

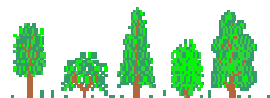
The

Urban Update



Winter 2004

Ohio Department of Natural Resources Division of Forestry Southeast Ohio Community Forestry Newsletter



An ISA Diagram of
Planting, Mulching and
Staking Recommendations

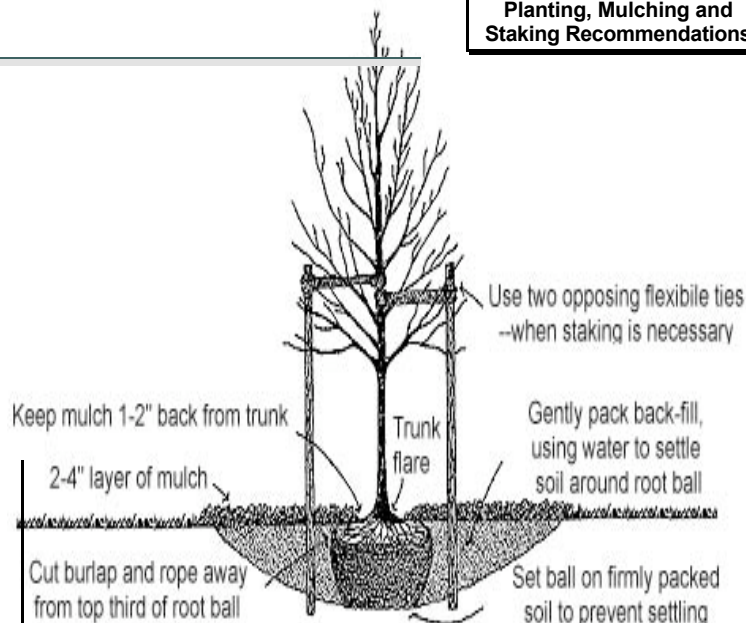
Planting Trees Revisited!

With planting season approaching it may be helpful to review how we plant our communities' trees. As we all know, being experienced tree planters, there is more to it than just sticking a tree in the ground. Assuming that we have already selected a good match to our site, the next step is making sure that the tree is going to have all the "makings" for a healthy, long life.

Selecting Your Stock: Purchase trees from reputable nurseries or landscapers. That often means making a field trip to check out their stock. Look for trees that have been well trained, are of good form for the particular species, are labeled with their Latin names, and are healthy. Ask the nursery landscapers how they transport their trees - making sure that they are covered in transport to prevent drying out. **Ask for a guarantee policy of one year for planted trees.**

Planting Depth: One of the leading causes of young tree mortality is improper planting depth. Unfortunately, many dug trees have several inches of surplus soil piled over their roots before they get to you. Using the top of this root ball as your planting guide would put the roots unhealthily too deep. Therefore, you have to carefully remove the excess soil from the top of the root ball and locate the tree's root flare (where the main root begins to grow away from the trunk) before placing it in the planting hole level with the existing grade.

Check the roots: This is a good opportunity to look for problems. Spread out or remove potential girdling roots when you can easily get to them.



Digging the Hole: The wider the better - especially when it comes to our southeast Ohio clay soil. This helps to loosen up the soil and give the roots a better chance of growing out and away from the existing root ball or container. Remember too, that you are displacing soil, don't pile it around the tree.

Remove the Burlap & Twine: Burlap works to wick water away from the roots. It may eventually break down; but what about the most critical first years after transplanting when the trees need a lot of water? The burlap can stay in the bottom of the hole. This often requires removing or folding down the top 1/3rd of the wire basket as well. Most twine today is plastic and will girdle the tree as the trunk grows if left on.

"He that plants trees loves others besides himself." - Fuller

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Mulch: 2-3 inches max of hardwood bark mulch is the best. Remember to leave an inch or two free around the trunk so that the tree doesn't think it's planted too deeply.

Remove Tree Wrap: This is one of those practices that we thought was for the good of the trees. It actually does little if anything to reduce sunscald and often times ends up holding in moisture. Another problem is that a lot of tree wrap is tied on with twine - imagine what that does as the tree grows! The same goes for the firmer plastic wraps: protects during transport, but people often forget to take them off.

Stake Only When Necessary: Research indicates that staked trees lack the trunk strength of their unstaked counterparts. If you have good stock and the tree is planted correctly, then staking is usually unnecessary. Trees planted in sandier soil, on windy sites, or larger trees with a heavy crown may need to be staked for 6-12 months until some roots are established.

By Stephanie Miller, ODNR Urban Forester NW Ohio

The powers of water are immeasurable. In the form of ice, it can chisel rock as effectively as steel. Unloosed in a river, it can slice through layers of volcanic ash like a knife through a cake. Meandering in a shady stream, it can make a home for green growing things. - Peggy Wayburn



How much rain can a tree retain?

