



# UCRBG Newsletter

## SAVE THE GEODESIC DOME!

By Jodie Holt and Kurt Gunther

One of the most iconic and beloved features of the UCR Botanic Gardens is our geodesic dome, a unique lath house that contains a special collection of shade-loving prehistoric cycads, ferns, and other subtropical plants. The dome is regularly covered by fast-growing flowering vines along the sides and top. One of these, *Aristolochia gigantea*, Brazilian Dutchman's pipe, produces striking giant flowers that hang pendant far overhead inside the dome (see photo on page 3). Unfortunately, growing plants collect moisture and organic matter; these, along with soil along the base of the dome have slowly weakened and undermined the lath comprising the dome panels during the more than three decades since its construction.



Out of concern for the safety of our visitors who regularly tour, rest, or take photos inside the dome, we made the decision to close it to the public and figure out how to repair this one-of-a-kind building. The reaction from our visitors, campus, and the community was immediate and the "Save the Geodesic Dome in the UCR Botanic Gardens" fundraising campaign was launched. In a wonderful twist, a visitor to Art in the Gardens saw our "Save the Dome" poster and told us that she lived next door to Kurt Gunther, the younger brother of Robert Gunther who donated the dome. Kurt worked with Robert in the early years of Monterey Domes, Inc. He helped engineer the dome for mass production. The connection was quickly made and we have now partnered with him to save the dome.

The original construction and dedication of the dome are intimately linked to the Gunther family of Riverside. Constructed in the mid-1980s, the dome was dedicated in 1986 in memory of Dr. Francis A. Gunther, distinguished research scientist, Professor of Entomology, and chemist at UC Riverside. During his career at UCR Dr. Gunther was in demand around the world for his knowledge of pesticides and the analytical techniques and methodologies required for their study. He distinguished himself early in his career when for the US government he re-engineered a sample of DDT confiscated from the Germans during WWII that was successfully used to control lice in the German military. For his scientific excellence he received the prestigious Wiley Award in 1959, the Citrograph Research Award in 1968, and many others. Dr. Gunther was also instrumental in planning the establishment of the US Environmental Protection Agency (EPA), and his work laid the groundwork for much of today's progress in protecting the environment from pesticides. At UCR he taught graduate courses in pesticide chemistry for 22 years, and during his career he trained 87 postdoctoral research fellows from 26 countries.

Monterey Domes, Inc., the company that manufactured and donated the geodesic dome lath house at the UCR Botanic Gardens, was started in the

*Continued on page 3*

## In This Issue

- P. 2 Director's Report
- P. 4 Spotlight on Miguel Estrada
- P. 5 Art in the Gardens
- P. 6 Butterfly Corner - Acmon Blue
- P. 7 Member Update/Plant Sale
- P. 8 Wildlife of the Gardens - Cooper's Hawk
- P. 9 What to See
- P. 10 In the Works

## Director's Report - Dr. Jodie Holt



The idea for a botanic garden at the new UCR campus was conceived in 1954; it became a reality in 1963 with the establishment of the UCR Botanic Gardens. The ensuing years saw the Gardens grow alongside the campus from a relatively open, Coastal Sage Scrub plant community to the rich, diverse plantings we see today. Early directors paved the road, constructed buildings and bridges over the arroyos, and installed plantings that focused on research and teaching needs of the faculty. The founding of the Friends of the UCR Botanic Gardens in 1980 by staunch supporters enabled the launch of activities including plant sales and Primavera in the Gardens.

As UCR grows so does our alumni and retiree population, and I have been delighted to discover that many of these individuals have strong connections to the Gardens. While hiking in the Sierra this summer I encountered a family who saw my UCRBG tee shirt and said “our alma mater!” At Art in the Gardens this month I met an alumni of the 1970s (yes, he remembers UCR’s football team!) whose father, mother, and sister had worked at UCR. We also enjoy close ties with some of the founders of the Friends, who remain strong supporters, members, and volunteers. Nearly every visitor to the Gardens has a story of connection that brought him or her back, often accompanied by family.

One prominent draw for our visitors is the beloved geodesic dome, built in the 1980s and dedicated to Dr. Francis Gunther, Professor of Entomology. Like the Gardens, the dome is an iconic destination for many on campus and in the community. The collection of prehistoric cycads, ferns and other exotic plants it houses create a cool, shady location for rest, reflection, and photography. Families with small children often linger on the dedicated benches inside the dome.

