

Years ago, I was a science teacher. When I presented a study on trees, I often began by proposing a simple problem designed to test the student's basic understanding of trees. *Imagine a young tree growing in the landscape. Its first branch appears two feet above the ground. If this particular tree grows an average of six inches per year, how high off the ground will that branch be in ten years?*

I was always amazed how many would answer, "Seven feet." Those familiar with how trees actually grow know that trees increase in height and breadth from the tips of their branches. Trees do not grow by telescoping out of the ground. In ten years, the branch on this tree would have actually been slightly closer to the ground than two feet, due to the branch also increasing in diameter. I would then point out that this tree with its first branch being only two feet above the ground would eventually pose problems for the homeowner. Our discussion would then lead to the importance of pruning trees— the *when to prune*, the *why to prune* and the *how to prune*.

Did you know that right now, winter, is the ideal time to prune most deciduous trees? One can certainly prune trees most anytime, but I share with you five primary reasons for pruning most deciduous trees in the winter.

- 1) During the winter, deciduous trees are dormant, and so are the many diseases and insects that can potentially invade pruning cuts.
- 2) With all the leaves gone for the winter, it becomes much easier to see the trees overall form and structure. Damaged and diseased branches are more readily apparent when not obscured by foliage.
- 3) Pruning in the late summer or early fall can stimulate new growth that may not harden off before the cold weather. This is not a concern during the winter.
- 4) Winter pruning is good for trees, leaving them with extra root and energy reserves to quickly heal wounds and support vigorous spring growth.
- 5) Winter pruning is also good for the homeowner. It creates a reason to venture outdoors on a mild winter's day to enjoy the beauty of nature.

Keep in mind, before we prune trees, it is important to understand why. Interestingly, most trees growing in nature do quite well without any pruning

intervention from us humans. However, as trees mature in the home landscape two main reasons for pruning arise. We should prune for the health of the tree and for safety.

One should always prune out dead branches or those that are rubbing to avoid diseases from entering the tree. Insect pests are most often attracted to trees that are stressed or diseased.

Pruning for safety is also critical. Having a branch extending outward into the landscape and being only two feet off the ground would certainly pose a problem. Imagine trying to mow the lawn beneath this tree. Furthermore, low hanging tree branches often obscure safe vision. If branches are allowed to hang too low over sidewalks and streets, injuries could readily result to passersby and/or motorists.

Although pruning does often improve the aesthetics of a tree, reducing a tree's size should not be the main reason for pruning. If a tree becomes too large for its location, the problem was most likely a case of planting the wrong tree in the wrong place. Next week I will address proper pruning techniques.

In the meantime, I share with you another science problem I asked my students. *Imagine a boat tied up by the shore. It has a ladder hanging over its side and three rungs are showing above water. Each rung is twelve inches apart. That evening, the lake receives a twelve-inch rain. How many rungs are showing above water come morning?* Think about it. 😊