

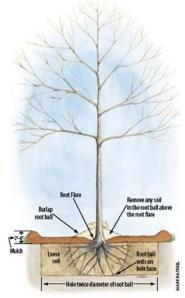
THE STUMP INFORMATION BY THE BOARD FOOT

APRIL 2006

Make a Tree Happy - Plant It Right!

Tree planting season is in full swing. Many people will be planting trees; private landowners, government employees, and professional nursery and landscape service providers. All of us can plant trees better.

For decades we have planted trees with the top of the root ball even with the ground or slightly below. This was believed to be the correct method. Unfortunately, these trees were all planted too deep. By planting too deep the trees roots do not get adequate air and water. The tree responds by growing roots up towards the surface. If all of the roots grow out, the tree manages to survive. Many times, some roots grow back toward the trunk. These roots are called stem girdling roots. As the root and trunk grow, they start to put pressure on each other. Since root and trunk tissue will not grow together, the root slowly prevents the trunk from expanding in that direction. The tree will slowly decline due



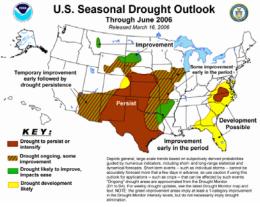
to not being able to transport water and nutrients in that part of the tree. Over time the tree dies a slow death. In worse case scenarios, the tree falls over because the girdling root has cut off too much of the trees structural support.

We can prevent most of these girdling roots by changing the way trees are planted. Before ever digging the hole, locate the root flare on the tree. Many times it is several inches below the top of the root ball. You can locate it by pushing a thin metal pin through the soil next to the trunk. When you hit a root, note the depth and check again in another location. Subtract this distance from the total root ball height. Now dig the hole no deeper than the adjusted depth. If you err, err on the shallow side. Place the tree in the hole, remove as much of the burlap and wire as possible (Container trees must have all of the container removed before placing in the hole). Scrap off the excess soil from the top of the ball until the root flare is exposed. Check to see if the root flare is at or slightly above the surrounding ground. Fill the hole to even with the surrounding soil. Do not place excess soil on the tree, utilize it elsewhere.

Taking advantage of this new planting method will save trees, save work (shallower holes), and provide you, your community, and clients with a happy tree for years to come.

Drought and Trees

We are all aware the region is in a drought. What you may not always consider is the impact a lack of water has on trees. As summer 2005 ended, drought was well established. Trees were reacting by dropping leaves early to conserve moisture and not building energy reserves or even staying healthy.

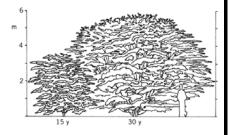


The drought appears to be continuing, but not as bad as last summer through June by the National Weather Service's Climate Prediction Center (www.cpc.ncep.noaa.gov/products/expert_assessment/seasonal_drought.html).

What does this mean for trees? The trees are entering the spring growing season in a stressed condition. A stressed tree is an easier target for pests to attack and some weak trees may not even made it through the winter. This susceptibility to attack and decline will continue for several years.

What can you do to help? Water the trees. An equivalent for 1.5 inches per week all at one time over the entire root system is desirable. Keep in mind a root system extends at least two times the height of the tree. Mulch around the tree with up to three inches of material while keeping it off the trunk. The finer the mulch, the less you should use. The bigger the mulch ring, the better. Aerate the soil. Adding air to the soil will help the roots grow. Keep heavy equipment off the roots, at least as far out as the drip line, preferably farther. The compaction of the soil crushes roots, drives out air and water, preventing the tree from getting resources needed to overcome stress. Finally, deal with attacks from pest in a timely manner. Scout your trees, look for potential problems and use a solution that helps the tree, but is the least deadly to non-target pests.

In the end, your trees have to help themselves, but you can make a huge difference by assisting.



kousa dogwood Cornus kousa

Kousa dogwood is a small tree with a mature height of 20 to 30 feet with an equal spread. This tree is appropriate for small to large yards, and parks. The specie does best on acidic, well-drained soil. It prefers a relatively sunny site and is more drought resistant than flowering dogwood. There are no serious pests of this tree, borer damage has been reported. The "flowers" are actually modified leaves called bracts around the actual non-showy flower. The "flower" color is white to pink depending on cultivar and weather conditions. The fruit is a cluster of red drupes that looks like a raspberry. It is showy between August and October. Two trees of different genetics are needed for fruit to form. The leaves are dark green and turn to a reddish purple to scarlet in the fall. Several cultivars to consider are 'Aget' for large, long lasting white flowers, 'Beni Fuji' for dark pink flowers, and 'Heart Throb' for large red flowers. Native to Japan, Korea and China, there appears to be great variability between seed sources between these countries.