Unfortunately, plants growing on structures eventually undermine their integrity, and the wood lath dome has suffered this fate. Due to its need for repair or replacement and potential risk to those inside, the dome was recently closed to the public, to the disappointment of many. We subsequently created a new “Save the Geodesic Dome in the UCR Botanic Gardens Fund” (<https://myadv.ucr.edu/CNAS/Dome>) that is already receiving contributions and will be the focus of a fall mini campaign. We are working with the Gunther family, campus facilities, and outside companies that build domes to determine the best and most rapid way forward.

As you will read in this issue, by spring there will be many new things to see in the Gardens, including progress on reopening the dome. Please stay in touch, visit our website, read our eNews, and visit often. I welcome your comments, suggestions, feedback and support! Please feel free to contact me at [bgdirector@ucr.edu](mailto:bgdirector@ucr.edu) or 951-784-6962.

Jodie

### UCR Botanic Gardens Staff

Jodie Holt, Director  
 Janine Almanzor, Curator/Education Coordinator  
 Miguel Estrada, Manager  
 Pam Ferre, Administrative Assistant  
 Jorge Fregoso, Nursery Technician  
 Pam Roose, Nursery Technician  
 Jarred Timme, Nursery Technician  
 Lois Whyde, Nursery Technician  
 Theresa McLemore, Special Projects  
 Christian Valdez, Kristine M. Scarano Intern  
 Kenneth Almero, Student Worker  
 Hector Barahona Lopez, Student Worker  
 Jasmine Eastland, Student Worker  
 Enrique Felix, Student Worker  
 Chuk Nnadi, Student Worker  
 Abraham Ortiz, Student Worker  
 Koby Park, Student Worker  
 Michelle Yi, Student Worker

### College of Natural & Agricultural Sciences

Kathryn Uhrich, Dean  
 Tim Paine, Div. Dean for Agriculture & Natural Resources  
 Dounia Sadeghi, Assistant Dean for Development  
 Chelsea Valdez, Human Resources  
 Deborah McWilliams, Physical Planning Liaison  
 Joann D. Young, Director of Communications

### BEES Administrative Unit Support Staff

Deborah Terao, Financial & Administrative Officer  
 Abraham Juliot, Receiving/Web Assistant  
 Amber Rhemrev, Financial Analyst/UCRBG Head Cashier  
 Frank Figueroa, Financial Services Supervisor  
 Michelle Peterson, Contract & Grants Analyst  
 Carlos Moran, Travel & Purchasing Assistant  
 RC Sutton, Financial Operations Manager

### Editors

Jodie Holt, Director  
 Janine Almanzor, Curator/Education Coordinator  
 Pam Ferre, Administrative Assistant  
 The UCR Botanic Gardens Newsletter is a quarterly magazine published by the UCRBG staff, 900 University Avenue, Riverside, CA 92521.

### Contact Information

Mailing Address: UCR Botanic Gardens, 900 University Avenue, Riverside, CA 92521  
 Physical Address: Schneider House, 4391 Picacho Drive, Riverside, CA 92507  
 Phone: 951-784-6962 Email: [ucrbg@ucr.edu](mailto:ucrbg@ucr.edu)  
 Website: <https://gardens.ucr.edu>





continued from page 1



Brazilian Dutchman's pipe, *Aristolochia gigantea*, growing on the dome

mid-1970s by Robert Reeves Gunther, third son of Dr. Francis Gunther. Bob, as he was called by his family and friends, started a predecessor dome company in Santa Cruz, California named Redwood Domes. Redwood Domes manufactured geodesic dome greenhouses from redwood that were marketed through mail-order concepts and techniques. Bob invented the steel hub that revolutionized and simplified the erection of geodesic domes, a brilliant design that was eventually patented. The steel hub, in combination with steel nuts and bolts, connected the supporting struts at the apex of triangles. Color-coding on the hub's steel flanges and on the ends of 2 x 4 or 2 x 6 struts made the dome easy to assemble, much akin to the old Erector Sets<sup>®</sup>, metal toy construction sets popular with children in the 1910s and beyond.

Kurt, the fourth son of Dr. Gunther, agreed to work with Bob in 1977 to start the manufacturing of owner-builder geodesic dome home kits. Kurt calculated the geodesic engineering that was used by Monterey Domes' structural engineers and designed all the proprietary manufacturing processes and procedures for the domes. He also designed and furthered the computerized optimization plans for manufacturing components, based on the well-known concept of bin-packing theory and using a fairly new programming language at that time, BASIC, aided by faculty in UCR's Department of Statistics.

