The Plant Sale is coming!

I love this time of year as I really enjoy our Plant Sales. They make me feel like a proud teacher showing off her students’ work during open house. Plant Sales are the two times of year when we can really show off the efforts of our volunteers, as nearly all propagation for Plant Sales is done by our wonderful volunteers. From the cutting, prepping, and sticking to the transplanting and maintenance, it is all performed by numerous helpers.

This year will be the second year for the Spring Plant Sale to be located in the upper nursery area instead of Alder Canyon. This event is a benefit for Botanic Gardens Friends members only and the gates will open at 9 a.m. and close at 2 p.m. Although UCR Parking Lot 13 will be under construction, TAPS (Transportation and Parking Services) assures us that we will have parking for this event, and there will be shuttles from the parking location to the front entrance of the Gardens as usual.

There will also be a shuttle inside the Gardens for those who need assistance getting to the upper nursery area. Volunteers will be directing those guests to the turn-around area. Otherwise, upon entering our front gates, guests will be directed to walk through Alder Canyon, taking the scenic route through our Chaparral section and looping back around to the Plant Sale area. Upon departure, walkers will be directed to the switchbacks through the lower Rose Garden, which makes the grade easier to navigate. Volunteers will be available to transport plants for those needing assistance.

This event is very different and easier than the Fall Garden Market & Plant Sale for our staff and volunteers in that we don’t have to move plants to the lower parts of the Gardens. For Fall Plant Sales, we move about 3,200 plants from our various growing areas down to Alder Canyon. Holding our Spring Plant Sale in our upper nursery area near the greenhouse requires us to move only about 800 plants; the rest will be displayed and sold right where they are grown.

One of the plants we specialize in growing and strive to have a good selection of for each sale is Salvia x jamensis, commonly called autumn sage. We grow over

*Continued on page 3*
Director's Report - Dr. Jodie Holt

Since its inception the UCR Botanic Gardens has served as a resource for teaching and research at UCR. In subsequent years it began to fulfill its promise as a public university garden, especially after the Friends of the UCR Botanic Gardens were formed. Expanded open hours, educational events, and twice-a-year plant sales brought in greater numbers of visitors.

The start of my term as director presented a good opportunity to reevaluate our vision and mission in the context of increasing visitors to the Gardens and rapid growth of UCR. These are reiterated here:

Vision ~ UCR's living museum, curated to inspire and facilitate education, research, and interpretation of the natural world

Mission ~ Serve as UCR's focal point for campus and community engagement in the science of nature, gardens, and conservation

Each year we set new goals and objectives to help us achieve our mission and realize our vision. Friends, volunteers, visitors, and followers of the Gardens have observed the changes we’ve made to enhance our collection and gardens, upgrade our facilities, expand our educational and engagement activities, and raise funds while lowering costs in order to accomplish these goals.

I am happy to share evidence of our progress toward becoming a focal point for the campus and community—our visitor count is huge! Since December 16, including closed days and inclement weather, we had over 12,500 visitors. Extrapolating to the rest of the year this is well over 75,000 visitors per year, a likely underestimate. While visitor counts alone do not demonstrate impact on lives and well-being, we are encouraged that our hard work is paying off by bringing more of the campus and community to our nature oasis in the Inland Empire.

With progress we experience new challenges, including weekend staffing, managing groups who arrive for photo shoots or gatherings, unwanted behavior such as tossing glitter, insufficient funds to maintain facilities, and more. Fortunately, our volunteer corps has been growing and new recruits, including students, are on-boarded every month. Additionally, we are fortunate to have the support and resources of a large university, most with no or reasonable cost. For major infrastructure items described elsewhere we are gratified that UCR is helping with some of the costs.

I encourage you to get involved in the UCR Botanic Gardens by volunteering, joining the Friends, and coming to our events. 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 or 951-784-6962.

