NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE SPECIFICATIONS

TREE/SHRUB PRUNING
(Ac.)
CODE 660

GENERAL SPECIFICATIONS

Procedures, technical details, and other information listed below provide additional guidance for carrying out selected components of the named practice. This material is referenced from the conservation practice standard for the named practice and supplements the requirements and considerations listed therein.

Timing of Pruning

To avoid attack by disease or insects, pruning of live branches will be limited to the dormant season (from the first frost to early March).

Pruning should commence at a small tree size:

Method	DBH (In.)	Tree Height	Pruning Height
3-Step: a	3-5	15-20 ft	7-10 ft
b	4-5	25-30 ft	12-15 ft
c	5-8	35-40 ft	17-20 ft
2-Step: a	3-5	20-25 ft	10-12 ft
b	5-8	35-40 ft	17-20 ft

Black walnut or fruit trees may need to be pruned earlier than this to maintain the desired leader control.

Starting to prune trees that have reached 9 inches in DBH or larger is not practical for timber production purposes.

Trees in recreational areas, parks, etc., may need pruning for aesthetic or safety purposes regardless of their size.

Dead branches may be pruned at any time.

Recommended Tools for Pruning

Use any appropriate, properly sharpened pruning tools including by-pass shears, chainsaws, pole saws, pruning saws, and bow saws.

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.

Pruning Procedure

Prune trees according to the following steps (See Figure 1):

1. Locate the branch bark ridge.
2. Find **A** (outside edge of branch bark ridge.)
3. Find **B** (swelling where branch meets branch collar.) If **B** is difficult to determine drop a line from **A**: the angle **XAC** is equal to the angle **XAB**.
4. Make the final cut on line **AB**.
5. Do not cut behind the branch bark ridge.
6. Do not leave stubs.
7. Do not cut into the branch collar.

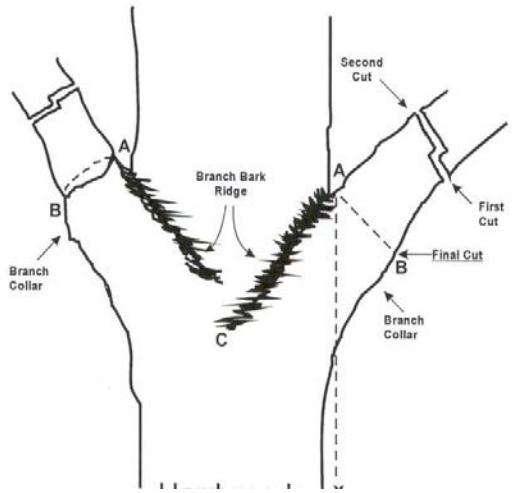

Figure 1 – Pruning Guidelines

Large, heavy branches may require the following undercut steps while pruning to prevent the falling branch from tearing the stem tissue as it falls from the tree:

1. The first cut is a shallow notch made on the underside of the branch, outside the branch collar.
2. The second cut is outside the first cut all the way through the branch to leave a small stub.
3. The stub is then cut as in the steps of the pruning procedure outlined for Figure 1.

Prune only dominant or codominant trees which will be the future crop trees when pruning for timber production.

Ideally, at two or three step pruning sequence should be used to maintain ½ to 2/3 of the total tree height in living branches. The live crown must be maintained at least equal to 1/3 of the tree height. Excessive pruning will reduce tree growth and make the trees susceptible to drought or insect attacks. A higher incidence of epicormic branching occurs in hardwood trees which have been pruned heavily.

Do not paint or treat pruning cuts.

Cutting into the branch collar, pruning flush to the trunk, or leaving a large stub may enhance tree decay and cause wood cracks and tissue dieback.

Dead branches should be pruned instead of broken off to help prevent the entry of disease organisms and to avoid discoloration of sound wood around the knot.

Improper pruning may reduce the value of the timber and cause trees/shrubs to be less healthy by increasing the incidence of disease or insect infestation.

Topping and tipping are improper pruning techniques and should not be used. Topping, cutting tree tops between branch nodes, is done to reduce tree height. Tipping is cutting lateral branches between nodes to reduce crown width.

Pruning Fruit and Nut Trees

Local Extension Service guidance will be used for the pruning times and methods for fruit and nut trees.

Pruning to Reduce Fire Hazard

For fire protection in a conifer plantation, begin pruning at any age but do not remove more than one-third of the live crown. Scatter the pruned branches away from the bases of the trees or pile and burn them.

Pruning for Pest Management

Do not leave pruning debris or vegetative material on the ground. It should be removed from the stand and burned.