

# THE STUMP

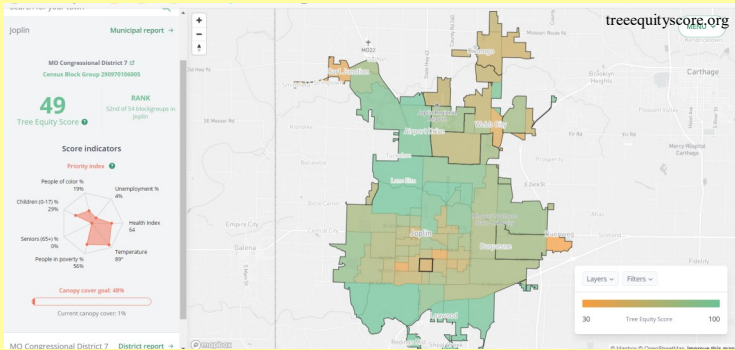
## INFORMATION BY THE BOARD FOOT

DECEMBER 2021

KNOT THE HOLE NEWS

### Tree Equity: A Growing Factor in Tree Planting Decisions

As you drive around a community, it is easy to notice trees are not distributed equally. Some portions of the community have more and/or bigger trees than others. It is based on land development choices of the past and often reveals that poorer neighborhoods have less trees and thus receive less benefits from them. This difference is becoming a concern for those funding trees around the country.

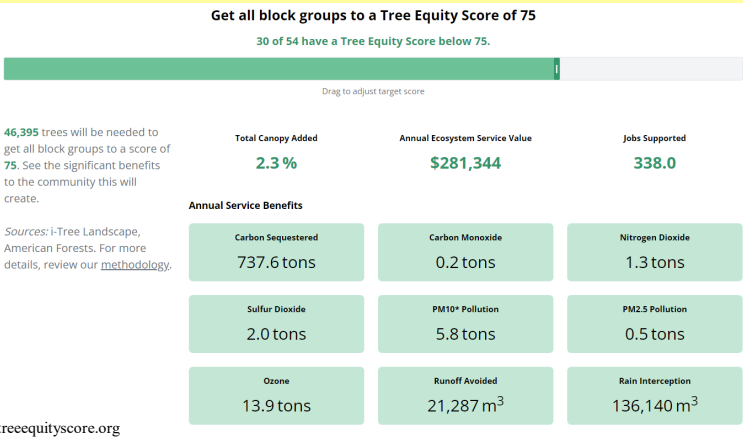


In response to this concern, American Forests created a Tree Equity map application for use via a web browser. This is a GIS based analysis of larger communities across the country. Unfortunately, this only includes the Joplin and Springfield metro areas in SW Missouri.

The analysis creates a Tree Equity Score for individual Census blocks and cumulative scores for whole communities. Each area's equity score indicates how much less canopy the neighborhood has than it should and how prioritized it should be for tree planting based on different sociodemographic and environmental characteristics. The lower the score, the greater the priority for planting. So, for example, if a neighborhood has a low relative canopy cover and a high concentration of people living under the poverty line, that neighborhood would have a lower tree equity score. The program also estimates the number of additional trees needed and potential ecosystem services produced if all neighborhoods in the community reach a certain tree equity score threshold but not at the Census block level.

More information is available on the methodology used at: <https://treeequityscore.org/methodology/>.

This web application may be useful in helping the Joplin and Springfield metro communities in deciding where to concentrate tree planting efforts in the future. Use the application at: <https://treeequityscore.org>.



### Value of the Urban Forestry

Recently a study conducted by the University of Nebraska-Lincoln Bureau of Business Research and sponsored by the Arbor Day Foundation and the USDA Forest Service aimed to determine the quality-of-life contributions and economic footprint of the urban forestry sector in the United States for the year 2017, which is the most recent year data is available for comprehensive analysis.

To compile the report, a consistent methodology was used across all states to provide both national results and comparisons among the states. The methodology also relies on administrative data from the U.S. Bureau of Census and the Arbor Day Foundation.

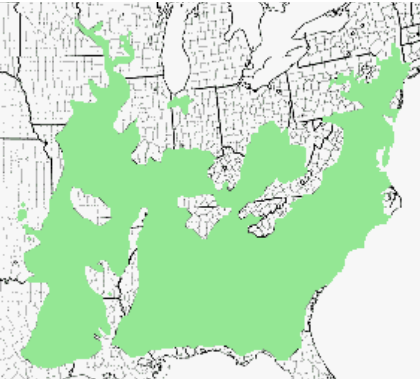
Key findings for Missouri include:

- 7,729 people are employed as a result of urban forestry activities in Missouri.
- Communities in Missouri enrolled in Tree City USA® invested an average of \$9.01 per resident for tree planting and care compared to \$3.00 per resident in non-participating communities nationally.
- Missouri Urban trees contribute \$1.6 billion in community-wide environmental benefits each year, such as carbon sequestration, air pollution removal, and avoided stormwater runoff.
- The urban forestry sector in Missouri has an annual sales and employment foot print worth \$842 million.
- Tree cover at private homes adds \$541 million annually to property values across Missouri.



River birch  
*Betula nigra*

River birch is a medium to large tree with a mature height of 70 feet and spread of 50 feet. This tree is appropriate for most yards, and parks. Often grown as a multi-stem specimen, the specie does best on moist, well-drained soil but adapts well to a wide range of extreme conditions but needs acidic soil. The leaves are triangular with serrated edges. The male flowers (catkins) add some interest. The bark exfoliates to expose white to bronze bark on younger stems, older stems are deeply furrowed. The cultivars 'Dura-Heat' and 'Heritage' are preferred for their drought resistance. Watch for the cultivar City Slicker® with all white bark coming out soon.



