Pruning is one of the most important tree maintenance practices. Over the years, the way in which we, as foresters, have approached pruning has changed dramatically. Today pruning is a science that, if not done properly, can be very damaging to a tree.

Here are some tips that may be of help to you before you take the saw to the tree. First, large tree pruning can be very dangerous work. Even the most highly skilled arborists have been seriously injured while pruning a large tree. This is especially true if climbing is involved. It is best to leave major large tree pruning to professional arborists. When selecting an arborist give strong consideration to whether or not the arborist is certified by a professional organization. Certification is a good indication of knowledge and commitment to the profession.

WHAT TO PRUNE

Most pruning should be confined to removal of broken, rubbing, damaged or dead branches. Sometimes pruning is necessary to elevate tree branches over a sidewalk, street, roof, or other structure. It is generally not necessary to thin a tree out so that more air passes through the crown. This practice is sometimes known as “lion tailing” and can leave the tree open to stress during the hot months of summer.

If you are cutting live branches, never remove more than about 20% of the total leaf area of the crown. If trees need to be elevated (removal of lower branches), the process can be done in stages over several years if a large amount of work needs to be done.

MAKING PRUNING CUTS

Pruning cuts should be made so that only branch wood is removed and the trunk or supporting stem is not injured. If only branch wood is removed, the wound is smaller, the tree will be able to seal the wound more effectively, and the chance of problems with wood decay will be greatly reduced.

To locate the proper place to make a pruning cut, look for the “branch bark ridge” on the upper surface of the union of the branch with the supporting stem. This is a line of bark that has been pushed up as the branch and supporting stem have grown. Some branch unions will not have this if they did not form properly. Instead they will have the branch simply pressing into the supporting stem, forming a sharp V-shaped union. At the base of the branch, and mostly on the underneath side, look for the “branch collar,” which is a slightly swollen area of stem tissue that wraps around the base of the branch. A proper pruning cut begins just outside the branch bark ridge and angles down and slightly away from the stem, avoiding injury to the branch collar.
Do not make flush cuts that remove the branch collar. Wounds that are created by flush cuts cause substantially more injury to the tree than wounds left by proper pruning. Branches should be pruned using a series of three cuts as shown in Figure 1.

WHEN TO PRUNE

It has often been said that pruning can be done when the saw is sharp. This is not too far from the truth. Winter pruning will provide an entire growing season after the cut for the tree to begin the sealing process. There are two times of the year when pruning should be curtailed. The first is during the active spring growing flush, usually April and May. During this period the bark is very tender and can be torn easily. This may result in a much larger wound for the tree to seal over. The second time is during the fall coloration period. It is at this time that the chances of serious decay are at their height. If you live in an area where oak wilt is a concern, pruning of oaks should be restricted from April through June.

PRUNING “DON'TS”

Never top trees. Topping creates serious hazards and dramatically shortens the life of a tree.

Never use paint or wound dressing to cover wounds. These materials do not help the tree and actually interfere with the tree's wound sealing process.

MORE INFORMATION

You can get more information about community forestry and tree care by visiting the Nebraska Forest Service web site at www.nfs.unl.edu/. You may also visit the International Society of Arboriculture site (www.isa-arbor.com/) following the link to Tree Care Consumer Guides.