



37TH ANNUAL U.C. RIVERSIDE BOTANIC GARDENS

FALL GARDEN MARKET & PLANT SALE

Saturday, October 19, 2019

Friends Preview Sale: 8 am to 10 am Public Sale: 10 am to 4 pm

By Janine Almanzor

There's always special excitement in the air at our Plant Sales. Everyone loves shopping for new plants to spruce up their gardens after the summer heat, visiting with fellow gardeners, and even learning something new. Here at the Botanic Gardens that excitement begins months before the sale. Staff and volunteers have been busy propagating, pruning, watering and fertilizing a



Ceanothus 'Wheeler Canyon', California lilac Photo by Pete Veilleux, East Bay Wilds

wide variety of plants, getting them ready to be brought to their new homes. Unless you have volunteered as a "plant mover" you can't imagine the hubbub of a dozen trucks transporting thousands of plants down the hill to Alder Canyon. It's all perfectly conducted like a busy train depot. This is when we know the Plant Sale is here again! We are especially looking forward to this fall's Garden Market & Plant Sale since we have transformed our spring event into a smaller Member Appreciation Plant Sale, which will be repeated next spring. We also have a couple of new vendors that we're sure you'll be pleased with – Pollinatives and Ridgedale Orchard & Vineyard, and we're thankful for our continuing vendors listed below. Please visit all their booths; they will be happy to answer any questions and help with your selection.

Pollinatives is a new company owned by a Riverside County Master Gardener, Donald Gerber. Donald wants to promote native plants to support native wildlife in our gardens so he only sells plants that are native to California. He will also be selling seeds!

Ridgedale Orchard & Vineyard is owned by Mike Horak, one of our own docents here at the Gardens. Mike has utilized his large property to produce fruit for making jams and herbs for making teas, and he has constructed a facility for propagating plants. He'll be bringing berries, lavender and other medicinal herbs to sell as well as his jams and possibly teas.

Our returning vendors include the following:

Blossoms of Aloha – Wonderfully scented plumerias and also Hawaiian ginger

Resendiz Brothers – A variety of potted Protea species and fresh cut flowers

Rob Roy's Plants – A large selection of cacti and succulents

High Noon Creations – Creative decorative potted succulents

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Director's Report - Dr. Jodie Holt



As a lifelong student I love fall, with its promise of cooler weather, autumn colors, rustle of leaves, and smells of nature (and new school supplies!). The academic year starts in fall when students return, classes resume, and UCR teems with activity. For the UCR Botanic Gardens the new school year brings back faculty, staff, and students; the resumption of school tours; and active planning for our events including the Fall

Garden Market & Plant Sale.

UCR has recently embarked on one of the busiest construction periods in its history, bringing significant improvements for our growing campus. While it is exciting, there will be times when roadways, pathways, and parking lots are closed and unavailable. With our embedded location and limited parking, we are certain to notice the impact of construction on Gardens visitors and activities for the next few years. We are working closely with UCR's Transportation staff and CNAS Facilities staff to locate alternate parking for Gardens visitors and event participants, and hope you will be patient as we anticipate the completion of these projects.

We too have exciting new initiatives underway. With guidance from UCR's Native American Student Programs, Theresa is advancing our Native American Garden and will begin installing plants this fall. The Conservatory Team has been meeting to design the collection display, and Janine is working with UCR's Entomology faculty and an intrepid Girl Scout to plan our new California Bee Garden. Lois, Jorge, and the students have finally gotten ahead of rampant weed growth and made significant improvements to the trails and plantings in our Australia Garden. We hope you will visit and check out these and other improvements ongoing in the Gardens.

We have also made progress in engagement activities over the past few months. Along with UCR, the Botanic Gardens website has been migrated to a new, more user-friendly platform. While it now more closely resembles standard UCR websites, adding valuable brand recognition, we retain our unique identity and *Agave* image. With support from our CNAS Development team and UCR Communications, we are adding a new Botanic Gardens Memorial brochure to our portfolio, and will soon begin designing a welcome brochure that includes our Gardens map. Working with an imaging company known for its signature outdoor signage, we plan to launch an interpretive signage program in the near future.