Trees have always absorbed and stored water. Only recently have humans realized the potential benefits of this natural phenomenon in managing stormwater. The ten-dollar word that we use to describe this is bioretainment. What is bioretainment? This is the storage of rainfall on leaves, branches, bark and roots, where water is:

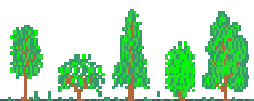
- evaporated into the atmosphere
- absorbed by the canopy surface or
- percolated into groundwater aquifers.

The average street tree can absorb 4000 gallons of storm water a year.

Why is this important? As communities grow and replace vegetated land with asphalt and other impermeable surfaces, stormwater can't be absorbed on site. Drainage systems divert stormwater away from communities and into natural waterways, as long as pipes aren't too small for water volume. But if infrastructure is not designed to hold increasing volumes of water from impermeable surfaces, flash flooding results. This costs taxpayers millions of dollars every year.

Another cost of stormwater runoff is pollution. As stormwater washes down streets and sewers and into natural waterways, it increases in temperature and picks up particulates, heavy metals, and other pollutants. This non-point source pollution, as it is called, ruins cool water habitats and deposits heavy metals in drinking water sources. Strategically planting and protecting trees can reduce stormwater and the costs associated with its control.

Evergreens are more effective at absorbing and retaining stormwater than deciduous trees. An integrated approach to effective stormwater management includes water conservation, retention, rain gardens, recharge areas, filter strips, and porous pavement. For more information on bioretainment, please contact: The Center for Urban Forest Research USDA Forest Service cuf@ucdavis.edu

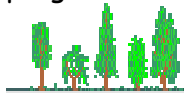


No shade tree? Blame not the sun but yourself. -- Chinese Proverb

2003 Tree City USA

Applicants accomplished some impressive feats that have truly enhanced their communities this past year. Collectively, Southeast Ohio's Tree City USAs planted 931 trees. **Athens** and **Marietta** outdid everyone by planting the most trees. They planted 254 trees and 186, respectively. **Chillicothe** planted 181 trees. **Belpre, Chillicothe, Wellston, and New Lexington** led the pack in tree pruning. They properly pruned 614 public trees. **Jackson, Wellston, Crooksville, New Concord, Portsmouth and Gallipolis** contributed to the region's urban forestry efforts as well. In total, 4128 volunteer hours were spent helping to manage the community forests in the region at a value of \$61,920.

Overall, this region's Tree City USA communities spent \$628,821.50! Last year, tree Cities across Ohio spent \$34,026,706 managing their urban forests. Thank you to the local governments and the volunteer Tree Commissions from **Athens, Belpre, Chillicothe, Crooksville, Gallipolis, Jackson, Marietta, New Concord, New Lexington, Portsmouth, Wellston, and Zanesville** for your extraordinary efforts to plant and protect trees. You do a superb job!!! To celebrate, **Zanesville** will be hosting an awards program on April 29th, 2004.



"You can gauge a country's wealth by its tree cover"
-St. Barbe Baker

What is an Urban Forest???

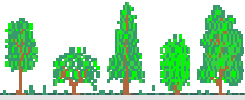
It is the vegetation and green spaces within communities that provide benefits vital to everyone's quality of life. Properly cared for and well-managed urban forests provide benefits that far exceed their management costs. Urban forests are an integral part of cities, rural areas, streets, backyards, parks, and open spaces. Urban forests provide shade, beauty, and habitat for wildlife. They reduce heating and cooling costs, intercept and store rainwater, improve air quality, and increase property values and local tax bases.

TOP TEN WAYS TO GROW HEALTHY TREES

1. Plant an appropriate species that will thrive in the site.
2. Plant small trees under utility wires. Plant large trees for shade.
3. When planting, dig the hole 3 times the width of the roots, but no deeper than then the root ball. See cover article.
4. Pulverize backfill when planting to reduce clods and air pockets around the new tree's roots. Don't forget to water!
5. Be gentle when handling burlapped trees. Don't drop the root ball and don't pull on the stem when planting.
6. Cut twine and burlap around the stem.
7. Reduce grass competition by planting ground covers, shrubs and/or applying mulch around young trees.
8. Keep **ALL** lawn equipment away from young tree stems and roots.
9. Minimize soil compaction by not mowing when soils are wet and concentrating activities beyond the drip line of trees.
10. Make trees a priority. Make room for new trees and take aim to protect the ones already in the ground.

For assistance with your community's forestry challenges and opportunities, contact The Ohio Department of Natural Resources Division of Forestry Regional Urban Forester, Ann Bonner at 740-589-9910.

Urban forestry is the planning, management, and research of urban forests. As cities continue to grow, increasing numbers of people will choose to live, work, and play in urban forests, making the field of urban forestry critical for healthy and sustainable living.



**Mark your Calendar:
Zanesville will host the
Southeast Ohio Tree City
USA Awards Program
April 29th, 2004**



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