

**Identification:** A medium sized bat (*Myotis septentrionalis*) with a body length of 3 to 3.75 inches and a wingspan of 9 to 10 inches. The bat's fur is dark to medium brown on the back and pale to tawny on the underside. This species of bat is easily distinguished from other species of *Myotis* by its long ears. During the winter these bats hibernate in caves and mines, called hibernacula. The hibernacula have constant temperature, high humidity, and no air currents. The bats hibernate in small crevices and cracks. During the summer, these bats roost singly or in colonies. They roost under the bark of trees, in cavities, or in crevices of live or dead trees. They will also roost in caves or mines during the summer. It is uncommon for this species of bat to roost in human structures.



**Importance:** The northern long-eared bat is federally listed as a threatened species under the Endangered Species Act. Threatened species are species that are likely to become endangered in the future. Endangered species are those that are in danger of becoming extinct.

**White-nose Syndrome:** Northern long-eared bat populations have declined sharply, up to 99%, across a large portion of its range. The decline is being caused by white-nose syndrome, a disease caused by the fungus *Pseudogymnoascus destructans* which affects hibernating bats. The disease is named for the white fungus that appears on the muzzle and other parts of the bat. The fungus has caused significant mortality and was first documented in New York in 2006. Currently, it has spread west as far as Missouri and spread south to Mississippi and Alabama. Alabama has seven counties with infected hibernacula. White-nose syndrome causes bats to behave strangely during the winter months, they will fly out during the middle of the day or cluster at the entrance of the cave/mine. The disease is estimated to have killed over 5.5 million bats in the United States and Canada. White-nose syndrome has been confirmed in the following species of bats: Big brown bat, Eastern small-footed bat, Gray bat (endangered), Indiana bat (endangered), Little brown bat, Northern long-eared bat (threatened), and the Tri-colored bat.

**Forestry Considerations:** Northern long-eared bats can be adversely affected by forestry operations if their roost sites are disturbed or if wooded corridors that provide them with cover on nightly flights between roosting and feeding sites are removed. Protect hibernacula that are inhabited by bats and leave a buffer of undisturbed vegetation around the entrance. Wooded corridors between roost sites and feeding areas should also be protected. The use of herbicides and insecticides in areas adjacent to foraging and roost sites should be carefully controlled and monitored for unanticipated adverse effects.

**Endangered Species Act 4(d) Rule:** The US Fish and Wildlife Service published the final listing and rule to the Federal Register on January 14, 2016. The rule took effect on February 16, 2016. The rule prohibits the purposeful take throughout the range of the northern long-eared bat.

Exceptions to the rule include: removal of northern long-eared bats from human structures, defense of human life (including public health monitoring), removal of hazardous trees for protection of human life and property, as well as authorized capture and handling by individuals permitted to conduct these same activities for recovery purposes. For areas of the country not affected by white-nose syndrome (areas outside the white-nose syndrome zone), the final 4(d) rule exempts incidental take from all activities. (See Map) For areas within the white-nose syndrome zone, take from hazardous tree removal is exempt from Endangered Species Act prohibitions. For areas of the country impacted by white-nose syndrome, the measures provided in the final 4(d) rule exempts incidental take from the following activities:

- Forest management practices
- Maintenance & limited expansion of transportation/utility lines
- Prairie habitat management
- Limited tree removal projects, provided these activities protect known maternity roosts and hibernacula.

As long as the above activities include the following measures:

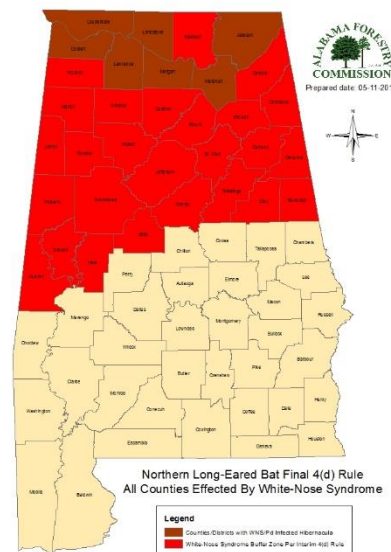
1. Activity occurs more than ¼ mile from known hibernacula.
2. Activity avoids cutting or destroying known, occupied maternity roost trees during pup season (June 1 – July 31).
3. Activity avoids cutting or destroying any trees within a 150-foot radius of known, occupied maternity roost trees during pup season.

Incidental take of Northern Long-eared Bats resulting from the conversion of mature hardwood or mixed forests into intensively managed monoculture pine plantations is not prohibited by the final 4(d) rule as long as known hibernacula and known, occupied maternity roost sites are protected. The U.S. Fish and Wildlife Service characterizes monoculture pine stands as poor bat habitat but emphasizes the importance of protecting hibernacula and maternity roost sites within plantations as an acceptable compromise for sustaining NLEB populations.

The 4(d) rule does not require private landowners to conduct a survey for northern long-eared bats, but a survey would help identify whether bats utilize the area. With the 4(d) rule in place the landowner has the added certainty that incidental take resulting from the exempted activities is not prohibited.

**Distribution by County:** Lauderdale, Limestone, Madison, Jackson, Colbert, Lawrence, Morgan, Marshall, DeKalb, Franklin, Marion, Winston, Cullman, Blount, Etowah, Cherokee, Lamar, Fayette, Walker, Jefferson, St. Clair, Calhoun, Cleburne, Pickens, Tuscaloosa, Shelby, Talladega, Clay, Randolph, Sumter, Greene, Hale, Bibb

**Counties with Hibernacula where the Fungus *Pseudogymnoascus destructans* has been Found or White-nose Syndrome has been Confirmed:**  
 Lauderdale, Colbert, Limestone, Lawrence, Morgan, Marshall, Jackson, DeKalb, Franklin, Calhoun



The Ecological Services Office of the U. S. Fish and Wildlife Service in Daphne, AL has an excellent key for landowners and managers to determine if a planned activity will cause prohibited take to Northern Long-eared Bats and if a permit for the activity is necessary. The key is located at the following website: <http://www.fws.gov/daphne/es/Bats/Bats.html>. Additional information is available online at: <http://www.fws.gov/midwest/endangered/mammals/nleb/>



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For more information please visit: [www.forestry.alabama.gov](http://www.forestry.alabama.gov)