

THE STUMP

INFORMATION BY THE BOARD FOOT

APRIL 2020

KNOT THE HOLE NEWS

Common Tree Myths - Debunked

It is never bad to review information you already know. With this in mind, let's review and debunk several myths about trees.

Myth #1: A tree's root system is a mirror image of what is above ground.

Roots are generally shallow in the soil, usually in the top 18 inches or less. A tree and its root system more closely reflect a wine glass on a dinner plate – the tree is the wine glass, the root system is the dinner plate.

Myth #2: Tree roots are responsible for damaging and blocking sewer lines.

Roots take advantage of where it is best for them to get water, air and nutrients. Roots are not physically capable of doing damage to a sewer line. They merely take advantage of the situation. The sewer line must be damaged first. Older clay tile lines have joints that leak and allow access to roots.

Myth #3: When removing a branch, cut as close (flush) to the trunk as possible.

Flush cuts break the tree's ability to close over and contain infections. Easily allowing decay to invade. A branch should be removed outside of the branch collar (or swelling) so as not to disturb the tree's ability to callus over and wall off the wound (CODIT).

Myth #4: The branches on a tree move up as the tree grows taller.

Trees grow from their buds not from the ground level. Branches remain where they first break bud and get larger in diameter. Each year they add layers of growth and extend their length.

Myth #5: Topping is a necessary evil – otherwise the tree will get too big.

Trees never get "too big". They are genetically inclined to grow to a size based on the resources available on that specific site. Topped trees often grow taller than a tree that was left to grow naturally and grows there faster since it needs to replace foliage to produce the sugars it needs to survive. In addition to that, you have branches that are weakly attached, and an unattractive tree.

Myth #6: If a little fertilizer is good, a lot is better.

Most trees get all the nutrients they need from the soil without additional fertilizer. Generically adding fertilizer, especially more than the label states can lead to the extra leaching into the ground water or running off to local water bodies polluting them. Do a soil test to see what is needed, if anything for your tree, then apply according to the recommendation.

Myth #7: After a pruning cut, wound dressing (pruning paint) is necessary.

Pruning paints are generally not recommended. Many of the commercial products contain petroleum, which is toxic to live tree tissue. It sometimes can cause additional dieback around a pruning wound. The paint does little to nothing to prevent infection of the wound after a short period. Often drying out and cracking allowing moisture in and making a great spot for pests to thrive. One exception to applying a paint to a fresh wound is during when oak trees are susceptible to attack by Nitidulids carrying oak wilt. This is during mid-March through June in our region. A light coat of latex paint will mask the odors the Nitidulids use to find feeding sites.

Myth #8: All newly planted trees must be staked.

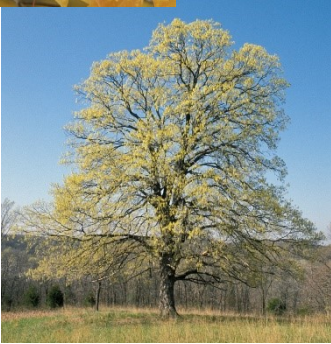
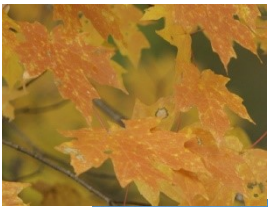
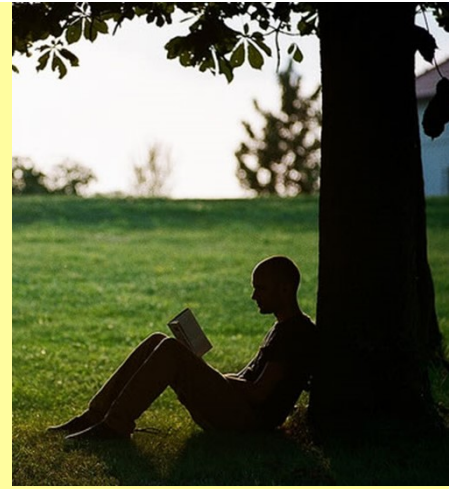
Newly planted trees often do not need staked. Only if they tip over due to wind, lack of roots system (sometimes tall bareroot trees), or too tall for the rootball. Other reasons to use stakes near trees but not necessarily attached are to reduce vandalism, and keep mowing and other equipment away from the trunk.

Myth #9: Mulch is good, so more is better.

Organic mulch is a great way to moderate soil temperature, help keep moisture in the soil, and add organic matter to the soil as it decomposes. Unfortunately, mulch piled around the trunk of a tree can cause problems for the tree. It holds moisture (what it is supposed to do) on the trunk for longer than the trunk is designed to take. This allows fungus and insects to attack the trunk. Also this may induce the tree to produce adventitious roots into the mulch that will die when the mulch dries out causing more stress.

Myth #10: Plant the tree deep.