Jodie
Continued from page 1

21 different colors of this species including white, yellow, light pink, dark pink, pink with purple, red, red and white, and several shades of orange. Most of these plants were developed by our former director, Dr. Giles Waines. This year will be no exception and, keeping my fingers crossed, all the autumn sages will be in full bloom in time for the sale. On the day of the event they will be found on the tables behind the greenhouse.

California native plants are always popular, but they can be a thorn in a propagator’s side. Natives are hard to germinate and propagate as they have very particular growing requirements. This year we will have a few more varieties of Ceanothus and Arctostaphylos available, as well as a good amount of Justicia californica ‘Tecate Gold’ that will be ready in time for the sale.

Succulents are another big seller for us, and they will be more prominent in front of and inside the lath house. Some new varieties in this section will include Echeveria species, small Euphorbia species, Echinocereus morriscalii, Ruschia crassa, Sedeveria ‘Blue Elf’, Pachyveria ‘Royal Flush’ and Sedum clavatum. Hope to see you all there! Be sure to tell our volunteers what a wonderful job they have done!

To keep Plant Sales exciting, I propagate new varieties from our vast collection. You will find varieties not easily available elsewhere. Here are some special plants that will be available this spring:

- Ballochia rotundifolia
- Eremophila calorhabdos
- Eremophila maculata ‘Aurea’
- Gossypium hirsutum
- Helichrysum species
- Hypoestes aristata
- Limoniastrum monopetalum
- Ruttyruspolia ‘Phyllis Van Heerden’
Spotlight On...Infrastructure
By Jodie Holt

Infrastructure—the basic physical structures and facilities of an organization—is taken for granted and expected (or hoped) to work. Unfortunately, our facilities are aging rapidly and failure has serious and costly consequences. Recent progress towards achieving our goals has been advancing “two steps forward, one step back” with the “one step back” being infrastructure. Fortunately, our CNAS Dean and campus administration have provided some financial assistance in tackling these critical needs, a few of which are highlighted in this article.

The most visible infrastructure project in the Gardens is our geodesic dome, which has reached a level of damage requiring closure for safety reasons until it can be repaired, hopefully this year. Fortunately, the dome is built of redwood and cedar, which are fairly insect resistant, because termites are ubiquitous in our area. Most other buildings in the Gardens have active termite infestations, including our renovated gatehouse/restroom building, so in February we hired a pest control company to tent for termites and replace the damaged wood. The conference room also has termite activity and damage to the eaves and fascia boards; we hope to undertake work on that building next.

In spite of renovation the entrance restrooms have continued to experience regularly clogged plumbing, resulting in the diagnosis of “catastrophic septic failure” right outside the conference room underneath a planted bed. We are awaiting an estimate for repair of the system and hope that funds can be found to move forward. This work will require digging up part of our roadway, but we are pleased that UCR TAPS will resurface the flat part of our roadway this year and cover all evidence of these problems. When you visit the Gardens and notice construction tape, detours, and signs pointing to porta-potties, we hope you will appreciate the importance of our work to repair and upgrade our infrastructure and eagerly anticipate as we do a future when all systems are in excellent working condition!

California Native Plant Tour

Join us for a docent-led tour of California native plants in the Gardens on Saturday, March 21, 2020 at 9:30 am. Experience the beauty and fragrance of our Golden State’s unique flora up close. In addition to the identification of specific plants and their characteristics, we will touch on topics such as the benefits of planting natives, basic tips for the selection and care of these plants for your garden, and additional resources to expand your knowledge.

The tour will be approximately 90 minutes and will traverse paved and dirt trails and some stairs. Please wear footwear appropriate for a nature walk through the Gardens. If you would like to participate in this tour please contact ucrbg@ucr.edu or 951-784-6962.