Plant illustration by Jenny M. Lyverse, from Landscape Plants for Eastern North America, 2nd Edition, Harrison L. Flint Author

Web Site Review

EcoSmart Design Software is a web-based program designed to evaluate the economic trade-offs between different landscape practices on residential parcels. The program estimates the impacts of strategic tree placement, rainfall management, and fire prevention practices. Users work in a computer-simulation environment to test various landscape and hydrologic alternatives to arrive at environmentally and economically sound solutions.

April 3

Tree Selection and Planting Workshop, Community Building, Monett, MO 6:30 PM Contact Jon Skinner (Jon.Skinner@mdc.mo.gov) 417-629-3423

April 7

Arbor Day - Missouri

April 8

ISA Certified Arborist Exam, Discovery Center, 4750 Troost Ave, Kansas City, MO Contact Bob Haines (bnhaines@opkansas.org), 913-327-6639, Registration Deadline has past, Register at www.isa-arbor.com/certification/exams.aspx

April 10 - 12

Trees & Utilities National Conference, Crown Plaza Chicago O'Hare, Chicago, IL Contact NADF (conferences@arborday.org), 888-448-7337, Registration information at www.arborday.org/TUconference.

April 12

ISA Certified Arborist Exam, UM St. Charles County Extension Office, 260 Brown Rd., St. Peters, MO Contact Mark Grueber (Mark.Grueber@mdc.mo.gov), 636-300-1953 extn. 248, Registration Deadline has past, Register at www.isa-arbor.com/certification/exams.aspx

April 17

Tree Selection and Planting Workshop, Newton Hall Conf. Rm, Crowder College, Neosho, MO 6:30 PM Contact Jon Skinner (Jon.Skinner@mdc.mo.gov) 417-629-3423

April 24

Tree Selection and Planting Workshop, Central County Annex, Carthage, MO 6:30 PM Contact Jon Skinner (Jon.Skinner@mdc.mo.gov) 417-629-3423

April 26

ISA Certified Arborist Exam, Missouri Electric Cooperative, 2722 E. McCarty St, Jefferson City, MO Contact Justine Gartner (Justine.Gartner@mdc.mo.gov), 573-751-4115 extn. 3116, Registration Deadline April 7, 2006, Register at www.isa-arbor.com/certification/exams.aspx

April 28

Arbor Day - National

April 28

ISA Certified Arborist Exam, Edmond, OK, Registration Deadline April 11, 2006, Register at www.isa-arbor.com/certification/exams.aspx

May 6

2006 Forestkeepers Tree Care Workshop, Springfield Nature Center, 4600 S. Chrisman, Springfield, MO Contact Forestkeepers (information@forestkeepers.org), 888-473-5323, Registration Deadline April 28, Registration form at http://216.119.79.248/pdfs/2006%20Workshop%20Registration%20Form.doc

May 9

NatureScaping, Walter Woods Conservation Area, Joplin, MO Contact Gladys Rigsby (Gladys.Rigsby@mdc.mo.gov), 417-629-3423, Registration required

May 10

NatureScaping, Walter Woods Conservation Area, Joplin, MO Contact Gladys Rigsby (Gladys.Rigsby@mdc.mo.gov), 417-629-3423, Registration required

June 3

Forestkeepers Annual Conference, Burr Oak Woods Conservation Nature Center, Blue Springs, MO Contact Forestkeepers (information@forestkeepers.org), 888-473-5323

June 6

Tree Identification Walk, Ewert Park, 7th St. and Murphy Blvd, Joplin, MO 6:00 PM Contact Jon Skinner (Jon.Skinner@mdc.mo.gov) 417-629-3423

June 19 - 21

Community Forestry at It's Best National Conference, Lied Lodge & Conference Center, Nebraska City, NE Contact National Arbor Day Foundation (conferences@arborday.org), 888-448-7337, Early Registration Deadline June 5, Information and Registration at www.arborday.org/communityforestry



www.ecosmart.gov

Congratulations to Carthage and Exeter for earning 2005 Tree City USA Recognition.

See what other communities have earned this honor at www.arborday.org/ programs/ treecitydirectory.cfm



"The Stump" web site: www.geocities.com/rocksandtrees/thestump/

To add or remove your subscription, update your address, change contact information or convert from the paper to the email - web version of "The Stump", contact:

Jon Skinner Urban Forester Forestry Division MO Dept. of Conservation 705 Illinois Ave., Ste. 6B Joplin, MO 64801-5065 417-629-3423 Jon.Skinner@mdc.mo.gov

Use of names of commercial products or organizations does not imply an endorsement or recommendation by the Missouri Department of Conservation.