UC RIVERSIDE
BOTANIC GARDENS
EST. 1963

Volume 41, Number 1, Spring 2021

UCRBG Newsletter

ONLINE SPRING PLANT SALE

Saturday, April 10 - Sunday, April 11

By Janine Almanzor

Spring is my favorite time of the year in the Botanic Gardens. The dormant trees have a new set of leaves, many plants are flowering, and everything looks refreshed. If you visit the Botanic Gardens you will notice many plants blooming, and since most of the plants we sell at the Plant Sales are from the Gardens, you will likely find them on our Spring Plant Sale inventory. The sale will be online since we are unable to have large events in the Gardens at this time. A plant list will be posted on our website two weeks before the sale, but the order form will only be available on Saturday, April 10 through Sunday, April 11. If you are a Friend of the Gardens, you will receive an email with a code for a 10% discount on all your plant purchases. Becoming a Friend is easy on our website https://gardens.ucr.edu/friends. The plant pick-up days are on Wednesday, April 22 and Thursday, April 23.

As you are doing your outdoor spring cleaning and want to refresh your garden with new plants, see where you can fit in any of these gems from our Gardens to yours.

Lilacs, *Syringa*– Lilacs are deciduous shrubs with deliciously scented flowers in spring. They are usually associated with cold winters, but these selections all bloom well in the Botanic Gardens. Five varieties will be available, Burgundy Queen, Gertrude Leslie, Red Pixie, Ramona, Burgundy, and Libby Erickson. They will do best in partial to full sun.

Syringa x *hyacinthiflora* 'Gertrude Leslie'

Syringa x *hyacinthiflora* 'Ramona'

Syringa 'Red Pixie'

Syringa vulgaris (Burgundy)

Syringa oblata 'Libby Erickson'

Continued on page 3

In This Issue

Director's Report - Dr. Jodie Holt

A new year signals a new beginning and brings optimism for good things to come. While we remain under COVID-19 restrictions, UCR is planning a return to in-person classes in fall and we eagerly anticipate bringing back some on-site events. In the meantime, as described elsewhere in this issue our staff and volunteers have continued to make progress on garden and landscape projects and launch wonderful new online and virtual initiatives.

One area of recent focus for us has been our volunteer program, which is vitally important to the success of any botanic garden. With our closure due to COVID-19 in March 2020 and loss of volunteers for two months, our informal, in-person style of volunteer management was no longer viable. Since that time we have implemented a new online process for volunteer recruitment, onboarding, scheduling, and hours reporting. We also use UCR's online system for COVID-19 training, testing, and daily wellness checks, and volunteers as well as staff continue to practice all necessary safety precautions while working in the Gardens.

The imposition of more bureaucratic and impersonal processes for managing our volunteer program have greatly helped us ensure health and safety of all yet give little opportunity beyond another email to show our great appreciation for our volunteers. Without them we would not have been able to reopen with Stewards at the entrance gate, recover from constant weed growth, clean up and widen trails for visitor safety, prune nearly 600 roses, host in-person pickups for online plant sales, record over 20 videos on native plants in the Gardens, and much more. We are truly grateful for everyone who chooses to donate his or her time to volunteer in the Gardens and will continue to look for creative ways to show our appreciation!

We have finally begun recruiting for new volunteers in targeted areas of current need, including Stewarding at the gate and weeding/pruning/cleanup in the geographic gardens. With campus approval we are also now able to recruit student volunteers. Although onboarding and COVID-19 safety processes might seem onerous, our volunteers have assured us that they are well worth it for the fun, fitness, and satisfaction they receive from donating time to the Botanic Gardens. If any of you reading this want to find out more about joining our intrepid team of volunteers, visit our website volunteer page (https://gardens.ucr.edu/volunteer), submit the online Volunteer Interest Form, and be prepared to have a fun and satisfying adventure!

As this new year unfolds we look forward to the return of more normalcy and the opportunity to expand our open hours to welcome more of you to the Gardens. Please stay connected through our website, eNews, and social media to find out what's new. I welcome your ideas and feedback at bgdirector@ucr.edu or 951-827-7095.

