

**Northern Long-eared Bat 4(d) Rule and  
Private Landowners in Michigan  
February 18, 2016**

Northern long-eared bats are documented from many Michigan counties and are believed to range throughout the entire state. The species hibernates in mines and caves in the winter (hibernacula) and spends summers in wooded areas.

The northern long-eared bat uses a wide variety of forested habitats, but is not found in all wooded areas in Michigan. The species' local distribution and abundance is influenced by the distance to hibernacula and quality of available habitat. Although it can be difficult to predict where the species may occur, once northern long-eared bats colonize a forest habitat for raising their young (pups), they will often return to the same areas annually.

As a result of this fidelity to specific locations, the U.S. Fish and Wildlife Service's approach to implementation of the Endangered Species Act (ESA) is based in part on "known" locations where the species has been documented to occur, specifically known tree roosting sites and hibernacula.

Please contact the East Lansing Field Office (contacts listed below) for Federal or wind energy projects in Michigan for project-specific recommendations. Under the ESA, the requirements for "Federal" projects (i.e., projects funded, authorized, permitted, or implemented by a Federal agency) are different than requirements for wholly private or otherwise non-Federal projects. This fact sheet is applicable to non-Federal projects. In addition, utility-scale wind turbines may attract and cause mortality of bats and warrant additional considerations.

Please also note that the Indiana bat, listed as endangered under the ESA in 1973, also occurs in forests in portions of Michigan. The protections afforded this species under the ESA are different than those used for the northern long-eared bat. Summer habitat for the Indiana bat typically includes small to medium-sized river and stream corridors with well-developed riparian woods, woodlots within 3 miles of small to medium rivers and streams, and upland forests. Female Indiana bats typically roost in trees that are dead or nearly so and  $\geq 5$  inches diameter (dbh) with exfoliating bark. The roost trees are in forests or woodlots or in trees that are located within 1,000 feet of other forested/wooded habitats.

Information on the distribution of the Indiana bat in Michigan is available at <http://www.fws.gov/midwest/endangered/lists/michigan-spp.html> and recommended survey methods are at <http://www.fws.gov/midwest/endangered/mammals/inba/index.html>. If your project is likely to impact Indiana bats or their habitat, please contact the East Lansing Field Office to determine if a permit pursuant to the ESA is warranted.

## **In Michigan, what is required if there are no known northern long-eared bat hibernacula or roost trees near a proposed project?**

We do not require private landowners to conduct surveys for ESA-listed bats on their lands, nor do we require our guidelines for northern long-eared bats to be followed on lands where no roosts or hibernacula are known. However, our records of these locations in Michigan are limited, and we expect northern long-eared bat roosts to be present in many locations in addition to those listed in this factsheet.

When there are no known northern long-eared bat roost trees or hibernacula in the project area, we encourage you to conduct tree-cutting activities and prescribed burns in forested areas during October 1 through March 31 when possible, but you are not required by the ESA to do so. When that is not possible, we encourage you to remove trees prior to June 1 or after July 31, as that will help to protect young bats that may be in forested areas, but are not yet able to fly.

### **Northern Long-eared Bat 4(d) Rule Take Prohibitions**

The definition of “take” pursuant to the ESA includes to harass, harm (e.g., habitat impacts), pursue, hunt, shoot, wound, kill, trap, capture, or collect (see 50 CFR 17.3 for details).

The final 4(d) rule for the northern long-eared bat (50 CFR 17.40(o)) was published on January 14, 2016. For more information on the final rule, please visit:

<http://www.fws.gov/Midwest/endangered/mammals/nleb/index.html>.

Under the final rule, prohibitions in Michigan include:

- Actions that result in the incidental take of northern long-eared bats in known hibernacula.
- Actions that result in the incidental take of northern long-eared bats by altering a known hibernaculum’s entrance or interior environment if it impairs an essential behavioral pattern, including sheltering northern long-eared bats.
- Tree-removal activities that result in the incidental take of northern long-eared bats when the activity: (1) Occurs within 0.25 mile of a known hibernaculum; or (2) Cuts or destroys known occupied maternity roost trees, or any other trees within a 150-foot radius from the maternity roost tree, during the pup season (June 1 through July 31).