Trees need to be planted with the top of their root system at the soil surface. Unfortunately, many are too deep in their rootball. There can be for many reasons for the excess soil, but is easily corrected by finding the root flare and removing the excess soil, then plant with the root flare at the surface.



sugar maple
Acer saccharum

Sugar maple is a large, deciduous tree with a mature height of 60 to 75 feet with a spread of 40 to 50 feet. This tree is appropriate for medium to large yards, parks, and boulevards with wider planting strips. The specie does best on well-drained, moderately moist soils. Verticillium wilt is the only major pathogen to this tree, though sapsuckers do like to peck holes in it in the winter and spring. Late summer scorch and "leaf-tatters" are a concern on exposed sites. The cultivars 'Legacy,' 'Green Mountain,' 'Commemoration' and the Caddo selections of "John Pair" and 'Autumn Splendor' do much better on these sites.



Images: MDC

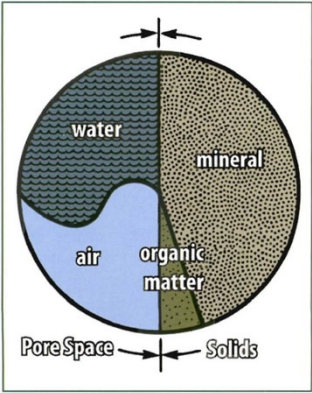
Range map modified from Silvics of North America web site - www.srs.fs.usda.gov/pubs/misc/ag_654/volume_2/acer/saccharum.htm

Book Review - Silvics of North America

Silvics of North American is Forest Service, Agriculture Handbook 654. It describes most of the native species of North America. While leaning to the woodland use of trees, it provides many details on the growth habit at various stages of a trees life, what may damage it, how and when it reproduces, geographic range map, and more. If ever interested in more detail about a tree, this is the book to start with. It is available online as web pages and a two-part PDF at: https://www.srs.fs.usda.gov/pubs/misc/ag_654/table_of_contents.htm.

Flooding – Saturated Soils

Tree roots require a mix of soil, organic matter, water, and air space for them to grow optimally. Ideally fifty percent soil and organic matter and fifty percent water and air space. Roots specifically require oxygen to grow. Space between the soil particles determine the available space for air and water. Compacted soils have less free space than uncompacted. When water fills all of the free space, no air is present. During this situation of total saturation, no oxygen is present for the roots to use. When this occurs for long enough period, which depends on specie and soil conditions, tree roots will start to die. Due to the root loss, the tree will decline and become susceptible to other pathogens. Occasionally, long term saturated soils will keep the tree from functioning long enough and it dies directly from that condition. This condition can occur in a drought when irrigation is left on too long and often.



With the COVID-19 situation, all listed events may occur, be postponed, or cancelled depending on the host groups' decisions. Verify before going.

April 1

Missouri Arbor Day - go hug, plant, or appreciate a tree.

April 21

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

April 23

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

April 24

National Arbor Day - go hug, plant, or appreciate a tree.

May 13

ISA Certified Arborist, Utility Specialist, and Municipal Specialist Exam, Jefferson City, MO, Information and Register at www.isa-arbor.com/Credentials. Deadline April 27.

May 19

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

May 28

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

June 1 - 3

TCIA Executive Arborist Workshop, Dallas, TX, Information and Registration at: <https://eaw.tcia.org>.

June 5 - 7

2020 MW-ISA Tree Climbing Championship, Wichita, KS, Information and Registration at: <https://mwisa.org/tree-climbing-championship>.

June 16

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

June 16

ISA Certified Arborist, Utility Specialist, and Municipal Specialist Exam, Springfield, MO, Information and Register at www.isa-arbor.com/Credentials. Deadline May 29.

June 25

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

June 25 - 27

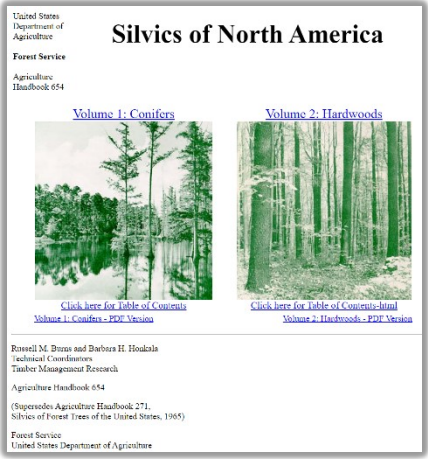
2020 American Conifer Society National Meeting, Clinton, IA , Information at: <https://conifersociety.org/news-events/event/2020-national-meeting>.

August 7 - 9

2020 International Tree Climbing Championship, Albuquerque, NM , Information at: www.isa-arbor.com/events/eventscalendar/index?id=9816.

August 9 - 12

2020 ISA Annual International Conference and Trade Show, Albuquerque, NM, Information at: www.isa-arbor.com/Events/Annual-Conference/2020-Annual-Conference.



Hawthorn,
white and odorous with blossom,
framing the quiet fields,
and swaying flowers and grasses,
and the hum of bees.

- F. S. Flint, 1885-1960, *Trees*

WHAT'S HAPPENING

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