Oklahoma State University Facilities Management Landscape Services



December 2023 Issue 3

Tree Tribute Newsletter

Sometimes, when the landscape presents persistent challenges you must find new and creative solutions. One of those intense challenges our campus forest has faced in recent years is that of Crape Myrtle Bark Scale. Read more about this invasive insect and its affect on the landscape here: OSU Extension CMBS Article. It's incredibly difficult to control, which has lead our FMLS department to consider Crape Myrtle replacements. In a much appreciated partnership with local plant breeder and retired professor, Carl Whitcomb, we've planted more than 40 donated Seven-Sons-Flower (Hepticodium miconioides) specimens across campus. With its multi-stem, tall structure, year-round visual interest, natural resistance to local pests and apparent cold heartiness, we believe this species could offer a great alternative solution to planting Crape Myrtles. Some of the best examples on campus can be found near the south side of the Architecture Building, located along Athletic Avenue. Hepticodium are relatively easy to find in the plant-nursery market. However, the Fall Festival cultivar, as developed by Whitcomb, is only sourced through him. Showy-white Hepticodium blooms are pictured below.

Weather is another ever-present challenge. In response to losing about 100 holly specimens to the extreme cold in February 2021, we searched for a more cold hearty alternative. Enter Mark Andrews of



Greenleaf Nursery in Park Hill, Oklahoma, Greenleaf Nursery Company, who has been growing and promoting new "Purple Hollies" in partnership with Mitch Magee of Evergreen Nursery in Poplarville, Mississippi, Evergreen Nursery. Their idea was to combine the vigor of the Red Hollies with the cold hardiness of the Blue Hollies by crossing Liberty Holly with Blue Prince Holly. As a result, they have four patent-pending crosses; My Lady[™], Monarch[™], Crown Point[™] and Grace[™]. The first three sections were sent to OSU as a trial site to test its cold resistance in our USDA hardiness zone. Check out four of the Monarchs[™] planted on campus at the southeast entrance to Whitehurst.

Campus Trees at a Glance

Avoided Run off: 101.4 thousand cubic feet, \$6,780/year

Number of Trees: 4,054 Number of Species: 395 Structural Value: \$15 million Canopy Cover: 8.31% Trees Planted: 216 Trees Removed: 98 Trees Pruned: 632 Oxygen Production: 193.2 tons/year Carbon Sequestration: 72.4 tons, \$12,400/year Carbon Storage: 2.46 thousand tons, \$419,000/year



| Crepe Myrtle | 8.6 |
|-------------------|-----|
| Holly sp. | 7.9 |
| Shumard Oak | 7.4 |
| Baldcypress | 6.8 |
| Chinese Pistache | 4.8 |
| Easter Red Cedar | 4.5 |
| Bur Oak | 4.4 |
| Southern Magnolia | 4.0 |
| Chinese Elm | 4.0 |
| Osage Orange | 1.9 |
| Eastern Redbud | 1.9 |
| Sweetgum | 1.9 |

Most Dominant Species

Percent Population

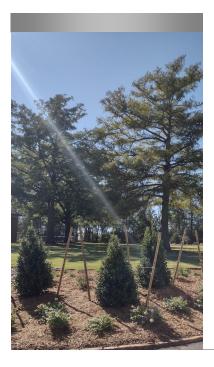


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Special Points of Interest

- Discover Ways to Interact with the **Campus Forest**
- Meet Members of Your Tree Leadership Board
- Get Insider Knowledge About Campus Landscape Projects
- Learn How Students Interact With **Our Campus Arboretum**