Geodesic domes were the brainchild of R. Buckminster Fuller (1895-1983), a pioneering thinker and brilliant inventor of the 20th century whose mission was to solve global problems for a more sustainable planet for all of humanity (<https://bfi.org>). Bob Gunther became friends with Buckminster Fuller, who subsequently served on the Board of Directors of Monterey Domes, Inc. There are many base designs of geodesic structures, which are not limited to spherical shapes. These include elliptical icosahedrons, octahedrons, elliptical

octahedrons, plus some others that are really strange.

According to Kurt, the dome at the UCR Botanic Gardens is based on a 3-frequency icosahedron class 1 geodesic sphere, as discovered by R. Buckminster Fuller. Fuller subdivided each icosahedra face into smaller triangles. Three subdivisions along each edge make a 3-frequency panel, which is good for 20 to 45-foot diameter domes. The dome in the Gardens is 45 feet in diameter with struts approximately 9 feet long. In our case the higher frequency of the subdivisions produces a more rounded shape to the dome. The chord factors that were used in determining strut lengths and angles of the UCRBG dome were from a computer generated readout under a NASA sponsored research grant, "Advanced Structural Design Concepts for Future Space Missions," Final Report, March 1970, NASA Contract NGR 14-008-002. The geodesic dome's structural calculations are one of the "real-life" spinoffs from the 1960's space program, developed using the Fortran programming language.

While the Gunthers' company Monterey Domes donated and fabricated our dome, other Gunther family members and friends generously donated funding to erect and dedicate the structure. Dr. Francis Gunther and his wife Jane had five children—Bob, Kurt, Francis, Ted, and sister Nancy. Four of the Gunther children are UCR alumni, and along with their parents and spouses obtained numerous college and post-graduate degrees. Their careers span horticulture, commercial agriculture, engineering, and one was involved in developing switching technology for modern cellular telephone systems at Bell Labs. This generous family not only enabled the construction and dedication of the geodesic dome, they also established an endowed graduate award in Entomology.



We are truly fortunate to have reconnected with the Gunther family after all these years and look forward to announcing the full repair and reopening of our special geodesic dome in the UCR Botanic Gardens, hopefully by spring 2020. If you would like to support this effort, please visit our giving page at <https://gardens.ucr.edu/donate> and select "Save the Geodesic Dome in the UCR Botanic Gardens Fund."

## Spotlight On...Miguel Estrada

By Janine Almanzor



After a long, eight-month search for a new Gardens Manager, I am pleased to introduce to you Miguel Estrada. Theresa McLemore's many skills made it difficult to replace her but we have been very pleased with how Miguel has fit right in and is doing a great job. His background begins with a lifelong love for plants that led him to Cal Poly Pomona for an Ornamental Horticulture degree. He graduated in 2010 and while in college he gained experience with two internships with the large

landscape company, Valley Crest. He continued on with Valley Crest for nearly five years in various positions during which time he acquired his Qualified Applicators License (QAL),

became an ISA Certified Arborist, and gained experience with commercial landscape management including large scale turf management, garden installations, and rooftop gardens.

He moved on to a smaller scale, privately owned landscape company where he learned not only about managing gardens but managing people as well. He supervised six maintenance routes totaling 22 employees and was the liaison with all the clients. This was key in his preparation for the Botanic Gardens Manager position since it isn't just about lawn maintenance and tree care but motivating and training team players, conflict resolution and visitor services. Here at the Gardens, Miguel manages the 40-acre garden, seven students, one part-time employee, and two full-time employees.

What drew Miguel to the Botanic Gardens was the desire to get out of the 'for profit' side of horticulture and work with people with the same passion for learning and love for plants that he possesses. He thoroughly enjoys interacting with all the visitors and volunteers and training the students. In his short time here he has already addressed tree maintenance, safety issues, water efficiency, and of course weeds. Having his fresh set of eyes on the Gardens, energy, and ability to accomplish so much with his crew has infused us with a sense that we are really moving forward.

# Bird Walk & Breakfast

**Saturday, January 4, 2020**

**7:30 am - 10:30 am**

Join Norman Ellstrand, UCR Distinguished Professor, and David Rankin, UCR Research Specialist, for a guided bird-walk tour in the Gardens. We anticipate viewing up to 50 different bird species on the bird walk, which will be followed by a wrap-up session and continental-style breakfast in the conference room.

