

TREE/SHRUB PRUNING (ACRE) 660

DEFINITION

The removal of all or part of selected branches, leaders or roots from trees and shrubs.

PURPOSES

- Improve the appearance of trees or shrubs, e.g., ornamental plants and Christmas trees.
- Improve the quality of wood products.
- Improve the production of plant products, e.g., nuts, fruits, boughs and tips.
- Reduce fire and/or safety hazards.
- Improve the growth and vigor of understory plants.
- Adjust the foliage and branching density or rooting length for other specific intents, such as wind and snow control, noise abatement, access control, and visual screens and managing competition.
- Improve health and vigor of woody plants e.g. disease, insect and injury management.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies on any area with trees or shrubs.

CRITERIA

General Criteria Applicable to All Purposes

The pruning method and timing will match the limitations of the site and soils, the intended purpose and be conducted in a safe and efficient manner. See Michigan-NRCS Sheet Tree/Shrub Pruning (660) Conservation Design Sheet.

Comply with applicable federal, state, and local laws and regulations during the installation, operation, and maintenance of this practice.

Never prune trees that are touching or near utility lines. Consult the utility company for assistance with such trees.

Do not cut into the branch collar, prune flush to the stem, or leave branch stubs, as this can result in delayed wound closure, and increased tissue damage and decay.

Pruning will not adversely reduce the growth and vigor of the tree or shrub for the intended purpose.

Do not leave debris and vegetative material left on the site after treatment that will present an unacceptable fire or pest hazard or interfere with the intended purpose and other management activities.

Burning of removed vegetation shall be done according to the MI-NRCS Prescribed Burning (338) practice standard.

Ground vegetation and/or conditions must be left in a manner to address erosion and other natural resource concerns to acceptable levels.

To reduce the risk of spreading oak wilt disease and Dutch elm disease, do not prune oak and elm species between March 1 and October 1, except as required to repair limbs and branches broken unintentionally during that time frame, e.g., storm damage, or where delaying pruning would be a safety hazard. If pruning is required on these species between March 1 and October 1, disinfect pruning tools between trees (see considerations).

Do not paint or dress pruning cuts, except following growing season pruning on oaks or elms as described above. Use latex paint or commercial tree wound dressing. Do not remove more than one third of the live crown at one time.

Do not prune higher than half the total tree height.

Additional Criteria Applicable to Shearing or Shaping Christmas Trees

Shear spruce and fir after the season's growth is complete and throughout dormant season (usually between November 1 and April 1). Shear spruce and fir just above a bud. Shear when temperatures are above freezing.

Shear pines during the active growing season just before terminal growth is completed (usually between June 20 and July 20).

Refer to Michigan NRCS Tree/Shrub Pruning (660) Conservation Design Sheet and North Central Regional Extension Publication 310, Shearing Recommendations for Christmas Tree Producers for additional information.

Additional Criteria Applicable to Corrective Pruning of Hardwood Seedlings

Prune seedlings in the late winter or early spring before the new terminal has grown more than 3 inches.

Prune seedlings only as needed to select one leader and to remove dead branches.

If a quality seedling is not apparent after 3 growing seasons, cut the tree off 1 inch above the ground during the dormant season. After stump sprouts appear, select the best sprout to leave and remove all others.

Additional Criteria Applicable to Clear Stem Pruning for Sawlog Production

Prioritize pruning of stands based on site quality and species. Preferred pruning time is late winter before bud break.

Prune to develop a clear single straight stem. Prune lower limbs and branches to a minimum of 10 feet; prune up to 18 feet if

possible. It may be necessary to implement multiple pruning treatments over several years to reach a 10-foot or 18-foot height.

Prioritize pruning based on species and local markets. In Michigan, the following species are favorable for pruning: sugar maple, northern red oak, white oak, black cherry, black walnut, yellow birch, tulip poplar, red pine, and white pine.

Prune vigorous, well-formed, single-stem dominant and co-dominant crop trees up to the number of crop trees per acre required to provide full stocking at maturity.

Additional Criteria Applicable to Pruning to Reduce Fire Hazard in Conifer Stands

Remove all the pruned branches from a 15-foot border strip.

CONSIDERATIONS

Improper or excessive 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.

Begin shearing Christmas trees when trees are 3-5 years old (approximately 3 feet in height) and continue until trees are marketed.

For consumer preference, shape Christmas trees so that the base is two-thirds as wide as the overall height (i.e., a 6-foot high tree should have a base that does not exceed 4 feet wide).

Limbs one inch in diameter or less will normally close within one or two years. Limbs in excess of 2 inches in diameter may take 10 years or to close.

Time pruning and shearing to minimize disturbance to breeding and nesting wildlife species.

To prevent the spread of pathogens, shearing and pruning equipment should be disinfected between pruning individual trees by dipping tools in 1 part bleach to 9 parts water or 70 percent denatured alcohol. (Note: bleach can corrode metal, and should be washed off equipment with soap and water after use.)

Review the estimated cost and projected economic benefits of the project before starting a pruning or shearing project.

Organic matter from decomposition of tree limbs will improve soil condition.

To maintain plant growth and sustain vigor, pruning and shearing may be done in two or more timed intervals.

Branches removed may be used for other purposes.

Pruning between October 1 and March 1 reduces the likelihood of introducing disease and insect pests into the tree wound. For example pruning of pine in forest stands during growing season increase the chance for attack by bark beetles and root collar weevil.

PLANS AND SPECIFICATIONS

Use Michigan NRCS Tree/Shrub Pruning (660) Job Sheet, or other approved specification sheets, technical notes, and narrative statements in the conservation plan, or other acceptable documentation for preparing specifications.

Specifications will include, but are not limited to, the following:

- Purpose of treatment
- Species or plant type treated
- Number of trees and/or shrubs to be pruned
- Minimum and maximum crown/branch removals
- Pruning method(s) and equipment
- Timing of the pruning
- Map indicating location of treatment
- Mitigation measures (e.g., slash and debris disposal) to minimize wildfire hazard and attraction of pests

OPERATION AND MAINTENANCE

Periodically inspect plant condition and take additional actions as necessary; e.g., additional pruning, pest management, nutrient management, and forest stand improvement.

REFERENCES

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