

## Why hire an arborist?

Spring is fast approaching and that means gardens to attend and flowers to plant, but what about your trees? Now is the best time to hire an arborist to maintain your trees before the hustle of bustle of spring hits.

Trees are a long-term investment that needs proper maintenance for vigorous and healthy growth. The best way to make sure your trees are properly taken care of is to first educate yourself about trees. There is plenty of free information about how to prune and maintain landscape trees, which can be obtained from your local TDA Division of Forestry office or on the Web at [www.utextension.utk.edu/publications/forestry.htm](http://www.utextension.utk.edu/publications/forestry.htm).

Consulting a professional arborist is the second step to ensuring proper maintenance of your landscape tree investment. An arborist is a specialist who cares for individual trees in a yard, business or park setting. Pruning to reduce hazards or dead limbs, assessing and controlling insects and diseases, and assessing proper nutrient care are several common services a qualified arborist can perform for your trees. They are knowledgeable about tree biology and are trained to provide proper tree care. There are a variety of things that one should consider before hiring an arborist:

- An arborist should be a member of a professional organization such as the International Society of Arboriculture (ISA), the National Arborist Association (NAA), or the American Society of Consulting Arborists (ASCA). Being a member of a professional organization demonstrates the arborists' willingness to stay up to date on the latest techniques and information.
- ISA Certified Arborists can be found in the yellow pages. These arborists are experienced professionals who have passed an extensive examination covering all aspects of tree care.
- A professional arborist should have proof of insurance and references, and you should take time to check their validity.
- Obtain more than one estimate on tree projects.
- Good arborists will only perform industry-accepted practices. Unacceptable practices include tree topping, using climbing spikes on trees that are not being removed and removing or trimming trees without need.
- Be wary of individuals who go door-to-door and say your tree needs to be pruned. Most reputable companies do not solicit work by knocking on doors.
- Have the arborist put everything in writing. This protects both you and them.

Trees are an important investment in any landscape situation and need to be cared for properly to get the highest investment returns. Trees that have been properly maintained add aesthetic value to your property, which can increase your real property value. Poorly cared for trees on the other hand are a liability, so it is worth the time to hire a reputable arborist to protect your investment.

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## City tree canopy

Trees are urban air conditioners, according to Kay Fermann, an urban forester with the Tennessee Department of Agriculture. “Tree cover in cities can reduce air temperature by as much as 10 degrees,” says Fermann. This can translate into big savings on air conditioning bills.

“That’s only one benefit of an urban forest canopy. There are many others,” says Fermann. Among these are attenuation of storm water run-off, reduction of air pollution, noise abatement, increase of wildlife habitat and improvement of privacy and beauty.

Trees intercept raindrops and slow down the rate at which storm water runs off. This means that fewer, smaller runoff control structures are needed. Fermann says that large cities with good tree cover save millions of dollars each year in this way. As an example, a recent American Forests study in the City of Chattanooga revealed a 17% loss of the city’s tree canopy cover since 1974. This loss was estimated as providing a value of \$279 million of stormwater benefits!

Trees are also valuable to city residents because of their ability to absorb many of the harmful chemical emissions, thereby purifying our city air. In a similar study in Chattanooga, the loss of canopy cover decreased the estimated annual air quality value by \$6.2 million. Thus, cities developing strategies to comply with air pollution standards would do well to consider their urban tree canopy.

The beauty of trees and their ability to dampen noise has positive psychological and even medical benefits, says Fermann. Among these are lower stress and lower blood pressure. “One study showed that people in a hospital given a view of trees recovered faster than people with a view of a brick wall,” says Fermann.

Taken together, she says, all these benefits make communities more desirable places to live. That raises property values and helps attract investment. “A lot goes in to maintaining a good tree canopy over a city, but we get a lot from it,” says Fermann.

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# Tree Maintenance

The secret to maintaining healthy yard trees lies mainly below ground. Take good care of the roots and a tree will prosper, says Kay Fermann, and urban forester with the Tennessee Department of Agriculture. “Roots are the half of the tree we don’t see, and they are sensitive to changes in moisture and soil structure,” she says. Fermann says the place to start in good tree care is to mulch, water and fertilize.

Mulch absorbs and holds water and discourages weeds and grass, which compete with tree roots. Apply composted mulch 2 to 3 inches thick. Do not put on more than 3 inches or it will shed water, and do not pile it against the trunk. Cover as large an area as you can, preferably out to the edge of the crown. “Actually, roots often extend two or three times that far,” says Fermann.

Water trees during droughts, especially spring droughts. Let the hose trickle for several hours, depending on the size of the tree. Trees require an inch of water every week to maintain proper growth and vigor.

Fertilize by broadcasting a high-nitrogen fertilizer at a rate of one pound per 100 square feet. Apply this in March or April when the roots are absorbing nutrients in preparation for the spring growth spurt.

Avoid soil compaction by keeping heavy vehicles off the rooting area. Protect the bark of young trees from injury by lawnmowers and trimmers. Fermann says the key to care of the crowns is to prune them properly and do not top them.

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## Don't top trees

Tree topping hurts trees, says urban forester Kay Fermann of the Tennessee Department of Agriculture. "Tree topping is not good pruning. Before investing in this procedure, I urge homeowners to consider the costs, consequences and alternatives," says Fermann.

Fermann says that topping has to be done often because the tree quickly replaces the cut-off limbs. "This creates another problem," says Fermann, "the new growth is attached only to the sapwood, not the heartwood, so it is very weak. It creates a safety hazard as well as looks ugly." And the damage does not end there. The large wounds invite decay, which further weakens the tree. "Quite often, topping ends up causing limbs to break off – the very thing it was intended to prevent," says Fermann. Beyond these reasons, topping also starves the tree, produces shock from the loss of tree crown, encourages insect and disease problems, and can result in death of the tree.

Proper pruning involves carefully removing limbs that detract from the structure of the tree and thinning the crown to retain the tree's natural form. Fermann says that limbs over three to four inches in diameter should not be removed unless absolutely necessary, since decay can enter before the wound seals.

"If the tree is simply too big for where it's growing, the homeowner should consider removing it and replacing it with a species that doesn't grow so big," says Fermann.

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## Plant the right tree in the right spot

Looking for a yard tree? Think before you plant, says urban forester Kay Fermann with the Tennessee Department of Agriculture. “The most important thing to consider is size,” says Fermann. “Are you planting a giant-sized species in a pygmy space?” This common mistake often results in undesirable topping of the tree or even necessitates removal.

If your tree is destined to be large, you may be creating a hazard. Large trees planted too close to a house may cause future roof problems from excess shade and falling branches. And should you decide that it must be taken down, the cost can run into the hundreds or even thousands of dollars.

Unless you have over 600 square feet of yard space with no power lines overhead, you’d best forgo oaks and maples in favor of smaller-maturing species. A wide selection of these is available, some with beautiful flower, form and fall foliage.

Improper placement of certain trees can also result in water line failures, as the roots explore the soil for moisture. Some tree roots can also lift sidewalks and driveways, resulting in homeowner liability and expensive repair.

Is the planting spot excessively wet, or is it very hot and dry? “Sweetgum tolerates wetness and Golden Raintree tolerates drought, but Eastern White Pine in either situation is probably doomed,” says Fermann.

Speaking of soil, is it heavy clay or, as is often the case in cities, merely subsoil and construction debris? Some species, such as Lacebark Elm, Golden Raintree, and Redbud tolerate these conditions better than others.

A tree is a long-term investment. Consult with your nursery manager when making a selection. The University of Tennessee Extension Service has pamphlets on tree selection that offer good information.

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