Jodie

UCR Botanic Gardens Staff
Jodie Holt, Director
Janine Almanzor, Curator/Education Coordinator
Miguel Estrada, Manager
Pam Ferre, Program Coordinator
Jorge Fregoso, Nursery Technician
Pam Roose, Nursery Technician
Lois Whyde, Nursery Technician
Christian Valdez, Kristine M. Scarano Intern
Irida Ayrapetyan, Student Worker
Hector Barahona Lopez, Student Worker
Enrique Felix, Student Worker
Beverlie Gomez, Student Worker
Abraham Ortiz, Student Worker
Antonio Torres, 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
Joann D. Young, Director of Communications

BEES Administrative Unit Support Staff
Deborah Terao, Financial & Administrative Officer
Abraham Juliot, Receiving/Web Assistant
Vacant, Financial Analyst/UCRBG Head Cashier
Amber Rhemrev, Financial Services Supervisor
Carlos Moran, Travel & Purchasing Assistant
RC Sutton, Financial Operations Manager

Editors
Jodie Holt, Director
Janine Almanzor, Curator/Education Coordinator
Pam Ferre, Program Coordinator

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: 951-827-7090 Email: ucrbg@ucr.edu
Website: https://gardens.ucr.edu

UCR College of Natural & Agricultural Sciences

Continued from page 1

Chuparosa, *Justicia californica*– If you are looking for a climate appropriate, low maintenance plant that will attract wildlife and have a long blooming season, this is a great choice. Chuparosa is a tough, deciduous shrub native to the deserts of southern California, Arizona, and northern Mexico. The tubular flowers are bright orange-red and attract hummingbirds; the common name chuparosa is Spanish for hummingbird. Butterflies and other birds are also attracted to the flowers. Once it is established it will only need summer water about once a month. We will also have the yellow flowered **'Tecate Gold'** selection for sale.

Giant coreopsis, *Leptosyne gigantea*– This is a coastal California native with bright green, ferny leaves and pretty, yellow, daisy flowers on the top of a woody trunk. It blooms in winter and spring and is summer deciduous, making it very water efficient.

Jerusalem sage, *Phlomis fruticosa*– This is a water efficient salvia relative (Lamiaceae, or mint family) native to the Mediterranean region that grows three to four feet high and wide. The soft, woolly, gray-green leaves are a perfect back- drop for the bold, yellow flowers arranged in whorls shish-kabob style on erect stems from spring through summer. Another water efficient Jerusalem sage available is the less common ***Phlomis purpurea***. The woolly, young leaves are silvery and age to gray green with the lavender-pink flowers blooming in spring. Both of these plants can grow in full sun to light shade in soil that drains well.

Lion's tail, *Leonotis nepetifolia*– Also in the mint family, this is a water efficient, herbaceous, shrub. It is not the commonly grown lion's tail, as this one gets to six feet tall. The striking, four-inch, mop like balls of orange, tubular flowers are also arranged in whorls on long spikes. It has a long blooming season and attracts hummingbirds.

Mint-leaved lion's tail, *Leonotis menthifolia* will also be available. This plant grows to about two to three feet with smaller light green, toothed leaves. Both plants can take full sun or light shade.

Andean Sage, *Salvia discolor*– As usual, we will have many species of *Salvia* available in a multitude of colors, but I want to highlight one of our favorites. Andean sage isn't a showy plant demanding attention, but quietly catches your eye. It is very attractive, growing to about two feet with light green leaves above and velvety white below. The tubular flowers are nearly black with contrasting pale green calyces. Plant it in a location where it can get some afternoon shade and protection from frost.

Renew or become a Friend of the Botanic Gardens by April 3 for a 10% discount on all your plant purchases!