*Please bring binoculars and wear walking shoes. Event will occur rain or shine.*

**Limited attendance!**

To RSVP please contact [ucrbg@ucr.edu](mailto:ucrbg@ucr.edu) or 951-784-6962



**\$10/member**

**\$15/non-member**

**Pay online at**

**<https://gardens.ucr.edu>**



## Art in the Gardens

By Karen Fleisher

On a beautiful fall Saturday, November 2, the UCR Botanic Gardens hosted our Eighth Annual *Art in the Gardens* event. The 850 plus visitors that afternoon enjoyed strolling through Alder Canyon, talking with the artists and artisans, and browsing and doing some early holiday shopping. A large selection of



Rebecca Kallinger selling mosaic art

beautiful jewelry, pottery, fused glass, photographs, painted gourds, watercolors, garden art, hand-turned wood vases, and mosaic pieces were available for sale. Mien van de Ven once again provided her delicious and beautiful baked goods in the popular Café, where visitors could sit at bistro tables and enjoy chatting with friends. For the artists as well as visitors it was a lovely way to spend a Saturday afternoon. It is always difficult to choose participants from the local talent in order to provide diverse and unique offerings to our visitors. We appreciate all

the artists and artisans who participated, and those who donated some of their proceeds to the Botanic Gardens. Thank you to volunteers Dennis Ponsor, Janice Ponsor, Steven Orr, Jake Jacobson, Merrill Barton and Susen Moors for their hard work and dedication to the event. Gardens staff, including our wonderful student workers, also contributed to the success of the event. We appreciate all the visitors who browsed and shopped and also stopped by our Botanic Gardens table to learn more about how to get involved. We look forward to another great event next year!

*The Botanic Gardens staff would like to give a special thank you to Karen Fleisher, organizer of Art in the Gardens, who made this successful event happen.*



A few of the many vendors in Alder Canyon

## Succulent Driftwood Class

Saturday, February 8, 2020

10 am - 12 pm

\$35/member

\$45/non-member

Pay online at

<https://gardens.ucr.edu>



Limited  
attendance!  
RSVP at  
[ucrbg@ucr.edu](mailto:ucrbg@ucr.edu)  
or  
951-784-6962



## Butterfly Corner

### Acmon Blue

Article and photos by Ann Platzer



Photo 1: Adult ventral view

The Acmon Blue, *Plebejus acmon*, (*syn. Icaricia acmon*) is an exquisitely beautiful small butterfly with a wing span of only  $\frac{3}{4}$  to 1  $\frac{1}{8}$  inches (Photo 1: Adult ventral view).

The early spring males are easy to spot because the dorsal surface of the wings is brilliantly blue. The female is also blue but in summer generations the dorsal wings are grayish-black (Photo 2: Adult female dorsal view, on buckwheat). In both sexes, the hind wings below and above exhibit a brilliant orange-red sub-marginal band. In addition, the wings have a delicate white 'fringed edge' with a thin sub-marginal black line (Photos 1 & 2).

The most favored host plant of the Acmon Blue is buckwheat, *Eriogonum* spp. (Photo 2), such as *E. nudum*, *E. latifolium*, *E. grande rubescens* and *E. fasciculatum*. Additionally, these adaptable females also lay eggs on lupines (*Lupinus*), milk vetches (*Astragalis*) and trefoils (*Lotus*).

Eggs are laid singly on host plants and the young larvae feed on leaves, flowers and even developing seeds. Like other members of the Gossamer-winged butterfly family Lycaenidae, the Acmon Blue has a mutualistic relationship with ants. When not feeding, larvae are often kept in an ant nest. In return for protection, the larvae provide ants with honeydew secretions that are rich in sugar and protein. Individuals overwinter as

second stage caterpillars. The adults feed on the nectar of many flowers, including their host plants, the buckweats.

The Acmon Blue has multiple broods resulting in a variable number of flights based on latitude and location. Typically, they fly from February to November near sea level, but June to October in the high country. Only one flight occurs in the far north and above the timberline. This striking lepidopteran is constantly on the move looking for nectar and especially host plants. Fortunately, a wide variety of favorable plants exist, including perennials, which allows the Acmon Blue to produce more than one brood per year and also permits its very wide distribution. As already mentioned, the first brood welcomes early spring flowers with its dazzling rich colors.

The Acmon Blue is a North American butterfly. It ranges mainly in California west of Sierra Nevada-Cascade-Divide south to northern Baja California, but may also be seen north to Oregon and Nevada. The typical habitat includes deserts, fields, prairie hills, weedy areas, roadsides and suburbs that hopefully include your Butterfly Garden. Fortunately, according to the Nature Conservancy Global Rank, it is secure conservation wise. But that doesn't mean you shouldn't plant buckweats in your Butterfly Garden and help another butterfly prosper.



