Campus Tree Care Plan

December 2019

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.
- 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:

- Payton Sullivan, Student Representative pms3728@truman.edu
- Lisa Hooper, Biology Department Faculty 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, Past President of the Kirksville Area Master Gardener Club and Community Representative LimestallSue@yahoo.com
- Luke Mudd, Grounds Supervisor (through May) lmudd@truman.edu
- Blake Pigg, Grounds Supervisor blapigg@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 lshook@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.

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).

A list of preferred trees for general planting has been created, and is outlined below. Tree diversity is important as is preference to native plantings.

Shade trees:
Northern Red Oak, Swamp White Oak, Burr Oak, State Street Maple, Autumn Blaze Maple, Fall Fiesta Maple, Burgundy Belle Maple, Ginkgo (male only), Linden (aka Basswood), Black Gum, Bald Cypress, Kentucky Coffeetree

Ornamentals:
Dogwood, Serviceberry, Redbud, Cleveland Pear (if available), Crabapple, Tulip Tree

Conifers:
Eastern White Pine, Eastern Red Cedar

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

An area of continued discussion is the Bear Creek corridor and rain garden. The student led project started well and some good growth has occurred, but little maintenance has been planned or undertaken. Conversations continue regarding maintenance, selective clearing, future plantings and interdisciplinary research opportunities. A second rain garden is in the works for spring planting utilizing lessons learned from the first rain garden. We are all working toward improving aesthetics as well as the environment. Our local forester is assisting with design and grant opportunities.

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

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. Truman was awarded a TRIM grant for winter of 2019-20 to hire an arborist to remove some trees with declining health and to trim others. Another aspect of the grant is to incorporate training for proper tree care.

Pruning - Tree maintenance occurs continuously on an as-needed basis.

Tree Removal – The grounds crew continues to determine what needs to be trimmed, pruned and removed while also planting trees to work toward replenishing the landscape. A few trees have been removed due to old age or bad health. Regular tree plantings have taken place; typically late fall and in spring.

Emerald Ash Borer Statement

The emerald ash borer is an exotic beetle from Asia that most likely arrived in cargo. It was found in MI 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 are affected. Any ash trees that are currently in poor condition will be removed.

Managing for Catastrophic Events

In the event of severe weather conditions, such as the droughts we have experience recently, 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, three specific goals include:

1. Continue to keep the tree inventory up to date by utilizing an automated system to update and track this inventory.

2. Fulfil the plan approved by the 2019 TRIM grant we were awarded for training by an arborist and specified tree maintenance. We plan to apply for a TRIM grant to continue this work in upcoming years.

3. Work with our local Missouri Department of Conservation to create tree and/or landscape plans for quadrants of campus to determine where trees should be planted; to plan for replacement of older trees in the future.

4. Maintain Tree Campus USA status and use for points for the AASHE STARS submittal as completed by the President's Sustainability Action Committee (PSAC).

5. Continue to work on arboretum status for the Truman campus, utilizing this space for student research and for the enjoyment of the community. Two Tree Walk brochures have been completed and we hope to expand the reach of use for these by sharing them with the local department of conservation. Utilizing Google Maps the tree walks have links to more information online. Tree tags at the trees on the walks include a QR scan so anyone can find more information as they enjoy the Tree Walk or just as they stroll around campus. Also completed is a comprehensive arboretum map of campus identifying the trees on the walks as well as other notable species. This map may expand in the future to include more plantings.

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 Affairs 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 or hang anything from a wire or rope from a tree
- There will be no tree plantings by groups or for dedications without pre-approval from the Advancement and Physical Plant offices

DEFINITIONS

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

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

STARS – 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.

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

Tree Protection Zone also known as the Critical Root Zone – 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 posted on the Truman Sustainability website. http://sustainability.truman.edu/the-land/ and http://sustainability.truman.edu/trees/ The website, as well as the specifications for protection, will be made available for contractor use. Initial adoption as well as any continued updates of these policies will be publicized through the campus and local media through the Office of Public Relations.