https://gardens.ucr.edu/friends

Spotlight On...Mike Cohen

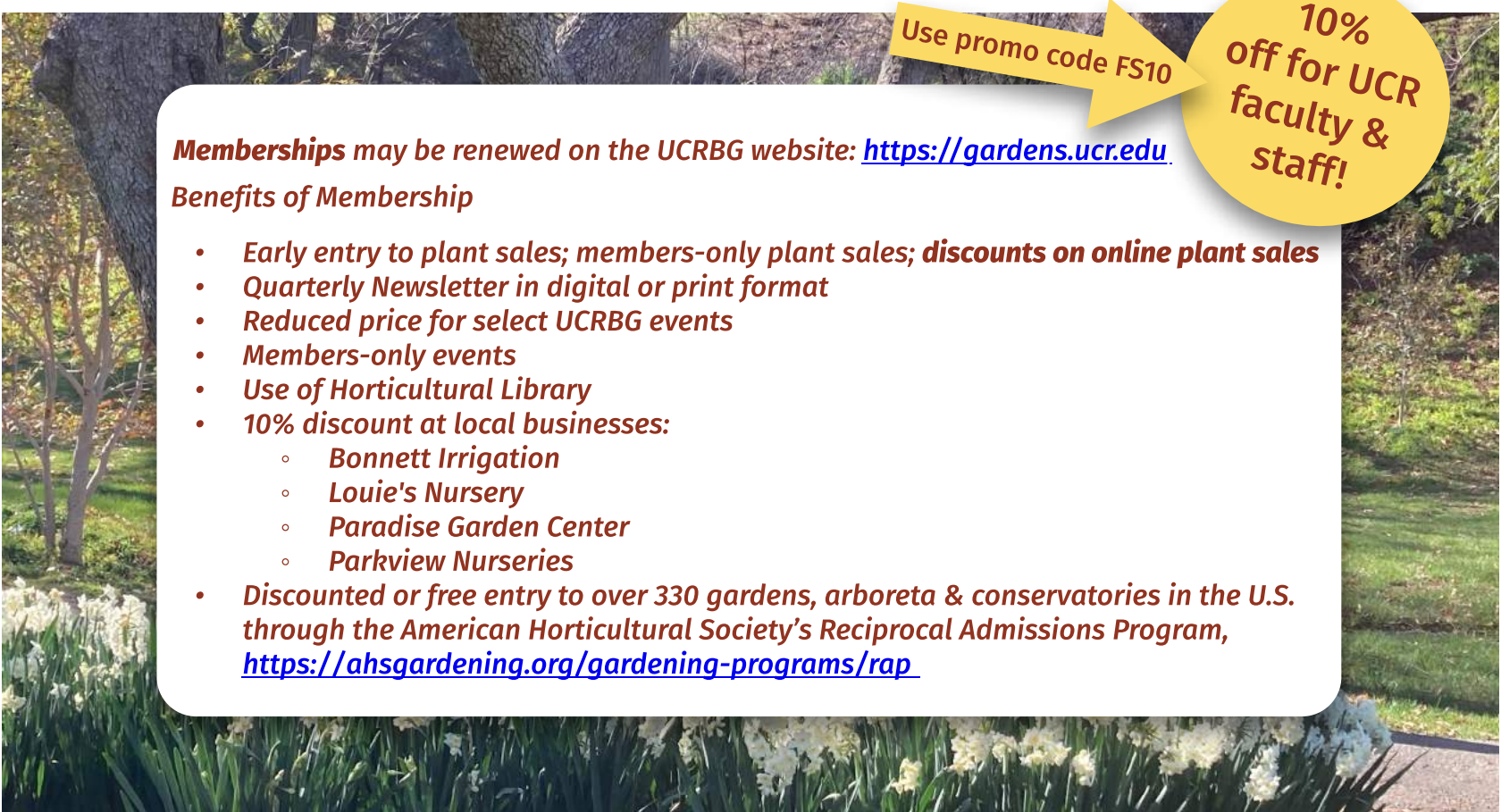
By Janine Almanzor

In the Fall of 2017, the Spotlight On article was about the Interactive GIS App, which at that time was just an idea. Now after almost three and a half years we've come a long way towards its fruition, thanks to our volunteer and contract GIS expert, Mike Cohen. With his extensive experience in GIS and his passion for the Botanic Gardens, Mike has brought the Gardens into the 21st century.

Mike's career as the GIS Team Leader for the County of San Bernardino along with his love and knowledge of plants led him to volunteer in plant related areas upon retirement. We first met Mike at an ESRI seminar where we learned that he had been volunteering at the UCR Herbarium. The Herbarium has been recognized as a leader in uploading their extensive specimen data into the Consortium of California Herbaria known as the CCH2. Mike has been responsible for much of that work. You can read about the Consortium in the Inside UCR magazine (https://insideucr.ucr.edu/stories/2020/11/23/ucr-helps-grow-massive-plant-portal). Other locations that have benefited from his GIS expertise are San Bernardino Valley College, the LA County Arboretum, and the Riverside National Cemetery.

Here at the Gardens, Mike has done far more than just create our GIS app, which is huge in itself! He is constantly thinking of ways to improve the Gardens' impact and apply new skills that he has learned. For example, there are several 360° views on our GIS app that he created. He is currently working on a 360° view of our new Native American Garden that will have plant names right on the picture and pop-ups to give more photos and information about each plant. We are planning on upgrading our current 360° view of the Butterfly Garden to this format as well. Another very helpful tool that Mike developed for the Gardens' employees is a Problem Reporter app. This tool utilizes ESRI's Survey 123 app so we can report and keep track of problems in the Gardens, such as irrigation leaks or broken labels. Using the app, we take a picture and get the exact location easily right from our smart phones.