Photo 2: Adult female dorsal view, on buckwheat

Happy Butterfly Gardening!

AP

Thanks to Edward  
Platzer for  
reviewing the  
article.

Ann Platzer





## Member and Donor Update

As a special benefit to members and donors at the Patron level and above, the Gardens staff and our Development team hosted our first special VIP catered dinner on Wednesday evening, November 20. The library in the Schneider House, formerly the living room and dining room of the residence, were transformed by beautiful table settings and candlelight for the occasion. Guests convened over wine and appetizers and were introduced to the new Gardens Manager, Miguel Estrada. Dinner was served by UCR's Citrus Grove Catering, and during dessert Director Holt gave guests a first glimpse and opportunity for input into new projects underway in the Gardens. As our newly revamped membership program grows we look forward to more such opportunities in the future to show our appreciation for our most devoted supporters.



VIP dinner in the Schneider House library

## Fall Garden Market & Plant Sale

By Janine Almanzor and Jane Evans

Once again the Fall Garden Market & Plant Sale was a huge success! An estimated 3,000 customers came to the Gardens that day to purchase plants and other garden related items for their home gardens. Thirteen vendors, including the UCCE Master Gardeners, and thirteen educational tables made the shopper's experience very full. There truly was something for everyone. Inquisitive children learned about insects and dinosaurs, students found many choices for dorm room plants and homeowners had a multitude of plant choices for every area of their garden and home.

Gardens staff worked for months preparing for the annual fall event, but the credit really needs to go to our volunteers. Without the 900 volunteer hours before, during and after the

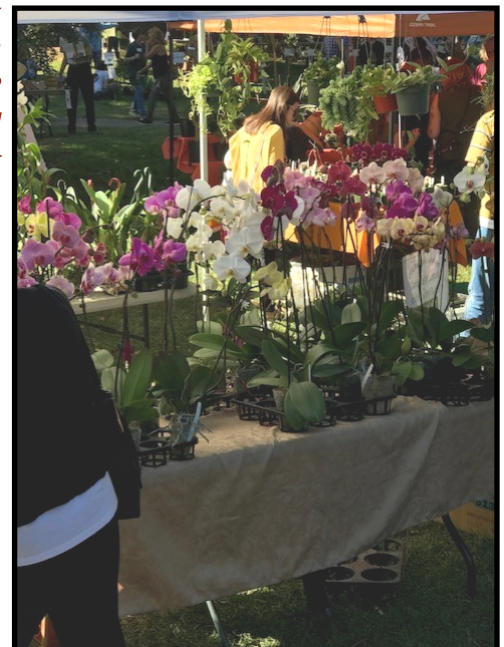
event we wouldn't have been able to hold this Garden Market & Plant Sale. With the support of our volunteers the Gardens has been able to continue this decades old tradition of hosting successful plant sales. Thank you especially to Becky Levers for coordinating all the volunteers and assigning jobs to every one of them.

Below is a note from Jane Evans who helped with supervising student volunteers.



Sigma Kappa students

*I was a volunteer at the 2019 Fall Garden Market & Plant Sale, where I helped out with organizing and supervising the UCR student workers who came from Sigma Kappa to assist. The girls were so terrific! They showed up as early as needed and were flexible when we needed to rearrange their assignments to give extra help in other areas. They worked as fast as they could, taping boxes together and bringing them to the locations where customers could use them. Some worked all morning doing this while others worked at Holding Stations where they kept track of customers' purchases while the customers were shopping. The girls were pleasant and helpful and we were so thankful for their help! We look forward to having even more UCR Panhellenic and club support at future plant sales.*



Orchids at the Garden Market & Plant Sale

## Wildlife of the Gardens

### Cooper's Hawk

By Michele Felix-Derbarmdiker

Have you ever spotted a gray flash and a poof of feathers? It is possible that you have just spotted a stealthy Cooper's Hawk hunting for its lunch. This is one of the most widespread accipiter species of hawk in North America. With practice this species can be spotted year-round in Southern California.

