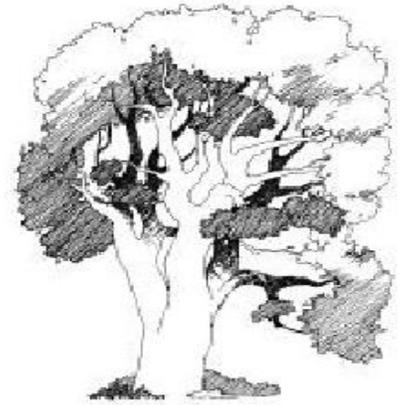

Pruning Shade And Ornamental Trees

Pruning can be of great value to shade and ornamental trees. Not only does it improve the appearance of most trees, but it can gently reduce the hazards trees pose during storms, and prevent insect and disease problems. Pruning also enables us to shape and train trees to achieve a desired outcome. Properly pruned trees will normally remain healthier and live longer than unpruned trees.



Homeowners can often do their own pruning if the job is small and the proper tools are available. Large jobs usually require a professional with knowledge and equipment to do the job correctly. Regardless of who does the job, it is necessary to have a basic understanding of pruning in order to know when pruning is needed, what kind of pruning, and to be able to select a tree care professional who will get the job done right.

Why Prune?

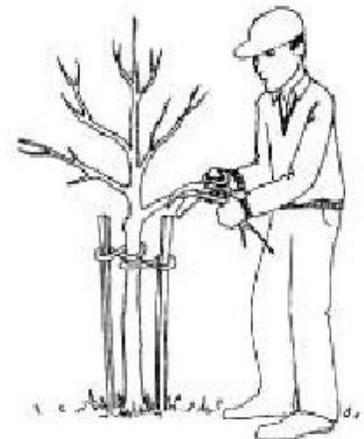
Of foremost importance in pruning trees is the objective. If the objective is not known, then perhaps pruning shouldn't be done at all. There are many reasons for pruning shade and ornamental Trees Some of these include:

Maintenance of Health, Appearance and Safety

Probably the most common reason for pruning trees is to remove broken, dead, and diseased branches that pose a threat to both the property around the tree and to the health of the tree. These branches serve as pathways for insects, and decay-causing microorganisms to enter the tree.

Reducing the Potential for Storm Damage

This is accomplished by reducing the weight of the tree's crown and its resistance to wind. Trees that are top heavy, or have foliage that is so dense the wind can't blow through them, can be more easily uprooted or broken during ice or wind storms. The possibility of this happening can be greatly reduced by thinning the tree's crown. Special attention should be given to weak, narrow, or v-shaped crotches; dead broken, or diseased branches competing with the main leader for dominance. In addition, thinning the sucker sprouts and small branches throughout the interior of the tree crown helps to accomplish this objective.



Horticulture

Pruning can be used to enhance flower and fruit production. A specialized knowledge of how the individual species flowers is required to achieve this objective.

Training Young Plants

Pruning is used in training young plants in order to achieve a desired form or structure. Knowing the growth habit of the individual tree species is very important in this type of pruning. However, some potential problems that should be watched for and treated early to prevent hazardous conditions from occurring in shade trees include:

- V-shaped crotches - Trees with forked trunks that come together at a narrow angle often split or break. One side should be removed.
- Rubbing or crossing branches - These cause damage and stress to the tree. The wound caused by the branches rubbing together serves as an entry point for insects, disease and decay causing microorganisms. At least one of these branches should be removed.
- Branches at angles less than 45° to the trunk and branches that compete with the main leader for dominance should be removed. They cause the tree to be weak structurally. Pruning is also done in young trees to cause them to take on a desired shape in the landscape and to improve the structure of fruit trees to increase their ability to support fruit yields and to make collection easier.

Utility Line Clearance

A major use of pruning is in utility line clearance. This type of pruning takes special training and only those persons qualified should attempt it, including pruning around lines for cablevision, telephone, fire alarms, etc. around a home.

