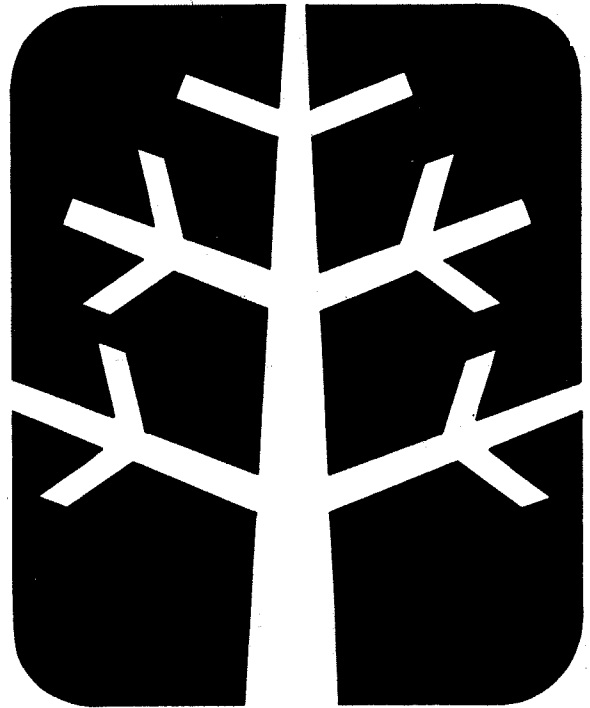# PRUNING TREES AND SHRUBS

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Pruning is necessary if the value and quality of the trees and shrubs in the landscape are to be maintained. The main reasons for pruning are removal of dead, diseased or injured branches; to improve the form, shape or size; to rejuvenate older plants and for safety and convenience

WHEN TO PRUNE

Generally, the best time to prune woody plants is in the early spring while they are still dormant. Exceptions to this rule include plants that will "bleed" if pruned in winter or early spring. Although this loss of sap causes no harm to the plant, it is a source of concern for many homeowners. To prevent sap loss in the spring, these plants should be pruned when they are fully leafed out. These would include maples (including boxelder), birch, black walnut, elms and honeylocust.

Trees that bloom on old wood should be pruned immediately after blooming. The flowering buds of these plants are produced the previous growing season. These plants include: forsythia, lilac, viburnum, mockorange and spirea

EVERGREENS

Evergreens can be pruned in the early spring (March - May) or in early summer after any new growth has hardened. Pines probably have the most particular pruning requirements. In the early spring they produce new growth known as "candles." These candles can be pruned when they have elongated but before the needles fully emerge.

Junipers, arborvitaes and yews can be pruned anytime from mid-April to mid-August. Pruning later would likely leave unhealed wounds that could result in winter damage.

HOW TO PRUNE

Always make pruning cuts just beyond (Figure 1) a side branch or bud. Plant growth will be directed into the remaining side branch or bud. Pruning paints are usually not necessary except on trees or shrubs that are susceptible to bacterial diseases such as fireblight.
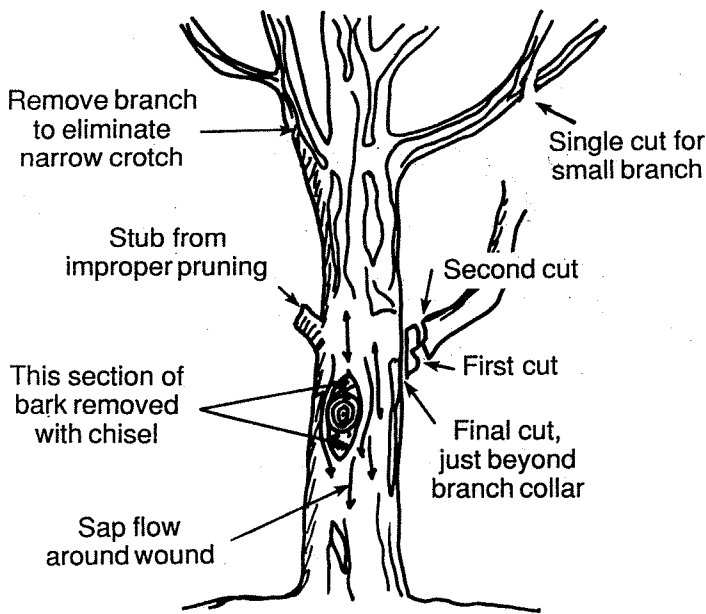
NDSU
Extension Service

Figure 1. Pruning trees.

