

Animal Enhancement Activity – ANM15 - Forest stand improvement for wildlife habitat and soil quality



Enhancement Description

This enhancement consists of the creation of snags, den trees, and coarse woody debris on the forest floor to a level optimum for native wildlife usage and long-term forest soil health. It may be implemented during thinning or harvesting or it can be implemented separately.

Land Use Applicability

Cropland and forestland

Benefits

The natural abundance and distribution of snags, den trees (trees with cavities) and coarse forest floor wood have been altered by decades of land conversion, fire suppression, and timber and firewood harvest. Creating an optimum level of such materials provides nesting and hiding cover and substrate for bird, mammal, reptile, and amphibian species while also providing the insects and detritus on which they feed. Downed wood is a preferred growing medium for various species of bryophytes, lichens, and fungi. Rotting wood found on the forest floor and later integrated in the soil surface layer by decomposition provides seedbeds for a variety of tree, shrub, and herbaceous species as well a rooting medium that retains moisture during dry periods.

Criteria

This enhancement requires:

1. Creation of snags
2. Downed wood
3. Suitable den/cavity trees distributed throughout the area being treated.

The levels and distribution of materials must be equal to levels found in similar natural community phases indicated in the correlated Ecological Site Description (ESD).

If a suitable ESD has not been developed, NRCS State Offices will develop an example site description that defines the number of snags, the amount of downed wood and number of den trees expected per acre.

This enhancement is implemented mainly by managing existing live trees, dead snags and woody debris. It may be implemented during thinning or harvesting operations or may be undertaken separately. Refer to Conservation Practice Standard Forest Stand Improvement (666) for criteria on the creation of snags, den/cavity trees, and downed wood.



United States Department of Agriculture
Natural Resources Conservation Service

2011 Ranking Period 1

Producers who want to conduct prescribed burning for other purposes on their forest land should consider enhancement PLT04.

Documentation Requirements

Following implementation of this activity, the landowner must document:

1. The average number of snags per acre
2. An estimate of percentage of the forest floor covered by downed wood.
3. The average number of den/cavity trees per acre
4. Delineations on a map or aerial photo of the areas having the distribution of snags per acre, percent cover downed wood, and/or den/cavity trees per acre
5. Representative digital pictures of snags, downed wood, and den/cavity trees

Indiana CSP Enhancement Supplemental Information

ANM15 - Forest Stand Improvement for Habitat and Soil Quality:

- Per acre:
 1. A minimum of 6-8 snags of at least 6 inches DBH.
 2. Leave or establish five (5) downed logs, 12 inches or greater in diameter at the largest end, to provide coarse woody debris.
 3. A minimum of 8-10 cavity/den trees, spread equally across a range of size classes 4-20 inches in DBH.
- Future den trees can be created by wounding selected trees that are at least 100 feet apart, and preferably ones that show signs of damage or decay. A cavity may take years to develop. Consider American Beech, Ash, Elm, Cottonwood, Sycamore, Maple, and Basswood for any of the methods below:
 1. Cut a limb, at least 10 feet off the ground (larger the better) about 6 inches from the trunk of the tree.
 2. Chop out a 6"x 6" section of bark on the trunk at least 10 feet off the ground.
 3. Drill a hole at least two (2) inches in diameter and three (3) inches deep. The hole should be under a limb that is three (3) inches or more in diameter if possible.
 4. Consider using [artificial nesting structures](http://ftp-fc.sc.egov.usda.gov/WHMI/WEB/pdf/Nestingstr.pdf) [ftp://ftp-fc.sc.egov.usda.gov/WHMI/WEB/pdf/Nestingstr.pdf](http://ftp-fc.sc.egov.usda.gov/WHMI/WEB/pdf/Nestingstr.pdf) in lieu of wounding trees.
- Snags can be created by "girdling" select trees with an ax or chain saw.