We will soon wrap up recruitment for our new Gardens Manager. It has taken eight months to replace long-time Manager Emeritus Theresa McLemore, whom we are fortunate to have still contributing her expertise to many projects. We hope you will stay in touch, visit our website, read our eNews, and visit often to experience for yourself the advances underway in the Gardens. As always I welcome your comments, suggestions, feedback and support! Feel free to contact me at bgdirector@ucr.edu or 951-784-6962. Jodie

UCR Botanic Gardens Staff

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Wild Birds Unlimited – Supplies for attracting birds to your garden and much more

Hula Tropicals – *Tillandsia*, *Hoya*, and *Bromeliad* species as well as other tropical plants

PIEP – Beautiful house and patio plants

Australian Outback Plants – A large selection of shrubs and trees native to Australia that are climate appropriate for our inland gardens

Orchids by Zeny – A variety of popular and easy to grow orchids as well some specialty orchids and *Clivia* species

UCCE Master Gardener Grow Lab – A large variety of vegetables, flowers, and herbs that they nurtured from seed.

On the Botanic Gardens side, we will have cacti, succulents, shrubs, herbaceous plants, trees, vines, house and patio plants and an area with plants that are native to California. Some of our most popular sellers are the large selection of sages we have. Many of the *Salvia x jamensis* were hybridized by the former Director of the Gardens, Dr. Giles Waines. They are easy to grow, don't require much water, are full of color most of the year, and the hummingbirds love them. Another plant to bring

to your attention is the propeller plant, or Crassula falcata. This South African succulent may not be in bloom in October but don't overlook it. The plant is very interesting with angled, opposite leaves that look like propellers. All summer these plants were radiant with clusters of bright red flowers that were striking against the light green succulent leaves. It will bloom best when the winter is cool but not freezing.



Crassula falcata, propeller plant



Buddleia marrubifolia, woolly butterfly bush

We will have a large selection of butterfly bushes which really live up to their name. Buddleia marrubifolia is commonly known as woolly butterfly bush because the light gray-green leaves look very woolly. They make a

beautiful backdrop to the bright orange flowers. It is a drought tolerant, rounded shrub 5-6 feet high and wide and does very well during our scorching summers.



Buddleia x weyeriana 'Bicolor', butterfly bush

Other *Buddleia* species for sale will be *B. salviifolia*, *B. asiatica*, *B. davidii*, and *B. x weyeriana* 'Bicolor'. We also have several *Ceanothus* available, commonly known as California lilacs or wild lilacs. These are popular sellers so get here early if you want to purchase one.

Ceanothus 'Wheeler Canyon' (photo on page 1) is a dense 6 feet tall by about 8 feet wide shrub native to California. It has showy, rich deep blue-violet flowers that attract bees and butterflies.

Ceanothus 'Concha' is known as being a very reliable cultivar because it can tolerate drought as well as summer water and it isn't picky about the soil type. It has deep blue flowers and can reach to 8 feet tall by about 10 feet wide.

Ceanothus 'Ray Hartman' is a taller cultivar reaching to about 20 feet. It can be considered an evergreen shrub or



Ceanothus 'Concha', California lilac

small tree and has medium blue flowers and dark green leaves. It can tolerate either heavy clay or sandy soils and our inland heat. Unlike some California natives, *Ceanothus* can take periodic summer irrigation. A plant list will be available on our website one to two weeks prior to the Plant Sale.

Spotlight On....Our Students

By Theresa McLemore



Luis De La Cruz

When shrubs need shaping, weeds need trimming, and plants need watering our student staff roll up their sleeves! Our student staff play a key role in all aspects of maintenance and care of the Botanic Gardens. While they are here

performing various tasks they also represent the Gardens and the entire UCR community, acting as garden stewards, guiding the public and answering questions. We are very fortunate to have eight students on staff, four of whom graduated this spring. Carson Brown, Luis De La Cruz, Ryan Klachko, and Nathan Weik will be greatly missed. Each one of them has been an asset to the Gardens. They all have unique backgrounds and exemplify the caliber of our student population here at UCR. I was fortunate to have spent some time with Luis De La Cruz before he leaves us. We had a pleasant conversation that went as follows.

T: Why did you choose UCR?