Free!!!
**Rose Pruning Demonstration**  
*By Janine Almanzor*

The annual Rose Pruning Demonstrations have taken place every year since 1979 and are still going strong! This year we had over 120 people in attendance on Sunday, January 12th, which is the largest attendance that we can remember. The weather was on our side with a beautiful day to be out in the Gardens. Expert demonstrators were stationed at different areas of both the upper and lower Rose Gardens and visitors went from station to station to learn how to prune the different types of roses. Our demonstrators were comprised of Master Gardeners, Botanic Gardens volunteers, and members of the Raincross Rose Society. The Rose Society also had a table with educational information and experts to answer questions. There were plenty of free refreshments for all and at the end of the event we held our traditional raffle, which makes the event so much fun! This year every attendee was able to take home a garden-related item because of our generous donors. This year our donors were Gail Watson (Friend and volunteer), Corona Clippers, Kellogg Supply, Louie’s Nursery, Moon Valley Nursery, Paradise Garden Center, Parkview Nursery on Chicago Ave., Sunshine Growers Nursery in Yucaipa, and the UCR Botanic Gardens.

![Gail Watson (left) and Pam Roose take a break from pruning](image1.jpg)

![Janice Ponsor enthusiastically demonstrates rose pruning](image2.jpg)

**Birding in the Gardens**  
*By Jodie Holt*

An enthusiastic group of birders joined us for our winter Bird Walk and Breakfast on Saturday, January 4, 2020, our first event of the New Year. After convening in the conference room at 7:30 a.m. for a brief introduction, UCR birding experts Norm Ellstrand and David Rankin each led 12 participants on an early-morning tour to spot winter resident and migrating birds in the Gardens. Afterwards the group gathered in the conference room for a continental breakfast and debriefing. A total of 87 birds in 28 different species was observed, including 15 Double-crested Cormorants and 15 Cedar Waxwings. UCR and the Botanic Gardens are recognized bird hotspots and as such are included in eBird, “…the world’s largest biodiversity-related citizen science project, with more than 100 million bird sightings contributed each year by eBirders around the world.” This project is maintained by the Cornell Lab of Ornithology and is supported entirely by grants, sponsors, and donations. Following each of our bird walks the day’s sightings are uploaded into the eBird database, which can be searched for bird records by location, year, month, or date range.

![Cedar Waxwing, photo by Lee Reeder](image3.jpg)

The UCRBG is also a regular location for the San Bernardino Valley portion of the Audubon Christmas Bird Count, which was held on Saturday, December 21, 2019. Three avid birders from this local Audubon chapter started their count at 8:00 a.m. and covered the Gardens as well as the surrounding areas to the north and west bounded by Big Springs Road and East Campus Drive. This group spotted 655 birds in 43 species, clearly supporting the designation of bird hotspot for UCR and the Botanic Gardens. We are happy to facilitate this important activity, which is the nation’s longest-running community science bird project and provides critical data towards bird conservation.
Butterfly Corner

Mylitta Crescent

Article and photos by Ann Platzer

Mylitta Crescent (Thistle Crescent), Phycides mylitta, family Nymphalidae, is the most vibrant orange of the crescents since its upper side is mainly a bright reddish-orange with greatly reduced narrow black markings (Photo 1: Dorsal surface of female on thistle). The underside is yellow-orange with somewhat blurry orange-red markings. Note the white arrow that points to the silvered crescent, a diagnostic characteristic for crescent butterflies (Photo 2: Ventral surface of female). This small butterfly has a wingspan of 1¼ to 1½ inches.

The female lays a large cluster of pale yellowish-green eggs on the underside of the leaves of its native host plant, the thistle, Cirsium spp. Fortunately, the larva eats many nonnative thistles, as does the larva of Painted Lady and Tiger Swallowtail, which helps combat the spread of invasive thistles. When not eating, the larva roosts in silk nests to protect itself from predators. If the larva has not pupated before winter, it hibernates until spring. In southern California a larva may be seen sunning itself on warm midwinter days.

Adults obtain nectar from their host plant thistle in addition to many other plants, such as seaside daisy (Erigeron glaucus), California aster (Aster chilensis) and goldenrod (Solidago canadensis). Flight time at sea level in southern California is from February to November but only from June to October in the high country. Breeding occurs continuously in warm weather areas.