Topping

Severely pruning the top of a tree leaving large branch stubs has been thought to invigorate a tree. But, in reality, it reduces the food supply, increases a tree's susceptibility to disease and insect attack, and reduces the life expectancy of the tree. An alternative to topping for invigorating a tree would be fertilization. Remember, topless trees are obscene.

Root Pruning

Though we usually talk about pruning from the standpoint of reducing the top of the tree, it is sometimes beneficial to prune the roots. Root pruning is often used to encourage a more fibrous root system, particularly in trees to be transplanted. It is also used to prevent damage to sidewalks, streets, buildings, etc. and prior to construction, to encourage root development. Care should be taken when using root pruning not to severely restrict the supply of water and nutrients being taken up by the plant. A professional should do this.

When to Prune

When a pruning job should be done depends on the type of plant, its condition and the desired results. Light pruning should be done almost anytime, as well as removal of dead, broken, weak or heavily shaded branches.

Early spring pruning allows the tree to focus its nutrients on the remaining portions of the tree and cuts callus over more rapidly. However, sprouting may be more of a problem at this time. Pruning to slow plant development is best done after the initial growing season but before the tree begins to store nutrients for the next seasons growth. In Mississippi, this would be about mid-summer. Fall pruning is most hazardous because it is at this time that decay-causing fungi are sending spores into the air and the tree has less time to callus over and prevent infection.

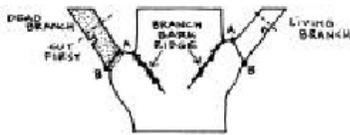
Winter pruning usually has the least damaging effect on the tree physiologically and gives the cut an entire growing season to callus over. However, extremely cold temperatures may be damaging to the exposed wood.

How to Prune

The rule used for the longest time was to “flush cut,” but research has shown this is not the best practice for preventing decay in trees. Rather, the limb should be removed at a point close to the trunk without cutting behind the branch collar or branch bark ridge. These are the natural areas of attachment and when the limb is removed behind this point it leaves an opening for decay to enter the main stem of the tree. The following illustrations demonstrate proper pruning techniques.

Natural Target Pruning

Locate points A and B where branch meets the branch bark ridge and branch collar. Remove branch along line AB.



Removing V-shaped Attachments

V-crotches and narrowly angled branches are difficult to remove because of the two trunks or branches come together in a way they appear to be grown together. To remove a v-shaped crotch, again use the three-step approach to reduce the top weight and prevent splitting. Cutting at a 30° to 40° angle upward to the point of attachment, remove the unwanted portion of the tree. Even though the two branches touch, they are usually not grown together.

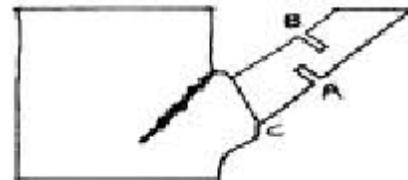
Use the 3-step approach by making an undercut at A, and overcut at B, then removing the stub at a 30° to 40° angle from point C to point D, the actual place of branch attachment.



3-Step Removal

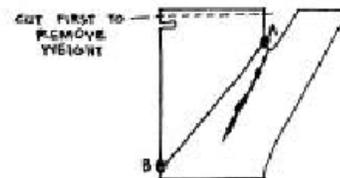
When pruning large limbs, the three-step method of removal should be used. This prevents the limb from breaking while being cut and stripping bark off the tree below the branch being pruned.

1. Undercut at Point A.
2. Make a second cut at B; limb should come off.
3. Remove stub at outer edge of branch collar and branch bark ridge.



Top Removal

Topping is not a healthy practice for shade trees. Avoid it if possible. If it is necessary to top cut, the diagram below shows the proper way.



Wound Dressings

Although wound dressing has been used for years to prevent decay in trees, the latest research shows that they may not have this effect at all. Instead, they may even, in some instances, promote more rapid decay. Trees, when wounded, respond by building up a natural barrier to decay. It is this natural barrier that research indicates will prevent decay rather than a dressing. Dressings may be applied as a cosmetic but if so, it should be applied in a thin layer.

Contact your local Service Forester for more information on the proper care of shade and ornamental trees



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