Images: Univ. of Wisconsin-Madison <https://hort.extension.wisc.edu/articles/river-birch-betula-nigra/>.  
Range map modified from USDA Forest Service Silvics of North America Web site - [www.srs.fs.usda.gov/pubs/misc/ag\\_654/volume\\_2/betula/nigra.htm](http://www.srs.fs.usda.gov/pubs/misc/ag_654/volume_2/betula/nigra.htm).



See National and other state findings, study methodologies including the complete report, and a Tree City USA Bulletin on the study at: [www.arborday.org/urban-forestry-economic/](http://www.arborday.org/urban-forestry-economic/).

## Web Review - Are Your Trees Storm Ready?

The Illinois Department of Natural Resources and Illinois Arborist Association, created a video featuring Illinois State Urban Forestry Coordinator Mike Brunk. They concentrate on making your trees storm ready by identifying potential issues and hiring an ISA Certified Arborist to address them. This is worth a view and possibly sharing with clients. See it at: <https://multimedia.illinois.gov/dnr/DNR-Are-Your-Trees-Storm-Ready-Nov-2021.html>

### Phytophthora Root Rot (*Phytophthora* spp.)

Several species of soilborne pathogens in the genus *Phytophthora* cause crown and root rot diseases of herbaceous and woody plants. Phytophthora rot may develop if soil around the base of the plant remains wet for prolonged periods, and/or when planted too deeply. In trees and shrubs, the pathogen kills plants by growing from the roots up through the root crown and into the lower trunk, where it kills the inner bark and causes a browning of the outer layer of sapwood. In general, *Phytophthora* requires warm, moist soils in order to cause disease. The leaves of plants affected by Phytophthora rot appear drought stressed. Trees or plants often wilt and die rapidly with the first warm weather of the season. Leaves may turn dull green, yellow, or in some cases red or purplish. Often, only plants in the most poorly drained area of the field or garden are affected. Phytophthora infections typically kill young trees, because their root systems and crown areas are small compared to those of mature trees. Symptoms may develop first on one branch or stem then spread to the rest of a tree or plant. Trees may decline over a period of years before finally dying or they may be killed in a single season. Symptoms on roots and crowns may vary somewhat depending on the species of *Phytophthora* involved, the plant being attacked, the resistance of the plant variety, and soil moisture and temperature. In general, trees affected by *Phytophthora* develop darkened areas in the bark around the crown and upper roots. Gum or dark sap may ooze from the margins of the diseased trunk area. If bark tissue is carefully cut away, reddish brown streaks or zones can be seen in the inner bark and outer layer of wood. No mycelium is visible in between the bark and wood in trees affected by *Phytophthora*, distinguishing this disease from *Armillaria* root rot.



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

#### December 1

Tree Line USA applications due. Information at: [www.arborday.org/programs/treelineusa/](http://www.arborday.org/programs/treelineusa/).

#### December 5 - 8

ASCA Annual Conference, Lake Tahoe, NV. Information at: [www.asca-consultants.org/mpage/AC2021conf](http://www.asca-consultants.org/mpage/AC2021conf).

#### December 13 - 16

ISA Annual Conference—Virtual Only. Information at: [www.isa-arbor.com/Events/Annual-Conference/2021-Annual-Conference](http://www.isa-arbor.com/Events/Annual-Conference/2021-Annual-Conference).

#### December 21, 8:30—10:30 AM

SWMCFC Meeting, Springfield, MO.

#### December 31

Tree City USA, Tree Campus—Higher Education applications due. Information at: [www.arborday.org/programs/treecityusa/](http://www.arborday.org/programs/treecityusa/) and [www.arborday.org/programs/tree-campus-higher-education/](http://www.arborday.org/programs/tree-campus-higher-education/)

#### January 18, 8:30—10:30 AM

SWMCFC Meeting, Springfield, MO.

#### January 18

ISA Certification Exam, Springfield, MO. Registration Deadline: December 31. Information at: [www.isa-arbor.com/Credentials/Exam-Information](http://www.isa-arbor.com/Credentials/Exam-Information).

#### January 26 - 28

2022 MW-ISA Annual Conference & Trade Show, Omaha, NE. Early-bird rate ends Jan. 12. Information and Registration at: <https://mwisa.org/2022-annual-conference>.

#### January 29 - February 3

2022 TCIA Winter Management Conference, Kauai, HI. Information at: <https://wmc.tcia.org>.

#### February 15 - 18

ASCA's 2022 Consulting Academy, Indianapolis, IN. Information at: [www.asca-consultants.org/page/CA2022](http://www.asca-consultants.org/page/CA2022).

**SWMCFC and Joplin MCFC meetings will be sporadic due the COVID-19 situation. Watch for individual emails announcing meetings as they occur.**



Chocolate comes from cocoa which is a tree.  
That makes it a plant.  
Chocolate is a salad. 😊

Anonymous from a restaurant

WHAT'S HAPPENING

“The Stump” website: <https://thestumpnewsletter.weebly.com>

To add or remove your subscription, update your address, change contact information or convert from the paper to the email - web version of “The Stump” contact:

Jon Skinner  
Community Forester  
MO Dept. of Conservation  
201 W. Riviera Dr.  
Joplin, MO 64804  
417-629-3434 Ext. 4543  
[Jon.Skinner@mdc.mo.gov](mailto:Jon.Skinner@mdc.mo.gov)



Use of names of commercial products or organizations does not imply an endorsement or recommendation by the Missouri Department of Conservation