



## Questions and Answers

### Designating Critical Habitat for the Northern Long-eared Bat is Not Prudent

#### 1. What action is the Service taking?

The Service is announcing our determination that designating critical habitat for the northern long-eared bat is not prudent. We listed the northern long-eared bat as threatened under the Endangered Species Act on April 2, 2015. At that time, we determined that designation of critical habitat was prudent, but not determinable. With additional information and a more in-depth analysis, we re-evaluated that determination. After further consideration, we determined not to designate critical habitat for the northern long-eared bat. This determination appears in the April 27, 2016, *Federal Register*.

#### 2. What is critical habitat?

The Endangered Species Act defines critical habitat as specific geographic areas that contain the physical or biological features that are essential to the conservation of the species and that may require special management considerations or protection. The Act requires the Service to designate critical habitat to the maximum extent prudent and determinable.

Critical habitat receives protection under section 7 of the Act through the requirement that federal agencies ensure, in consultation with the Service, that any action they authorize, fund, or carry out is not likely to destroy or adversely modify critical habitat. During consultation, the Service works with the federal agency to identify ways to minimize adverse effects to the species.

A critical habitat designation imposes no requirements on state or private actions on non-federal lands where no federal funding, permits or approvals are required. Designation of critical habitat does not affect land ownership, does not allow the government to take or manage private property, nor does it establish a refuge, wilderness, reserve, preserve or other type of conservation area. It does not allow government or public access to private lands.

For more information about critical habitat, see [http://www.fws.gov/endangered/esa-library/pdf/critical\\_habitat.pdf](http://www.fws.gov/endangered/esa-library/pdf/critical_habitat.pdf)

#### 3. Why did the Service determine that designating critical habitat for the northern long-eared bat is not prudent?

We considered designating critical habitat within the context of the northern long-eared bat's seasonal habitat needs: summer habitat and winter habitat. Typical of many bats in the eastern

United States, northern long-eared bats use two distinctly different and usually separate areas during their annual cycle. During summer, they feed, roost and raise young in forested areas. Some males and non-reproductive females may use caves and mines during the summer. During winter, the northern long-eared bat hibernates in caves and mines, called hibernacula.

During summer, the northern long-eared bat is widely distributed in a variety of wooded habitats and its habitat needs for roosting and foraging appear to be flexible and not specific. Thus, summer habitat for the northern long-eared bat, while important, does not have specific physical or biological features that are essential to the conservation of the species; and therefore, does not meet the definition of critical habitat. Additionally, northern long-eared bat summer habitat is not limited or in short supply and summer habitat loss is not a range-wide threat to the species. Designating critical habitat in the areas where it summers would not benefit the northern long-eared bat, and therefore, would not be prudent.

Winter habitats used by northern long-eared bats (*i.e.*, hibernacula) have fairly specific physical and biological features that make them suitable. Factors influencing a hibernaculum's suitability include its physical structure (*e.g.*, openings, interior space, depth), air circulation, temperature profile, humidity, and location relative to foraging sites. So, northern long-eared bat winter habitat does have specific physical and biological features that are essential to the conservation of the species, and, therefore, meets the definition of critical habitat. However, since listing the northern long-eared bat as threatened, information became available demonstrating that designating critical habitat would likely increase vandalism, disturbance, and, potentially, the spread of white-nose syndrome in the caves and mines where northern long-eared bats hibernate. Therefore, we determined that it is not prudent to designate winter habitat as critical habitat for the northern long-eared bat.

#### **4. Why would designating summer habitat as critical habitat not benefit the northern long-eared bat?**

Critical habitat regulations provide two examples of circumstances when designating critical habitat may not benefit the listed species and, therefore, may not be prudent. Those circumstances are: where the present or threatened destruction, modification, or curtailment of a species' habitat or range is not a threat to the species, or where there are no areas that meet the definition of critical habitat for the species. Summer habitat for the northern long-eared bat falls within both examples. First, the present or threatened destruction, modification, or curtailment of summer habitat is not a threat to the species; rather, disease (white-nose syndrome) is the primary threat to the species within its summer habitat. Second, no areas of summer habitat meet the critical habitat definition for the northern long-eared bat because there are no specific physical or biological features of summer habitat that are essential to the conservation of the species.

*The present or threatened destruction, modification, or curtailment of summer habitat is not a threat to the species:*

There are an estimated 281,529,000 acres of forested habitat available for the northern long-eared bat throughout its range in the United States. The projected future loss of forests due to conversion is anticipated to be a small percentage of the total amount of forest habitat.

Additionally, this bat uses a wide variety of forest types across this wide range. Thus, northern long-eared bat summer habitat is not limited or in short supply, and summer habitat loss is not a range-wide threat to this bat.

*Summer habitat does not meet the definition of critical habitat:*

Under the Act's definition of critical habitat, occupied areas are included in a critical habitat designation if they contain physical or biological features (a) which are essential to the conservation of the species, and (b) which may require special management considerations or protection. Physical or biological features that are essential to the conservation of a species typically include habitat features that provide the animal space, food, cover, and protected habitat. To identify these, we focus on features that provide for a species life-history needs. For the northern long-eared bat, this would include roost sites, prey, foraging areas and areas to travel among these sites.