We are thankful for the many hours Mike has devoted to improving the Gardens' technology. He always has a great attitude when we ask him to do one more thing, like adding memorials or signs to the GIS app. His love for the Gardens and joyful attitude has made him a great pleasure to work with. We also greatly appreciate Chuck Farrar, retired UCR CNAS Staff Research Associate, who has done much of the footwork to upload the plants into our GIS app.



Use promo code FS10

10% off for UCR faculty & staff!

***Memberships** may be renewed on the UCRBG website: https://gardens.ucr.edu*

Benefits of Membership

- *Early entry to plant sales; members-only plant sales; **discounts on online plant sales***
- *Quarterly Newsletter in digital or print format*
- *Reduced price for select UCRBG events*
- *Members-only events*
- *Use of Horticultural Library*
- *10% discount at local businesses:*
  - *Bonnett Irrigation*
  - *Louie's Nursery*
  - *Paradise Garden Center*
  - *Parkview Nurseries*
- *Discounted or free entry to over 330 gardens, arboreta & conservatories in the U.S. through the American Horticultural Society's Reciprocal Admissions Program, https://ahsgardening.org/gardening-programs/rap*

Butterfly Corner

California Tortoiseshell

Article and photos by Ann Platzer

The California Tortoiseshell, or Tortie (*Nymphalis californica*), in the family Nymphalidae, is a medium-sized butterfly with a wingspan of 2 to 2 ¾ inches. The color of the dorsal side of the wings is pumpkin orange with huge black wing borders with slightly scalloped edges (Photo 1: dorsal view). In addition, there are three large, black, irregular shapes along the leading edge of the upper front wing; the outer one is bordered on two sides with white. The ventral side is a dark mottled brown with darker wing bases resembling a dead leaf (Photo 2: ventral view). What perfect camouflage!

Photo 1: Dorsal view

Tortie's range is primarily in the mountains of Pacific Coast states, but they also fly east to the Rocky Mountain States and along the Canadian border to the Great Lakes region. Their habitat is montane chaparral, especially in canyons, oak woodlands, ponderosa pine forests and occasionally higher mountain zones. They are rapid fliers and thus difficult to capture with your camera unless they are sipping nectar or visiting mud puddles.

The female lays eggs in clusters and the larvae are gregarious, feeding on leaves of over 50 species of California lilac, *Ceanothus sp.* The young larvae must have young tender foliage to begin feeding, whereas large larvae can eat mature leathery foliage. Since California lilacs in the Tortie's range put on all their growth at the beginning of the season, adult butterflies must migrate to higher elevations to find this species just bursting out from melting snow in early summer to produce a second

Photo 2: Ventral view

or third brood. Individuals from the last brood will migrate back to lowland California to hibernate over winter.

The California Tortoiseshell likes nectar from flowers of manzanita, *Arctostaphylos sp.*, which includes over 40 species ranging from shrubs to small trees. Their other nectar sources include thistles and other composites such as asters and daisies. During large migrations to California, Oregon, and Washington they may feed on virtually any nectar source.

Flight time for the California Tortoiseshell in southern California is spring to fall. The adult hibernates at low elevations in our foothills during the winter and on warm winter days in southern California may be seen sunning itself, returning to its roost at night. These overwintering adults will appear in early spring to lay eggs, thus living 9 to 10 months before death.

Many years this species is quite uncommon, but like the Painted Lady, it has periodic population explosions and migratory movements as a huge burst of millions found in the mountains and northern portions of California. This population explosion is first seen as caterpillars covering *Ceanothus* shrubs. Next the adults make the news as they fly everywhere and stop traffic by smashing into windshields and blocking drivers' view. Although the population dynamics and migratory patterns of the California Tortoiseshell are not well understood, it certainly responds favorably to many healthy host plants by producing millions of offspring.

Happy Butterfly Gardening

AP

Thanks to Edward Platzer for reviewing this article.

Plants & Human Affairs Series
The Rubber Tree

By JoAnn Anderson

When we think of rubber trees, we are probably thinking of the great tropical forests of South America, southeast Asia, and even Africa and India. The most common commercial rubber-producing tree in those areas has been *Hevea brasiliensis*. Rubber, however, can be produced from the latex of a variety of trees of different species and even families, some of which can be seen at the Botanic Gardens. Latex alone can be used for certain adhesive effects, but to produce rubber latex must be mixed with the juice of another plant, *Ipomoea alba* (morning glory vine), which grows in abundance in the same environments as rubber trees. The story of how the mixture of latex and morning glory juice was discovered and refined is one of the most fascinating episodes in the history of civilization and man's use of and reliance on plants.

