out from the disease, and several New Hampshire towns have reported young bats dying.

Brunkhurst said bats that contract white nose syndrome usually have a characteristic white fungus on their muzzles, wings and tails, but only in the caves and mines where they winter.

She said the bats use up their stores of body fat, which is all they have to survive the winter, and become emaciated and die.

Dr. Scott Reynolds has been studying a little brown bat maternity colony in

Peterborough for more than 15 years. He said in August the Peterborough colony had averaged about 2,000 bats over the last 15 years, and has been in existence for at least 40 years. There are now fewer than 100 bats left, and they've lost the advantages of being a sizable colony.

A number of historic bat colonies where large numbers of bats gathered and had their pups have been lost because of the disease "... and there is pretty strong evidence those bats are dead," Brunkhurst said.

Dr. David Blehert and his colleagues, who discovered the fungus, have named it *Geomyces destructans*. It is not known whether the fungus directly causes the bats to become emaciated during the winter or if some other process is killing the bats, according to Brunkhurst.

Susi von Oettingen, an endangered species biologist with the U.S. Fish and Wildlife Service in Concord, said the \$500,000 approved by the Senate "is a drop in the bucket" of what is needed to deal with the disease.

The agency also diverted \$800,000 from projects it had budgeted for other endangered species to fund some of the more than \$5 million worth of submitted research proposals.

She said she hopes Congress will approve more funds so state fish and game agencies will have enough people to respond to the disease.



Courtesy photo A bat displaying likely white nose syndrome symptoms in late February at Breathing Cave in Bath County, Va.

"We don't have a paid position that is dedicated" for managing the syndrome, she said.

Funding could be used to create such positions as well as regional coordinators.

Now, Jeremy Coleman, a federal endangered species biologist in New York state, is serving as national coordinator for white nose syndrome issues. He said the plan could help states where the disease has not made its presence felt.

The Northeast was caught off guard when white nose syndrome appeared two years ago, and biologists scrambled in triage mode to deal with it, he said.

Vermont's Matteson said the U.S. Fish and Wildlife Service must secure enough funding so researchers can study the disease thoroughly.

"The disease is still not really understood," she said.