L: The student population was diverse. They have a great Spanish Literature program, and that is my major. The campus is also somewhat close to home.

T: How did you find out about the UCRBG?

L: I came here on an AP Bio field trip when I was a junior in high school.

T: What was your favorite thing to do here at the UCRBG?

L: Other than the periodic "Shindigs" or BBQ, I really enjoy trimming shrubs, trees, vines and hedges. The results were immediate and it made the BG look well-tended.

T: That brings nicknames to mind, do you have one?

L: Yes, Picasso. (A name given for his artistic ability in shaping plants)

T: Do you have a favorite or dreaded plant?

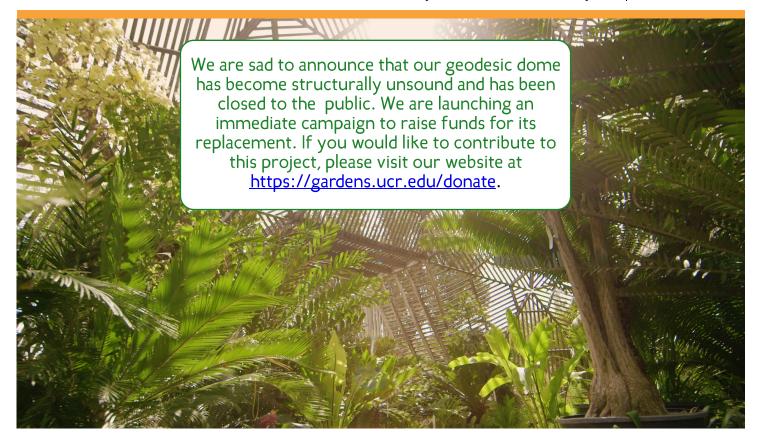
L: Weeds, weeds, and oh yeah weeds.

T: Do you have an area in the BG that you enjoy most?

L: The Ficus Grove is my favorite. It's always cool there in the summer, and it feels as though you are on another continent. It gives you the feeling that there is something much bigger than yourself.

T: As you move on what do you feel you will take with you?

L: Friendships. I have developed friendships with staff members and other students that have influenced me in positive ways, like a family away from home. I will also miss working at the Botanic Gardens. Where else can you work in an environment with beauty all around. The BG will always be a part of me.



Twilight Tours 2019: Terrific Turnout!

By Georgia Renne

Twilight Tours on Saturday evenings, July 13 and August 10, continued the popular UCR Botanic Gardens summer tradition. For the July event eight resilient docents toured 61 brave adults and children throughout the shaded gardens in the hot 90-degree weather. On the August Saturday evening at 6:00 pm it was a cool 79 degrees with eight docents ready for the 98 adults and children who began arriving early, many of whom had not made reservations. Fortunately we accommodated all! Janine Almanzor, Curator, stated that this night's attendance was the largest she had seen in her 11 years of Twilight Tours.

All visitors on both evenings shared the unique experience of being in the Gardens as the sun sets and darkness comes, noting the special quiet and calmness that arrives. Even though the sun was setting, western fence lizards and granite



Enjoying refreshments under the moon

spiny lizards were easily spotted in the warmest areas. In the Butterfly Garden floating above the blooming lantana, butterfly bush, and sage, we saw monarchs and cabbage whites. One teenager even spotted several monarch caterpillars on milkweed the and pointed them out to the docent and group.



Bobcat photo by Lee Reeder at the UCRBG

It was almost totally dark peering in the Turtle Pond, but we could see a couple of red-eared slider turtle faces peeking up at us. Several cottontail rabbits delighted us scurrying to safe places for the night. A kingsnake was spotted by one of the groups. One adventurous tour group climbed to Bobcat Rock and surprisingly spotted two adult bobcats with one juvenile, a thrilling treat. Unique to all of us was seeing the huge growing fruit of the California buckeye trees. All enjoyed seeing the blooming iridescent pink crepe myrtles along with the special Rose Gardens, still beautiful in the dog days of summer thanks to the many Gardens volunteers. When finished with their tours, visitors enjoyed snacks of veggies, dip, crackers, cheese, grapes, and cookies with cold lemonade and water along with shared stories sitting together in the darkening Gardens. As if on cue for the final act, we then saw the tiny California leaf nosed bats fly high into the night above the trees looking for their nightly insect dinner.



