

CAMPUS ARBORETUM

arboretum.arizona.edu

Volume 6, Issue 1

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College of Agriculture and Life Sciences

FALL 2010

INSIDE THIS ISSUE

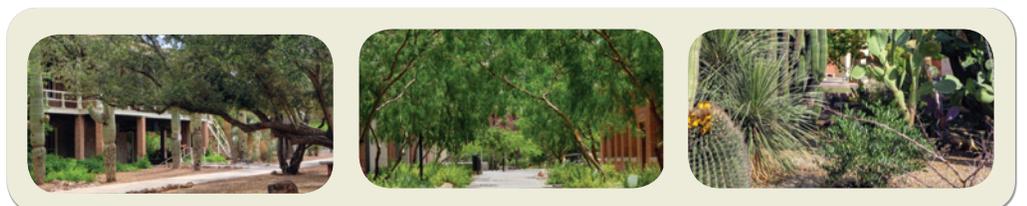
- Director Retiring.....2
- Tree Campus USA3
- Arboretum Visionaries 4
- Ethnobotanical Signage in the Krutch Garden.....5
- In Memoriam: Quercus Virginiana - Legacy to Steve Fazio.....6
- Monocot Garden - Another Inspired Student Project.....7

NEW DIRECTOR'S STATEMENT/ARTICLE

I've arrived!



As I have begun to explore campus these past few weeks I have felt increasingly more amazed and humbled to realize the legacy I've inherited as the new Director of the UA Campus Arboretum. I am simply in love with the campus landscape, not only for its beauty but also for all the values the Arboretum represents. The Arboretum provides opportunities for education, culture and community outreach, for active stewardship in preserving heritage, conserving natural resource and developing sustainable practices. It also provides a place for others to experience serenity and respite from the heat! (So far, this is my favorite asset. It really is HOT here!). I want to thank you for your support and advocacy in creating and maintaining this wonderful resource. I look forward to the exciting opportunities this position will provide for me to meet and work with you in fulfilling our future goals for the U A Arboretum. Please feel free to stop by my office in 101 Herring Hall for a visit or send a note to me (tquist@cals.arizona.edu). I would love to hear your past experiences and future hopes relating to the Arboretum.



ARBOR DAY 2010

On the week before Earth Day/Arbor Day/Sustainability Day in 2010, students from the College of Agriculture assisted the Campus Arboretum with a new garden highlighting palms and succulents.

Landscape Architecture grad students Chris Kiefer and Ken Mills designed an intriguing landscape space for the southwest side of the Gould Simpson building. This site is a challenge because of the brutal sun in summer.

Next to the building the students planted statuesque heat-loving palms, strong-formed desert agaves and yuccas, wispy native grasses, and colorful interest in all seasons. Local growers had produced many of the plants, and the Tucson Cactus & Succulent Society donated some salvaged yuccas.

Facilities Management assisted with irrigation and soil contouring. Steel elements (edges and planter boxes) from recycled/scrap steel add design flair. Undergraduate Plant Science major Chelsea Cox acted as the “landscape contractor”, arranging for delivery of plants, overseeing the installation, and recruiting the UA Horticulture Club and the College of Agriculture Ambassadors for assistance.



UNIVERSITY OF ARIZONA TREE CARE PLAN

The application process to be recognized as a Tree Campus USA required a Campus Tree Care Plan. This kind of document is important for any campus; it directs the long term care of the tree collection while it identifies particular conditions or specific requirements unique to the college or university.