Collecting latex from *Hevea brasiliensis*

Sometime around 1600 BCE, or about the time that Homer was reputed to be writing *The Iliad* and *The Odyssey*, the architects of the massive cities of the Yucatan and Mesoamerica had discovered how to mix latex from *Castilla elastica*, the rubber tree native to the Yucatan jungle, with the juice of their sacred morning glory vine. This produced a substance that had useful, interesting, and even seemingly magical properties. Varying the ratio of the materials produced different properties; a mix of 50:50 produced an elastic rubber with bounce; a higher concentration of latex created a harder material that could be used for items like sandals. Thus occurred the invention of the rubber ball, an innovation that was to have far-reaching cultural and even empire-building consequences.

There is general agreement that the origin of the ball game was almost certainly in the coastal lowlands where latex-producing trees were common. Archeological evidence shows that the practice of playing ball figured prominently in the culture of the Olnec, Mayan, and Aztec civilizations and has persisted in some form from its beginnings around 1600 BCE to the present. In fact, the name "Olmec" means "rubber people." Even later, the Aztecs produced rubber for a variety of uses, including for trade.

Ipomoea alba, morning glory vine

While the specific rules of the earliest ball game are not known, the basics are clear. Each court had rings set high on opposite walls through which the ball had had to pass. This was more difficult than apparent because the ball could not be touched by hands. Balls retrieved from excavations have ranged from a few inches in diameter to nearly a foot in diameter, and even though they bounced, were made of fairly hard rubber and could cause severe damage including breaking bones. The participants of the game wore protective gear including helmets and padding. While the game took slightly different forms in various cultures over the centuries, the ball courts are all similar though differing in size and display artworks and markings that suggest mythical and ritual meaning. There is a rich literature on the ball game that can be accessed at the website of the Ancient History Encyclopedia.

Various archeological studies have placed rubber balls and ballcourts throughout Mesoamerica and even south into Central and South America, as well as far to the north in what is now Arizona, and there is evidence of native people still playing a version of the ancient game. In Mexico it is called "pelota maya" or Maya ball. It has been said that, while the origins of the game were most certainly tied to rituals including sacrifice, the game was also apparently played for recreation by children and women. This means that we are looking at nearly 4,000 years of history in which the rubber tree and its latex figured prominently in the rise and spread of a single cultural tradition.

While the Botanic Gardens does not have a *Hevea brasiliensis* tree in its collection, there are several *Ficus elastica* trees, the Indian rubber tree. There are two trees in the Ficus Grove and a variegated hybrid in the greenhouse, which will be on display when the new Conservatory opens. *Ficus elastica* produces the latex that has been used to make rubber but the main commercial source for rubber making is *Hevea brasiliensis*. *Ficus*

elastica can grow outdoors in Southern California but requires plenty of space for its huge canopy and vigorous roots. In colder climates it is grown as a houseplant. You can visit the Ficus Grove at the Botanic Gardens and think of the impact the rubber tree has made on civilizations from ancient times.

Succulent Wreath Class

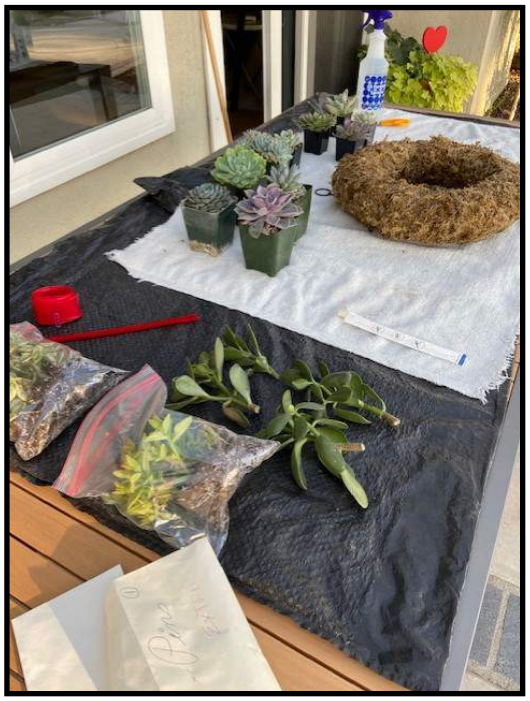
By Pam Ferre

In December 2020 the Botanic Gardens was pleased to host a virtual Living Succulent Wreath Workshop, led by UCCE Master Gardener Linda Powell. Each participant was provided a kit including a 15" sphagnum moss living wreath form, topiary pins, chopsticks, moss, and a variety of succulents with which to create a unique succulent wreath. Often grown as ornamental plants due to their striking appearance and low maintenance requirements, succulents are well-suited to being planted in a living wreath. Suggested succulents for this project include *Pachyphytum*, *Aeonium*, *Crassula*, *Echeveria*, *Haworthia*, *Kalanchoe*, *Sedum*, and *Sempervivum* varieties.