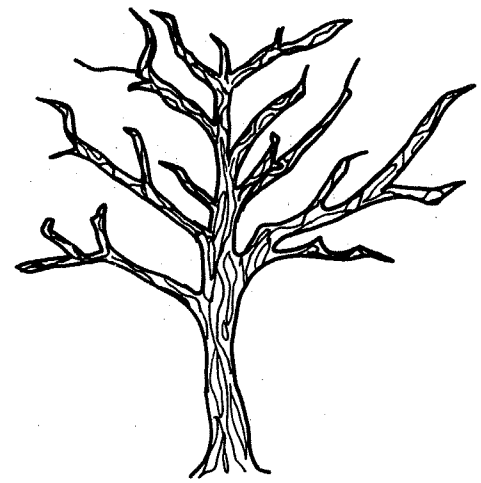# DECIDUOUS WOODY PLANT PRUNING GUIDELINES

TREES

When removing large branches, three cuts are necessary to avoid tearing the bark. The first cut should be made on the underside of the branch, about 12" out from where the branch joins the trunk. This cut should be one-fourth to one-third of the way through the branch. Be sure to stop before the saw binds. The second cut is made on the topside of the branch, 1 to 2 inches farther out than the first cut. Saw completely through the branch. The final cutting operation should be made just beyond the branch collar (see diagram). Cutting flush to the main trunk should be avoided as the cuts produce larger wounds and are slower to heal. Never leave branch stubs because these serve as entryways for disease organisms. **Topping, heading back, hat-racking or stubbing large trees is not recommended!** (Figure 2). This method of "pruning" cause a large number of weak, small shoots (suckers) at or near the cut surface. The improperly pruned tree never returns to its characteristic shape or form.
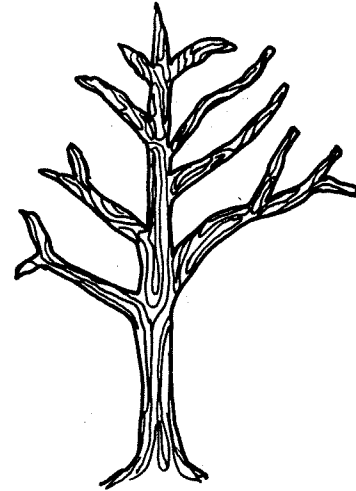
SHRUBS

Thinning and heading back are two methods of pruning shrubs. Thinning is removal of a branch by cutting it back to the main stem or ground level. This results in a more open plant without promoting excessive new growth.

Heading back is the removal of the terminal portion of a branch by cutting it back to a bud or another branch. The shape of the shrub may be controlled by cutting back to an outward or inward pointing bud, depending on the desired directions of growth. Heading back will promote the growth of new shoots and will result in the growth of a denser plant.

Rejuvenation of a shrub can be accomplished by using a combination of these methods.

THIS — but only when highly necessary

NOT THIS!!

Figure 2.

HEDGES

Hedge plants are pruned to give them a uniform, pleasing appearance or to keep them in bounds. Pruning of young shrubs ensures that many branches will develop at the base of the hedge.

Hedges should be pruned to keep the top portion narrower than the bottom. This allows the sun to reach all sides, permitting full, dense, growth.

Leggy, or thin hedges are best cut back to near ground level in early spring. Rapid regrowth then can be properly shaped to taper the top.

