

# THE STUMED INFORMATION BY THE BOARD FOOT

JUNE 2009

## @#\$&%! Surface Roots!

Surface roots are frustrating to many people and may cause trip hazards, make it more difficult to mow grass, get hit by mower blades, or may lift sidewalks and driveways.

Surface roots may occur for several reasons. Some species are more likely and almost guaranteed to have surface roots. If you are the proud owner of a maple; elm; sycamore; or sweetgum, you either have or mostly likely will have surface roots.

Other specie develop surface roots when soil conditions do not have adequate oxygen available for root growth. Many of our heavy clay soils naturally are like this. Construction of buildings



Image by Joseph O'Brien, USDA Forest Service, Bugwood.org

and homes also is a source of soil compaction which drives air from the soil.

Another thing people are unaware of is almost all roots exist in the top 18 inches or less of the soil! A root that starts 2 inches below the surface and continues to grow will become exposed on the surface as it gets larger in diameter.

How should you deal with surface roots? Where at all possible leave the roots alone and deal with the grass, and sidewalk or driveway instead. Adding a thin layer of mulch around the roots and killing the grass protects the root and reduces mowing needs. Using mulch with other plants like hosta add beauty and protects the roots. When planting new plants near the root, only dig a hole large enough for the plant, larger holes will damage the feeder roots and reduce flow of water and nutrients to the tree. There is nothing wrong with maintaining bare soil adjacent to roots either.

Do not add soil around and over the roots. This does not solve the problem because the root will continue to grow and will extend above ground. Also many trees are very sensitive to having soil added over their roots and will decline because of it.

Surface roots are a vital part of a tree. Removing roots randomly can cause severe damage to a tree and possibly create a dangerous situation if removed too close to the trunk. Root severance should be the last thing attempted just before total tree removal. No root should be removed within 3 times the diameter of the tree and no more than one root over multiple years. Whenever root severance is done, part of the trees ability to be healthy is reduced.

The key to remember is trees and their roots need space with adequate growing conditions. For us to keep trees, we may need to adjust to their needs and reactions to their growing site.

#### A Hole Around A Tree Could Mean Trouble

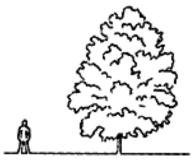
Recent windstorms resulted in many downed trees. A few trees developed a hole ringing around the trunk. These trees look and function like poles in the ground. Soil pushed up around these trees, in the past, hides possible root damage. I suspect these trees had their roots decay like their blown over brothers, but being buried so deep they did not go over. These are dangerous trees and should be considered for removal because they are likely to fall



in the future. If you do not want to remove a green tree without more evidence, excavate the base until roots are found and see if there is damage.

# Sustainable Landscape Management in a Commercial Setting

Managing high profile commercial properties is a challenge. Competing demands and a tough environment makes keeping plants happy and looking good difficult. On July 25, 2009, Robert Balek, Supervisor of Grounds of the University Plaza Hotel, Springfield, will explain what he does to manage the University Plaza Hotel grounds. He will highlight his management successes and the problems he has encountered. He will also discuss the process he and the hotel are going through to become a "green hotel." Pre-registration is required by calling 417-895-6880. Meet in the Kansas meeting room in the hotel at 8:00 AM, July 25, for registration with the program running from 8:30 to 11:30 AM.



swamp white oak
Quercus bicolor

Swamp white oak is a large tree with a mature height of 50 to 80 feet and an equal or larger spread. Appropriate for a medium to large yard, park and street plantings this tree has a medium growth rate. It requires an acid soil and grows best in fertile, moist, well drained soils with full sun, but has tolerance for poor soil conditions. Once fully established in a landscape it is capable of withstanding drought. The alternate, simple leaves are lustrous dark green turning yellow to tan in the fall. A few hybrids with white oak have been created and are noted with the nomenclature Quercus X jackiana.