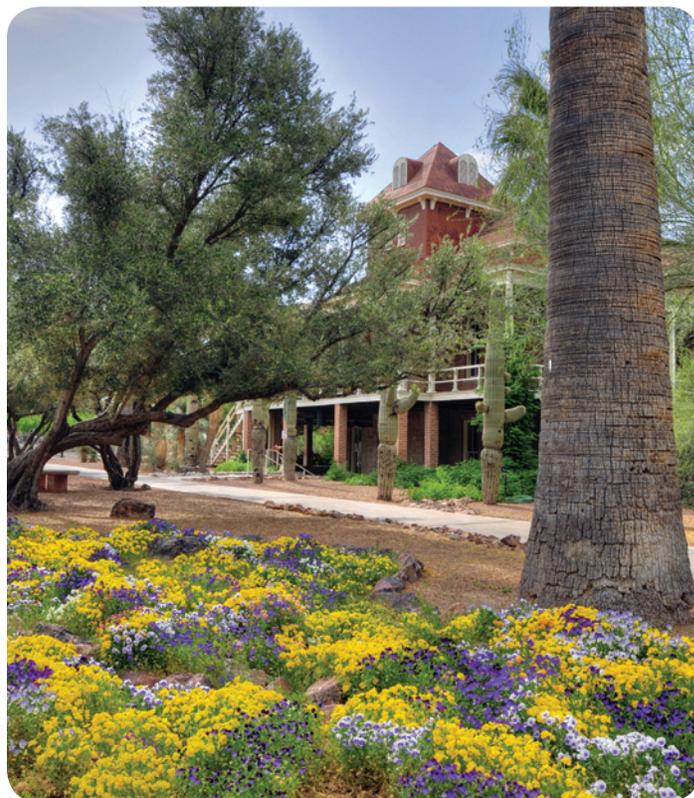
The text below is from the document which, with several attachments, can be found at <http://arboretum.arizona.edu/documents/UATreeCarePlan.pdf>

“The purpose of the UA’s Tree Care Plan is to guide the decision making process of the Campus Arboretum, Facilities Management, Planning, Design and Construction, and other campus units who may have reason to impact the health and well being of the 7000 campus trees on the University of Arizona campus in Tucson Arizona.”

In brief, the Tree Care Plan describes the following aspects of the University of Arizona ‘s tree care:

- Committees that collaborate to guide decision-making on best care for the campus trees and expansion of the tree collection as part of Tucson’s urban forest.
- Policies on planting, tree removals, and maintenance practices—including references to accepted arboriculture industry standards on proper pruning and care—as well as descriptions of storm response, irrigation, and fertilizing.
- Specific guidelines for tree protection, both as a general policy and during construction projects (with priorities for conservation of existing trees or replacement).
- Guidelines for tree damage assessment from natural causes, construction, or decline.
- Prohibited practices, from UA staff or student carelessness.
- Definitions of terms, goals and targets (including staff training), and a communications strategy for the Plan.

We hope everyone who loves the UA campus will become familiar with the Tree Care Plan. The staff at the Campus Arboretum, UA Facilities Management and UA Planning Design and Construction are committed to following its guidelines, and we welcome input from the public as we move forward into the next decade of campus tree stewardship.



WHO BENEFITS FROM AN ENHANCED CAMPUS ARBORETUM?

- Our young people—UA students enriching their lives in a peaceful shady environment.
- Visitors to southern Arizona—potential students, alumni, friends, fans, winter visitors.
- UA Alumni Association, through continual enthusiastic pride in campus appearance.
- Botanists, teachers and researchers who utilize campus plants in their work.
- All staff, faculty and campus workers.
- Grade school classes who visit the UA Campus.
- Neighbors and weekend users.
- Greater Tucson through the UA’s contribution to sustaining Tucson’s urban forest

WILDLIFE ON CAMPUS

At any season, at any time of day, there's more wildlife on campus than just the student population! From Cooper's hawks who nest in the tallest trees, to turtles and ducks that use the fishpond; from native ants, butterflies and dragonflies to lizards, rabbits, cats, finches, owls, ravens, doves, and native woodpeckers—the campus is a menagerie, if you just know where to look!



FRIENDS FUND

In the fall, we traditionally think of students returning to campus and golden leaves floating down to carpet the ground. It's a special time for the campus arboretum, as students, neighbors and community friends converge to enjoy cooler temperatures.

While we may take the arboretum for granted, it's worth remembering that this incredible collection of trees has taken decades to assemble. And its variety, health and care have been lovingly provided for by generations of supporters, including professional horticulturalists, devoted neighbors and caring citizens.

