

## Keeping Trees Healthy: Urban forests need care

Considering all the benefits we receive from our forest canopy, it makes sense to invest some time and resources to keep our trees healthy. Those are not just ornamental plants that bloom in spring and turn pretty colors in fall. They work all the time, and they work better when we prune off dead branches, keep mulch in place, and protect roots and trunks from cars and bikes and weed whackers.

### What you can do for your urban forest:

#### Plant trees.

It’s traditional to plant a tree in memory of a loved one, or in commemoration of a milestone event like the birth of a child or moving into a new home. If you can’t plant any more on your property, donate to to your own city’s tree fund, or to a tree planting organization like American Forests or the Arbor Day Foundation.

#### Get involved.

- Participate in your city’s Tree Commission if it has one. Or start one if there isn’t one.
- Volunteer for a tree planting event in your area.

### CONTRARY TO POPULAR BELIEF...

**1. The roots of trees DO NOT reach down as deep as the tree is tall.**

**Most of the roots live in the top six inches of soil.**

**They do, however, extend out horizontally well beyond the outermost branch tips.**

**2. The roots of trees DO NOT break into sewer pipes.**

***However, if your pipe is already cracked, roots will take advantage of the gap and grow into the pipe seeking oxygen and water.***

**In other words, don’t blame the tree. Fix your sewer pipe.**

### For more information:

[www.cuyahogareleaf.org](http://www.cuyahogareleaf.org)  
[www.ACTrees.org](http://www.ACTrees.org)  
[www.americanforests.org](http://www.americanforests.org)

[www.naturewithin.info](http://www.naturewithin.info)  
[www.treesaregood.com](http://www.treesaregood.com)  
[www.arborday.org](http://www.arborday.org)

[www.itreetools.org](http://www.itreetools.org)  
[www.treebenefits.com](http://www.treebenefits.com)

Cuyahoga ReLeaf® is a program of the Cuyahoga River Community Planning Organization, working to restore and protect the river, its watershed and Lake Erie. Visit us at [www.cuyahogareleaf.org](http://www.cuyahogareleaf.org) or email [info@crcpo.org](mailto:info@crcpo.org).

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# Citizen ForesTree

## A Guide for Landscapers, Homeowners and Property Managers

### In this guide:

- **WHY TREES?**
- **THE RIGHT WAY TO PLANT A TREE (not necessarily how you’ve been doing it forever)**
- **THE RIGHT WAY TO MULCH A TREE (more isn’t necessarily better)**

### Why trees?

Trees and your city forest are important for our health, our economy and our environment.

Healthy forest canopy reduces flooding, absorbs stormwater, interrupts runoff and is essential for clean water and healthy streams, rivers, wetlands and lakes.

We are losing trees in our cities at an alarming rate, just when we need them most.

### Trees are good for us.

#### Trees increase property values -

A red maple whose trunk is 12 inches in diameter provides \$50 in added property value each year, increasing as it grows.

#### Trees save you money -

- Trees reduce energy costs, when they are placed so as to shade buildings in summer and block winds in winter, and by cooling sidewalks and contributing moisture to the air. Even planted on your tree lawn, that same red maple can reduce your utility bills by as much as \$50 a year.
- Trees reduce fuel costs. Vehicles parked in shade or shelter use less fuel to cool down in summer and warm up in winter. And the more trees you have the less you need to mow, saving gas and time.
- Trees reduce watering expenses. Established trees need less water than lawns, and their shade can reduce the water needs of other landscape plants.
- Shade from trees extends the life of paved surfaces, including roofs.

#### Trees make us healthier, happier, smarter and safer -

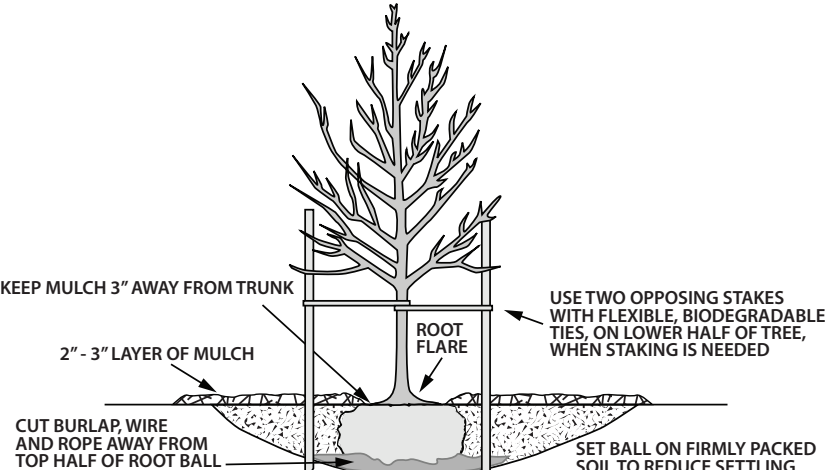
- Trees capture air pollution and breathe out oxygen
- Trees reduce stress and contribute to a general sense of well-being.
- Shade helps reduce incidents of skin cancer.
- Patients with views of greenery heal faster and have better outcomes than those without.
- Urban areas with lots of greenery have less crime than those without trees. Neighborhoods with abundant trees feel safer and residents interact more than those without trees.
- Trees around homes and schools improve self-discipline and reduce symptoms of ADHD.

