

Virginia Gardening

with Jim May

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Get young trees off to a good start with proper pruning

If you plan to plant any trees in your landscape this spring, get them off to a good start by planting them at the proper depth, watering them well and pruning them properly.

Proper training and pruning are essential in developing a tree with a strong structure and desirable form. Trees that are properly pruned while they are young will require little corrective pruning when they mature. This can be critical because 10 years later, you don't want to be climbing that tree with a chainsaw in hand to take out any big limbs.

By selecting the proper tree you can avoid a lot of pruning in the future. There are dozens of species of trees that grow to less than 30 feet tall. These include several species of Maple (*Acer*), Holly (*Ilex*), Cherry and Flowering Plum (*Prunus*) and Hawthorn (*Crataegus*). Many native trees including Serviceberry (*Amalanchier*), Hornbeam (*Carpinus*), Redbud (*Cercis*), Dogwood (*Cornus*) and Silverbell (*Halesia*) also grow to a manageable size.

Proper tree selection and placement in the landscape could prevent a lot of drastic pruning of mature trees. Topping and other disfiguring types of pruning can be avoided if the right tree is planted in the right place and that tree gets trained while young. Let's all work together to wipe out these mutilating practices.

There are also many trees that have a narrow growth habit and don't get very wide. Look for cultivar names such as 'Fastigiata', 'Columnaris', 'Skyward', 'Spire' and 'Sentry'. Ask local nursery personnel for help in finding the right size tree for your situation.

Proper pruning of young trees will prevent a lot of problems later. Select trees that have permanent scaffold branches with wide angles of attachment to the trunk. Narrow angles of attachment signal a point of future weakness. The popular Bradford Pear tree (*Pyrus calleryana* 'Bradford') is beautiful but has very narrow branch angles and tends to break during ice storms or wind. Unfortunately, this usually occurs after the tree matures and is 10 or more years old. Look for other pear cultivars such as 'Aristocrat' or 'Chanticleer' ('Cleveland Select') that have stronger branch angles.

Select trees in the nursery that have a single or terminal leader. Maintain that single leader while the tree is young by pruning any lateral branches that start to grow higher than the terminal leader. Many species of trees including

Sweetgum (*Liquidambar styraciflua*), Tulip Poplar (*Liriodendron tulipifera*), Red Oak (*Quercus rubra*) and others naturally grow with a single leader. Nursery personnel will be able to help you select trees with good branching habits.

There are a few simple principles that you need to understand before you set out to prune a tree.

- Start out with the proper tools. A sharp pair of hand pruning shears, long-handled lopping shears and a pruning saw are all you need.
- Every cut you make has the potential to change the growth of the tree. Always have a purpose in mind before making a cut.
- Proper technique is critical. Poor pruning can cause damage that lasts for the life of the tree. Learn where and how to make the cuts before picking up the pruning shears.
- Trees don't heal the way people do. When a tree is wounded it grows over and "compartmentalizes" the wound. In effect, the wound is contained within the tree forever.
- Small cuts do less damage to the tree than large cuts. This is why proper pruning (training) of young trees is critical. Waiting to prune a tree when it is mature can create the need for large cuts that the tree can't easily close.

Where you make a pruning cut is critical to a tree's response in growth and wound closure. When removing a whole limb the cut is called a thinning cut. This type of cut should be made just outside the branch collar, not flush to the trunk. The branch collar is a swollen or slightly raised area where the branch attaches to the trunk. This area contains growth regulators that allow the tree to compartmentalize the wound. However, if you remove or damage the branch collar, the tree will be injured unnecessarily.

When training a tree to grow in a certain direction, make a heading cut just above an outward-growing bud. You must be careful because cutting too close to the bud could kill it and cutting too far away will leave a stub that can lead to infection. Heading cuts in general stimulate growth in buds below the cut.

A good structure of primary scaffold branches should be established while the tree is young. The scaffold branches provide the framework of the mature tree. Maintain radial balance with branches growing outward in each direction. Properly trained young trees will develop a strong structure that will require much less corrective pruning as they mature.

If you feel unsure of what to do, call an expert. All over Virginia, we have Extension Agents, Certified Arborists and Virginia Certified Horticulturists who do this for a living and can direct you. Consider consulting one.

Virginia Gardening with Jim May is brought to you by the Virginia Green Industry Council and the Virginia Department of Agriculture and Consumer Services.