The Botanic Gardens is grateful to volunteer Karen Fleisher, who helped organize and facilitate the Living Succulent Wreath Workshop. We hope to offer more virtual events in the future. To find out more, please visit our website events page at gardens.ucr.edu/events.

The beautiful final product!

The supplied kit



The set up

Mien Van de Ven displaying her wreath

Wildlife of the Gardens

Botta's Pocket Gopher

By Michele Felix-Derbarmdiker

Frustration, destruction and one animal wrecking crew are just a few terms that come to mind when we think of this common animal. While some, particularly gardeners, consider them the stuff of nightmares, this miniature excavator provides an essential service to soil health and ecosystems. In a single year one pocket gopher can move over two tons of soil, allowing moisture, air and nutrients to be distributed. While they are busy reconfiguring the soil they also serve as a tasty meal for a variety of predator species.

Habitat/Feeding

California is home to five species of pocket gopher but the Botta's pocket gopher (*Thomomys bottae)* is the most common. They can make their home in most habitats as long as there is plenty of soil, preferably soft and not inundated with water. The soft soil allows for perfect burrowing conditions but their ability to dig with their teeth and claws allows them to dig in many soil types. Pocket gophers dig burrows consisting of a main tunnel with other tunnels branching off to form areas for resting, feeding and defecating. The tunnel systems allow them to search for food in relative safety. Pocket gophers are not fussy eaters, and will consume roots, seedlings, shrubs, grasses and trees. They can venture outside the burrow system to feed, but prefer to snack on roots underground or by pulling off the "now you see it now you don't 'cause I pulled the entire plant underground" trick. Their excellent noses and sensitive whiskers allow them to locate food and navigate underground.

Breeding

Reproduction can vary greatly depending on vegetation availability. In vegetation-rich areas breeding can occur up to four times a year, while habitats with sparser vegetation provide a single breeding opportunity in the spring. Breeding season is the only time of year when these solitary individuals interact. After an approximate 18-day gestation, the female will give birth to an average of 3-4 pups. Around 40 days later the pups are weaned and within 8 months they are sexually mature.

Identification

Botta's pocket gophers are covered in coarse fur, often matching the habitat soil. They are 6-10 inches in length, with males being larger than females. Look for small eyes, short ears and a stubby tail, which is used as a sensory tool when maneuvering backwards. Their most characteristic features are the fur-lined cheek pouches, which extend from the head to the shoulders. These nifty food storage pockets are the feature from which their name is derived. Also, notice a large set of teeth. Similar to other rodents, pocket gopher teeth grow continuously during their 3 years of life, although they are constantly worn down.

These critters are not likely to make an appearance for you on the surface, but certain indicators can give clues to whether you have a gopher or a mole. Both species dig tunnels and plug entrances; however, how the hole is plugged differs between the two species. Gophers that are actively tunneling will have a relatively flat fresh soil covered entrance. A layer of fan shaped soil will also appear around the entrance. Moles on the other hand create volcano shaped mounds above the entrance, hence the term molehill.

Threats

The population numbers of Botta's pocket gopher are considered stable across its range and it is listed as a Species of Least Concern on the IUCN Red List. It is a staple of many local food webs and its main threats remain predator species such as coyote, skunk, birds of prey and the angry gardener.

