

THE STUMP

INFORMATION BY THE BOARD FOOT

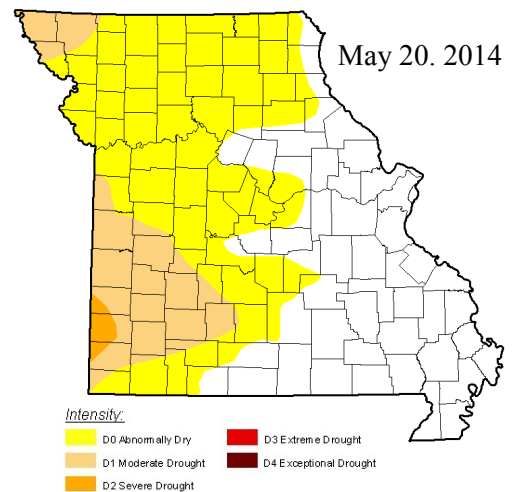
JUNE 2014

KNOT THE HOLE NEWS

Here We Go Again!

In case you have not noticed, we are dry! As recent as February 11, 2014 all of southwest Missouri had normal moisture conditions. By February 25, 2014, all of southwest Missouri was entering drought. Now portions of Barton, Jasper, and Newton counties are in Severe Drought conditions. Follow weekly drought status at the U.S. Drought Monitor (<http://droughtmonitor.unl.edu>).

The Climate Prediction Center (www.cpc.ncep.noaa.gov) is predicting drought will persist or intensify for most of southwest Missouri for June through August.



With current conditions dry and future conditions likely to remain so, I encourage everyone with trees planted in the last three years to water those trees. Weekly use of irrigation bags like Tregator® and Ooze Tube® or buckets with small holes will work well. I encourage 15 to 20 gallons of water per inch of tree diameter measured six inches above the root flare (caliper). So, a 2 inch caliper tree needs 30 to 40 gallons of water per week. If your trees show wilt or browning between weekly watering, provide some more.

Irrigation for Nurseries

While irrigating individual trees can be done most efficiently with irrigation bags or buckets, irrigating nursery plants is a different matter. Plants may be watered individually by a person holding a hose, in groups by large scale irrigation sprinklers, drip irrigation, or other methods. Each has benefits and costs, but often all fail in providing the right amount of water all of the time when the plant needs it.

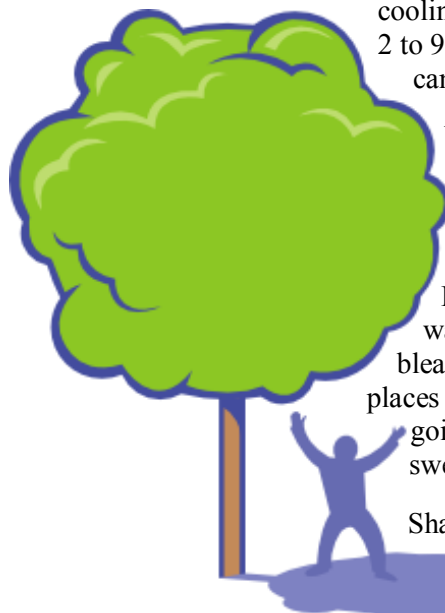
The number of plants and close proximity to each other by specie and cultivar allows for individualized drip irrigation systems by crop. University of Georgia researchers have been developing a system linked with moisture sensors to irrigate plants optimally. This provides the amount of moisture the plants need, but not more than that. This results in healthier plants and saves money.



They are utilizing newer model moisture sensors and custom software to program when moisture level thresholds are low or met. A few sensors are placed in a few pots of each crop. The computer reads the output from the sensors then turns on and off the irrigation system by crop to provide water to keep the plants watered at the desired level. Learn more about this promising technology at: <http://smart-farms.net>.

Keep Cool, Enjoy the Shade of a Tree

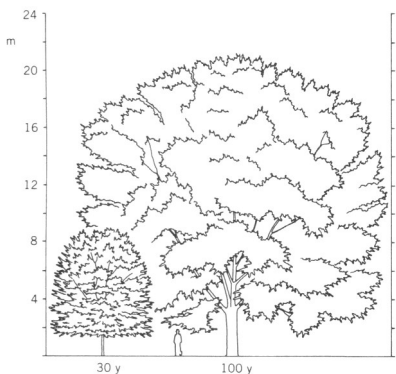
Where do you find people in the park in the summer? The pool when swimming. What about when not in the water? Most often under a tree. Trees are natural air conditioners! Animals and people know this instinctively. We feel cooler in the shade. This is due to the sunlight not directly shining on us and the evapotranspiration of water vapor from the tree cooling the air near it. Evapotranspiration can cool the air by 2 to 9 degrees Fahrenheit alone. Eliminating direct sunlight can cool a surface between 20 and 45 degrees Fahrenheit.



