

Pruning Trees

Pruning most trees when they are dormant is the best time since this period allows people to easily visualize the structure of the tree, maximize wound closure in the growing season, reduce the chance of transmitting disease, and discourage excessive sap flow from wounds. Pruning trees during this dormant period should produce strong, healthy and attractive trees. By understanding how, when and why to prune trees while following these simple steps should help improve the strength, health and appearance of trees in your yard.

Reasons for Pruning

Pruning should be completed for a number of reasons. The most common reasons pruning is completed is for human safety, tree health, and the general aesthetics of the tree. The following are reasons to prune trees on your property:

- Remove branches that could fall and cause injury or property damage
- Remove branches that interfere with line of sight on streets or driveways
- Remove branches that grow into utility lines
- Remove diseased or insect-infested wood
- Remove broken or damaged limbs
- Thinning the crown to increase airflow and reduce some pest problems
- Develop strong tree structure
- Stimulate flower production

To reduce the need for pruning it is best to consider a tree's natural form. It is very difficult to impose an unnatural form on a tree without a commitment to constant maintenance.



Tree Trimming

The City of Shakopee Street Department will be trimming boulevard trees and trees adjacent to sidewalks as time and weather permit this winter/spring. Low branches overhanging the streets can damage emergency vehicles and street maintenance equipment.

Pruning Cuts

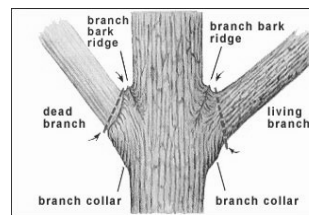
To find the proper place to cut a branch, look for the branch collar (See Crown Raising Figure) that grows from the stem tissue at the underside of the base of the branch. On the upper surface of the branch there is usually a branch ridge that is parallel to the branch angle along the stem of the tree. A proper pruning cut does not damage either the branch bark ridge or the collar.

When pruning branches make sure the tools are sharp enough to cut the branches cleanly without tearing. Branches large enough to require saws should be supported while the cuts are made. If the branch is too large to support, make a three-step pruning cut to prevent bark ripping (See Crown Reduction Figure). The three-step pruning method is as follows:

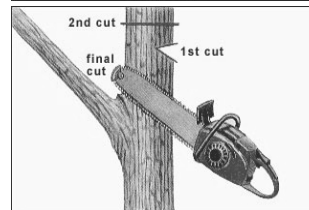
1. The first cut is a shallow notch made on the underside of the branch, outside the branch collar. This cut will prevent a falling branch from tearing as it pulls away from the tree.
2. The second cut should be outside the first cut, all the way through the branch, leaving a short stub.
3. The stub is then cut just outside the branch bark ridge/branch collar, completing the operation.

Crown Raising

- Always maintain live branches on at least two-thirds of a tree's total height. Removing too many lower branches will hinder the development of a strong stem.
- Remove basal sprouts and vigorous epicormic sprouts.



Crown Raising



Crown Reduction

Crown Reduction

- Use crown reduction pruning only when absolutely necessary. Make the pruning cut at a lateral branch that is at least one-third the diameter of the stem to be removed.
- If it is necessary to remove more than half of the foliage from a branch, remove the entire branch.

Crown Thinning

- Assess how a tree will be pruned from the top down.
- Favor branches with strong, U-shaped angles of attachment. Remove branches with weak, V-shaped angles of attachment.
- Lateral branches should be evenly spaced on the main stem of young trees.
- Remove any branches that rub or cross another branch.
- Make sure that lateral branches are no more than one-half to three-quarters of the diameter of the stem to discourage the development of co-dominant stems.
- Do not remove more than one-quarter of the living crown of a tree at one time. If it is necessary to remove more, do it over successive years.

Information obtained from <http://fr.cfans.umn.edu/extension/index.html>.