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

What to See in the Gardens

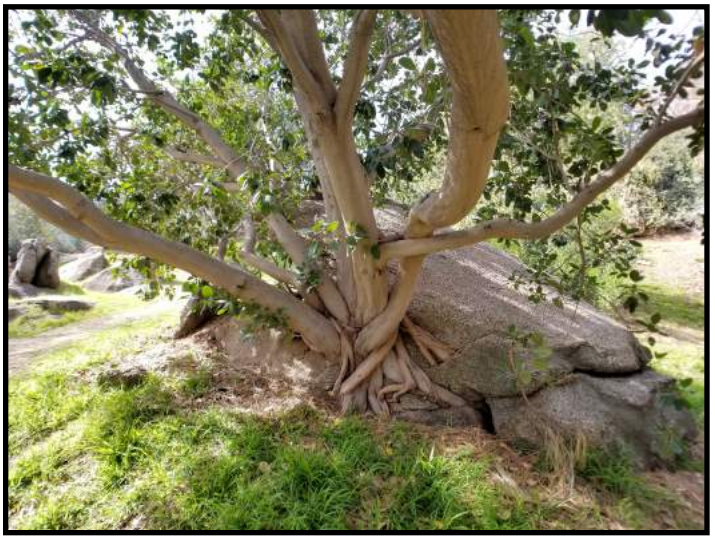
Article and photos by Miguel Estrada

In a short time, soil temperature will rise and daylength will increase, and the subtle changes will signal to thousands of specimens to increase their activity. Trees and shrubs that have shed their leaves will once more produce new foliage to capture the necessary energy to sustain their growth and build up stores for next Spring's push. You don't have to walk far to see this. In our Deciduous Forest and Alder Canyon we have over 25 trees that will leaf out soon. Though this may not be as beautiful as flowers painting a hillside, it is remarkable to know that next year's success depends heavily on the current year's leaf production. Whether through stress or age, which can limit the number of leaves and/or leaf size, leaf production can have a severe impact on plant photosynthetic capacity. At some point in the life of a plant, energy expenditure for maintenance will be greater than what is captured, leading to decline and the eventual death of the plant.

Alnus rhombifolia, white alder

This yearly event is what motivated my first recommendation for what to see. Right by our Alder Canyon sign by the trail leading to trail marker 36, stand two *Alnus rhombifolia*, white alders. One, planted in 1962, is the last remaining white alder from the original stand. Unfortunately, this tree is nearing the end of its natural life. But since its planting it has added considerable size to its structure, growing about a 2-foot trunk diameter, reaching nearly 40 feet in height, and at one point having a crown size that spanned over 30 feet. Now that crown is in retreat, sloughing of dead branches with each subsequent growing season. The other alder, planted in 2014, is vigorous and the one that will assume the role as the most robust alder in Alder Canyon. For now, I urge you to look at these two trees and pay close attention to the details of the young *vs.* old specimen.

When I visit other gardens, I search for something I don't see often. If something like this piques your interest, then head to near Bobcat Rock, between trail markers 25 and 26. There you will find a *Ficus*t tree that has anchored



Tree anchored in a rock

itself in a rock. What was once a small foothold for this tree has grown with the thickening of the trunk and root diameter over time. Though the roots are in soil, the way the tree is situated it appears as if it is growing from rock itself. My last recommendation is a favorite among our visitors. *Sophora secundiflora*, Texas mountain laurel, typically grows as a multi-trunked shrub, slowly reaching a height of about 10-15 feet. What sets this apart as a favorite is the scent the hanging bluish-lavender flowers produce. Many visitors have told me that they can smell this plant from the parking lot and that it reminds them of grape soda. These shrubs are only a short walk from the entrance and are found near the first and second bridge. Visit soon and experience this delightful plant for yourself and see why so many visitors rave about it.

Sophora secundiflora, Texas mountain laurel

For more to see in the Botanic Gardens please visit our webpage on what blooms each month throughout the year, at https://gardens.ucr.edu/information/bloom.

In The Works

By Botanic Gardens Staff

Although we wish for more rain, beautiful weather has facilitated completion of many projects in the Gardens, and of course remote work continues as well. Here is an update on our activities, some of which are described in more detailed articles elsewhere in this issue.

On-site:

- Manager Miguel's team is renovating several damaged areas of Alder canyon lawn, which comprises 25,000 square feet of grass. We look forward to a beautiful, rejuvenated lawn by late spring.
- The slope along the left side of the steps just inside the entrance to the right were cleaned up and planted with new succulents from our collection, creating a lovely new view for your walk.
- The cactus knoll at the eastern end of the North American Desert Garden was planted with several new species from our collection.
- A float valve was installed in the turtle pond, effectively eliminating a longstanding problem of water overflowing and running down the arbor steps, creating a safety hazard. The steps should now remain free of slippery mud and algae during the winter.
- The perimeter road/trail along the southwest edge of the Gardens has had many deep ruts and gullies develop over the years. These have been repaired with a stabilizing mix of fill dirt and cement, creating a smooth walking surface, and greatly reducing the safety hazard.
- Our Oak Woodland area is just under a quarter acre in size and has 13 oaks in the flat area, where years of rain have buried their root collars. This accumulated soil is being removed to open the area around the trunks, and the irrigation program will be modified to help preserve these beautiful trees.
- Curator Janine and her volunteers have continued adding new plant and bed labels throughout the Gardens.
- Special Projects volunteer Doug has begun refinishing some of our beautiful redwood garden signs that he produced and installed a few years ago.

