

**NATURAL RESOURCES CONSERVATION SERVICE  
CONSTRUCTION SPECIFICATIONS**

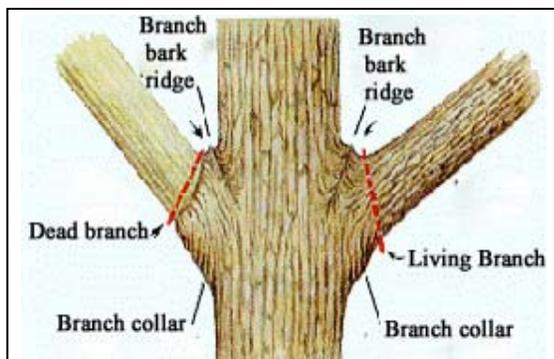
**TREE/SHRUB PRUNING**

**1. Scope**

The work consists of removing all or parts of selected branches or leaders from trees and shrubs. This specification will be used to carry out this practice. Practice application will be documented in the technical notes and narrative statements in the conservation plan.

**2. Pruning Recommendations**

- Prune only on stands that have a site index of 55 or higher, as identified in the Forestland Productivity report, found in Section II, Soil Data Mart, soils reports.
- Branches shall be removed close to main stem but avoid cutting through the branch bark ridge. Pruning is normally restricted to branches less than two inches in diameter.

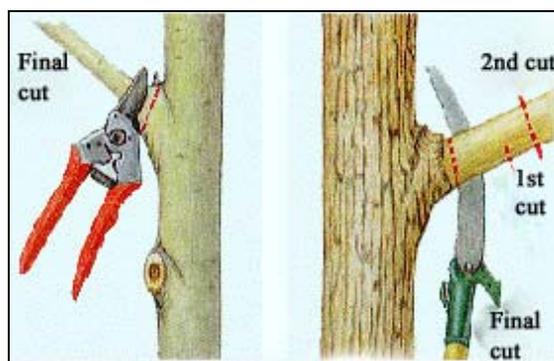


(Figure 1)

- Remove no more than one-quarter to one-third of the live crown in any one pruning. The live crown should be pruned no more than one-third to one-half the total height.
- Pruning priorities should be given to high value species such as black walnut, bur oak and pecan. (crop trees)
- Prune from the top down.
- Begin corrective pruning black walnut the second year after planting. For natural

stands of black walnut and other hardwoods, prune before they reach eight inches diameter breast high (dbh).

- Prune to develop a single, straight stem. Continue pruning until a clear log is obtained; at least nine feet long.
- Badly deformed black walnut trees four inches or less in diameter should be cut off one-half inch above the ground and allowed to re-sprout. Trees must be cut during the dormant season.
- Preferably, live branches should be pruned before they reach two inches in diameter.
- If possible, avoid pruning when leaves are forming or falling.
- Cut live limbs outside the branch collar to prevent damage to the tree. (Figures 1 and 2)
- To prevent tearing down the trunk make three cuts to remove a live limb (Figure 2)
- Remove all dead branches and stubs to a nine foot height.
- Do not treat cuts with wound dressing.



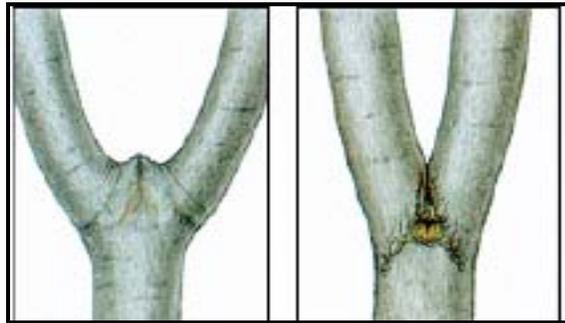
Cutting a small branch

Cutting a larger branch

(Figure 2)

- Branches with strong U-shaped angle of attachments should be retained. Branches

with narrow, V-shaped angles of attachment often form included bark and should be removed. (Figure 3)



U-shaped strong union      V-shaped weak union

(Figure 3)