### TIP

Go to  
[www.treebenefits.com](http://www.treebenefits.com)  
for a calculator that will  
show you the value of  
the benefits that the  
specific trees on your  
property provide.

## How to plant a tree.

Proper Planting Procedures. Period.  
(Or “I don’t care how you’ve been doing it for forty years. Do it this way.”)



### DO...

Pull the soil away from the trunk until you see the top of the biggest root. Measure the depth from the bottom of the flare to the base of the roots.

Dig the hole three times as wide, but only as deep as the root ball.

Put the tree in the hole and lay a shovel handle across the hole and root ball to check depth. Add an inch to allow for settling.

Make sure that the root flare (think “ankle and top of foot”) shows above ground level. Planting high is better than planting too low.

Cut away and REMOVE the burlap, twine and wire basket while the tree is in the hole. All of it. Spread the roots out. If the tree’s in a container, cut away the container and spread any circling roots out.

Make sure the tree is straight from all sides, and backfill with a mix of mostly the old soil and some new composted soil. Pack it down with your feet. Don’t jump.

Stake the tree, only if it’s unstable or in a windy location, with a tall stake, and connect it to the tree with paper masking tape. By the time the tape decays the tree won’t need it anymore.

Water with 5 gallons for every inch of trunk diameter, then another 5 gallons for good measure (15 gallons for a 2” caliper tree.) Water this much every week for the first two years.

### DON’T...

Don’t trust that the way it is in the container or burlapped ball is at the right depth.

Don’t dig too deep.

Don’t be stingy. Roots need room to grow

Don’t plant too deep and don’t bury the root flare. Planting too deep is the fastest way to kill a new tree.

Don’t leave any packaging on the root ball or in the hole.

#### What’s wrong with this planting?

- The tree is planted too deep.
- They left the burlap AND twine (and probably the wire basket, too.) This tree is doomed.



## Proper mulching for happier, healthier trees.

Mulch matters! Trees need mulch, but bad mulching kills trees.

**MULCH IS GOOD.** It protects the soil, keeps roots moist and cool, and suppresses weeds.

**NEVER** pile mulch up around the trunk (stem) of a tree. Ever. Not even close.

Roots grow where there is moisture and oxygen. Trees need their roots to grow outward.

Trees grow by transferring food up and down the outer layers of the trunk, just beneath the bark. That’s the only part of the trunk that’s really “alive.” Any damage to the trunk stops the food from flowing.

The moisture conserved under mulch is good for growing root *ends*, and mulch can keep the soil underneath from compaction.

But when that moisture stays around the trunk and root flare, it encourages the roots to stay around the stem, and makes the tough roots encircle the more tender trunk. Eventually they will get tighter and tighter until they choke off the tree’s food, and will grow into the tree’s “skin,” weaken the tree and can finally make the tree fall over if it manages to live that long.



### What mulch?

*Cypress* is cheap, but its harvest depletes cypress wetlands, so it’s not exactly green.

*Pine Bark* lasts long, but can float away, and it acidifies the soil slightly.

*Municipal tree trimmings* don’t last long and can pull nutrients from the soil.

*Hardwood mulch* comes in colors, and cheaper kinds can include pressure treated lumber or weeds. It decomposes faster than bark, and can also pull nutrients from soil.

*Stones, pebbles, or gravel* don’t decompose, doesn’t pull nutrients, and comes in various colors.



### TIP

#### IT’S GOOD TO BE SQUARE!

It seems natural to create a round mulch bed.

But a square mulch bed is a lot easier to make and maintain. And it discourages the dastardly practice of volcano mulching, so your trees have a fighting chance to grow and thrive.