The range of Mylitta Crescent is from southern British Columbia through Baja California. Habitats are from sea level to the high mountain meadows, moist canyons and dry fields. Undaunted by urban spread, it abounds around vacant lots and unattended scrubby fields anywhere thistle grows. Although the Mylitta Crescent is considered to be secure globally, plant a native thistle to welcome this butterfly into your garden.

Happy Butterfly Gardening!

AP

Thanks to Edward Platzer for reviewing this article.

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Become a Friend

Join or renew your Friends membership before the Member Appreciation Plant Sale on April 18 at https://gardens.ucr.edu/friends_
The UCR Botanic Gardens Joins the Sentinel Plant Network

We are pleased to announce that the UCR Botanic Gardens has joined the Sentinel Plant Network, a partnership between the American Public Gardens Association and the National Plant Diagnostic Network that contributes to plant conservation by engaging public garden professionals, volunteers, and visitors in the early detection of serious plant pests and diseases. The Sentinel Plant Network was launched in 2011 with financial support from the USDA's Animal and Plant Health Inspection Service through the Farm Bill, Section 10007 and currently includes over 300 public gardens across North America.

Our garden was recently able to send Miguel Estrada and Janine Almanzor to participate in the Sentinel Plant Network training for the Southwest Region at San Diego Botanic Garden in San Diego, CA. This event engaged 70 front line professionals from 33 public gardens in the southwestern US as well as diagnosticians from the region and a representative from the USDA's Animal and Plant Health Inspection Service. At this workshop, Miguel and Janine and the other participants learned about the economic and environmental impact of serious plant pests and diseases as well as the threats in our region, host plants affected, common signs and symptoms and the best practices for monitoring and reporting. They also learned about the Network's educational outreach materials and public-facing website, sentinelplantnetwork.org, and the American Public Gardens Association's Plant Heroes® youth education program.

"Public gardens are strategically positioned to protect plants from serious plant pests and diseases by monitoring their collections and educating the public about the importance of early detection and rapid response," said Marisol Mata, one of the Association's Plant Protection Program Coordinators for the Sentinel Plant Network.

To learn more about the threats to our local flora and how you can help protect the trees in our community by getting involved in early detection, come by the Gardens or contact Miguel or Janine at ucrbg@ucr.edu about taking a class!

Succulent Driftwood Class

By Pam Ferre

On February 8 we offered a new activity, a Succulent Driftwood Class, to a sold-out group of 24 people ready to learn and create. Facilitated by volunteers Karen Fleisher and Linda Powell, registered participants each created their own unique living plant arrangement. As a Master Gardener, Linda expertly provided the workshop attendees with a step-by-step tutorial on how to plant succulents in a driftwood planter. Originating from areas such as Africa and South America, succulents grow well in hot and dry conditions, are available in a variety of shapes and colors, and are ideal for planting in a piece of driftwood. Workshop attendees were provided all supplies including one piece of driftwood, six 2" succulents, sphagnum moss, stones, and shells. Every participant enjoyed the class and went home with a work of art to display in their home or garden. To meet the high level of interest, Linda and Karen have graciously agreed to teach a second Succulent Driftwood Class on Saturday, May 2, 2020. Thank you Linda and Karen! Registration and payment for the event are online at https://gardens.ucr.edu/.

Corynn and Stacey Evans

Touring the San Diego Botanic Garden to observe plant pests and pathogens

A participant's creation
Have you ever spotted a large brown bird with a reddish tail, while out on a drive or walk? It is quite possible that you have just spotted a Red-tailed Hawk, *Buteo jamaicensis*. This is one of the most widespread and common species of hawk in North America. Once you have some key bits of knowledge, you will be able to spot these beauties all over Southern California.

**Habitat/Feeding**

The Red-tailed Hawk can be found in a variety of habitats that offer high points for perching and open spaces for hunting. The hawk will survey terrain or soar in high circular motions in search of prey. When they spot potential prey, they have a smooth slow skillful dive with outstretched talons. This hawk can eat a variety of prey, helping it be versatile and survive a variety of habitats. What can you find on the menu you ask? Squirrels, rabbits, voles, rats, lizards, frogs, birds, insects, bats and carrion are part of the Red-tailed diet. Bon appetit!