#### Habitat/Feeding

The Cooper's Hawk is chiefly found in densely wooded areas with taller trees; however, they are becoming more common in neighborhoods or parks with tree cover. These hawks have also discovered that neighborhoods offer easy pickings via bird feeders. The hawks will use tall trees for nesting and as cover for hunting. This species mostly hunts with stealth and surprise. It will utilize dense cover to watch potential prey then strike hard with lightning speed. This hawk can eat a variety of prey, but eats mostly small to medium sized birds. What can you find on the menu you ask? Squirrels, chipmunks, mice, lizards, pigeons, starlings, jays, robins, insects, and bats are part of the Cooper's Hawk diet. Bon appetit!

#### Breeding

This species' courting display involves flying over a territory with slow wings beats. If love is in the air, the male will begin a bowing display to seal their bond. The male primarily constructs a cup shaped nest of sticks or builds upon an old nest of another bird or squirrel. Nests are typically high in tall trees of densely wooded areas. The female can lay 2-6 pale blue eggs. Once the chicks arrive both parents will participate in rearing, with the male primarily hunting for food and the female brooding the chicks for the first two weeks. The chicks are fully grown and begin to fly after about 5 weeks. These juveniles can be identified by their yellow eyes, brown coloring on heads and wings and brown streaking on the underparts.

#### Identification

The Cooper's Hawk is a medium sized bird, about the size of an



Juvenile Cooper's Hawk, photo by Lee Reeder

American Crow. Other members of this genus include the Sharp-shinned Hawk and the Northern Goshawk. Members of *Accipiter* are known for short rounded broad wings and long tails. These three hawks can be difficult to distinguish from one another, especially when sighted from afar. The Cooper's Hawk is slightly larger than a Sharp-shinned Hawk and can be found mostly year-around in Southern California, whereas the Sharp-shinned Hawk only visits our area in the winter season. Northern Goshawks are rare visitors to our area. When trying to identify a Cooper's Hawk, look for stiff wing beats, striking red eyes, blue gray coloring on head, back and wings and rusty red barring on underparts.

#### Threats

At this time, populations are considered stable but population decline was detected in the 20th century. This is possibly due to exposure to DDT. Like other hawks, they also face threats from automobile collisions, power line collisions, shootings and poisoning from rodenticides.

*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.*

## 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>



## What to See in the Gardens

Article and photos by Miguel Estada



California sycamore, *Platanus racemosa*

As the new Gardens Manager, I have walked all the trails and seen most of the plants. There is a lot to see and experience, which is wonderful, but it may also be difficult for first time visitors trying to choose a place to start. Fortunately, my first visit is still fresh in my mind and I will point out a few specimens that caught my attention that day.

As most people new to the Gardens do, I headed down to the grassy area of Alder Canyon. I took the south walkway and encountered a magnificent California sycamore (*Platanus racemosa*). What I find fascinating about this sycamore is its size. At over 80' tall and a canopy spread of 60', it easily towers over all others in the area. Pay attention to the trunk as well; sycamores have very distinct looking bark.

I continued my exploration past the Baja California section where I spotted the next impressive plant in the collection. The dragon tree (*Dracaena draco*) stands with thick branches and is



Dragon tree, *Dracaena draco*

adorned with clusters of sword-shaped blue-green leaves. It creates a beautiful look among a dense planting of palms. You can find this near trail marker 7. A fun note, this species is commonly used as a house plant, but if planted in the ground can rival other trees in size.

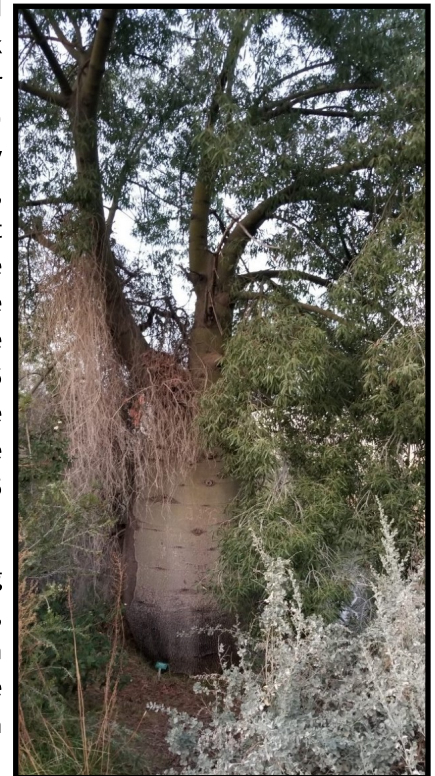
The next specimen, bottle tree (*Brachychiton rupestris*), is in the Australia section and needs the most effort to get to, which is why I didn't get to it my first time around. However, with the help of the hard working Gardens team, we've made the hike a lot easier. We cleared the most direct route to this "must see" plant. The newly cleared trail can be accessed in Oak Woodland, to the left of the Memorial of Life Monument. Along the way you will have the opportunity to see Balance Rock, a view of various colors and textures from the plants in the collection, and even a younger bottle tree.