Plant illustration modified from original by Dale Larison, Missouri Department of Conservation Range map modified from USDA Forest Service Silvics of North America Web site www.na.fs.fed.us/spfo/pubs/silvics\_manual/ Volume\_2/quercus/bicolor.htm

## **Web Site Review**

Trees provide many benefits. They save energy by cooling our homes and protecting them from winter winds, reduce storm water runoff improving water quality, absorb carbon dioxide and produce oxygen, reduce smog, attract wildlife, help asphalt last longer, and increase property values.

So, how much do you receive in benefits from the tree along the street? Not Certain? Thanks to research, the STRATUM component of the i-Tree suite was created to calculate the dollar value of benefits street trees provide. Now Davey Tree Expert Company and Casey Trees (a Washington, D.C. non-profit that cares for the trees of the District) have developed the online version of the STRATUM program. Not all trees are listed but a substitute is easy to select. Use the Tree Benefit Calculator at www.treebenefits.com.



Chaining something to the tree or hitting it with a car does not hurt the tree.

Of course, the above is incorrect. Tree bark is no match for a car. Even if the damage is not seen, a portion of the bark may be killed. Hit a young tree hard enough and it will break. Items chained to a tree can rub



off the bark. Once the bark and live tissue directly under it are gone, the trees ability to move sugars down from the crown is gone. The tree will not survive long once it is girdled in this manner. Use appropriate parking bumpers and non-living items to chain to.

#### June 1

TRIM grant applications must be postmarked by TODAY. Mail to: Community Forestry Coordinator, Missouri Department of Conservation, P.O. Box 180, Jefferson City, MO 65102-0180

#### June 4

ISA Certified Arborist Exam, Springfield, MO, Registration Deadline May 18, 2009, Register at www.isa-arbor.com/certification/tests.aspx.

#### June 6

Midwestern Chapter ISA Tree climbing Competition, Swope Park, Kansas City, MO, Information at www.mwisa.org/mc/page.do?sitePageId=34121, timcrews@ryanlawn.com, 417-838-0390

## June 11

MCFC State Meeting, MDC State Office, Jefferson City, MO, 10 AM Contact Justine Gartner (Justine.Gartner@mdc.mo.gov), 573-751-4115 Extn 3116.

#### June 19

Kansas Arborist Association Summer Field Day, Overlook Park in Clinton Lake, KS, Information at www.kansasarborist.com/summerfield.aspx

#### June 22 - 23

NRPA - Alternative Funding Development Program, The Truman Memorial Building, Independence, MO, Information and registration at www.nrpa.org/content/default.aspx?documentId=8712

## June 25

MLNA Field Day, 2400 South Scenic Road - Springfield, MO, Information at www.mlna.org/events-professionals.htm, bryan@acs.bwicompanies.com, 417-529-2073

# June 26 - 27

American Conifer Society Central Region Annual Members Meeting, Cincinnati Ohio, Information at www.conifersociety.org/

#### July 12 - 14

TCIA Legislative Day on the Hill, 2009, Marriott Key Bridge, Arlington, VA, Information and registration at www.tcia.org/public/meetings\_legislativeconference.htm

#### July 24 - 29

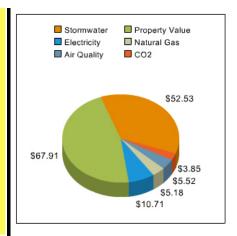
ISA Annual Conference and Trade Show, Providence, RI, Information and Registration at www.isa-arbor.com/conference/default.aspx

#### **August 6 - 8**

2009 American Conifer Society National Meeting, Hauppauge, New York, Information at www.conifersociety.org/

#### August 13

MCFC State Meeting, MDC State Office, Jefferson City, MO, 10 AM Contact Justine Gartner (Justine.Gartner@mdc.mo.gov), 573-751-4115 Extn 3116.



I like trees because they seem more resigned to the way they have to live than other things do.

- Willa Cather, 1913



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

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