**Drought and Tree Response**

We have received some rain in the last few weeks of August, but the damage to trees is already done. The drought is at Severe to Extreme categories in southwest Missouri. In these low moisture conditions, trees will react in the short and long term to this stress.

- Short term responses could include:
  - Wilting of leaves;
  - Scorching of leaf margins;
  - Dropping leaves early - brown, yellow, or green;
  - Early Fall color;
  - Hair root death;
  - Twig dieback - especially in the tops of trees;
  - Death of recently planted trees without established root symptoms or already sick trees;

Each specie and tree responds differently. Some have greater tendency for one response than another. Red buckeye for example will drop leaves and be able to leaf out next spring. Hackberry and river birch regularly drop leaves during the summer months.

There are other physiological effects of the lack of water. These all add up to a weakened tree. The weakened tree is then setup for longer term effects.

Some of these could be:

- Less growth the following year(s);
- Greater susceptibility to attack from pests;

These effects could last for several years and some trees succumb to the secondary pest(s). We saw this during and after the 2012 drought with many older black oaks dying. They were attacked by various insect and fungi pests with hypoxylon being the most visible.

Keep these thoughts in mind as you care for your trees in the future. Long memories will help you understand your trees better.

**ISA Moving to Atlanta**

On July 31, 2018, the International Society of Arboriculture announced it would be moving their headquarters to the Atlanta area.

An excerpt from their press release:

> The Board of Directors strategically determined that positioning the ISA global headquarters in Atlanta will allow for increased membership and credentialing services, more efficient travel, and partnership alignment. This relocation will also allow the organization to expand its reach and better support the ISA mission.

> “The ISA office moved to Champaign from Columbus, Ohio nearly 50 years ago because that is where the sole staff member lived,” said Paul Ries, ISA board president. “Today, our global footprint is better served by a large metropolitan area with easy air access for our staff and members. The Board carefully considered 12 different cities and determined that Atlanta offers our organization the best situation to help us grow into the future in a cost efficient manner.”

**Prepare Now for Next Springs Tree Planting**

Planting a tree takes quite a bit of planning to do it correctly. Now add the concept of planting multiple trees. Here is an list of steps that need done, missing some of the details:

- Every single planting site needs selected and mapped;
- Restrictions on each site like hardscapes and utilities need identified;
- Trees appropriate for the site chosen;
- Creating the specifications for the bid;
- Ordering the desired trees;
- Inspecting, accepting or rejecting, trees at the suppliers site or after delivery;
- Arranging for delivery;
- Specifying planting specifications;
- Working with the planting contractor to follow the specifications;
- Inspecting, accepting, or rejecting the actual planting;
- Mulching correctly;
- Staking only if needed;
- Planning for and watering the trees;
- Keeping weed/grass free zones around the trees; and
- Keeping the lawnmower and string trimmers away.

It is time to start planning, trees can become hard to find if you wait too long. Call, if you desire assistance or reference materials.
**Book Review - Tree Protection & Preservation**

Tree Protection & Preservation: A Pocket Guide of Best Management Practices is a concise summary from the American Public Works Association (APWA) about work around trees. It covers basic tree biology, critical root zones, root severance, tree protection strategies, signs of construction damage, and remediation strategies. This book is appropriate for the arborist as a quick guide, but more importantly, it is from a group city government planners and engineers recognize. Get it from the APWA store at: https://www.apwa.net/Store/SearchResults.aspx?searchterm=tree%20protection&searchoption=ALL.

**Ammirallia Root Rot (Ammirallia Spp.)**

Ammirallia, also called shoe-string root rot and honey mushroom, is a root and butt fungus that increases the risk of tree failures. This pathogen is capable of killing cambium and the lower trunk on stressed trees. Mycelial fans and mushrooms appear after tree is either dead or an advanced stage of decline. Ammirallia often is able to attack trees during and after drought. Once noticed, the tree should be carefully examined for structural stability.

**September 18**

SWMFC meeting, 8:30 - 10 AM, MDC SW Regional Office, Springfield, MO.

**September 18 - 20**

MoGIA 2018 Fall Field Day and Professional Tour, St. Louis, MO Registration and information at: https://www.mogia.org/.

**September 19**

Saluting Branches Work Day, Missouri Veterans Cemetery, Springfield, MO Registration and information at: https://www.salutingbranches.org/.

**September 21**

ISA Certified Arborist, Utility Specialist, and Municipal Specialist Exam, Lincoln, NE, Registration deadline Sept. 5, Register at www.isa-arbor.com/certification/becomeCertified.

**September 27**

JMFC meeting, 7 - 9 AM, Shoal Creek Conservation Education Center, Joplin, MO.

**October 2**


**October 15 - 19**


**October 16**

SWMFC meeting, 8:30 - 10 AM, MDC SW Regional Office, Springfield, MO.

**October 17**


**October 25**

JMFC meeting, 7 - 9 AM, Shoal Creek Conservation Education Center, Joplin, MO.

**November 17**

JMFC Pruning Workshop, 9 AM - Noon, Cunningham Park, Joplin, MO.

**November 20**

SWMFC meeting, 8:30 - 10 AM, MDC SW Regional Office, Springfield, MO.

**November 28 - December 1**


**November 29**

MoGIA 2018 Conference, Information at: https://www.mogia.org/.

**December 18**