



# Campus Tree Care Plan

# December 2021

# PURPOSE

Trees provide shade for people and buildings, thus reducing heat gain. Trees also provide habitats, can reduce rainwater runoff, lessen noise, improve air quality and naturally provide beauty to the environment. It is for these reasons that the following objectives guide our purpose of having a campus tree care plan.

- Protect and maintain the variety and quality of trees on the campus property; a variety of trees is desired with the goal of maintaining one of each tree native to the area.
- Utilize the tree variety for educational needs in the campus community.
- Incorporate more sustainability into the landscape.
- Assure that the removal of any tree on campus is conducted with proper consideration.
- Increase coordination and share resources to maintain trees both on campus and in the community.
- Support consideration for birds, insects and wildlife.

# **RESPONSIBLE DEPARTMENT**

The Physical Plant and the Grounds crew are responsible for planting and maintaining the grounds.

# CAMPUS TREE ADVISORY COMMITTEE

The Campus Tree Advisory Committee is composed of:

- Del Hannay, Student Representative <u>meh8277@truman.edu</u>
- Lisa Hooper, Biology Department Faculty <u>lhooper@truman.edu</u>
- Bill Kuntz, University Farm Manager <u>brkuntz@truman.edu</u>
- Donna Liss, Chief Information Officer and Chair of the President's Sustainability Action Committee <u>dliss@truman.edu</u>
- Sue Limestall, Past President of the Kirksville Area Master Gardener Club and Community Representative LimestallSue@yahoo.com
- Brek Snyder, Grounds Supervisor <u>breksnyder@truman.edu</u>
- Sam Guth, Physical Plant Director and member of the President's Sustainability Action Committee sguth@truman.edu
- Lori Shook, Campus Planning and member of the President's Sustainability Action Committee Ishook@truman.edu

#### **Terms and Roles of Representatives**

The committee members listed above have accepted to serve on the committee for a minimum of one year but with the expectation for continued membership. Additional members may be appointed. The members are expected to actively participate and/or contribute in the care plan, observances and service learning opportunities. Both the City of Kirksville and our local Missouri Department of Conservation (MDC) have representatives that are kept involved in our meetings and/or activities.

## TREE CARE POLICIES

#### **Planting and Plant Selection**

All trees planted at Truman State University will be of an appropriate species and will follow the planting procedures recommended by our local Resource Forester (these planting procedures include specifics on site preparation, tree placement, soil backfill, mulching, and staking).

Outlined below is our list of preferred trees for general planting. Tree diversity is important, as is preference to native plantings. Regular plantings take place in fall and spring. The planting seasons are from October through December in the fall and from March through May in the spring.

# 7-15 feet height

American Cranberry Smoke Bush Ninebark Red Buckeye Viburnum: Arrowwood, Blackhaw, Nannyberry Witchhazel

<u>15-30 feet height</u> American Holly Crabapple, disease and rust resistant variety Eastern Redbud Flowering Dogwood, select locations Ohio Buckeye Serviceberry

30-60 feet height Bald Cypress Black Gum Eastern Red Cedar Norway Spruce Oak: Blackjack, Chinkapin, Post, Swamp White Red Maple River Birch Sassafras, select locations

60-80 feet height American Linden/Basswood Eastern White Pine Hickory: Shagbark, Shellbark or Bitternut Kentucky Coffee Tree Oak: Bur, Northern Red, White Sugar Maple Tulip Tree

Trees other than those listed above will be considered for approval by the Campus Tree Advisory Committee.



In addition to tree plantings, our committee assists with native perennials and other landscaping. Working side by side with our local MDC Department and Resource Forester, Yvette Amerman, and with assistance of funds from the Student Environmental Sustainability Fee Accountability Committee, this past summer a row of unused tree beds on the east side of campus were filled with native gardens. MDC provided all of the plants. The Truman grounds crew assisted with moving dirt and mulch. The three surviving trees in their beds remain in place. The other trees did not survive in this location due to limited space and salt from snow removal. Sue Limestall of our committee created the plant list, designs, and provided recommended maintenance.

http://newsletter.truman.edu/article.asp?id=28365 http://newsletter.truman.edu/article.asp?id=28571

# Landscaping

Landscaping on the Truman campus must adhere to the Open Space Concept issues and opportunities outlined in the Campus Master Plan. The objectives outlined in the Open Space Concept section identify the need to maintain our campus environment by protecting sacred spaces, and to strengthen open space definition through additional tree plantings on the north and south borders of campus.

#### **Maintenance and Removal**

This fall Truman hired a local tree company to be available for tree pruning and removals as might be required due to pedestrian hazards or weather. Truman was awarded a Tree Resource Improvement and Maintenance (TRIM) grant for winter of 2020-21 for tree pruning throughout campus.

*Pruning* - Tree maintenance occurs continuously on an asneeded basis.

**Tree Removal –** The grounds crew continues to determine what needs to be pruned and removed while also planting trees to work toward replenishing the landscape. When trees are removed it is due to old age, weather damage, or bad health.



