Pruning Trees and Shrubs
FOR OTHER THAN FRUIT PRODUCTION

1. Example of branch to be removed to eliminate narrow crotch (shown here) or possible disease

2. Second cut

3. First cut

4. Final cut

5. Stub from improper pruning

6. Wide crotch, to be encouraged

7. Single cut for small branch

8. Lower branch, to be removed while comparatively small

John Zaylakie
Extension Forester

Donald G. Hoag
Ass't in Horticulture

NDSU LIBRARIES
WHY PRUNE?

Trees are pruned to obtain a certain definite shape; to remove dead, injured or diseased branches; and to limit their size.

Shrubs are pruned to limit the size of the plant; to give them desired shape; to improve their vigor and appearance; and to control disease and insect damage.

PRUNING EVERGREENS

For pruning, evergreens fall into three groups, which are based on the time the pruning should be done and the method of doing the pruning.

GROUP I - JUNIPERS, CEDARS AND ARBORVITAE

These may be cut at any time, preferably from April to mid-August. You can trim anywhere as long as you do not cut beyond the living foliage portion of the branches. It is best to confine your work to the younger wood. Use hedge shears on compact, "definitely formed" trees. Hand shears or a knife can be used on other forms such as low growing, globe, or prostrate types.

GROUP II - PINES (primarily Mugho)

The pines, except in occasional cases where older wood must be taken out, are pruned only in late spring when the buds have made most of their elongation and the needles are beginning to grow in length. The diagram on the left shows at what stage of growth you can do your pruning.

Pruning back of the pine bud can be done by cutting with pruners, or simply by breaking off the bud end with the fingers.

Avoid using hedge shears in shaping your pine. These shears can cause damage to the needle tips and branches. Tips of cut needles tend to brown up and branch stubs are unsightly.
GROUP III - SPRUCES

Spruce, a large, tall growing tree, is often planted in confined spaces. To keep it in bounds, yearly or biennially pruning must be done. The preferred method of pruning consists of cutting back on 1 year old shoots (last year's branches) making the cut to one of the lateral (side) buds on the shoot. If older wood is to be removed, cut back to another shoot or branch. The best time for pruning is just before new growth begins in the spring; although light pruning can be done in summer or early fall.

Spruce can also be pruned the same as pine—that is, by cutting or breaking off part of the new succulent growth.

If leaders are broken or fail to develop, bend the nearest shoot into the position the leader should occupy. Tie in place to a brace. After a month or two the brace may be removed. It may be necessary to cut back all the other branches in the whorl.

A FEW GENERAL RECOMMENDATIONS ON EVERGREEN PRUNING

Be careful in evergreen pruning to: (1) Leave the lower limbs on the tree as long as they are alive and healthy. Evergreens look best when they are green from the ground to the top. (2) Avoid severe pruning in late summer or fall, as removal of outside limbs exposes weaker inner branches which are not accustomed to exposure and are therefore more subject to winter damage. (3) Avoid pruning below live foliage, as evergreens do not readily put out new growth from old wood. (4) Prune your trees often, preferably once a year. Junipers can be pruned twice a year.
HARDWOODS

It is usually best to prune shade trees during late spring or early summer, or as soon as the tree is in full leaf. (Pruning of the birches and maples including boxelder should be delayed until the tree is in full leaf. These varieties bleed profusely if pruning is done in early spring.) At this time the wound will begin to heal immediately with less chance of insect or fungus damage.

Branches under 1 inch in diameter can be removed flush to the main branch or tree trunk with one saw cut or with pruning shears. Removing larger limbs should be done in three separate cuts:

1. Make a cut on the under side of the branch about 1 foot out from where the branch joins the trunk. This cut should be at least one-fourth of the way through the branch.

2. A second cut is made on the top side of the branch and 1 or 2 inches farther out than the first cut. This cut should be continued through the branch.

3. The third cut is then made flush with the tree trunk, cutting off the remaining stub.
All cuts of 2 inches or more in diameter should be painted with a tree wound dressing. Orange shellac, asphalt (without creosote), or crude lanolin are excellent dressings.

In general, trees other than evergreens are pruned by heading back the side branches. Avoid cutting back the leader whenever possible.

HEDGES

Hedge plants are pruned to give them a uniform, compact, pleasing appearance or to keep them in bounds. Occasionally, pruning is done to influence flowering.

An important point to remember in hedge pruning is to have the top narrower than the bottom. This allows the sun to shine on all sides of the hedge, thereby permitting a full dense growth from the ground to the top.

![Leggy Mature Hedge Incorrectly Pruned](image1)

![Properly Shaped Hedges](image2)

SHRUBS

In transplanting all small shrubs including hedge plants, prune back severely to within 3 to 6 inches from the ground. Large shrubs should be pruned to approximately 50 percent of their crown size. Established shrubbery is divided into two groups for pruning.
Group I: Early flowering shrubs that bloom from buds produced the previous summer are included in this group. Examples of such shrubs are Van Houtte spirea, lilacs and honeysuckles. For this group of shrubs in the case of old unpruned plants, cut out old canes to the ground in the spring to rejuvenate them. Immediately after blooming, cut back the remaining larger canes to a young lateral branch. Avoid removing more than one-third of the top at this "after-blooming" pruning.

Group II: Late flowering shrubs that bloom from shoots of the current year are in this group. Examples are Hills of Snow hydranges, tamarix and Froebeli spirea.

These shrubs are best handled by cutting out at the ground line in early spring all canes 2 years old or older.

Correct Way To Prune

Before Pruning

Wrong Way