Please note that not all tree-removal activities within the buffer of a hibernaculum or maternity roost tree will result in take. The timing and extent of tree removal may be an important consideration in those circumstances, please contact our office to discuss your project plans in more detail. If your activity would result in incidental take that is prohibited based on the above, we will work with you to determine whether a permit pursuant to the ESA may be applicable.

## Michigan Known Hibernacula and Roost Tree Locations for Northern Long-eared Bat

We have compiled location information for northern long-eared bat hibernacula and known roosts trees in Michigan. This information can be used to help project planners in determining the applicability of provisions of the northern long-eared bat final 4(d) rule under the ESA. Please use the tables below to see if we have information that may be applicable to your project.

If you are planning a project that may remove trees from forested habitat in the Michigan townships below, please contact our office with more specific information on the location of your project and we will confirm for you whether there are any known hibernacula within ¼ mile of your project or any known roost trees within 150 feet of your project.

### Where are the known northern long-eared bat hibernacula in Michigan?

<b>Known Northern Long-eared Bat Hibernacula in Michigan</b>			
<b>County</b>	<b>Townships Containing Hibernacula and/or Buffer Areas</b>	<b>Number of Hibernacula</b>	<b>Landownership Within Buffer(s)</b>
Alpena	Alpena (T32NR9E)	1	Public
Baraga	L'Anse (T49NR33W)	1	Private
Berrien	Buchanan (T7SR18W)	1	Private
Dickinson	Breitung (T40NR30W, T39NR30W), Norway (T39NR29W)	8	Private (8)
Gogebic	Ironwood (T49NR46W); Bessemer/Wakefield (T47NR45W)	2	Private (1), public (1)
Houghton	Adams/Quincy/Franklin/Stanton (T55NR34W); Calumet (T56NR33W); Laird (T49NR35W, T49NR36W); Schoolcraft (T56NR32W)	3	Private (1), public (2)
Keweenaw	Allouez (T57NR32W, T58NR32W); Eagle Harbor/Grant (T58NR30W); Eagle Harbor/Houghton (T58NR31W)	10	Private (9), private + public (1)
Mackinac	Hendricks (T44NR7W)	4	Public (4)
Manistee	Dickson (T22NR14W, T22NR13W)	1	Private + public
Marquette	Ely (T47NR28W); Tilden (T47NR27W); Richmond (T47NR26W)	3	Private (3)
Ontonagon	Bohemia (T52NR37W); Carp Lake (T51NR44W, T51NR43W); Greenland (T51NR37W, T51NR38W, T50NR38W); Matchwood (T49NR41W, T49NR42W); Rockland (T50NR39W, T49NR40W)	42	Private (20), public (8), private + public (16)