The New Forested University House

In 2020, construction began at the University House, a property owned by the university used to host formal, presidential events and act as a residence for the sitting presidential family. The new house is incredibly grand and versatile, expertly designed to accommodate everything from large gatherings to small-group meetings. Of course, the landscape was just as expertly planned. It's a mosaic of grand, forested lawns, scattered with smaller, more intimate gardens, all of which will serve the university and its presidential families for generations to come. While the construction process wrapped up in 2022, landscape work is continual and evolving. One hundred eleven trees across 37 different species were planted as part of the initial landscape renovation. A large portion of those plantings can be described as understory, showy trees including many different cultivars of Redbuds (C. canadensis), Magnolias (Magnolia sp.), Hollies (Ilex sp.) and Dogwoods (Cornus sp.), among others. Still, there were many overstory trees planted as well. Including Cypress (Taxodium sp.), Oak (Quercus sp.), Maple (Acer sp.) and Blackgum (Nyssa sp.). Of the 111 trees planted, only four have been lost. All losses can be attributed to weather conditions and have been replanted. Kenny White is the horticulturalist responsible for caring for the University House landscape in its entirety. He and University Arborist Caitlin Gipson partner closely in caring for the University House forest. Kenny has been with FMLS for nine years and is a highly valued member of the team.

Image left: Three new My Lady[™] Hollies planted near existing Cypress and Oak trees north of the new University House.

"Since we've moved into the presidents house last fall, that property is just incredible... it's just so beautiful."– Darren Shrum, First Cowboy

Internship/Student Positions

The OSU Facilities Management Landscape Services Department (FMLS) offers many opportunities for students to gain valuable experience and knowledge about landscape care. As funding allows, the department offers a summer forestry internship where one student is selected to work directly with the university arborist. During this paid, field-based internship the student will learn how to plant, prune and care for trees in a number of ways. GIS experience is a plus! The department also offers a summer landscape design internship, as funding allows. This student works closely with the Landscape Design team, primarily in the office, with programing and design concepts. Finally, OSU FMLS offers several paid part-time, field-based student landscape maintenance jobs year-round. For information, contact Pat Phibbs 405-744-7154

Campus Tree Report 2023

210 trees planted; representing 47 species across 20 genera, finding homes at 36 sites.

Tree Removal Breakdown: 98: 36 Natural Decline, 23 Construction, 15 Landscape Renovation, 12 Drought, 5 Wind, 3 Hazard, 2 General Aesthetics, 1 Irrigation Issues and 1 Disease.

A Drastic Increase of Species: How did we go from 164 tree species in 2022 to 395 in 2023? It's all in how one chooses to define a species. The ArbNet Foundation considers every different cultivar of a particular pant as its own different species. In compliance with being a Level II Arboretum, we've adopted this definition, and it has helped us increase our species diversity drastical-ly! For example, we had previously counted all five campus inventoried cultivars of Eastern Red Cedar (*Juniperus virginiana*) specimens as one species. But, using ArbNet's definition, we can count each of the five different cultivars as its own species (straight *J. virginiana*, Brodie, Canaer-ti, Hillspire and Prairie Sentinel). Of course, we are always finding and planting new species on campus also. It's our goal to have at least 500 different tree/woody perennial species on campus by fall 2027, which would qualify us for Level III Arboretum status. For reference to previous years' data, please refer to the Tree Tribute Newsletter Archive: Tree Tribute Newsletter Archive <u>I Oklahoma State University (okstate.edu</u>)

In 2023, we'll continue to focus on increasing the university's overall tree canopy. This is an ongoing and evolving goal that will be reached by planting more trees and maintaining the health of our existing forest.

We will continue to celebrate trees and offer the OSU community opportunities to learn about our campus Arboretum via Service Learning Projects, tree plantings, use of the Interactive Campus Map Tree Layer and potentially through future virtual and/or in person tree tours.

A complete list of goals and arboretum care standards can be found on our website: Arboretum Tree Care Plan and Standards | Oklahoma State University (okstate.edu)

Please remember to not feed the squirrels. For more information please read the 2021 newsletter.



Pictured Above: Students help plant the honorary 2020 Arbor Day tree, a Redpoint® Maple. A photography class held in Morrill Hall was allowed to leave class and attend the tree planting. This tree is visible from the grand steps of Morrill Hall, and students will enjoy it for years to come.

