



Northern Long-eared Bat *Proposal to List as Endangered*

Why the Northern Long-eared Bat is Proposed for Endangered Species Act Protection

Responding to a petition to list the northern long-eared bat, we collected and analyzed available data and information. This included contacting all state natural resources agencies within the species' range to request survey data and any other available information. Our analysis included a white-nose syndrome risk assessment that projected the disease's rate of spread and impacts on this bat, which led to our proposal to list as endangered.

White-nose Syndrome

White-nose syndrome, a fungal disease, is the predominant threat to the northern long-eared bat. Due to this disease, northern long-eared bat numbers in some caves in the Northeast declined by up to 99 percent. Also, although counts of little brown bats at some sites have been consistent post-white-nose syndrome (at drastically reduced levels), no evidence suggests this is the case for the northern long-eared bat. For example, 14 populations that became locally extinct within 2 years of the disease arriving continued to have no northern long-eared bats 5 years after white-nose syndrome.

Since its first documented occurrence in New York in 2006, white-nose syndrome has spread rapidly throughout the East and is spreading across the Southeast and Midwest. Although it is not yet found throughout the entire range of the northern long-eared bat, the fungus that causes white-nose syndrome is in 28 of the 39 states (with the disease confirmed in 25 states) and it



Photo by Ann Fraschauer/U.S. Fish and Wildlife Service

Northern long-eared bats hibernate in caves and mines during winter.

continues to spread. In fact, white-nose syndrome was documented in Michigan and Wisconsin after the proposal to list was published. However, we have received comments questioning the probability and likely rate of white-nose syndrome spreading to currently unaffected areas and how the disease will impact the northern long-eared bat in currently unaffected or recently affected areas.

Other Factors Affecting the Species

Other factors that may affect the northern long-eared bat include: wind energy development, habitat destruction, disturbance at hibernacula, climate change and contaminants. Although these factors did not cause the initial dramatic population decline, we must now explore whether these are important factors affecting the northern long-eared bat's ability to persist while experiencing declines caused by white-nose syndrome. Through our continuing analysis, we are

Benefits of Bats *Bats help farmers and make healthy forests*

Northern long-eared bats, like all bats found in the northern and eastern United States, are predators of night-flying insects, including many of the most damaging agricultural and forest pests. Although small in size, bats are voracious feeders. A single little brown bat can eat up to 1,000 mosquito-sized insects in a single hour, while a pregnant or lactating bat eats the equivalent of her body weight in insects each night. Bats consume mosquitoes, moths, locusts and grasshoppers. Research published in the journal *Science* (April 2011) estimates that through reduced crop damage and reduced need for pesticides, bats save U.S. farmers roughly \$22.9 billion every year. A tremendous economic saving but it also means fewer pesticides enter our ecosystems.

strengthening our understanding of these factors, and exploring ways they can be addressed.

The Listing Process

We are now analyzing all comments and information received during the open comment period. We are also contacting the states within the bat's range for updates to information previously provided. Engagement with states continues as our field office staffs communicate directly with state natural resource agency staffs. At both the management and staff levels, we are responding to requests for more information and involvement, and have committed to work closely with the states to assess the needs of this species, and to develop appropriate conservation measures to meet those needs.

While continuing our assessment of risk for the northern long-eared bat, we are also charting a path forward (internally and in consultation with the states and tribes) that includes identifying strategies to determine critical habitat, population viability thresholds, recovery needs and guidance for section 7 consultations, section 10 permits and habitat conservation plans. We recognize the needs of the forestry industry, and consider it a priority to better understand the impact of forest management on this species and to develop conservation measures to protect the bat while avoiding undue economic impact.

Potential 6-month Extension

By Endangered Species Act regulation we must make a final decision within 12 months of publication of the proposed rule. The Act does allow for a 6-month extension when "there is substantial disagreement regarding the sufficiency or accuracy of the available data relevant to the determination." Based on comments received that disagree on the accuracy and sufficiency of the existing information on white-nose syndrome, we are considering

extending the deadline to make a final decision. If the deadline is extended by 6 months, we will make a final decision on the proposed rule no later than April 2, 2015.

Final Decision

The final decision options are to 1) withdraw the proposed rule, 2) list as endangered or 3) list as threatened. The terms "endangered" and "threatened" are defined in the Act, and Section 4(b) does not allow consideration of the economic impact of a listing. Rather, we must determine whether the species is "in danger of extinction" (endangered) or "likely to become an endangered species within the foreseeable future" (threatened) based solely on the best scientific and commercial data available.

When a species is listed as threatened, under section 4(d) of the Act the Secretary may issue regulations that she deems necessary and advisable to provide for conservation of the species. These rules specify that some activities are consistent with or contribute to a species' overall conservation, and even if those activities result in take (harming, harassing, killing) of a threatened species, that take is not prohibited, nor is a take permit needed.

Tools under the Endangered Species Act

While protecting endangered and threatened species, the Act also provides mechanisms that allow flexibility for otherwise lawful activities that may harm listed species. These mechanisms encourage conservation of imperiled species while private individuals, businesses, government agencies and others conduct their normal activities.

Incidental take permits and habitat conservation plans: Section 10(a)(1)(B)

Private landowners, developers, and any other non-federal groups and

individuals can carry out normal activities that take endangered or threatened species by receiving an "incidental take" permit.

Interagency Cooperation: Section 7

The Act requires federal agencies to consult with the Service when activities they conduct, authorize or fund may affect listed species. Like incidental take permits and habitat conservation plans, this process is used extensively to resolve potential conflicts with activities that may take listed species. The process includes identifying the amount or extent of anticipated take, reasonable and prudent measures to minimize that take, and terms and conditions that must be observed when implementing those measures.

In January 2014, the Service developed voluntary guidance for federal agencies called "Northern Long-eared Bat Interim Conference and Planning Guidance." This voluntary guidance is meant to streamline our technical assistance for federal agencies while the northern long-eared bat is proposed and will help them with section 7 consultation if the species is eventually listed. While conferencing guidances are not developed for every proposed species, because the northern long-eared bat is found across so many states, this voluntary guidance will help ensure consistent recommendations across the range.

The Service is committed to using the regulatory flexibility available under the Act to minimize or avoid economic impacts while conserving northern long-eared bats. We are committed to practicable solutions that focus conservation efforts where they are most needed and will be most effective. We will work with all constituencies to accomplish this in the spirit of cooperation and partnership.

For questions or more information please visit our website at www.fws.gov/midwest/endangered