EVERGREENS

Evergreens need to be pruned based on the presence of their foliage on the branch. Care should be taken not to cut beyond the green foliage portion.

Frequent, light pruning of junipers, arborvitaes and yews each summer for several years will result in a thick and fuller plant (Figure 3).
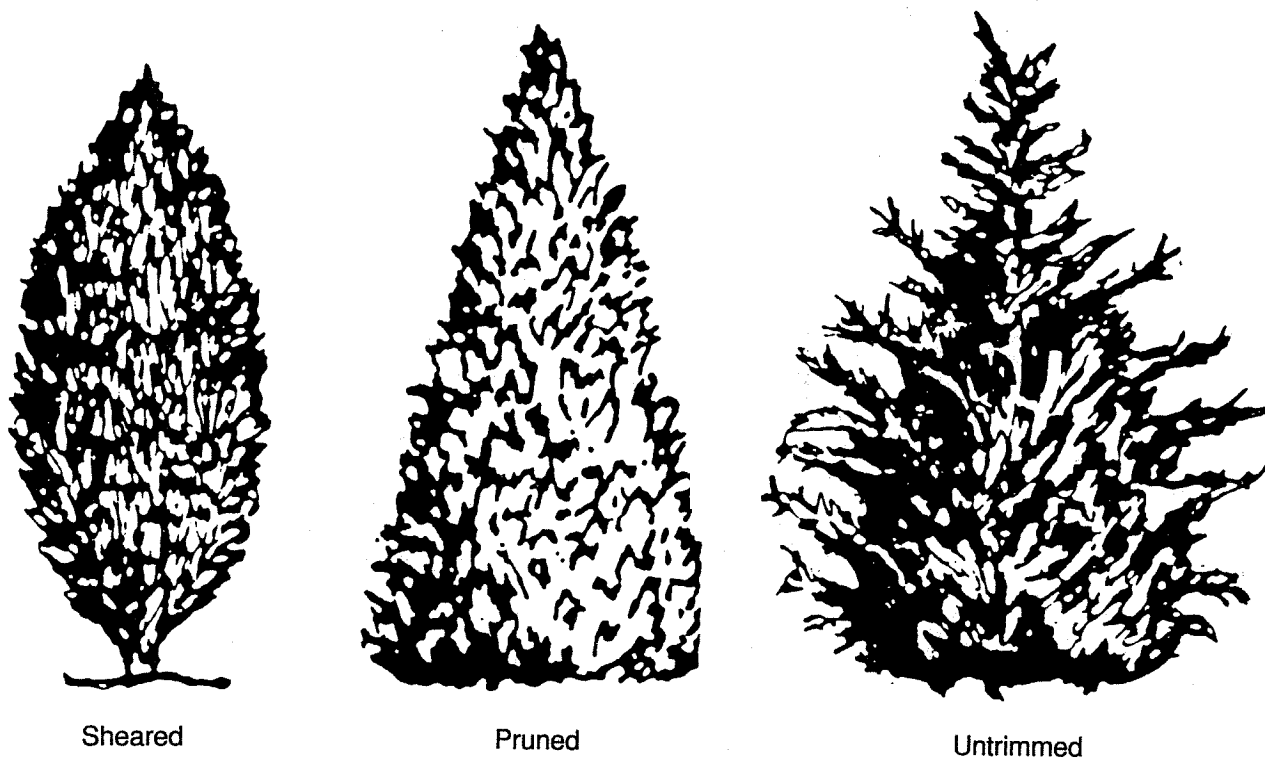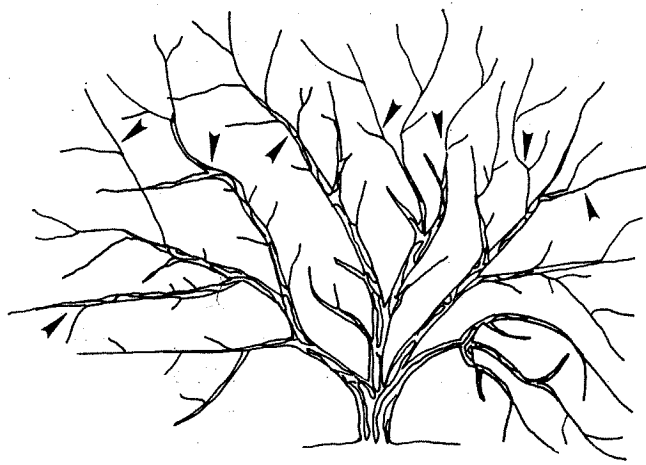
Sheared · Pruned · Untrimmed