STATE OF THE GARDENS

By Jodie Holt

We wrapped up our busy academic year in the Gardens with our June Friends Annual Meeting, where members enjoyed wine, appetizers, and desserts and heard the State of the Gardens address. This article is a brief summary of my address including our budget, accomplishments, and goals for the coming year.

Vision and Mission

The UCR Botanic Gardens is UCR's living museum, and all our activities focus on advancing our mission of serving as a nature oasis and focal point for campus and community engagement in the science of nature, gardens, and conservation. We strive to create a sense of place at UCR where our visitors experience nature, learn science, and help protect our natural world.

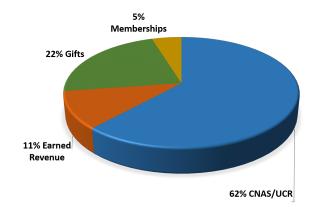
2018-2019 Accomplishments

Administration and Management

We have a small but formidable staff—five full-time, two part-time, and ~nine student workers. Theresa McLemore, our long-time Gardens Manager, retired in December and we have been actively recruiting her replacement since then. During the past eight months Janine has served double-duty as both Curator and Interim Manager, and our Nursery Technicians Lois Whyde and Jorge Fregoso have taken on additional responsibility to cover all areas of garden and facility maintenance. I am pleased to report that since the June meeting we have successfully completed recruitment and our new manager will begin his post in September.

Without the dedication of dozens of volunteers who donate thousands of hours to all areas of work, many of our activities would not be possible. Our Friends members, UCR's oldest support group, provide revenue through annual dues, and we gratefully acknowledge many generous donors to the Gardens. Over our history many Friends have been active volunteers as well, and we cherish all those who contribute their time, talent, and/or treasure for the betterment of the UCR Botanic Gardens.

UCRBG Income 2018-19

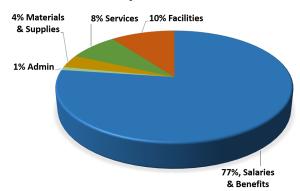


Budget overview

The UCRBG income stream is comprised of CNAS funds (some salaries and benefits), earned revenue (plant sales, Primavera, conference room rentals, gatehouse donations, and events), gifts and endowment payouts, and memberships; total income was \$535,655 for 2018-19. Our endowments total just over \$2.6 million, down 2% from this time last year (but up 6% from two years ago). As in the past two years, we maintain a corpus of non-recurring, non-interest-earning gift funds that are being used to augment staffing, conduct deferred maintenance, and initiate new projects.

Expenses are categorized into salaries and benefits (~77%); facilities (10%); gardens, horticulture, and programming (12%); and administration (1%). Our expenses for 2018-19 totaled ~\$718,000, a deficit of \$182,337 that was made up by gift funds carried forward. We are fortunate that our administrative expenses are lower than at peer institutions due to support we receive from UCR. We enjoy significant financial, administrative, development, and facilities support from CNAS (College of Natural & Agricultural Sciences) as well as other UCR support and service units such as Communications and IT.

UCRBG Expenses 2018-19



Development and fundraising

Our biggest development initiative this year was revamping our Friends membership program under the guidance of our CNAS Development team and the UCR Foundation. Comparable to other botanic gardens, we now offer a tiered membership structure with benefits commensurate with membership level. We also rolled out a beautiful new membership brochure produced by UCR Communications' design team, and new membership cards are in the works. Accompanying this updated program rollout, we held our first ever Member Appreciation Spring Plant Sale. Because the event was smaller than our large Garden Market & Plant Sales we held it in the upper nursery area of the Gardens, which also greatly reduced the time, labor, and expense involved in moving thousands of plants to Alder Canyon.

Similar to 2018 we enjoyed tremendous support and assistance from our Development team in offering Primavera in the

Gardens, our signature fundraiser, now in its 21st year. Because of the cool, drizzly weather the event was smaller and more intimate than the prior year, and guests and vendors thoroughly enjoyed visiting while crowded under protective canopies. Nevertheless, this special event raised significant funding in support of the Gardens and our initiatives.