Arbor Day 2023

The 2023 Arbor Day ceremonial tree planting was made special by planting two trees. First, the 2023 tree, a Greenfeather® Pond Cypress (Taxoium ascendens 'Carolyn Malone') sponsored by OG+E, was planted near the northeast corner of the Seretean Performing Arts Center. First Cowboy, Darren Shrum, was in attendance and spoke, saying in part: "... When you walk on this campus you really can't find a place that isn't beautiful." Pictured right, Renee Shuette, SAF chair, speaks about the many positive attributes of this tree, including its suitability to the location and its beautiful 'soft and feathery-orange' fall color. Just to the south of the Pond Cypress, a Redpoint[®] Maple (Acer rubrum 'Frank Jr.' PP 16769) was planted as an honorary 2020 Arbor Day tree. Remember, Arbor Day was canceled that year due to the COVID-19 pandemic. Shuette spoke again about the natural history of the tree and why it's well-suited for the area. Students planted this tree specifically, see picture above. Many other campus forest supporters were present, including Jessie Martin from OG+E, FMLS CFO Ron Tarbutton and several members from the FMLS Dept., Brand Mgmt. Dept., and the Tree Leadership Board, among others.

This location was selected to continue reforestation efforts after losing five trees in the area to the October 2020 ice storm. Both trees were sourced through Greenshade Trees LLC of Yukon, Oklahoma.



Campus Forest Accolades

Tree Campus Higher Education:

OSU has been awarded this recognition annually since 2011! TCHE is an award presented by the Arbor Day Foundation to campuses that meet five criteria that highlight its devotion to a healthy campus forest and community/education outreach. The five criteria are: having an active Campus Tree Advisory Committee, creating and following a Campus Tree Care Plan, having dedicated annual expenditures, observing Arbor Day, and facilitating a Service Learning Project.



Accredited Level II Arboretum:

In 2022, Oklahoma State University was granted level II arboretum status through the ArbNet Foundation. This is an internationally recognized award that is reapplied for in five year cycles. There are seven criteria that must be met to obtain a level II accreditation: having an arboretum plan with collections policy, a governance group, housing more than 100 tree and woody species, employing paid management personnel, hosting public access event(s) and practicing enhanced educational programs. This award also demonstrates our university's dedication to its campus forest and related education outreach.



The event was livestreamed via Inside OSU and is archived on its website at this link: 2023 OSU Arbor Day Celebration - Inside OSU

Tree Leadership Board Members 2022-2023

Dr. Bryan Murray: Prof. NREM

Dr. Tom Kuzmic: Prof. Emeritus NREM

Dr. Tom Hennessey: Prof. Emeritus NREM

Dr. Mike Schnelle: Prof. and Extension, Horticulture and Landscape Architecture

Craig Spencer: Director, Energy Services Facilities
Management

Jana Phillips: University Architect, Long Range Facilities Planning

David Hillock: Consumer Horticulture Extension, Horticulture and Landscape Architecture

Laura Payne: Horticulture Educator Payne County Extension

John Lee: Director, Landscape Services Facilities Management

Tyler Maly: Assistant Manager Landscape Services Facilities Management

Caitlin Gipson: OSU Univ. Arborist Landscape Services Facilities Management

Renee Shuette: Pres. OSU SAF Chapter

Belen Rodriguez: Pres. OSU Hort. Club





David Hillock

Originally from Iowa, David developed a love for the outdoors while working in the yard amongst peonies and lilacs. He also fondly remembers climbing a maple tree which his dad planted; it's still standing! At 10 years old, his family relocated to Utah where he was introduced to horticulture. After high school, David studied at Ricks College (now BYU-Idaho) where he met and married his wife. From there, he worked as a gardener in a retail garden center, planting more than 200,000 flowers for annual displays each year. 1992 brought the completion of a Bachelor of Science landscape horticulture degree at Stephen F. Austin State Univ. in Nacogdoches, Texas. A master's degree in science horticulture/landscape maintenance and nursery production from Colorado

