



Let's Trim the Right Way

by CARL SCHWARTZKOPF, Mid-Continent Agronomist, USGA Green Section

As the summer months come to a close, with the growth of grass slowing up somewhat, it is time to turn our thoughts to fall and winter maintenance. Since the repair of equipment is usually scheduled when the weather does not allow outside tasks to be completed, scheduling of tree trimming and pruning can be planned for the fall and warmer winter days.

WHY PRUNE?

Trees or shrubs are pruned to preserve their health and appearance, to prevent damage to golfers and the course. Pruning for health involves removing broken, dead or diseased branches and to prevent decay-producing fungi from penetrating into the healthy parts of the plant. Live branches can be removed to allow sunlight to filter through for better turfgrass growth. Branch stubs are removed to allow proper healing.

Dead, split and broken branches are a constant hazard to life and property. Low-hanging live branches should be removed to a height of 10 to 12 feet when they interfere with golfers

or with mowing under them.

HOW TO PRUNE

There is not a standard method of pruning, but certain procedures and precautions generally have been used by successful arborists. These procedures include starting pruning operations in the upper part of the tree and working down. This helps to shape the tree properly and saves time in clearing the tree of pruned branches that become lodged in the lower branches as they fall. All dead, broken, diseased and insect-infested branches should be removed. Small branches that may prove undesirable within a few years should also be removed. Clean cuts should be made as nearly flush as possible next to the branch that is to remain. Dead branches should be cut back to healthy wood, so the live tissue surrounding the cut can heal.

All final cuts should be made as close as possible to the remaining live portion of the tree. Stubs should never be left, since proper healing is inhibited, thereby providing an

environment that may promote wood decay. Theoretically, all wounds, regardless of size, should be painted with a dressing. However, in actual practice wounds over two inches in diameter are painted. One should bear in mind that decay may readily develop in smaller untreated wounds, especially in trees that have a low vigor with a slow healing process.

WHEN TO PRUNE?

Although there are advantages and disadvantages in pruning during certain seasons, trees may be pruned at any time of the year. The timing is usually controlled by practical considerations. Trees can be pruned more easily to the desired shape when they are in foliage, and it is easier to see the weakened, diseased or dead branches.

Since most rapid healing occurs on wounds in early spring, it can be an ideal time for pruning. However, some trees, such as maples and birches, bleed so profusely when cut in the spring that it is better to delay pruning until summer or fall, when the sap does not flow as freely. Therefore, many trees are usually pruned during the winter to distribute tree maintenance work more evenly over the year.

REMOVING LARGE BRANCHES

The tree will suffer considerable damage if only a single pruning cut is made in a large branch, as shown in figure 1:

As the cut deepens, the remaining wood will become too weak to support the weight of the limb, and much of the bark below will be ripped off. The proper method to use in removing a large branch is shown in figure 2. About a foot beyond the proposed final cut, a preliminary undercut is made until the saw blade binds (cut A). On the upper side of the branch an inch or two beyond the first cut, a



FIGURE 1.



Decay may develop in untreated tree wounds.

second cut is made to sever the branch (cut B). The short stub remaining can be removed by making the final cut (cut C) as nearly flush with the main branch as possible. The stub should be held in by the operator's free hand or a rope to prevent tearing the bark. When an entire branch is small enough to be held firmly in place by ropes or by hand, the first and second cuts (cuts A and B) may be omitted.

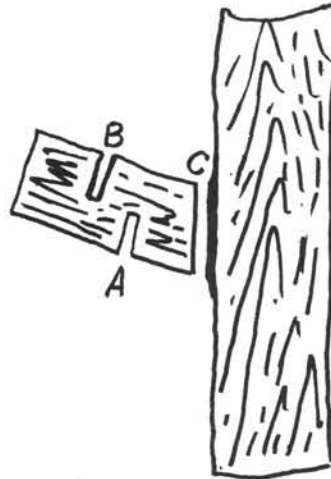


FIGURE 2.

Removing large limbs from trees requires additional precaution. In many instances, large branches must be lowered to the ground in pieces or whole to avoid damage to shrubs, turf and property below. This can be accomplished with the use of two or more heavy ropes that lower and guide the branches in their descent.

TREATMENT OF WOUNDS

A major reason for decay and death of trees can be traced to neglected wounds made several years before. The bark of trees, like our skin, serves to protect the cells and tissue below. Once this protective cover is broken, the area below is subject to infection by disease, insects and other parasites.

Wounds made by a tree owner's saw in removing a dead, broken or unwanted branch, by a skidding automobile, or even by a mischievous boy's ax should be treated.

DRESSINGS

To protect the tree from the scar or wound of pruning, it is helpful and strongly suggested that a wound dressing be applied. An ideal wound dressing would disinfect the area treated, prevent entrance of disease organisms and insects, and stimulate callus formation. It would also be easily applied, sufficiently porous to allow excess moisture to evaporate from the wound underneath, and not crack upon drying or weathering.

Unfortunately, no single dressing has yet been developed that meets all of these requirements. However, many of the following items are commonly used: orange shellac, asphaltum paint, creosote paint, grafting wax, house paint and many easily available commercial tree paints.

Regardless of the wound dressing used, optimum results are obtained when the dressed surfaces are inspected periodically and recoated once or twice a year. This is important when the dressing blisters, cracks or peels. When preparing old wounds for recoating, it is best to clean the surface with a stiff wire brush to remove the blisters and loose flakes.

SAFETY HINTS FOR PRUNERS

1. Determine the general condition of the tree. Greater precautions should be taken when working in an old, weak tree, as compared to a young tree that is sound.
2. Examine pruning equipment often for safety and efficiency.
3. Know the type wood in the tree. Extra precautions are needed in weak-wooded trees, such as poplars, silver maples, willows and tulip trees than are required in pruning trees such as elms, oaks, hickories and plane trees, which have stronger wood.
4. Danger is greatest when branches are wet and when temperatures are low.
5. Peeling bark and fungus growth indicates dead and dying branches. Limbs exhibiting these symptoms should not be used for support.
6. When electric wires run through a tree, remember the danger of electric shock is increased when the tree is wet.
7. Do not allow tools to come in contact with wires, even though the wires are supposed to be insulated.
8. Always have a safety rope properly attached to yourself and the tree.

A proper dressing stimulates callus formation.