Cleared trail to the bottle tree

The larger bottle tree is near trail marker 21. This species has an adaptation that allows the trunk to swell as it matures and stores water. One look at it and you will know why it's called the bottle tree. While writing this piece my curiosity got the best of me and I decided to measure the trunk diameter of the Alder Canyon giant (sycamore) and this relatively compact bottle tree, which is 1/3 the height and spread of the sycamore. The sycamore did not disappoint. The trunk came in at 41.5 diameter inches, while the bottle tree, not to be outdone, came in at 52.5 diameter inches.

Whether you're looking to be impressed by size, aesthetics, or just an odd appearance, these recommendations are a good place to begin.



Bottle tree, *Brachychiton rupestris*



## In The Works

By Botanic Gardens Staff

The Gardens staff and volunteers have been very busy over the past few months; here are a few of the projects, initiatives, and activities underway or completed.

- ▶ The ground has been cleared and prepared for planting of the new Native American Plants Garden, and installation will occur in late fall, perhaps by the time of this issue.
- ▶ In a major water-saving initiative we have ceased nighttime sprinkler irrigation and will work around our visitors and tours to schedule sprinkler irrigation based on plant need, while converting beds to drip irrigation as appropriate.
- ▶ A “Problem Reporter” layer was added to our interactive GIS app for internal use in noting safety, plant health, or other issues; several weak or broken limbs and unhealthy trees were noted and will be removed in early December.
- ▶ As occurred on the UCR campus, several trees in the Gardens were found to be infested with polyphagous shot hole borer (PSHB), an invasive beetle that spreads *Fusarium* fungus and ultimately kills the tree. Most of the trees can be treated, but one near the entrance is highly infested and will be removed soon.
- ▶ We recently joined as a participant in the Sentinel Plant Network, offered to garden members of the American Public Gardens Association (APGA). As a participant we will join other gardens in scouting, reporting, training, and educational outreach activities pertaining to pests and pathogens in our area that potentially impact our collection.
- ▶ With the goal of better connecting to UCR students, we hosted a Botanic Gardens table at the popular ‘Wednesday Nooner’ event at the campus bell tower, where staff gave handouts and promoted the Gardens to passersby.
- ▶ A generous transfer of infrastructure funds from campus administration funded the installation of new gates at the Schneider House Office, the tree maintenance noted above, and other safety and security upgrades.
- ▶ We are working on a revised Sales & Service contract, which allows us to conduct revenue generating activities for the support of the Gardens; check our website and calendar for new activities and events planned for 2020.



Native American Plants Garden in progress



Shot Hole Borer damage on a tree



Abraham Ortiz & Kenneth Almero at the Wednesday Nooner

## ROSE PRUNING DEMONSTRATION

Sunday, January 12, 2020  
1-3 pm

Rain delay date : Sunday,  
January 19, 2020

Learn to prune hybrid teas,  
floribundas, grandifloras,  
climbers & miniatures

Raffle & refreshments  
Free admission & parking in  
Lot 13



*As we reach the end of 2019 I remain in awe of the support the UCR Botanic Gardens receives from our many donors, volunteers, and of course Friends members. The Gardens staff and I are deeply grateful for the legacy of continual engagement by so many from the very beginning of the Friends membership program, one of UCR's oldest volunteer support groups. Over the past year your generosity has supported garden renovation, trail restoration, and new initiatives including renovation of our greenhouse collection, design and installation of our new Native American Plants Garden, and creation of new, cutting-edge interactive and interpretive maps of the Gardens. Additionally, your support has enabled us to increase our student worker corps, which both enhances our workforce and aids in their education and future career goals.*

*Your contribution will keep our Gardens and valuable programs growing strong for many years to come. Please make your gift today!*

