Snags, den trees, and coarse woody debris for wildlife habitat

Conservation Practice 666: Forest Stand Improvement

APPLICABLE LAND USE: Forest; Associated Ag Land; Farmstead

RESOURCE CONCERN ADDRESSED: Fish & Wildlife – Inadequate Habitat

ENHANCEMENT LIFE SPAN: 10 Years

Enhancement Description

Improve wildlife habitat through creation and retention of snags, den trees, forest stand structural diversity, and coarse woody debris on the forest floor, to provide cover/shelter for native wildlife species.

Criteria

• States will apply general criteria from the NRCS National Conservation Practice Standard Forest Stand Improvement (Code 666) as listed below, and additional criteria as required by the NRCS State Office.

• Identify desired wildlife species that use snags, den trees, coarse woody debris, and/or brush piles for shelter, cover, nest sites, and/or rearing sites.

• Manage for specific tree species, or a selected mix of species, size-classes, and stocking rates at the appropriate scale to meet desired wildlife habitat requirements.

• Create, recruit, and maintain sufficient snags, nest, cavity/den trees, and coarse woody debris to meet requirements of desired species. Arrange downed woody material into brush piles as appropriate for desired wildlife species. Refer to criteria in NRCS Conservation Practice Standard Upland Wildlife Habitat Management (Code 645) for manipulation of vegetation.
The enhancement will comply with all applicable federal, state, and local laws and regulations, and with States’ Forestry Best Management Practices for Water Quality.

When determining which trees will be killed for snag creation, and/or used to create cavities/dens, consider effects on the remaining stand.

- Identify and retain preferred tree and understory species to achieve all planned purposes and landowner objectives.
- Use available guidelines for species and species groups to determine spacing, density, size-class distribution, number of trees, and amount of understory species to be retained.
- Refer to criteria in NRCS CPS Integrated Pest Management (Code 595) to assist with site-specific strategies for pest prevention, pest avoidance, pest monitoring, and pest suppression.
- Consider using downed woody material to create brush piles for additional wildlife habitat.
Documentation and Implementation Requirements:

Participant will:

- Prior to implementation, participant will work with NRCS to identify the desired wildlife species that use snags, den trees, coarse woody debris, and/or brush piles for shelter, cover, nest sites, and/or rearing sites, and are likely to benefit from the enhancement.

<table>
<thead>
<tr>
<th>Desired Wildlife Species</th>
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<tbody>
<tr>
<td></td>
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</table>

- Prior to Implementation, participant will work with professional forester or NRCS to delineate on a map the acres that the enhancement would be applied.

- Prior to implementation, participant will work with professional forester or NRCS to estimate how many snags, den trees, coarse woody debris, and/or brush piles are present per acre on the acres identified.

- Prior to implementation, work with NRCS to determine how many snags per acre per size class would be needed in addition to those present that will benefit the wildlife species.

<table>
<thead>
<tr>
<th>Snags and Woody Residue size classes</th>
<th>Estimated Snags/Den Trees per Acre</th>
<th>Desired Snags/Den Trees per Acre</th>
<th># of Snags/Den Trees per Acre to be Created</th>
</tr>
</thead>
<tbody>
<tr>
<td>Snags 6-10 inch diameter at breast height</td>
<td>2 or more</td>
<td>2 or more</td>
<td></td>
</tr>
<tr>
<td>Snags 10-20 inch diameter at breast height</td>
<td>2 or more</td>
<td>2 or more</td>
<td></td>
</tr>
<tr>
<td>Snags &gt;20 inch diameter at breast height</td>
<td>2 or more</td>
<td>2 or more</td>
<td></td>
</tr>
<tr>
<td>Large Woody Debris &gt;20 inch diameter</td>
<td>1 or more</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Brush piles</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

- During implementation, notify NRCS if any planned changes to verify they meet the enhancement criteria.

- During implementation, keep a written log and take digital photos of snag/den trees created and approximate locations on a map.

- After implementation, notify NRCS that the work has been completed; submit digital photos.

- After implementation, retain digital photos for NRCS to verify practice has been completed.
NRCS will:

☐ Prior to implementation, provide and explain the following NRCS Conservation Practice Standards as they relate to implementing this enhancement.
  - Forest Stand Improvement (Code 666)
  - Upland Wildlife Habitat Management (Code 645)

☐ Prior to implementation, assist participant in determining which wildlife species will benefit from snags, den trees, coarse woody debris, and/or brush piles for shelter, cover, nest sites, and/or rearing sites.

☐ Prior to implementation, assist the landowners to delineate on a map the acres that the enhancement would be applied.

☐ Prior to implementation, assist the participant to determine the number of snags (by size class), den trees, coarse woody debris, and/or brush piles exist on the acres delineated by the enhancement. Determine the desired number, with the difference being the # of snags, den trees, coarse woody debris, and/or brush piles need to be created to meet criteria of the enhancement.

☐ During implementation, as needed, evaluate any planned changes to verify they meet the enhancement criteria.

☐ After implementation, verify that the number of snags, den trees, coarse woody debris, and/or brush piles have been created.

NRCS Documentation Review:

I have reviewed all required participant documentation and have determined the participant has implemented the enhancement and met all criteria and requirements.

Participant Name ______________________________ Contract Number _______________

Total Amount Applied ______________________ Fiscal Year Completed _______________

______________________________  ________________
NRCS Technical Adequacy Signature  Date