Collection and conservation

Our staff and volunteers continue to update our collection database, add new plant labels, and add plants to our interactive GIS app. Janine is also working on new plant acquisitions for our gardens, new projects, and propagation for plant sales. We are fortunate to have Theresa, Manager Emeritus, working with us on a recalled part-time basis to lead the planning and installation of



Girl Scout, Melissa Wade with her bee box

our new Conservatory and new Native American Plants Garden. Janine is also starting work on our new California Bee Garden with help from Entomology faculty and an eager Girl Scout volunteer. Janine also took a University Extension GIS course and produced our first interactive Story Map of the Gardens, which is now featured on our website.

Horticulture and facilities

Our big facilities improvement this year was the renovation of the restrooms that are part of our entrance gatehouse. Working with an outside contractor, UCR funded the conversion of one side into an ADA accessible restroom, while BG and CNAS funded upgrades to the other restroom as well as new doors, fixtures, exterior lighting, and painting for both restrooms. We also added a new water fountain with bottle filling station, which are very popular with our visitors.

Major renovation and trail improvement has been done in the Baja California and Australia Gardens, and tree pruning and slash cleanup continues in the Subtropical Fruit Orchard. Improvement of the geographic gardens along the western slope of the Gardens will continue to be a focus in the coming year.

Education and research

Volunteer docents led guided tours for 86 groups in 2018-19, totaling 206 tours and 3078 visitors. These tours included dozens of K-12 school groups and several adult groups. Janine organized another docent training class early this year and we welcomed many new docents to the program, which will help us keep up with demand for educational tours. Numerous groups signed up for self-guided tours during the year, as well. The Gardens hosted many classes and labs from UCR and RCC

and we will continue to encourage teachers to sign in so we can track their use of the Gardens in teaching. Over 35 UCR research projects were conducted in part in the Gardens, including many student-run projects that focus on plants, hummingbirds, insects, climate, and earth sciences.

Engagement

Gardens events are very popular and sell out quickly; this year we held several Bird Walk & Breakfast events, two Twilight Tours, and another successful Rose Pruning Workshop. Art in the Gardens brought in over 900 visitors, a significant increase from past years. Once again we held our Fall Garden Market & Plant Sale, where we sold plants propagated from our collection as well as BG-branded items including tee shirts, coffee mugs, tote bags, water bottles, ball caps, and garden kneelers, all of which display our beautiful *Agave* image and name. We continue to promote the Gardens to campus and the community in other ways including our revamped website, Facebook page, newly formatted Newsletter, and various media outlets.

Volunteers are the backbone of our workforce; we currently have 279 current volunteers who reported over 5,160 hours worked in 2018-19. About a quarter of our volunteers are regular workers, while others focus on special events or activities. We hosted a volunteer appreciation luncheon in June, with food, raffle prizes, and a small gift for each attendee, which is just a small token of our great appreciation for our wonderful volunteers.

Challenges, Opportunities and the Future

The UCRBG is not a standard academic department and has unique and challenging issues. With some salaries but no operating or facilities support from UCR, we continue to work towards achieving a sustainable budget by evaluating and reducing costs, considering new opportunities to raise revenue, and partnering with UCR's service units for greater efficiency and synergy in operations. We are also engaged in discussions with campus leadership regarding bigger unfunded challenges including the need for more parking, safety and security, and coping with aging roadways, retaining walls, and plumbing systems.

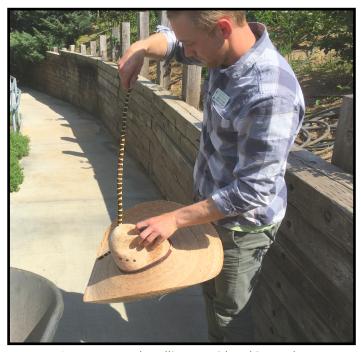
As a public university garden we also enjoy unique opportunities to serve as a nature oasis for the campus and community, enhance UCR's research and teaching enterprise, and promote UCR to the wider community. We continue to work with our partners in Development to seek creative ways to enhance fundraising so that funding does not impede our accomplishing these and other goals. The Gardens has a dedicated, talented, and energetic staff, including a wonderful group of students, who share our vision and aspirations. We hope you will continue to support, visit, and engage with the UCR Botanic Gardens as we embark on another exciting year together.