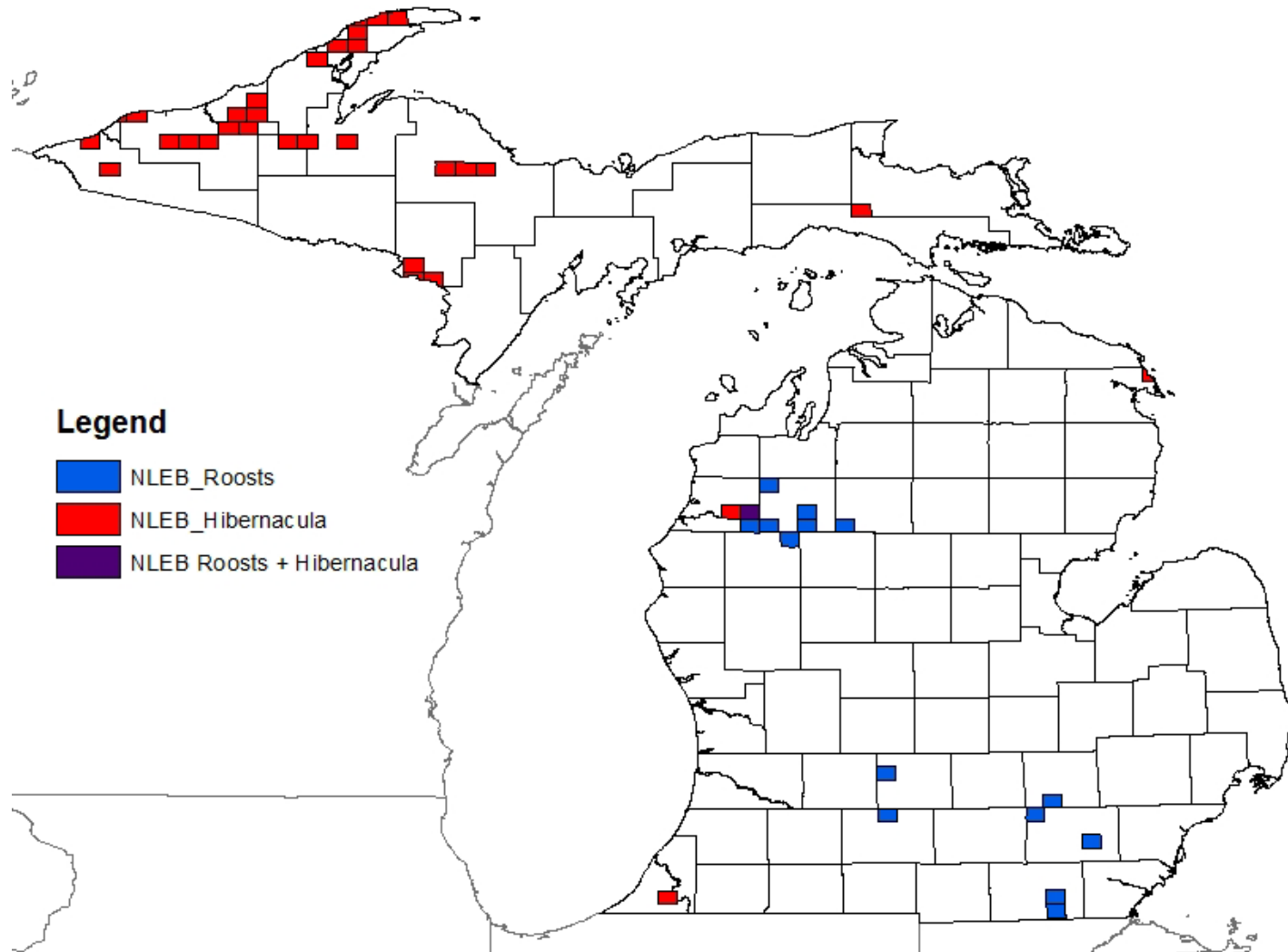
**Where are the known northern long-eared bat roost trees in Michigan?**

<b>Known Northern Long-eared Bat Roost Tree Locations in Michigan</b>			
<b>County</b>	<b>Townships Containing Roosts and/or Buffer Areas</b>	<b>Number of known roosts</b>	<b>Landownership Within Buffer(s)</b>
Calhoun	Convis (T1SR6W)	1	Public (1)
Eaton	Vermontville (T3NR6W)	1 (female)	Private (1)
Lake	Dover (T20NR11W)	4 (all female)	Public (4)
Lenawee	Ogden (T8SR4E), Palmyra (T7SR4E)	81	Private (81)
Livingston	Putnam (T1NR4E)	2 (1 female)	Private (1), public (1)
Manistee	Dickson (T22NR13W), Norman (T21NR13W)	4 (all female)	Private (2), public (2)
Missaukee	Richland (T21NR8W)	4 (all female)	Private (4)
Washtenaw	Lyndon (T1SR3E), Pittsfield (T3SR6E)	3 (2 female)	Private (2), public (1)
Wexford	Cherry Grove (T21NR10W), Selma (T22NR10W), South Branch (T21NR12W), Wexford (T24NR12W)	20 (16 female)	Private (17), public (3)

**For additional information contact:**

East Lansing Field Office  
 2651 Coolidge Road  
 East Lansing, MI 48823  
 Phone: 517-351-2555  
 Fax: 517-351-1443  
 TTY: 1-800-877-8339 (Federal Relay)  
 e-mail: [EastLansing@fws.gov](mailto:EastLansing@fws.gov)

### Map of Known NLEB Occurrence, Roosts, and Hibernacula in MI\*



**\*Map last updated 7/21/2015.**

**Map will be updated as additional information becomes available.**