

**NATURAL RESOURCES CONSERVATION SERVICE  
NEVADA CONSERVATION PRACTICE SPECIFICATION**

**TREE/SHRUB PRUNING**

(Acre)

**CODE 660**

**I. SCOPE**

The work shall consist of furnishing labor and equipment to prune trees at the locations shown on the conservation plan map.

**II. PRUNING FOR QUALITY SAWLOGS**

Trees will be selected and identified for pruning prior to any pruning activities.

Pruning will only be considered in Douglas-fir, Jeffrey and ponderosa pine stands. The site index must exceed 70 (McArdle)(Meyer).

Pruning may begin when the tree has reached a dbh of 3 inches. Pruning will be limited to trees that do not exceed 9 inches dbh unless they are growing with extreme rapidity and then 12 inches dbh should be considered the maximum.

Remove no more than 1/3 of the live crown in any one pruning.

No live branches exceeding 2 inches in diameter will be pruned.

Branches will be removed from the main stem to a height of 9 to 19 feet, depending upon the age of the tree and the intended utilization of the sawlogs.

No more than 100 to 150 well spaced crop trees will be pruned per acre.

Branches will be sawed off just outside the branch flare of the limb collar without damaging it. Lower dead branches may be carefully removed with a lightweight axe.

Pruned branches will be removed from around the base of the tree. They may be scattered or piled to be burned. Planners will refer to practice standards and specifications on PRESCRIBED BURNING (Code 338).

Pruning will be done during dormancy (fall, winter, early spring) or late summer.

Pruning in the spring or periods of active shoot elongation will be avoided. Pruning in pines should be accomplished after the new growth has elongated and the new growth hardens to woody material.

**III. PRUNING CHRISTMAS TREES**

Pruning may begin when the tree has reached a dbh of 3 inches.

Once shaping has started it may be required one or more times each year until harvest.

Delay basal pruning until no more than 1/3 of the total foliage on the tree will be cut off to prevent excessive shock.

Basal pruning will be done to form a handle of 8" to 12" in length.

**Pines**

- Shaping will be done when the new growth (candles) snap off easily and cleanly with the fingers. The new growth must not have hardened to woody material.
- The leader will be pruned to control height growth. The maximum distance from the branch whorl will be 12 inches and the cut will be at a 45° angle. If the leader is pruned, the top whorl must be pruned to 6 to 8 inches in length to prevent them from taking over terminal growth.
- Shear current year's growth on lateral branch to maintain a cone-like symmetry.
- If a lateral branch must be removed it will be cut off near a side branch so a stub of dead wood will not be left.
- Basal pruning will be done to form a handle of 8" to 12" in length.

## Spruces and Firs

- Shaping will be done after periods of active growth during dormancy (late summer, fall, winter, early spring).
- The leader will be pruned to control height. The distance from the branch whorl will be 8 to 12 inches. The cut will be made at an angle of 3/8 to 1/2 inches above a live single bud. If two or more buds are present, all but one bud will be removed. The top whorl must be pruned to 3 to 5 inches shorter than the leader to prevent it from taking over terminal growth.
- Shear the lateral branches to maintain a cone-like symmetry without regard to individual branches.
- Remove the bottom whorl of branches to form a handle.

## IV. METHODS

Remove limbs all the way to the main trunk or to a new leader or remaining limb.

Preserve the branch collar. Make the cut just outside the bark ridge formed by the junction of the limb and the main stem.

Pruning shall be accomplished with sharp tools.

**Live pruning.** The removal of live branches is known as live or green pruning.

**Hand and pole saws.** Live pruning in forest situations is generally accomplished with hand and/or pole saws in conjunction with portable ladders or tree climbing to reach high branches.

The three-cut technique shall be used when pruning with saws. Large branches tend to split when cut down through with a single cut causing the bark to rip down the main stem.

1st cut: 8 to 10 inches from the crotch or branch angle on the underside of the branch about 1/3 to 1/2 way through.

2<sup>nd</sup> cut: 1 to 3 inches out from the first cut from the top down. The weight of the branch as it is cut will cause 'bark rip' before it falls away, stopping at the first cut.

3<sup>rd</sup> cut: Remove the remaining stub by cutting just outside the branch collar.

**Loppers.** A kind of long-handled pruning shear, loppers are used to prune branches generally smaller than 3/4 inches in diameter that can be reached from the ground.

Prune with the hook or anvil of the shear on the side away from the plant.

**Hand Shears.** In 2 types, the hook-and-blade and the blade-and-anvil, they are used for routine pruning of buds and small twigs. They have little utility in forest pruning situations.

**Dry Pruning.** The removal of dead branches from the tree is known as dry pruning. Methods of dry pruning are the same as for live pruning with one exception.

In forest pruning situations, some species may be dry pruned by knocking the dead branches off with clubs. A high proportion of the limbs break inside the branch collar, and wounds of this type heal quicker than those made by other tools.

**Shearing.** The practice of cutting back new growth to improve the form and density of the remaining crown is known as shearing. Commonly applied to Christmas tree plantations, shearing is accomplished with long-bladed shears or shearing knives.

## V. BASIS OF ACCEPTANCE

After pruning has been completed, an on-site inspection with the contractor to determine the condition of the trees and adherence with practice specifications.

## OPERATION AND MAINTENANCE

Reinspection and re pruning as needed for the prescribed purposes.

## REFERENCES

Townsend, L.R. 1993. Tree and Shrub Planting Guide. Utah Division of State Lands and Forestry, Salt Lake City, UT.

Smith, D.M., Hawley, R.C. 1962 The Practice of Silviculture. John Wiley & Sons, Inc., New York.