#### **Emerald Ash Borer Statement**

The emerald ash borer is an exotic beetle from Asia that most likely arrived in cargo. It was found in the state of Michigan in 2002 and has been found in 35 states and in Canada. The larvae feed on the inner bark of the ash trees and eventually kill the trees. There are insecticide treatments (injections, soil treatments and cover sprays) available that require the right timing and multi-year applications. These treatments are cost prohibitive and may not always be effective. While we do not want to remove all ash trees we will take a wait and see approach which may lead to tree removal as they become affected. Any ash trees that are currently in poor condition will be removed.

#### **Managing for Catastrophic Events**

In the event of extreme weather occurrences, such as droughts or ice storms, trees in poor health or fallen trees will be removed by Physical Plant in cooperation with contracted services as needed. The priority for removal is to address any roads or streets first, followed by ensuring a clear path for food service deliveries to the residence halls. Access to other critical facilities will follow the removal in these two areas.

#### PROTECTION AND PRESERVATION POLICIES

The Campus Tree Care Plan will be shared with on- and off-campus contractors regarding tree protection during any construction.

*Prior to construction*, tree protection zones will be established. The contractor is to review the site with Truman representatives and fence off designated protected areas.

*During construction*, this zone is to remain undisturbed to allow trees and plants to survive, and this area Is not to receive added compaction or excess soil. No root raking shall be allowed within the protection zone.

Any additional landscaping included in a construction project will be reviewed during the construction design phase, and the plantings will be handled by the campus grounds crew before and after any project is completed.

# **GOALS AND TARGETS**

Continue to develop the Open Space Concept identified in the Campus Master Plan. This will not only achieve some of the goals outlined in the master plan, but it will also help Truman achieve its overall sustainability goals. While Truman will continue to work on many activities in this tree care plan, other goals include:

- Continue to keep the tree inventory up to date by utilizing an automated system to update and track this inventory. A comprehensive inventory of trees was completed in 2011, resulting in a master spreadsheet with information about each tree on campus property including: GPS location, site information, proximity to buildings, description by size, name and condition, and any physical problems or disease. There are approximately 1,750 trees.
- 2. The plan to fulfil the arborist training portion of the 2019 MDC TRIM grant was canceled due to COVID. We will pursue this again when a more permanent Grounds Supervisor is assigned. We completed the work for the 2020 TRIM grant within the northeast area of campus. The current 2021 TRIM grant work will occur prior to March 2022. The committee is discussing what to prioritize for a 2022 TRIM grant application.
- 3. Work with the Missouri Department of Conservation to create tree and/or landscape plans for quadrants of campus to determine where to plant trees in order to plan for replacement of older trees in the future.
- 4. Maintain Tree Campus Higher Education status and use for points for the AASHE STARS submittal as completed by the President's Sustainability Action Committee (PSAC).
- 5. Expand use of our tree walks and engage the broader community.

# TREE DAMAGE ASSESSMENT

Any damage or vandalism performed on any tree shall be assessed by both the Grounds Supervisor and the Physical Plant Director immediately. After inspecting the damage, the solution(s) to the problem will be discussed among the Campus Tree Advisory Committee members. Any issues dealing with student conduct will be turned over to the Student Life Office.

# **PROHIBITED PRACTICES**

The following will be publicized as prohibited:

- Do not lock bikes to trees
- Do not cut roots
- Do not knowingly damage trees
- Do not nail into a tree
- Do not attach anything to a tree
- There will be no tree plantings by groups or for dedications without pre-approval from the Advancement and Physical Plant offices



# DEFINITIONS

<u>Heat gain</u> – referring to the increase in temperature in a space, object or structure as a result of solar gain.

<u>Landscape</u> – areas of land that are distinguished by differences in landforms, vegetation, land use, and aesthetic characteristics.

Native plant – a plant which occurs naturally and is indigenous within the region.

<u>STARS</u> – the Sustainability Tracking, Assessment & Rating System developed by the Associated for the Advancement of Sustainability in Higher Education (AASHE) to self-report and measure a university's sustainability performance.

<u>Tree inventory</u> – listing of all trees on campus including GPS location, species, size, conditions, observations, recommendation regarding care.

<u>Tree Protection Zone also known as the Critical Root Zone</u> – an imaginary circle on the ground determined by the tree diameter, in inches, measured 4.5 feet above grade multiplied by 12 inches.

#### **COMMUNICATION STRATEGY**

This Campus Tree Care Plan is available on the Truman Sustainability website. http://sustainability.truman.edu/the-land/ and http://sustainability.truman.edu/trees/ Initial adoption of tree policies, as well as any continued updates of these policies, are publicized through the campus and local media through the Office of Public Relations. Award of the Tree Campus designation and award of the MDC TRIM grant are shared via Truman media. http://newsletter.truman.edu/article.asp?id=28182 http://newsletter.truman.edu/article.asp?id=27958 http://newsletter.truman.edu/article.asp?id=28453 http://newsletter.truman.edu/article.asp?id=28453 http://newsletter.truman.edu/article.asp?id=28541 https://twitter.com/TrumanState/status/1386673949992423428 https://twitter.com/TrumanState/status/1438578493021954053