State University followed in 1996. In 1997, David relocated his family to Stillwater, Oklahoma, and began serving OSU as an assoc. extension specialist for Consumer Horticulture and as a master gardener program coordinator. On his career, David says, "Being an extension specialist and the state MG coordinator here gives me the opportunity to do what I love most, share my love for horticulture while also learning from others." David enjoys spending time with his wife, three kids and five grandkids and also enjoys NASCAR, hockey and travel. David has served on the Tree Leadership Board for five years, and we so appreciate his service!



What do you enjoy most about being on the Tree Leadership Board?

"I think how the campus looks is very important to the success of the university and am grateful administration understands that and are willing to invest in it, especially the trees, which really creates a comfortable and inviting atmosphere. Being a part of the group that takes care of the trees has been enlightening and educational. I am glad I can be a part of its success." -David Hillock

Belen Rodriguez

Horticulture Club President and Tree Leadership Board Member

Degree: Horticulture with minor in Pest Management

Hometown: Dallas, Texas

Why Horticulture... While studying an unrelated major, I joined the horticulture club and realized that I loved getting hands-on, caring for the organization's plants and seeing their blooms. Not long after, I switched majors to horticulture and have been having a lot of fun since!

After graduation... I want to try working at an ornamental production operation or a retail nursery to learn more about how a business operates, and in due time I might even start my own!

Belen's favorite tree is... Probably the fruiting fig. I have one at home and find its small size quite adorable! The soft fruits are like mushy sugar to me.

Renee Shuette

Society of American Foresters Chapter Chair and Tree Leadership Board Member

Degree: Forestry with minor in Wildlife Ecology

Hometown: Allen, Texas

Why Forestry... Originally, I was going to study wildlife ecology and wanted to work for the National Park Service after college. When I came into college for orientation, a man by the name of Dr. Tom Kuzmic was the person who convinced me to study forestry with a minor in wildlife. I think he was biased because he was a forestry professor, but I thank him all the time for convincing me to follow this path.

My dream job... Working with the U.S. Forest Service, which I am currently doing, or eventually working for the National Park Service as a tour guide/interpreter. I love telling stories and meeting new people, and this would be the job to do that.

An interesting fact about me is... I have been to 22 states in the US including Alaska and Hawaii and 12 countries including the Galapagos. My picture is from timber cruising on the Chattahoochee-Oconee National Forest this past summer for my internship with the U.S. Forest Service.

Engineering South, a Versatile Landscape

Most have seen the new, striking Bison topiary located at the east end of the Native Plant Corridor. But look just past it, and you'll see the extensive renovations and addition to our Engineering South Building. Renovations were not limited to the inside! Nearing the final steps of the project, you'll notice 23 new trees have been planted in the landscape adjacent to the building. In the southeast lawn, you'll find two Swamp White Oaks (Quercus bicolor), which will become large shade trees . Nine upright Taylor Junipers (Juniperus virginiana Taylor) were installed on the east side of the building. They will act as vertical/formal accents against the tall structure. An assortment of showy understory trees, Magnolias (Magnolia sp.) and Redbuds (Cercis canadensis) were planted along the south side. Also, many shrub-type plants were planted on the west side of Engineering South in the Native Plant Corridor. An interesting one is the Dwarf Chinkapin Oak (Quercus prinoides). Next time you walk through this garden, look for the distinctive Chinkapin leaf, but on a much smaller stature than you would typically expect! It's our goal, in the next few years to, add shrub-type trees to the online tree inventory. Unfortunately, as a result of the project, we lost three trees and a handful of crape myrtles. But, six trees were successfully protected and retained through the construction process; five oaks and one maple, all of which are mature and sit on the north side of the building. Some of them have squirrel and residual ice storm damage, but seemed to have come out of the construction process unscathed. For more information on our tree protection standards, please follow this link: Arboretum Tree Care Plan and Standards | Oklahoma State University



