

**Animal Enhancement Activity – ANM56 – Increase summer roost habitat for forest dwelling bat species**



**Enhancement Description**

This activity consists of managing forestland and forested riparian areas by creating new potential roost trees within a forest and associated riparian areas to achieve desired summer habitat for forest dwelling bat species.

**Land Use Applicability**

Forestland

**Benefits**

Forest dwelling bats that hibernate in caves are experiencing severe decline due to White Nose Syndrome (WNS). Several declining species roost individually or in maternity colonies under loose bark of dead or dying trees, in cracks or crevices of live and dead trees, and in hollow trees. Beneficial forest

management practices include retaining a continuous supply of snags of different diameter and decay classes in woodlands through time to provide roost trees, promoting trees species that characteristically have loose or exfoliating bark, and protecting and restoring riparian corridors. Ensuring available roost trees through habitat management is important for the continued survival and reproduction of forest dwelling bats.

**Conditions Where Enhancement Applies**

This enhancement applies to all forest land use acres.

**Criteria**

Where a Forest Management Plan has been completed, all of the criteria listed below will be followed:

1. These criteria and any tree removal activities will be coordinated with U.S. Fish and Wildlife Service (USFWS). This includes the establishment of minimum criteria to meet the habitat requirements of the bat species of concern while avoiding potentially detrimental disturbances during the maternity period.
2. Create additional snags within the forested acres by girdling/killing live trees. When choosing trees to kill, consider that the majority of snag-roosting bats prefer the largest available snags, which often extend above the forest canopy and retain bark for a longer period of time. Also focus on killing trees that are undesirable for quality forest products due to species or form.
3. Promote use of live trees with loose or exfoliating bark by killing all trees adjacent (canopies within 15 feet of habitat tree) to trees determined to have desired bark characteristics, as



defined by NRCS state technical staff. Larger diameter trees should be considered as habitat trees, as desirable bark characteristics tend to improve with the size and age of the tree. Large/mature trees also develop splits, breaks, dead limbs, and cavities that serve as roosting areas.

4. Habitat trees should be distributed evenly across the treated acres.
5. The combined snags and live, loose bark trees should be created or maintained at a combined rate as determined to be necessary to meet the habitat requirements of the bat species of concern and the specific forest type, as defined by the USFWS and NRCS state technical staff.

### **Adoption Requirements**

This enhancement is considered adopted when the appropriate number of habitat trees are created or identified based on the specific forest type(s). The number of trees required per acre to meet the adoption requirements will be determined by the NRCS state technical staff in consultation with the USFWS.

### **Documentation Requirements**

1. Delineation on a map or aerial photo showing the location of all treated areas and the forest type.
2. A listing of habitat trees created or identified by size and species within each forest type.
3. Representative digital images/photos of the habitat trees created.

### **References**

Taylor, Daniel A. R. 2006. Forest Management and Bats. Bat Conservation International, National Fish and Wildlife Foundation, USDA Natural Resources Conservation Service.

Missouri Department of Conservation. 2008. Indiana Bat (*Myotis sodalist*): Guidelines for Landowners Using Conservation Practices.

Wisconsin Department of Natural Resources. 2013. Northern Long-Eared Bat (*Myotis septentrionalis*) Species Guidance. PUB ER-700.