



Campus Tree Care Plan

December 2023

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 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:

- Lisa Hooper, Biology Department Faculty, retired in May lhooper@truman.edu
- Bill Kuntz, University Farm Manager brkuntz@truman.edu
- Donna Liss, Chief Information Officer and Chair of the President's Sustainability Action Committee dliss@truman.edu
- Sue Limestall, Community Representative <u>LimestallSue@yahoo.com</u>
- James Moloney, Student Representative jm3713@truman.edu
- Elizabeth Musco, Student Representative emm3326@truman.edu
- Dan Robbins, Grounds Supervisor dlrobbins@truman.edu
- 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 <u>Ishook@truman.edu</u>
- Kale Slayton, Student Representative kls6551@truman.edu
- Mairin Warner, Student Representative mew5622@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. Early spring 2023 we put out notices for student representatives and had several positive responses. We elected to invite them all to participate as they can. https://newsletter.truman.edu/article.asp?id=34237

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

15-30 feet height

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.



Working side by side with our local MDC Department and Resource Forester, Yvette Amerman, the campus was successful in getting some more trees and shrubs through Project CommiTree with the Forest ReLeaf of Missouri program. We hope to work with this program in the future for trees to replace our ash removals.

The native gardens planted in 2021, shown in the image above, continue to do well and are very attractive to pollinators!

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

Fall 2022 Truman hired a local tree company to be available for tree pruning and removals as might be required due to pedestrian hazards or weather. This has been extended. Truman was awarded a Tree Resource Improvement and Maintenance (TRIM) grant for winter of 2022 and again in winter of 2023 for removing primarily Ash trees 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 36 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 our previous statement regarding the ash borer was to take a wait and see approach the ash borer has been found throughout the area. We are now advised to remove ash trees to prevent the further spread and have a project underway to continue removal this winter.

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:

- 1. Continue to work with the MDC on cost share agreements when possible. Winter of 2022 the TRIM grant began removing ash trees. Winter of 2023 continues with the list of ash tree removal as well as some invasive pear trees. We are working as a committee to plan the work to submit for future grant opportunities, including planting trees after the ash trees have been removed.
- 2. Following the ash tree removal a future TRIM grant will be submitted to update the campus tree inventory. The last inventory was done in 2011. We can then keep it up to date by utilizing an automated system to update and track this inventory. The master spreadsheet will include information about each tree on campus property such as: 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.
- 3. Work with the MDC 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. Work with MDC and Project CommuniTree through Forest ReLeaf of Missouri to apply and receive free threes and/or shrubs for campus and in the northeast Missouri communities.
- 5. 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).
- 6. Expand use of our tree walks and engage the broader community.
- 7. Work with instructors and students in the science fields to establish Elm tree starts from our large and healthy Elm tree in red barn park. This Elm has survived through Dutch Elm disease.
- 8. Organize and oversee student group participation in clean-up of Bear Creek and the riparian corridor.

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.

Truman also received free trees from Forest ReLeaf in the fall.

https://www.instagram.com/p/CqLXZqQLXxa/

https://newsletter.truman.edu/article.asp?id=34290

https://newsletter.truman.edu/article.asp?id=36049