To preserve this treasure and to honor founding director Libby Davison, the Campus Arboretum board initiated the Davison Friends of the Campus Arboretum Endowment. This fund will provide a steady stream of income to ensure the arboretum continues to inspire our community for years to come.

While we have made significant progress toward the minimum \$10,000 needed for an endowment, we are still a couple thousand dollars short of our goal. You can help by showing your support with a tax-deductible gift. All amounts are welcome.

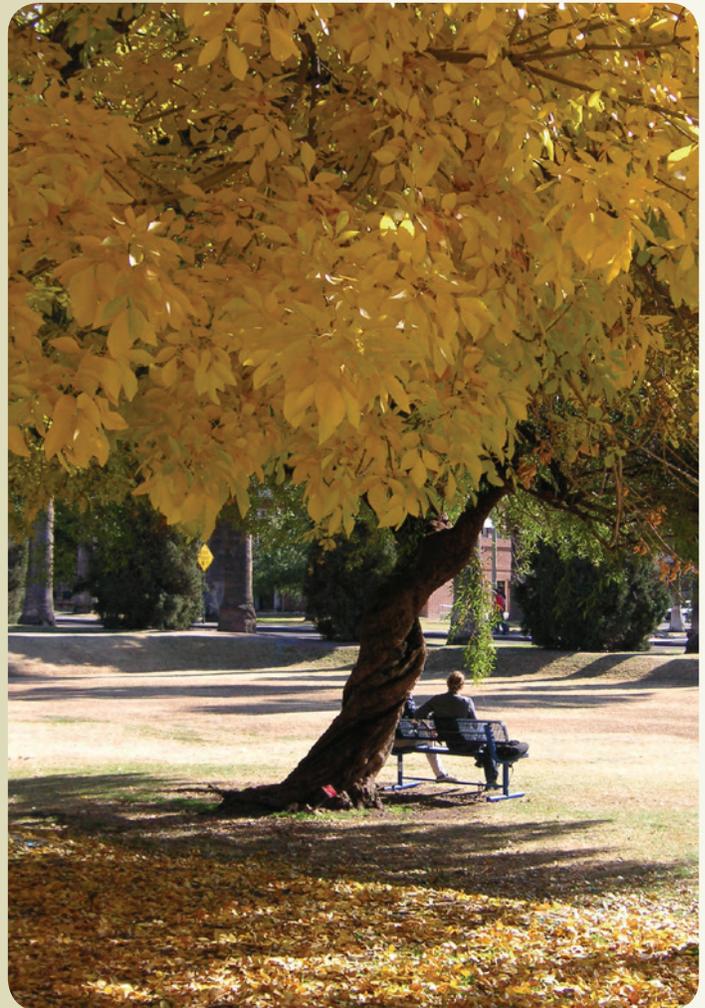
Did you know that no credit card fee will be assessed if you make your gift online? Make your contribution at: <http://arboretum.arizona.edu/FriendsFund.html>

If you would like to send your check by mail, the address is

UAF/Davison Friends of the Campus
Arboretum Endowment

UA College of Agriculture & Life Sciences
PO Box 210036

Tucson, AZ 85721 -0036



NEW SPECIES ON CAMPUS

Since Spring 2010, the following new tree and large succulent species have been added to the UA's collection. All were installed by students and staff. Thanks to Tucson residents John Eustice, Mick Reed, Merve Larson, and Gene Joseph—as well as the Tucson Cactus and Succulent Society and the Desert Legume Program—for helping us expand our collection!