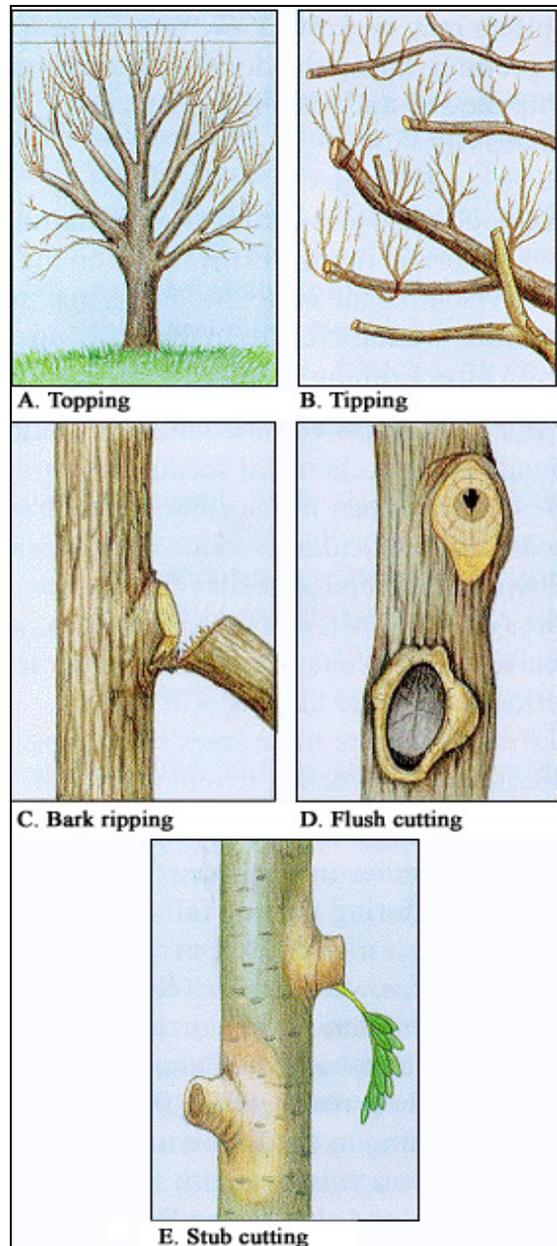
- Lateral branches should be no more than one-half to three-quarters of the diameter of the stem at the point of attachment.
- Avoid producing "lion's tails," tufts of branches and foliage at the ends of branches, caused by removing all inner lateral branches and foliage.
- Avoid improper pruning cuts that cause injury and bark ripping as illustrated in Figure 4.

**Pruning to Enhance the Beauty of an Area.**

- Do not remove more than one-quarter to one-third the trees live crown in any one pruning.
- Tree height or width may be shortened by cutting branches back to where they fork with another branch.
- Remove the ends of large branches prior to making final pruning cuts to prevent peeling or stripping of the bark. (Figure 2)

**Pruning (Shearing or Shaping) Christmas Trees.**

- Pruning and shearing is a necessary operation for adding quality to Christmas trees. It is a highly specialized procedure that varies with the desires of the grower.
- Generally, Christmas trees are sheared to achieve a compact, symmetrical, and balanced crown while maintaining a natural appearance.



(Figure 4) Improper Pruning Practices

- Shearing usually starts two to three years after planting or as soon as growth of the terminal leader exceeds 10 to 12 inches. Corrective pruning of multiple leaders is completed annually until the actual shearing for shape and density is begun.
- Spruce and fir can be sheared any time during the year, but the best time to shear is from June to October. Pines are to be sheared during the active growing season from June to early August.

- For the first shearing, cut all side branches necessary to give the tree the desired shape and taper. Desired taper varies from one-half to two-thirds as wide as the tree is tall. Shearing should usually be completed only on the current year's growth. Occasionally it may be necessary to cut older growth to correct a shape problem.
- Basal pruning is the removal of all branches below the first good whorl of branches creating a handle 8 to 14 inches long. It also provides benefit in reducing insect and disease damage to the tree. Basal pruning should be completed during the dormant season at the time of the first or second shearing.
- Cut branches close to the tree trunk, but avoid cutting through the branch bark ridge.

**References:**

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Illustrations by Julie Martinez, Afton, MN

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