Pruning - Tree Renovation

Frequently, old maple trees, plum trees, cherry trees, and apple trees have been neglected in the gardens and have become unkempt and unmanageable. In many cases, these trees can be brought back to a more manageable state without having to remove them. The primary means of renovating older trees is through judicious and properly selected pruning cuts.

Most trees do not take kindly to severe pruning, and are even less tolerant of poor or improper pruning. Do not try to correct all the problems of a neglected tree in one single year. Spread out the renovative pruning process over a period of two or three years. Correct watering and fertilizing techniques should also be observed during this renovation time.

Notes of Renovation

* Is the tree worth saving? Did you grandfather give it to you, or does it have other sentimental value? Did it bear fruit that was exceptionally good? Is the tree structurally sound? Is the tree in a suitable location? Does it provide shade, or interfere with lawn mowing? Is it full of insects and diseases?

* The ultimate goal of renovating a tree is to prune it heavily for two, three, or even four years, so you do not have to prune it very much after the renovation process is finished. It is not a hard, complicated, lifetime project.

* Prune the tree twice a year for 3 years: once in the early-spring; and once again in July or August.

* Spring pruning stimulates a lot of new growth. Summer and fall pruning does not stimulate excessive new growth.

* Do not fertilize the tree during the renovation period. Make sure you do not over-water the tree.

* Try not to remove more than 20% to 30% of the total tree in any one year. Severe pruning stimulates excessive new growth.

* If, for example, the tree is currently 23 feet tall and you want to bring it back to about 14 feet, lower the overall height by 3 feet per year.

* It is not necessary, or sometimes it is not possible, to correct all errors in tree structure. Sometimes you just have to live with the problem, or remove the tree entirely.

Definitions

Thinning Cuts Completely removes entire stems, limbs or branches. Thinning allows sunlight to reach the center of the plant. Thinning also redirects energy to the remaining branches, instead of stimulating new grow, side shoots, or suckers.

Heading Cuts Partially removes stems and branches. Pruning cuts are in the middle of branches, next to side branches, or next to buds that will direct the new growth the way you want it. These cuts promote thicker branching and produces a fuller canopy. They can have a tendency to stimulate suckering unless a dominant leader is left.

Sucker or Water Sprout: A fast growing shoot that usually grows vertically with no side branches.

The First Year

Initially, all dead, diseased, or broken branches must be removed. Secondly, any large branches that upsets the balance, or, any obviously awkwardly placed or crossing branches should be removed. These branches need to be removed to make way for new growth. The tree's framework is the most important thing to remember at this stage of renovation. After removing each large branch, stand back and look at the overall shape of the tree, so you do not make a disastrous mistake. *Measure twice, cut once.*

After removing the major branches and limbs, remove all the sucker growth near the ground and bottom of the tree trunk. Next, carefully thin out the smaller, twiggy growth. Do not just head back the undesired branches, remove the entire branch (use thinning cuts). Try to remove those branches that will allow sunlight to get to the center of the tree.

Which small branches or twigs to remove

1. Remove all the shoots, (except one that is in the best location to reshape the tree), that are growing from each 'single growing point' on the main branch or trunk.

2. Remove hanging or crossing branches.

3. Remove parallel branches. Branches should be evenly spaced around the tree. Branches growing parallel to each other should be at least several inches apart.

4. Remove all suckers and water sprouts. You may need to leave one water sprout at each of the 'single growing points' you want a new branch to start growing from. If you do need to leave a water sprout, head it back so it is only about 12" to 18" long. Do not ever leave a sucker it's full length.

The first year's pruning may remove a significant amount of wood. Be careful not to take out too much all at one time.

Try not remove more than 30% of the entire tree each year.

The First Year's "Second Pruning"

Assuming the first major pruning was accomplished in the spring, be sure to prune the tree lightly again in July or August. Remove any suckers that have grown excessively or that are definitely growing in the wrong part of the tree. By pruning in the summer and fall you can remove some of the branches without stimulating the tree to re-grow as fast. You will not have to prune as severely next spring if you do some of the pruning in the fall. Do not do any major pruning in the fall, wait until winter or spring for that.