<i>Fouquieria burragei</i>	<i>Fouquieria diguettii</i>	<i>Fouquieria purpussii</i>	<i>Fouquieria leonilae</i>
<i>Agathis robusta</i>	<i>Fouquieria fasciculata</i>	<i>Callitris intratropica</i>	<i>Ravenea xerophila</i>
<i>Brahea edulis</i>	<i>Bursera schlectendalii</i>	<i>Bursera filicifolia</i>	<i>Yucca brevifolia</i>



STATISTICS:

Total number of trees on the campus: over 8000

Total number of different kinds (taxa) of trees: 337

Number of taxa represented by just one or two individuals: 200 taxa

Number of taxa in the Legume family (Fabaceae): 109 taxa

Number of Certified Arborists on the Facilities Management/Grounds crew: 5



HERITAGE TREE - UA's Moon Tree - *Platanus occidentalis*

What's a 'moon tree'?

In 2002, the CNN, Associated Press, and the Christian Science Monitor began to send out the question: Where had all the Moon Trees gone? From NASA's web site: "Scattered around our planet are hundreds of creatures that have been to the Moon and back again. None of them are human. They outnumber active astronauts 3:1. And most are missing. They're trees."

What were they talking about? Nobody under the age of 30 had ever heard about the Moon Trees, and most everyone else had forgotten. Yet, it is a fascinating story about tree seeds which traveled to the moon on the Apollo 14 flight in 1971.

NASA included the seeds in astronaut Stuart Roosa's kit. He had been a smoke jumper for the US Forest Service, and was willing to pack them along. In a joint effort, NASA and the USFS wanted to compare their eventual performance (back on earth) with seeds that had not made the trip through space. Tree species which made the journey to the moon and back include redwood, loblolly pine, sycamore, sweetgum, and Douglas fir.

There is much more information about this experiment on several web sites—just "google" 'moon tree'.

After the space mission, the seeds were germinated; the ones that had gone to the moon performed as well as the controls. The young tree seedlings were given to state forestry associations, educational institutions, used as dedication trees, and sent abroad. Some are in historic sites in Washington and Philadelphia. Some are at girls' camps and city parks. Some did not survive the transplant.

The University of Arizona campus received a *Platanus occidentalis* in 1976. The seedling was about 8 feet tall at that time, and a small ceremony was held with UA officials. According to the press release, the seedling was to be planted on the southeast side of Flandrau Planetarium "as a reminder of the important role of forests in our national heritage and in our future life on Earth".

Platanus occidentalis is native to the eastern half of the US, and has varying leaf shapes, all loosely palmate or "maple" shaped. Many of the individual populations have very hairy leaves, while others are less so. In its current site next to the Flandrau Planetarium, the tree gets shade in the afternoon. Although the eastern sycamore is not a species we'd normally choose for the alkaline soils and dry heat of the southwest, it has performed fairly well.

Our native sycamore, *Platanus wrightii*, is a better choice for the southwest, although it is most at home in a riparian system. In the washes and valleys between the sky islands, they thrive through seasons of high water, but need good drainage. In town, we can use *P. wrightii* in the shadow of building, in a 'canyon' or narrow walkway, or in some situation where they're not battered by drying winds. However, they'll use all the water we can provide.

Richard Felger's book, *Trees of Sonora*, describes *Platanus wrightii* as growing in canyon bottoms or above the grasslands in north to eastern Sonora, up to altitudes of 6000 ft. This species is monoecious, with female flower clusters that hang like "balls" from the stalk. These develop into ¾ inch fruiting heads that split apart at maturity. Leaves are palm shaped, and deeply indented (more so than *P. occidentalis*) with smooth margins, but are often hairy at least on the undersides. Sycamores are known for their light colored bark which can peel off attractively - revealing green layers and patterns.

Further south and west of Tucson we can find *Platanus racemosa*, native to both Californias - Baja and Alta. This species has leaves that are more elongate, with tips that are more rounded than the other sycamores. Another distinguishing feature is that the "conks" or seed heads are sessile on the stalk.

The University of Arizona boasts three sycamore species: *P. wrightii*, *P. occidentalis*, and the hybrid *P. x acerifolia* (known as London Plane Tree). Regardless of species, Sycamores are a readily identifiable feature of riparian areas in the west. They are not known for their tolerance to arid soils or hot conditions. Nonetheless, in cooler urban areas they can brighten up a dull streetscape, casting dappled shade and showing off golden foliage in the fall.