Figure 3. Pruning evergreens.

With the larger pfitzer type junipers that need a reduction in size, follow along the branches to be cut and find some small new growth that parallels the branch. Just above this, make a diagonal cut.

If spruce or pine should lose their tops from injury, simply select the largest lateral of the nearest whorl and gently bend it up and tie to an attached brace. Use cloth or other non-girdling materials for fastening. Cut back other lateral branches by about half so that they do not compete with the shoot that has been selected.

If the tree's top was broken for some time before the damage was noticed, a double or multiple leader may be developing. Remove the leaders farthest from the central axis (Figure 4).

As with deciduous plants, evergreens should always be cut back to a side branch or bud. Do not leave stubs!
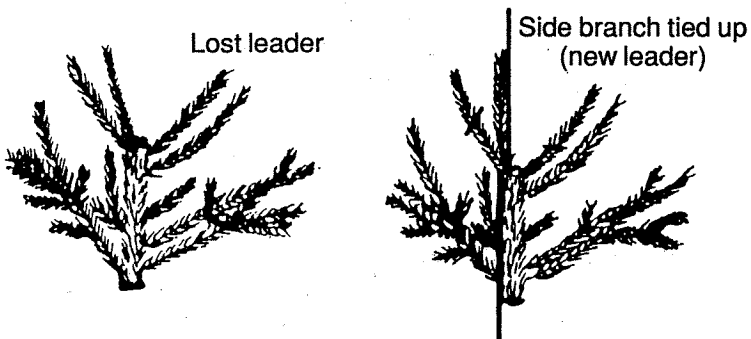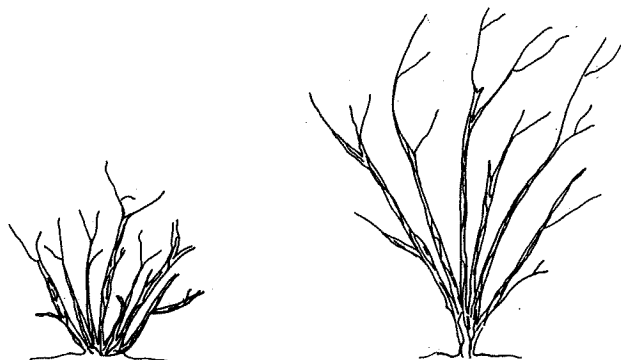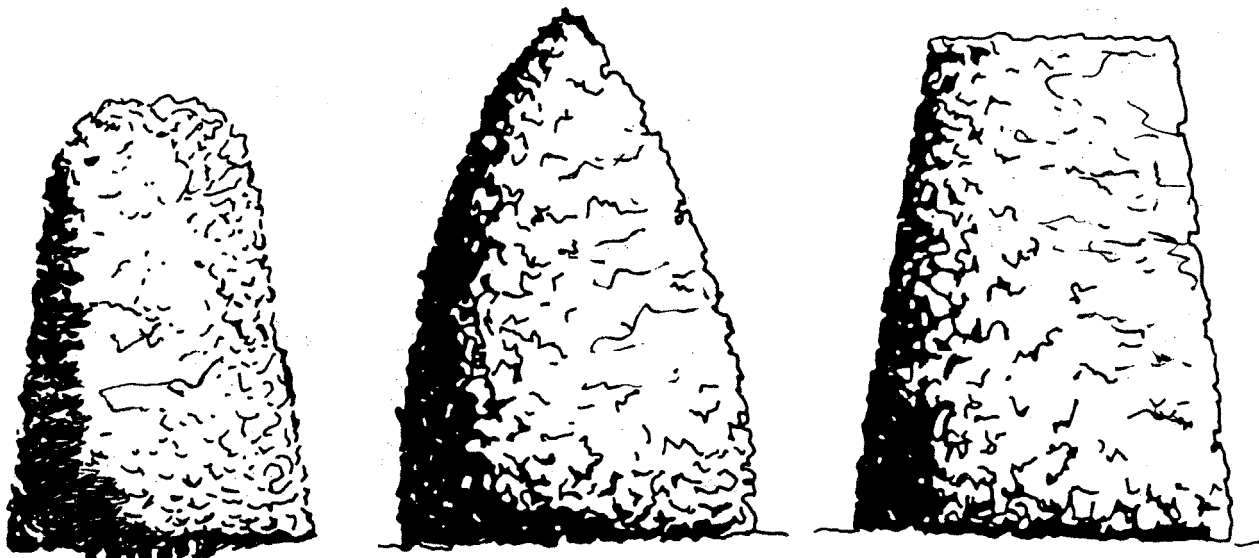