Remote work:

- Janine and volunteer videography team Jim and Claudia Clark produced a video of Janine describing and demonstrating how to prune roses, which will be posted on our website.
- Janine, the Clarks, and volunteer and native plants expert George Spiliotis have produced 20 short videos, with more to come, describing native plants in the Gardens that would be suitable for the home landscape. These will also be available on our website.
- Our CNAS development team spearheaded several giving campaigns for the Gardens, one to raise funds for our new Conservatory and another to grow our endowment fund and improve the long-term financial sustainability of the Gardens.
- Under direction of Program Coordinator Pam, our creative student worker Michelle has designed a new Volunteer Brochure.
- Director Jodie Holt has given several talks accompanied by colorful slide shows to large virtual audiences, including UCR retirees, UCR alumni, UCANR Master Gardeners, and outside groups. One gratifying outcome has been the recruitment of several eager new volunteers.

Cactus knoll

Arbor steps below the pond

Perimeter road

Oak woodland

Rose Pruning

By Janine Almanzor

For the first time since 1979 the Botanic Gardens was not able to hold its annual Rose Pruning Demonstration. The event has grown in popularity over the years, with last year's attendance topping 120. Since the Gardens houses nearly 600 rose bushes our small crew needed assistance pruning them, so we proceeded with rose pruning in-house with much appreciated assistance from our volunteers. Master Gardeners and seasoned rosarians came to the Gardens at our usual Rose Pruning Demonstration time on Sunday, January 10 from 1-3 pm. Although we missed the opportunity to educate the public about roses, everyone was amazed at how much was accomplished because we weren't demonstrating and talking. The volunteers wore masks and were stationed at least six feet apart to ensure everyone's safety. As a small token of our appreciation, every volunteer was given a bag of delicious treats, either scones or cookies, from Baguette Bakery & Café. Thank you to all who participated and for our wonderful volunteers who maintain the Rose Gardens year round.

Carol Haffter

Lee Bayer

Sheilah Bellew & Judi Newby

UCR and Botanic Gardens COVID-19 Update

UCR remains in a Phase 2 Recovery Plan, outlined here: https://campusreturn.ucr.edu, and the Gardens continues to follow all requirements of UCR, Riverside County, California State, and the CDC.

Due to the need to permanently staff the entrance gate we remain open for limited hours, Monday through Friday, 9 a.m. until 12 noon. We recently recruited a few more volunteer Stewards for the gate so have added two open Sundays per month, 8 a.m. until 12 noon. When we can increase staffing and/or Stewards we will continue to expand our open hours.

The following restrictions remain in effect to prevent the spread of Covid-19:

- Staff gate attendants to insure adherence to all policies
- Facial masks or coverings required for entry **and** when physical distancing from others is not possible
- Physical distancing of at least 6 feet required from others not in your party
- Group size limited to 10 persons
- Designated restrooms open with hand sanitizer available
- Drinking fountains closed but bottle hydration stations open
- New touchless online functions including payment of admission donation

The UCR campus remains closed with only critical operations continuing, including remote instruction. Faculty research remains limited, nonessential staff are working remotely, and all events are suspended. Campus status and updates are posted here: https://campusstatus.ucr.edu.

We are fortunate to be able to welcome visitors to our beautiful Botanic Gardens and provide a safe space for enjoying our gardens, wildlife, and a chance to get some exercise. Please visit our website for updates on our status, hours, and upcoming events.

UC RIVERSIDE
Botanic Gardens

900 University Ave.
Riverside, CA 92521

Non-Profit ORG
U.S. Postage
PAID
UCR

UCRBG Virtual Opportunities

GIS Map App
https://gardens.ucr.edu/all-virtual-tours

Plant Ecology in the UCR Botanic Gardens Story Map
https://arcg.is/H8fO

Deserts of the Southwest Story Map
https://arcg.is/1n9WGa

Plant Diversity at the UCRBG Conservatory Story Map
https://arcg.is/1HHPzj

Please note: The UCRBG hours are Monday - Friday 9:00 am - 12:00 pm and the first and third Sundays 8:00 am - 12:00 pm until further notice.

The Gardens will be closed on March 26 & April 4.