Why is this important? We can take advantage of this inexpensive natural resource. Placing trees in strategically selected locations can make our lives better.

Placing trees on the east and west sides of places we want to protect from the sun, like buildings, ball fields, bleachers, picnic areas and more will provide us with places people will want to congregate and enjoy. For me, going to a summer sport event and getting a sunburn while sweating profusely severely reduces the fun.

Shading windows of a building will also result in less heat inside and reduce the cooling bill, saving money—yeah!



water oak
Quercus nigra

Native to southern and eastern U.S., water oak has potential as an unique tree in our landscape. It ranges from 50 to 80 feet tall. Crown shape varies from conical to rounded. This tree transplants easily. Doing best on moist sites. I have seen it surviving in planting pits surrounded by concrete. Leaves are simple, variable in size and shape with 3 lobes at apex or sometimes no lobes present. 1.5 to 4 inches long and 0.5 to 2 inches wide, and deep, dark green above paler underneath. It is common for the leaves to hang on late into the fall. Weaker wooded than most oak specie, it is susceptible to damage from ice and snow loads. Juvenile leaves may be highly lobed and look nothing like older trees for several years.



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

Book Review - Evaluating Tree Defects: A Field Guide

Designed for the knowledgeable forester, or arborist, this book provides a useful field reference to evaluating trees with defects. Methods for evaluating decay in stems, examples of higher risk trees, and basic tree biomechanics are shared. Multiple color images, math examples, and line drawings are used to assist the reader understand concepts presented. The book is available on multiple sites including the authors site at: <http://www.safetrees.com/field-guide.html>.

Pest Highlight - black knot

Caused by the fungus *Apiosporina morbosa* (sym. *Dibotryon morbosum*), black knot can occur on native and ornamental cherry and plum trees. It is spread by wind or water splash in the spring. The spores released from existing knots infect newly growing or wounded tissue. By the end of summer, new infections are small and brown to light olive-green. As the gall matures it becomes black and hard. The galls continue to grow until girdling the stem they are on. Eliminating their source of nutrition. Control is by pruning out infections during the winter to reduce the local source of infection. Fungicides may be used, if applied at bud swell, early bloom, full bloom, then every two to three weeks until branches stop growing. See extension publications for detailed recommendations.



June 1

2015 TRIM Grant application must be postmarked to MDC state office

June 12 - 14

American Conifer Society National Meeting, Atlanta, GA, Information and registration at: <http://conifersociety.org/events/event/2014-national-meeting-in-atlanta/>

June 12

State MCFC meeting, 10 AM - 2 PM, MDC State Office, Jefferson City, MO

June 14

ISA Midwestern Chapter Tree Climbing Championship, Missouri Botanical Garden, St. Louis, Information and registration at: www.mwisa.org/tree-climbing-championship

June 18 - 19

Utility Arborist Association Safety Summit, Tulsa, OK, Information at: www.utilityarborist.org/professional/calendar.aspx?id=34

June 20

Kansas Arborist Association Summer Field Day, Leawood, KS, Information and registration at: www.kansasarborist.com/pdf/KAA%20Field%20Day%202014.pdf

June 21

ISA Certified Arborist, Utility Specialist, and Municipal Specialist Exam, Fair Play, MO, Registration deadline June 5, 2014, Register at www.isa-arbor.com/certification/becomeCertified/

June 26

Joplin MCFC meeting, 7 AM - 9 AM, Wildcat Glades Conservation & Audubon Center, Joplin, MO

July 24

Joplin MCFC meeting, 7 AM - 9 AM, Wildcat Glades Conservation & Audubon Center, Joplin, MO

August 2 - 6

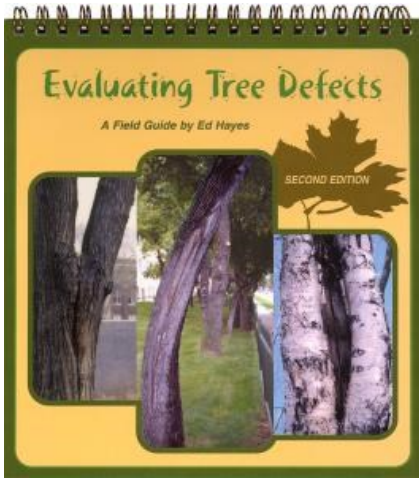
2014 ISA Annual International Conference and Trade Show, Milwaukee, WI, Information and Registration at: www.isa-arbor.com/events/conference/index.aspx

August 14

State MCFC meeting, 10 AM - 2 PM, MDC State Office, Jefferson City, MO

August 28

Joplin MCFC meeting, 7 AM - 9 AM, Wildcat Glades Conservation & Audubon Center, Joplin, MO



Except during the nine months before he draws his first breath, no man manages his affairs as well as a tree does.

~George Bernard Shaw,
Maxims for Revolutionists, 1903

WHAT'S HAPPENING

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