The Second Year

Remember: Do not water or fertilize the tree very much this year. Prune more of the small, twiggy branches. Try to remove about half of the remaining unwanted branches this year. Do not remove more than 20% to 25%of the total tree during this pruning session. Follow the same guidelines you used last year in determining which branches to remove. Be sure to thin out the unwanted branches rather than just heading them back. Remove the branches that are the most obviously mis-placed or the most over-crowded.

The Second Year's "Second Pruning"

In July or August, remove any suckers or branches that are definitely growing in the wrong part of the tree. Do not do any major pruning at this time of year.

The Third Year

Remember: Do not water or fertilize the tree very much this year. Remove the remaining unwanted branches this year. Do not remove more than 10% to 20% of the total tree during this pruning session. Follow the same guidelines you used in the last two years in determining which branches to remove. Be sure to thin out the unwanted branches rather than just heading them back.

The Third Year's "Second Pruning"

In July or August, inspect your tree. Little or no pruning may be required. However, remove any suckers or branches that are definitely growing in the wrong part of the tree.

The Fourth, Fifth and Sixth Year

Once a neglected tree has been restored to health, little (if any) yearly pruning is required. You may occasionally need to thin some of the over-crowded branches. You may also have to remove some over-vigorous shoots. You are just trying to maintain the proper shape of your tree.

Tree Size

Pruning stimulates new growth, it does not stunt growth. Do not try to keep a naturally large growing tree small just by pruning it, you will probably give up after a few years.

Although the speed and nature of growth depends on the species and other various growth factors, the ultimate height and size of a tree is determined by the tree's genetics. Remember, pruning is only temporary. Trees will grow to their natural height and width, but you can help determine their shape.

Except for some fruit trees, very little pruning should be required after the tree is a few years old. You can alleviate a lot of pruning problems just by choosing the correct variety of tree for the location.

Fixing a 'Broken Tree'

Renovation pruning can help restore trees that have been improperly pruned or have been 'Topped'. You can improve the appearance of your tree, even after it's been severely pruned and it shows heavy water sprout growth. As the water sprouts begin to enlarge, they can be selectively "thinned out" and "headed back" by using properly placed pruning cuts.

It generally involves using the same procedures for restoring a neglected tree. It is the gradual reduction of bad growth, so that the plant is less cluttered and encouraged to put on good new growth.

New growth can then be directed outward to expand and fix the tree's crown. This process will need repeating for a few years just like rejuvenating an old tree. The scars, both physical and visual, will never completely disappear, but you can minimize their appearance.

Bark Ringing

Occasionally a tree, shrub, or vine will not produce flowers on its own. Putting the plant under stress (lack of water or fertilizer) will sometimes help a plant to bloom. If stressing the plant doesn't help, physical injury may work.

Some gardeners will beat the trunk or branch with a stick; without damaging or killing the plant of course. Another, more professional way to injure a tree is to **"ring the bark".** You must ring the tree in May. Do not ring the bark any other time of the year.

When utilized properly, bark ringing can limit the growth of trees enough that it will help focus the energy of the tree more on the foliage or the fruit that it produces. However, if the procedure isn't done correctly, you can find yourself with a seriously damaged branch or tree that could possibly die. Weedeater damage around the base of the tree is a good example of when bark ringing is detrimental.

Step 1. Mark a ring around the tree trunk or branch with a 1/8" wide marker.

Step 2. Cut two rings through the bark just deep enough to reach the heartwood. The rings should be about 1/8" apart; cut on each side of the mark you made. Do not cut too deeply into the heartwood or you may weaken the plant's physical strength. Do not remove the bark; just cut it. Leave a half inch of bark (within the ring) untouched on both sides of the trunk or branch.

Step 3. Cover the wound with two overlapping circles of adhesive tape. Electrical tape works great for this covering. Smear Vaseline over the edges and seams to exclude air from the cut.

Step 4. The plant should start to produce flowers the following year. If not, you may have to repeat the process.

Step 5. Be careful, you may kill the branch or tree if you are too aggressive.

Step 1   Step 2   Step 3