North Carolina Cooperative Extension

**Freeze Damage**

Mostly minor freeze damage occurred during mid-March to primarily open flowers. Expected result is less fruit / seed from trees with damage. According to the Missouri Climate Center, the AVERAGE last frost free date for our area ranges between April 15 to April 20. We can get freezes before and after these dates, but becomes less likely the closer we get to May. There is a chance of a killing frost/ freeze into early May for some locations. While it looks like we are all set for spring, be aware of the possibility of freeze damage, even into early May.

**TRIM Grant & TRIM Grant Workshops - April 10-11, 2017**

Tree Resource Improvement and Maintenance (TRIM) Grant applications are out! The grants are meant to help communities improve their community forest. The grant may be used for anything that affects trees positively that are owned by your community. TRIM grants are a cost-share matching grant that allows in-kind match with a 60 (MDC) /40 (Local) split. Tree City USA’s get a 75/25 split.

Two TRIM Grant Workshops are being offered in Southwest Missouri to help you learn about what qualifies and important changes for this round of grants. Please call to register.

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Contact Information</th>
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<tbody>
<tr>
<td>April 10, 10 AM</td>
<td>10 AM</td>
<td>Wildcat Glades Conservation &amp; Audubon Center, 201 W. Riviera Dr., Joplin, MO 417-629-3423</td>
<td>417-629-3423</td>
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<tr>
<td>April 11, 9 AM</td>
<td></td>
<td>MDC Southwest Regional Office, 2630 N. Mayfair Ave., Springfield, MO. 417-895-6880</td>
<td>417-895-6880</td>
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**Midwest Tree Climbing Championship - June 3-4, 2017**

Have you ever seen a really good tree climbing arborist? It looks almost effortless. Tree climbers from around the Midwest will gather in Springfield at the Nathanael Greene-Close Memorial Park to hold this years Midwest Tree Climbing Championship. This isn’t a competition for the guy with climbing spikes, it is for serious arborists interested in skill and safety.

Contestants compete in five events (Work Climb, Throw Line, Aerial Rescue, Belayed Speed Climb, Secured Foot Lock). The highest scoring individuals (Men and Women divisions) compete in the Master Challenge which combines the aspects of a daily job to crown the Champion who earns the opportunity to go to the next level. While speed can play into the activities, safety is foremost in importance. If a participant has a piece of equipment that is deemed unsafe, they cannot use it and must replace it or not compete. If they do something unsafe, they can be disqualified.

What is even more amazing at this event is the comradery. All of the participants want everyone to do their best. They have been known to loan equipment, teach each other, encourage less skilled new climbers, and have a great time with friends and family.

I encourage you to take the time to attend this event. While CEU’s are most likely not available for the viewing audience, you will learn something and have a great time.

**Tree Affects on Stormwater: The Numbers**

When working with engineers, we need to remember they are math people. Numbers rule their world. A few years ago, a proposed equation was created and is becoming a standard for quantifying the water retention effects of trees to be incorporated into stormwater management planning. Sorptivity (S), the potential maximum stormwater retention in inches, is calculated using a factor called a curve number (CN). For Tree cover, CN is 70. Volume of water captured in cubic feet by the tree cover is then calculated based on the square foot area of the tree canopy preserved. While this is not an exact function because it is generalized for all tree species, it gives a good enough number for stormwater management planning.

\[
S = \frac{1000}{CN - 10}
\]

\[
\text{Volume Captured} = \frac{S}{12} \times \text{Area}_{\text{CanopyPreserved}}
\]
Book / Web Review - Stormwater Trees

Stormwater control is an issue for all communities. Trees can play an important role in reducing water running down the street. “Stormwater Trees” is a brief how-to on incorporating trees into the harsh paved environment of communities. It provides short descriptions of various techniques to allow trees to survive and grow to provide the maximum benefit possible. See the technical memorandum at https://www.epa.gov/sites/production/files/2016-11/documents/final_stormwater_trees_technical_memo_508.pdf.

Ash Flower Gall Mite (*Aceria fraxiniflora*)

Ash has many insects dependent on it. The ash flower gall mite is one of them. It causes aesthetic issues with the tree but does not affect tree health. The female mite overwinters under the bud scales and as the male ash flowers start to expand, the microscopic mite moves into the growing flower to feed. The reaction to feeding results in the gall. She lays eggs starting the cycle of multiple generations during the summer. During the fall the flowers turn brown and woody hanging on the tree. Treatment is not needed for tree health or recommended. Enjoy nature at work. With EAB nearby, this dependent insect may also be forced to extinction with the ash tree.

April 10

TRIM Workshop, 10 AM, Wildcat Glades Conservation & Audubon Center, 201 W. Riviera Dr., Joplin, MO. Register by calling 417-629-3423.

April 11

TRIM Workshop, 9 AM, MDC SW Regional Office, 2630 N. Mayfair Ave., Springfield, MO. Register by calling 417-895-6880.

April 18

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

April 27

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

May 10


May 16

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

May 25

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

May 30

Tree ID Walk, 6:30 PM, Downtown City Park, El Dorado Springs, MO.

June 2


June 3 - 4

Midwest Tree Climbing Championship, Nathanael Greene-Close Memorial Park, Springfield, MO, Check www.mwisa.org for updates and details.

June 13

Tree ID Walk, 6:30 PM, Cunningham Park, Joplin, MO.

June 16


July 30 - August 2