**Breeding**

In late winter or early spring, you may be lucky enough to spot a Red-tailed pair preforming their courtship display. Red-tailed Hawks are monogamous and can mate for life. Their display involves a ceremony of aerial acrobatics and plunging dives to Earth. If love is in the air, the pair may lock talons and descend in a beautifully choreographed tumble towards Earth, letting go of each other at last moments. The pair will construct or repair an old nest with large sticks and greenery. The female can lay 1-5 white splotchy brown eggs. Once the chicks arrive both parents will participate in rearing. The chicks are fully grown and fledge the nest after approximately 50 days.

**Identification**

The Red-tailed Hawk is a stocky large member of the genus *Buteo*. It has an average wing span of 49 inches and weight of 2.4 lb. Other members of this genus include the Zone-tailed Hawk, Red-shouldered Hawk, Broad-winged Hawk, Swainson’s Hawk, Ferruginous Hawk and Rough-legged Hawk. Members of *Buteo* are known for broad wings and short wide tails. The Red-tailed Hawk is most often confused with the Red-shouldered Hawk. There are several indicators that can help with a correct identification.

To identify a perched Red-tailed, look for the following:

- Brown colors on the head and back
- Brown colored belly band
- Spotted white to cream colored v-shape on the back
- Glimpse of rust red tail feathers

To identify a soaring or flying Red-tailed, look for the following:

- Rounded wings
- Dark brown marks on the leading edge of the wings
- Red rust color of the breast and tail

Take note; there are several subspecies of Red-tailed Hawks. These subspecies have geographic variations in color.

**Threats**

The Red-tailed Hawk is not a listed species and has a stable population. Despite this they still face threats. Most threats are linked to humans. We humans like to build on open flat land which the hawks prefer for hunting. They also face threats from automobile collisions, power line collisions, shootings and rodenticide.

*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

Article and photos by Miguel Estada

Spring is here! It is the time for plants to put forth new growth and blossoms. You will not have trouble spotting our showy specimens. They will call to you just as they call to the pollinators. I encourage you to see those beautiful flowers but make sure to add my recommendations to your next visit.

**Brahea armata, Mexican blue palm**

The Mexican blue palm (*Brahea armata*), is the first specimen on my list. It's located on the north side of the gatehouse (lower restrooms). I've seen this palm a few times, but it really caught my attention when I was pruning some of the inflorescences. There are many features that make this specimen attractive. The bluish-silver color is stunning, it requires little water once established, it tolerates desert heat, and it is hardy to 10°F. Rare in nature, *Brahea armata* is restricted to several small canyons and desert slope areas of northwestern Baja California. However, due to its qualities it has been cultivated and is valued in ornamental landscapes and gardens.

Next on list is the pencil cholla cactus (*Cylindropuntia ramosissima*). I found this beauty near the entrance to our Sub-tropical Fruit Orchard. I routinely pass cacti and succulents along the way but the pencil cholla has a unique tree-like structure that makes it stand out among other cacti. Each branching arm appears uniform in thickness. It has some spines but is not entirely covered. This variety is native to the Mojave and Sonoran Deserts of the southwestern US as well as to Baja California.

Last on my list is the big-leaf maple (*Acer macrophyllum*). This is a fast grower that can reach a considerable size. With ideal conditions, it can grow to heights over 100' and a spread over 60'. The tree has large palmate leaves and distinctive fruits called samaras or “maple keys.” The seeds occur in winged pairs and spin as they fall to the ground. Most species are deciduous, and as of this writing the one I have in mind still hasn’t leafed out. You may wonder why I suggest a visit to a slumbering tree. For that, you really need to see it in person. We have more than one *Acer macrophyllum* in the Gardens. The one to see is in Alder Canyon, approximately 200’ before reaching trail marker 36. It’s at the base of the east facing slope. The tree has a large cavity; in fact, a good portion of the trunk and scaffold branches are hollow. Still, the tree stands, is stable, and continues to grow. Are you curious as to how this happens and how the tree is still alive? Good. Curiosity is a good thing to have. The quick and broad answer is that damage created an entry site for a wood decaying organism, which is common to the big-leaf maple.

