Voluntary Management-Tree Pruning

PURPOSE

Management Activities in the Conservation Reserve Program (CRP) ensure plant diversity and wildlife benefits are enhanced throughout the contract period while maintaining soil and water resources. From the 2018 Farm Bill, USDA with input from other federal, state, and local partners, identified practices that require management activities and those that are voluntary. In Indiana, management activities for tree practices were approved as voluntary and are not required. This document describes Tree Pruning practice option for Management Activities.

Pruning ensures plant diversity by maintaining or improving plant productivity, health and vigor, and/or to reduce excessive plant pest pressure. Healthier plants tend to provide more flowers, fruits and nuts that benefit wildlife. Pruning can improve herbaceous species beneficial to wildlife by creating an open canopy that allows light to reach the forest floor. On very young trees, pruning can maintain, create, or improve the main central leader. Pruning on young and older trees can also promote a clear knot-free trunk by removing branches along the central stem.

FREQUENCY

All management practices must be completed by the end of year 6 of a 10-year contract and by the end of year 9 of a 15-year contract. On re-enrolled land, Tree Pruning can begin as soon as technically feasible. On new tree plantings, pruning can begin after the trees are established as documented by a Final Status Review (typically after the third or fourth growing season).

Pruning can be executed every year or as often as needed without removing more than one-third of the live crown in a single growing season. Regular yearly pruning is ideal, but if necessary, conduct heavy pruning at 3-year intervals or more to reach desired results.

Pruning activities can begin at any height. Optimally, begin pruning while the trees are still small, less than 4 feet in height.

To protect federally-listed bats (such as the Indiana bat and Northern Long-Eared bat), pruning activities on trees ≥ 3 inches diameter-breast height (DBH) will only be conducted between October 1 and March 31. Pruning is best done when the vegetation is dormant, in winter or early spring. Use of large mobile equipment such as tractors, skid steers, feller bunchers, etc. are not authorized during the primary nesting season (April 1 - August 1).

PLANNING

Pruning operations will follow the Tree/Shrub Pruning (660) Standard in the NRCS Field Office Technical Guide (FOTG).

SPECIFICATIONS

The following are specifications for tree pruning on CRP acreage in Indiana:

- Planning specifications must include the frequency, time period, and specific actions for pruning.
- Tree species with the highest benefit to desired wildlife will have top priority for pruning.
IN- CRP Management-Tree Pruning

- CRP payments for pruning are based on 20 to 75 trees per acre.
- Remove no more than one-third of the live crown in a single growing season (Figure 3).
- Maintain the health and vigor of trees by removing the minimum amount of living biomass required to achieve the pruning objective.
- With prior approval from the FSA County Committee (COC), it may be possible to stack some pruning refuse into brush piles for wildlife habitat features.
- Brush piles on CRP will follow Upland Wildlife Habitat Management (645) Standard and the Indian Wildlife Brush Piles Job Sheet.

Subject to approval by the FSA County Committee (COC), the CRP participant may make commercial use of forest refuse resulting from forestry practices if the participant agrees to:

- Protect the area from erosion by establishing adequate wildlife cover
- Burn debris or otherwise treat the forest refuse to improve resource condition and enhance wildlife habitat and reduce the spread of insect and disease.

GENERAL CONSIDERATIONS

- On young trees, make pruning decisions starting at the top and work down. Prune to develop a single, straight, central leader (Figure 1)
- Assist the central leader by totally removing or at least tip-prune any competitive leaders.
- When tip pruning or shortening a branch, always cut back to another branch or bud (Figure 2).
- It is recommended to prune limbs that are small in diameter (<1 inch in diameter) because pruning cuts will normally close within one to two years. Limbs in excess of 2 inches in diameter may take up to 10 years to close.
- Lower limbs larger than 2 inches may be cut back to a short stub and gradually removed over a 2 to 3 year period. Removing gradually will allow the main stem to become larger, thus creating a smaller wound to stem ratio (Figure 4).
- Limbs over 3 inches in diameter are best to leave rather than remove and create a large wound.
- On larger trees or after the main leader is established remove lower limbs, and limbs growing upward into the canopy (Figure 5).
- Retain right-angled branched (near 90°) for a longer period of time.
- Remove suckers or sprouts that emerge from the base of the tree or around wounds from prior pruning or injury (Figure 6).
- Keep about half the total height of the tree in live leaf-bearing branches when young. As the tree becomes larger, this proportion can be reduced to one-third.
- Minimum pruning will be needed on species with aggressive main central leaders such as sweetgum.
- When pruning diseased wood, disinfect pruning and shearing tools as needed to minimize the spread of pathogens.

BRANCH PRUNING

Small branches and limbs (up to 1.5”) may be cut with a hand pruner or lopping shear. The by-pass style pruner is considered superior to the anvil style. The preferred tool for cutting small and medium sized limbs (1.5” to 4” diameter) is a hand or pole saw with a curved blade having approximately 6-8 backward-facing teeth per inch that cut on the “pull” stroke. Bow saws and chain saws are more appropriate for limbs larger than 4” in diameter.

Prune small branches (< 2 inches in diameter) just above an outside bud or at a fork. Make clean cuts as close to the remaining branch or tree stem as possible. Do not cut into branch collars. Figure 7 illustrates details about proper techniques for pruning large branches.
WILDLIFE CONSIDERATIONS

To enhance future wildlife benefits concentrate pruning on tree species that will provide soft and/or hard mast, or have high pollinator characteristics.

Shelter and nesting for early successional wildlife species can be created by pruning for shorter bushier trees/or shrubs.

Removing excess branches can improve the quality of flowers or fruit. For example, pruning decreases the amount of material the plant needs to sustain. By having fewer branches with fruit, more energy can be placed in making the fruit than maintaining lots of branches.

Combined pruning and thinning practices can help achieve a more developed tree crown with higher potential to produce more nuts, fruit, and flowers for wildlife.
**TREE PRUNING - SPECIFICATIONS SHEET**

<table>
<thead>
<tr>
<th>Landowner:</th>
<th>County:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Farm:</th>
<th>Tract:</th>
<th>Field(s):</th>
<th>Acres:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CONCURRENCE OF IDNR DISTRICT BIOLOGIST FORESTER? (IF required):**

*Required on CP3, CP3A, and CP31, or as requested by FSA or NRCS*

**SPECIFIC RECOMMENDATIONS**

Prune the following tree species with wildlife benefits:

- Number of trees to prune per acre: __________
- Spacing (ft. x ft.): __________
- Year(s) (must be during dormant months): __________
- Frequency (interval in years): __________

**Optional/Additional Specifications for Treatment of Forest Refuse/Debris:** (Subject to approval)

Use of large mobile equipment such as tractors, skid steers, feller bunchers, etc. are not authorized during the primary nesting season (April 1 - August 1). Forest refuse left on site must not pose a significant wildfire, safety, environmental, or pest hazard.

- Subject to approval, the CRP participant desires to make commercial use of forest refuse resulting from thinning.

- Create brush piles for wildlife cover with materials left from pruning work. Follow Upland Wildlife Habitat Management (645) Standard and the Indian Wildlife Brush Piles Job Sheet.

**Additional Considerations & Specific Actions:**

---

**Helping People Help the Land.**

USDA is an equal opportunity provider and employer.