The northern long-eared bat has a large geographic range, uses a wide variety of forest types and is considered flexible in its summer habitat requirements. The bat's geographic range extends north from the southeastern U.S. into the Canada's Yukon Territory. Within this range, it lives in many different types of wooded habitats that are diverse in size, physical structure and species composition. The northern long-eared bat uses tracts ranging from large contiguous forested blocks to small woodlots; densely stocked stands with a thick tree canopy to loosely stocked stands with much lower tree canopy cover; and hardwood forests to mixed pine/hardwood forests. Within these forests and woodlots, the bat's specific habitat needs for feeding, shelter, and reproduction are also generic and flexible. They roost in cavities, crevices, hollows, or under loose bark in many different species of tree, live or dead, that are generally over 3 inches in diameter. This bat species also forages in a variety of forest types. Although there are elements of summer habitat that the northern long-eared bat needs (forests for roosting, raising young, foraging, and commuting between roosting and foraging habitat); the species' specific needs and preferences for these habitat elements are relatively flexible, plentiful, and widely distributed. Thus, summer habitat for the northern long-eared bat does not have specific physical or biological features that are essential to the conservation of the species and, therefore, does not meet the definition of critical habitat.

Based on this information, designating summer habitat as critical habitat would not benefit the northern long-eared bat because destruction of summer habitat is not a predominant threat to the species and there are no areas within summer habitat that meet the definition of critical habitat.

Thus, we determined that it is not prudent to designate summer habitat as critical habitat for the northern long-eared bat.

## **5. Why would designating hibernacula as critical habitat increase threats to northern long-eared bats?**

We have determined that the publication of maps and descriptions outlining the specific locations of northern long-eared bat wintering areas, which would be necessary for a critical habitat designation, would increase awareness and visitation of hibernacula. People interested in accessing caves and mines would have detailed location information for these hibernacula, which would increase visitation of the caves and mines, and thus increase disturbance of hibernating bats.

Disturbance of hibernating bats has long been considered a threat to cave-hibernating bats, including the northern long-eared bat. Northern long-eared bats hibernate during winter to conserve energy during a time when the energy expense of staying warm is high and food resources are low or non-existent. Each time a bat arouses during hibernation, it uses energy to warm itself and increase its metabolic rate. Human activity within hibernacula can arouse bats more frequently, causing premature energy store depletion, increased susceptibility to disease, and starvation. There are numerous incidents of vandalism within and around caves and mines, targeted killing, and disturbance of hibernating bats, including northern long-eared bats, throughout its range. Compounding the effects of disturbance in hibernacula, northern long-eared bats infected with white-nose syndrome are believed to be less resilient to disturbance.

Additionally, identifying hibernacula locations by designating them as critical habitat could increase the rate that white-nose syndrome spreads. Humans can transmit fungal spores that cause white-nose syndrome and decontamination remains one of the only options to reduce that risk. State, federal, and local agencies and organizations are concerned that making hibernacula locations more public will result in more people visiting those areas and not properly decontaminating after leaving hibernacula. This would result in spreading white-nose syndrome fungal spores if people use contaminated gear in uninfected caves or mines.

We concluded that disclosing locations of northern long-eared bat hibernacula would increase vandalism and disturbance at hibernacula, and, potentially increase the rate that white-nose syndrome spreads to uninfected sites.

## **6. Is summer habitat important for the bat?**

Yes. The public should not construe our “not prudent” determination to mean that summer habitat is not important for the northern long-eared bat. Obviously, during summer northern long-eared bats need areas where they can roost, raise their young, forage, and travel between these areas. However, the bats’ specific needs and preferences for these habitat elements are relatively flexible, plentiful, and widely distributed.

### **7. How is the northern long-eared bat protected?**

The northern long-eared bat was listed as threatened under the Endangered Species Act in 2015. Listing protects species by prohibiting “take” under section 9 of the Act. The take prohibition includes activities that result in the direct killing or injury to listed animal species. The Service also published a 4(d) rule that uses flexibilities under section 4(d) of the Endangered Species Act to tailor protections to areas affected by white-nose syndrome during the bat’s most sensitive life stages, including hibernation and rearing young.

In addition, section 7 of the ESA protects listed species by requiring that other federal agencies formally consult with the Service to ensure that their actions are not likely to jeopardize the continued existence of a listed species or adversely modify critical habitat. Through this consultation, the Service works with the federal agency and advises on whether the actions would affect the species or critical habitat as well as ways to avoid those impacts.

### **8. How can I get more information?**

We have information about the northern long-eared bat, including its threatened status, and our determination that designating critical habitat is not prudent, on our website at [www.fws.gov/midwest/endangered/mammals/nleb](http://www.fws.gov/midwest/endangered/mammals/nleb).