Trees have adapted to endure some damage, even the hollowing of the trunk and limbs, because the living conducting tissue occurs in a cylinder where wood and bark meet. Because the center of mature trees is no longer living, they can live on even with extensive damage. I hope you enjoy your time at the Gardens and my recommendations.
In The Works
By Botanic Gardens Staff

As noted elsewhere, infrastructure has been a focus of the past few months, but progress is also being made on other projects and initiatives.

- Installation of the new Native American Plants Garden, located adjacent to the Colonial Herb Garden, is nearly complete. Jorge and the students have laid paving stones and decomposed granite to delineate planting beds while maintaining a natural and rustic appearance.

- With the help of eager volunteers, including a group from AmeriCorps, and supervision by Lois, rapid progress has been made towards cleaning up our Subtropical Fruit Orchard so it can be opened for tours.

- Miguel is tackling the Alder Canyon lawn as our pilot area for installation of automated sprinklers with timers, which is expected to greatly reduce water use for irrigation.

- In anticipation of the start of repairs of the dome, the crew has cleaned up the surrounding area and dug a trench to remove soil from the foundation of the dome. To donate please visit https://gardens.ucr.edu/donate and use the drop-down to select “Save the Geodesic Dome in the UCR Botanic Gardens” fund.

- As noted elsewhere, the gatehouse was tented for termites and damaged fascia boards and eaves were repaired or replaced and repainted.

- UCR Parking Lot 13 is now closed to visitors while a multi-story parking structure is being built; TAPS has added additional visitor parking spaces to Lot 10 at the base of Botanic Gardens Road and is working closely with us on parking for all our events in 2020.

- At long last, we have received a donation of a used off-road vehicle in great condition, which will facilitate projects and clean-up in more remote areas of the Gardens.

- Our people-counter is finally working well and the number of visitors to the Gardens is truly impressive. Over 12,500 visitors were counted between December 15 and February 15, which included several days of closure and bad weather. Stay tuned for future reports of visitor counts during spring, our busiest time of year.

Succulent Driftwood Class
Saturday, May 2, 2020
10 am - 12 pm

$45/member
$55/non-member
Pay online at https://gardens.ucr.edu

Limited attendance!
RSVP at ucrbg@ucr.edu or 951-784-6962
PRIMAVERA in the GARDENS

Sunday, May 17, 2020
2 - 5 pm
Tickets $100

Forever Highlanders

UCR has a growing network of more than 120,000 alumni across the globe. We invite you to join this powerful community of support, pride, and unity.

Why Join the Alumni Association?

Your membership strengthens the programs we provide, keeps alumni connected, and enhances the student experience.

alumni.ucr.edu/join
UCRBG Calendar of Events

March 21  California Native Plant Tour, 9:30 - 11:00 am
April 4   KUCR Live in the Gardens, 1:00 - 4:00 pm
April 14  Volunteer Orientation, Meeting Room, 9:00 am
April 18  Spring Celebration, 9:00 am - 2:00 pm
April 25  Bird Walk & Breakfast
May 2     Succulent Driftwood Class
May 12    Volunteer Orientation
May 17    Primavera in the Gardens, 2:00 - 5:00 pm
June 9    Volunteer Orientation, Meeting Room, 9:00 am
June 25   Annual Meeting, 6:00 - 8:00 pm

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.

In response to the Coronavirus outbreak we remain open and operational; however, as per UCR all gatherings have been postponed including events, tours, rentals, and photoshoots.
Campus updates are posted here: https://ehs.ucr.edu/coronavirus
Gardens updates are posted here: https://gardens.ucr.edu.