Shrub pruning — selective size reduction.

Lost leader · Side branch tied up (new leader)
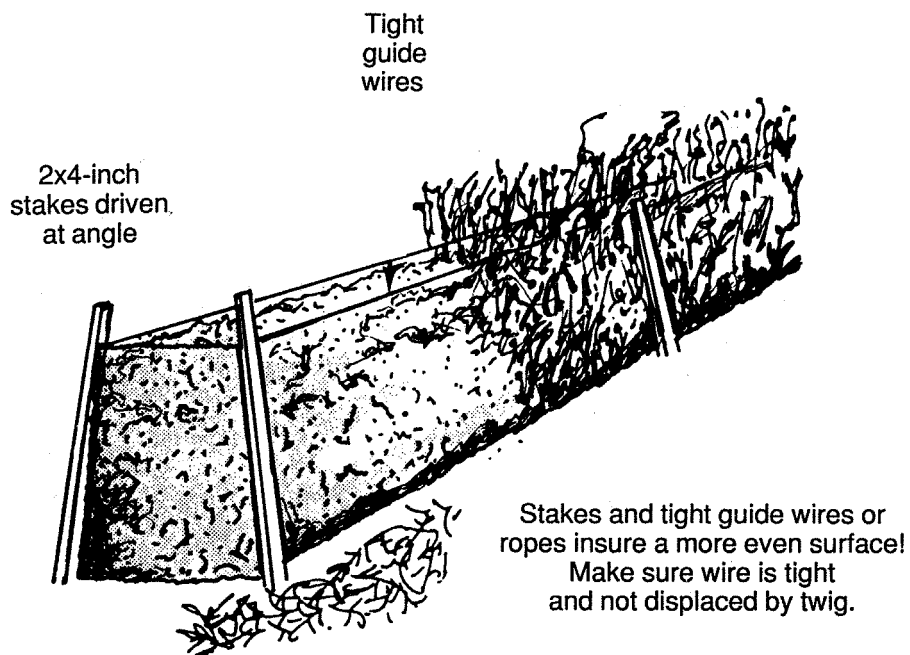
Figure 4.

To avoid heady pruning, select shrub cultivars that mature at desired heights.

Correct pruning of hedges.

Correct hedge forms — prune so the sun can reach the bottom branches.

Tight
guide
wires

2x4-inch
stakes driven
at angle

Stakes and tight guide wires or
ropes insure a more even surface!
Make sure wire is tight
and not displaced by twig.

For more information on this and other topics, see: www.ag.ndsu.edu