Wildlife of the Gardens

The California Kingsnake

By Michele Felix-Derbarmdiker

Imagine a being with zero fear of a rattlesnake bite. Further imagine the being having dazzling camouflage and possessing the strength of someone twice its size. This would make for a formidable opponent. This is no great warrior of folktales but a living breathing creature. This creature of wonder is the California kingsnake (*Lampropeltis calforniae*).



Carson Brown handling a resident kingsnake

Habitat/Feeding

The California kingsnake is a snake endemic to the western United States and Northern Mexico. Throughout its range it will reside in a variety of habitat types, primarily those found below 7,000 ft. While this species is considered to be primarily diurnal, it will shift to nocturnal habits if temperatures are consistently hot. Weather changes can also cause this species to go into brumation (the cold-blooded animal version of hibernation).

They are opportunistic hunters, consuming lizards, birds, eggs, frogs, and even other snakes. This is where they have earned the name of kingsnake. They have the unique ability to kill and consume a variety snake species including rattlesnakes. Remarkably, this species is immune to rattlesnake venom. They do not possess venom themselves but kill through constriction. A study out of the University of Louisiana found that the kingsnake produces the strongest squeeze in relation to body size of any snake in the world. Further studies are being conducted on muscle physiology, in the hopes of revealing more of the king's secrets.

Breeding

Courtship in this species begins in early Spring, with males fighting intense battles over the opportunity to mate with a female. Eggs are laid between the months of May and August, with hatching occurring 40-65 days after laying. California kingsnakes develop completely inside their eggs rather than giving birth to live young. There is little parental investment and young are born ready to hunt and care for themselves.

Identification

The California kingsnake is diverse but all variations are smooth scaled, 2-3.5 ft. long and shiny in appearance. Colors and patterns are typically a combination of black, brown, yellow or white. It is believed that about 30 different naturally occurring patterns exist. The most common pattern is brown with alternating bands of yellow or white. The docile nature of this snake has led it to be popular with the pet trade and breeders have created even more combinations, including albino.

Threats

This species is not currently considered threatened or endangered. The two biggest threats to this species are the pet trade and fearful humans. As with most wild animals that become part of the pet trade, many are abandoned when people become overwhelmed by their care. The release of pets into the wild population can introduce disease into local habitats.

Humans often kill this snake, believing it to be dangerous. In reality, humans have little to fear. It is typically very docile and possesses no venom. If threatened, some will coil and rattle their tail to imitate a rattlesnake. As with other snakes, be respectful of their space and they will more than likely move along.

Michele is a UCR graduate who worked as a field biologist for 6 years throughout Riverside County and is currently a naturalist for Riverside-Corona Resource Conservation District.



What to See in the Gardens

By Lois Whyde

Summertime is an exciting time here in the Gardens, not only because of the challenges of triple digit heat but because it is the season of getting big projects done. Our student employees are more available during their summer break, able to put in more hours, and in turn we can complete the projects that we cannot get done during the school year. The students have been helping us remove debris, prune, weed and in general, clean out many areas of the Gardens. What I am most proud of and excited to report is this summer's biggest project, what we call, 'the Road to Australia.'



Located at the very highest, southwestern edge of our 40 acres, the Australian section has always been a challenge to get to. Shrubs, undergrowth and weed trees all contribute to clogging the pathways and main roadway. An additional challenge in that area is having the right equipment to remove the debris. Currently we only have one vehicle that will climb those hills and it can carry only a small load. (We are working to acquire a rugged, four-wheel drive, all-terrain vehicle with towing capacity.)

One of those challenges has been solved by creating a road

wide enough to maneuver safely over the steep hillside. Led by my compadre Jorge Fregoso, a team of two students have been pruning, clearing, digging and excavating on a daily basis. Jorge's goal is to remove at least one unwanted weed tree a day. "I just

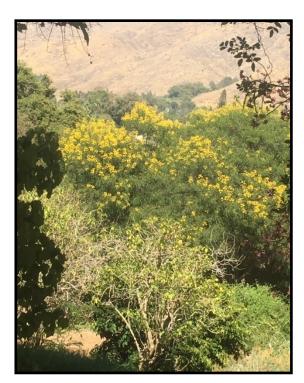


Jorge Fregoso

want a place for the people to walk safely, up to Australia," Jorge said, "so they can better see the collection and all the views along the way." The process is long, hard and grueling, but the results will be fantastic! The 6-8-foot-wide road can easily be seen crisscrossing the hillside. Accessible from Bobcat Rock just above Oak Woodland, the road to Australia leads one all the way up the backside of the hill, ending at the highest, westernmost point in the Gardens.