*I look forward to seeing you in the Gardens.*

*Jodie S. Holt*

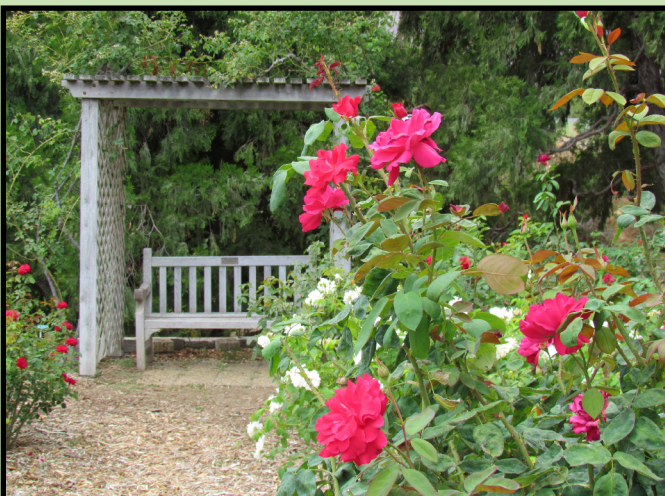
Jodie S. Holt, Ph.D.  
Director UCR Botanic Gardens



## Your legacy in the Gardens

You may wish to have an impact that will ensure the beauty and vitality of the UCR Botanic Gardens for future generations to enjoy. There are many ways to accomplish this, including a gift through your will or a charitable gift annuity that pays income back to you. You may direct your gift to general support of the Gardens or any one of our special projects or programs.

If you would like more information on how to leave a legacy to the UCR Botanic Gardens, please contact:



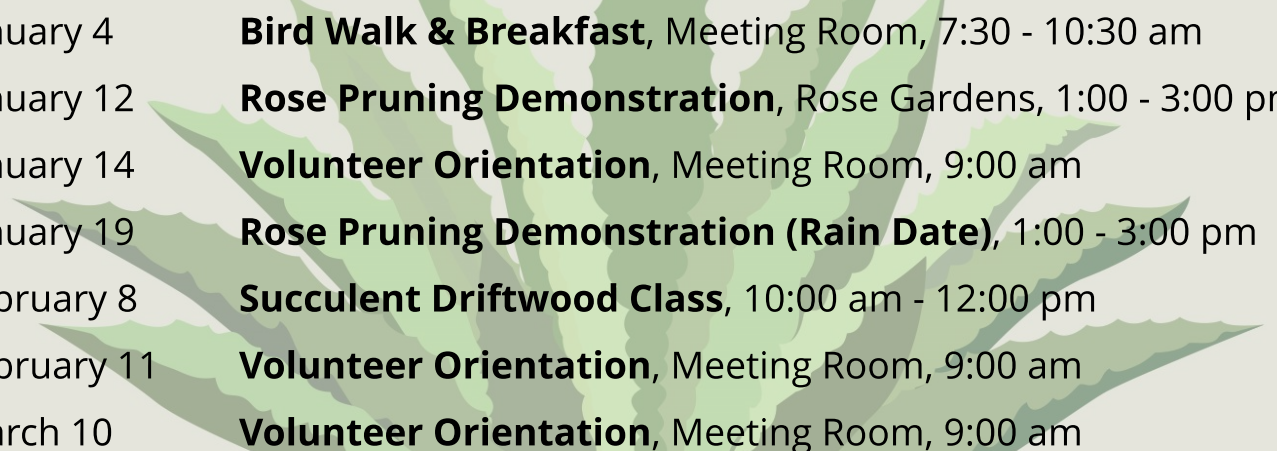
Dounia Sadeghi  
Assistant Dean for Development  
College of Natural and Agricultural Sciences  
951.827.3067  
Dounia.sadeghi@ucr.edu

*If you have already remembered the Gardens in your plans, please let us know as we would appreciate the opportunity to steward your generous gift.*

University of California, Riverside  
Botanic Gardens  
900 University Ave.  
Riverside, CA 92521

Non-Profit ORG  
U.S. Postage  
PAID  
UCR

## UCRBG Calendar of Events

- 
- |             |  |
|-------------|--|
| January 4   | <b>Bird Walk &amp; Breakfast</b> , Meeting Room, 7:30 - 10:30 am |
| January 12  | <b>Rose Pruning Demonstration</b> , Rose Gardens, 1:00 - 3:00 pm |
| January 14  | <b>Volunteer Orientation</b> , Meeting Room, 9:00 am             |
| January 19  | <b>Rose Pruning Demonstration (Rain Date)</b> , 1:00 - 3:00 pm   |
| February 8  | <b>Succulent Driftwood Class</b> , 10:00 am - 12:00 pm           |
| February 11 | <b>Volunteer Orientation</b> , Meeting Room, 9:00 am             |
| March 10    | <b>Volunteer Orientation</b> , 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.