

## Animal Enhancement Activity – ANM15 -Forest Stand Improvement for Habitat and Soil Quality

### New Jersey Addendum



#### Forest Stand Improvement - Habitat and Soil Quality

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

A recent thinning creates downed wood and opens the stand which will increase forest understory growth and diversity. Two to 3 live trees per acre will be girdled to create snags based on community phase data in the Benefits Ecological Site Description. About 1 to 2 snags per acre are already present. Den/cavity trees have been retained throughout the thinned area. 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 for Forest Stand Improvement - Habitat and Soil Quality

This enhancement requires:

- Creation of snags (**4 snag trees/acre**)
- Downed wood (**4 downed logs/acre, >12” diameter & 16’ long**)
- Suitable den/cavity trees distributed throughout the area being treated (**3 den trees, live or dead, with natural cavities, >12” DBH**)

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.

## **Documentation Requirements for Forest Stand Improvement - Habitat and Soil Quality**

Following implementation of this activity, the landowner must document:

- The average number of snags per acre
- An estimate of percentage of the forest floor covered by downed wood.
- The average number of den/cavity trees per acre
- 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
- Representative digital pictures of snags, downed wood, and den/cavity trees