In the past year we have planted several new beds with Australian natives, donated by Australian Outback, a Garden Market vendor. Those areas are now more accessible due to this newest project. Along the road there are several specimen plants of the collection and one incredible specimen, a bottle tree, *Brachychiton rupestris*, which will be featured in a future issue.

Once the project is completed, more than 70 weed trees will have been removed. This will create additional hillsides that we will be able to plant. The road will offer us the opportunity to remove debris more quickly and more safely, so that we can continue to work in Australia. Now that it is cooler, we hope you will take a leisurely stroll on the Road to Australia, to the "Land Down Under," and revel in the beauty of the hillside, the scenic view of the whole Riverside area and the most peaceful spot in the Gardens.



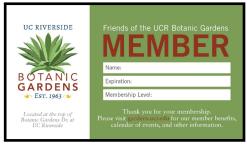
One of the more spectacular displays of color in the Garden every fall, is the crown of gold tree, *Cassia excelsa*, which was planted around 1965. The 54 year-old tree is located in the Ficus grove area, but can be seen from almost any part of the Gardens.

In The Works

By Botanic Gardens Staff

During the summer slowdown our staff and volunteers have been very busy working on a variety of projects to improve the Gardens and expand our impact. Here are a few of the projects, initiatives, and activities underway or completed over the past few months.

- In spite of the summer heat, major cleanup has been accomplished in the Subtropical Fruit Orchard, Australia, and Baja Gardens. The staff have opened up and widened some of the trails in Australia, as well. The views from this area are fantastic!
- With the help of numerous volunteers, progress is being made towards installing the new Native American Plants Garden, Conservatory displays, and California Bee Garden.
- ► The Herb Garden is slowly being inventoried and cleaned up with the assistance of dedicated volunteers. Dead plants have been replaced and much pruning, weeding, mulching and labeling has been accomplished.
- Our Curator and Director have been busy giving talks about the UCR Botanic Gardens to campus and community groups, and both were featured on a Spectrum News InFocus show about Riverside that toured and highlighted the Gardens. See the link on our website to watch the segment.
- Working with UCR Communications we have designed new Friends membership cards that will replace our current cards over the next few months.
- Our Gardens website was migrated to a new platform along with all other UCR websites; the new sites are rich with content and very user-friendly.
- After taking a GIS class from University Extension, Curator Janine produced our first interactive Story Map that highlights the North American Desert Garden. This app is an abbreviated digital version of the Deserts of the Southwest booklet originally written by April Gacsi and Steve Morgan, and can be accessed using a smart phone or tablet. We hope to produce more Story Maps of our gardens, which will greatly enhance the educational value of the visitor experience. View it here https://arcg.is/1n9WGa.
- We are sad to be losing several of our student workers this year, who are graduating and moving on from UCR. We wish the best for Carson Brown, Ryan Klachko, Luis De La Cruz, and Nathan Weik in their future endeavors. Along with our continuing students, we will welcome four new student workers as the fall quarter starts.



New Friends membership cards



Deserts of the Southwest Story Map



Support the UCR Botanic Gardens

To donate online

Donations may be made with a secure credit card payment process by searching

*Botanic Gardens** at https://myadv.ucr.edu

Pushing the Limits in Your Garden

By Robin Salter, Manager Emeritus



Delonix regia, royal poinciana

As an avid plant collector in semi-good standing with Mother Nature, I've always enjoyed pushing the envelope as far as what flowering treasures can grow in my Western Sunset Plant Hardiness Zone 19. I'm certain Mother Nature has taken great joy in my attempts to push this horticultural envelope over the years and has even occasionally allowed me to succeed with my repertoire (*Brugmansia sanguinea*, *Rhododendron javanicum*, *Stephanotis floribunda*, etc.) of grand planting attempts.