"Every moment we dedicate to action holds the promise of a lasting legacy. On Sept. 14, we invested an afternoon in planting trees on our campus, a small yet significant act with the potential to endure for generations. It's in these humble beginnings that we find the power to create profound, enduring change." - Rose Arzamani, student SLP participant

Service Learning Projects

Service Learning Projects (SLPs) give the student body the opportunity to interact with and care for the Campus Arboretum in direct, hands-on ways. They learn about the tree planting process and new tree care. It also gives the students a sense of pride and ownership in the landscape.

The first SLP of the year was held on March 23, 2023, outside of McElroy Hall. Forty students attended and assisted in planting six trees. Three Swamp White Oaks (*Quercus bicolor*) were planted along the north side of the building, and along the east, two Armstrong Maples (*Acer x freemanii* 'Armstrong') and one Greenfeather Pond Cypress (*Taxodium ascendens* 'Carolyn Malone').

The second 2023 SLP took place on Sept. 14 in Orange Grove, just north of the Classroom Building. Twenty students participated in planting two trees. These trees were planted as replacements for a large, mature Shumard Oak (Quercus shumardii) that was lost to illness earlier in the year: one Shingle (Quercus imbrica) and one Nuttall (Quercus nuttallii) Oak. Both will eventually grow to be low-maintenance, large shade trees with high pest resistance. Additionally, these trees help to support a diverse forest, as Campus only houses one other Shingle Oak and six other Nuttall Oaks.





Oklahoma State University

Facilities Management

Landscape Services

The Facilities Management Landscape Services Department is responsible for the overall design, installation and maintenance of 870-plus acres. We serve the university by providing skilled landscape services to help the OSU community achieve educational success. By doing this, we help our organization develop a dynamic outdoor learning environment through campus beautification.

How to Donate

Please visit https://osugiving.com/your-passion/campus-tributes

Or from www.osugiving.com > Your Passion > Program Support > Campus Tributes > under 'Areas of Impact' click "Campus Tree Planting and Maintenance Fund" > From here, you may donate any amount.

For a donation of \$1,800 or more, a metal plate in the shape of bark will be placed on the tree statues adjacent to the Cowboy Family Tree art piece located at Theta Pond. See statue below.

To fill out information for the plaque, scroll down to the bottom of the same web page listed above and select "Download our Campus Tributes order form here."

Please direct any donation questions to:

Pam Higgins, Director of Annual Giving, Pipeline Readiness and Student Foundation phiggins@osugiving.com | 405-269-0822

Thanks to Our 2023 Donors!

While we may no longer list or share donor names due to understandable and important privacy policies put in place through the OSU Foundation, we will continue to ensure all donors will receive this newsletter as a show of appreciation for their generous gifts. The <u>Cowboy Family Tree Planting and Maintenance Fund</u> acquired many special gifts this year, and OSU FMLS is incredibly thankful. Please follow the links and/or directions above if you are interested in giving to the campus forest.

Someone who gives back to the campus forest through her actions is University Arborist, Caitlin Gipson. You may have read the alumna profile published about her in the Fall 2023 edition of *STATE* Magazine, titled *Putting Down Roots: Alumna takes on university position supporting campus canopy*. If you didn't get the chance to read it, click the link above.

"Being featured in STATE Magazine is exciting for any alum, but I'm especially excited to use this platform to educate the Cowboy Family about our campus forest and the Cowboy Family Tree Planting and Maintenance Fund."- Caitlin Gipson, University Arborist

Pictured far right: The Cowboy Family Tree donor plaques at Theta Pond. Pictured right: University Arborist, Caitlin Gipson.

Oklahoma State University

Facilities Management

Landscape Services

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Special thanks to Mallory Pool, Senior, School of Media and Strategic Communications, for proofreading this document before publishing.

We Run Together. We Win Together.





FACILITIES MANAGEMENT