Like most gardening hobbyists, I too suffer from a perpetual case of zone envy, never completely satisfied with the Inland Empire's Mediterranean climate. I find myself daydreaming of Southern California's Coastal Zone 24 and all its subtropical plant possibilities. The fact that I'm constantly mailed nursery catalogs with their enticing eye-candy selections only encourages my nefarious (guilt free) tropical plant addiction. We fall prey to these catalogs; in a horticultural trance we justify our selections because of cleverly marketed zone envy words such as borderline, protected location, or that classic phrase, "with the proper microclimate pocket it should be marginally hardy."

However, in rare instances aided by luck, patience, or just discovering that right "microclimate pocket," a horticultural semi-miracle can occur. It did for me with the spectacular *Delonix regia*, the royal poinciana tree, considered to be one of the most beautiful trees in the world. This flowering tree in the bean family Fabaceae, subfamily Caesalpinioideae, has fern-like leaves, a flamboyant display of flowers and is similar in appearance to *Albizia julibrissin* (silk tree or mimosa), except with a grander panache of large (3"- 4") brilliant scarlet-orange crepe-paper like flowers. Each flower has four spreading petals and a larger fifth petal (the banner) which has streaks of yellow and white. Native to Madagascar's dry deciduous forests it has been introduced into tropical and sub-tropical regions worldwide. In many tropical parts of the world it's grown as an ornamental tree and in English it's also known as flame tree, flamboyant or peacock tree.

In 1999 I received a small amount of Delonix seeds from a plant collector located in the La Jolla area of San Diego. I turned this

precious booty over to the UCR Botanic Gardens' late great plant propagator Bill Gary. The seeds were scarified, soaked in warm water for 24 hours, planted in a fast draining soilless germination medium and then placed in the warmth and safety of the greenhouse. Almost 90% of the seeds germinated and the seedlings grew very quickly to almost 10" tall the first few months. These original plants were repotted and staked several more times (ending up in 2-gallon containers) and tucked away in the greenhouse for almost two years before finally being moved to harden off in the lath house in individual 5-gallon containers for one more year.

In October of 2002, I planted three of these plants in my garden in Riverside in different areas of the garden. Within six months one tree succumbed to the wrath of the garden's prowling night creatures and another to a cold snap that occurred over several winter nights in a row. The last surviving *Delonix* was planted among a



taller grouping of trees and plants in a protected, slightly banked area below a tall cinder block wall. This area has well-draining soil that was enriched with organic matter at the time of planting and receives slightly dry to medium watering from a Rain Bird Micro Spray Drip system. It's screened from the cold winter winds from the northeast and is at the highest (1,500') location on the property; it also receives an added layer of cold windbreak protection from the neighbor's row of *Eucalyptus* trees.

The *Delonix* has thrived in the comfort of this location growing 35-40 feet tall, and its branches and feathery laced leaves are now intermixed within the canopy of the other surrounding trees. In 2017 it bloomed (lightly) for the first time, about 18 years!! However, last year it lived up to its flamboyant flame name with a display of hundreds of vibrant red flowers as well as several flattened 18" bean-like seed pods. It typically drops its foliage in late winter or early spring and will start flowering in May or June and continue into early October.

Zone envy propagates imagination, pushes one's green thumb limits and encourages gardeners to keep hunting for exotic or unusual plants that will transform their landscape. Perhaps such discoveries will create magical focal points providing continued seasonal pleasures. Good things/flowers do come to gardeners that wait but hopefully your precious floral treasures will reward you within a more reasonable timeframe.

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UCRBG Calendar of Events

October 8 Volunteer Orientation, Meeting Room, 9:00 am

October 19 Fall Garden Market & Plant Sale

8:00 - 10:00 am Members Sale, 10:00 am - 4:00 pm Public Sale

October 20 Gardens closed

November 2 Art in the Garden 10:00 am - 3:00 pm

November 12 Volunteer Orientation, Meeting Room, 9:00 am

December 10 Volunteer Orientation, Meeting Room, 9:00 am

Please note: The UCRBG will have late openings (1:00 pm) on the 1st and 3rd Friday of each month. Please check our website for holiday closure dates.