

# The University of California, Riverside Botanic Gardens UCRDBG Newsletter

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43RD ANNUAL U.C. RIVERSIDE BOTANIC GARDENS

## SPRING PLANT SALE NEWS

Friends Preview Sale: Saturday, April 2, 8 a.m. to 11 a.m.

Public Sale: Saturday, April 2, 11 a.m. to 4 p.m.

and Sunday, April 3, 9 a.m. to 3 p.m.

The spring plant sale is just around the corner and, at the time this article was written, El Niño hadn't lived up to its promise. We've prepared for continued drought by gathering a huge selection of California native and California friendly plants for the sale. There will be plenty of new and exciting varieties, as well as some old favorites. Let's look at a small sampling of what will be available.

Three trees are of particular interest. From the Mediterranean comes **Marina strawberry tree, *Arbutus 'Marina'***. This evergreen manzanita relative can grow to 30 feet and has a lot going for it. It has large, leathery, dark green leaves, handsome peeling bark, big clusters of tiny, pink-blushed, urn-shaped flowers, and showy, edible fruits that start out yellow and ripen to red. On top of all that, it is water efficient. **Desert willow, *Chilopsis linearis*** comes from northern Mexico and the southwest U.S., including southern California. The sale will offer the cultivar, **'Burgundy'**. This deciduous, small tree grows to



Marina strawberry tree, *Arbutus 'Marina'*

20 feet high. In spring and summer it is clothed in narrow, willow-like leaves and produces trumpet-shaped flowers in a rich burgundy shade. The flowers attract hummingbirds. ***Ceanothus 'Ray Hartman'*** is derived from California native plants. One of the largest of the *Ceanothus*, growing up to 20 feet tall, it can be trained as a large shrub or into a more tree-like form. It has leaves that

are especially large for a ceanothus, and spike-like clusters of medium blue flowers in spring.

Among the shrubs to be available at the sale are two from South Africa. **Balloon pea, *Lessertia montana***, is a four-foot, evergreen shrub with silvery, compound leaves that nicely set off the rather spectacular, bright red flowers. The pea-shaped flowers have conspicuous, beak-like keels and are followed by decorative, inflated



*Ceanothus 'Ray Hartman'*



Marina strawberry tree, *Arbutus 'Marina'*

pods that give the plant its common name. Also from South Africa comes an especially dark-pink-flowered form of breath-of-heaven, *Coleonema pulchellum* 'Red'. Breath-of-heaven invites fondling with its soft, needle-like, aromatic foliage. The tiny, starry flowers are produced in abundance and are attractive to butterflies. Breath-of-heaven can grow to 5 or more feet tall.

Three Australian shrubs will be offered. **Narrow leaved mint-bush**, *Prostanthera linearis* is an upright, evergreen shrub that grows to five feet high. Its reddish stems bear narrow, deep green leaves and many half-inch, trumpet-shaped, purple flowers in spring and summer. The flowers attract hummingbirds. Need a massive groundcover? *Acacia redolens* 'Desert Carpet', **desert carpet acacia**, may do the trick. It grows to only about two feet high but can spread 12 or more feet. This drought tolerant shrub has narrow, gray-green, leathery "leaves" and clusters of tiny, yellow puffball flowers that are vanilla scented. What appear to be leaves are technically flattened petioles, called phyllodes. **Coastal-rosemary**, *Westringia fruticosa* 'Blue Gem', is an evergreen shrub, three to five feet high -- more compact and upright than other westringias. Its narrow, olive green leaves, that are white woolly below,

are vaguely reminiscent of rosemary, thus the common name. 'Blue Gem' produces spikes of dainty, lavender-blue flowers over a long spring to fall period.

We always

try to offer several lavenders for each sale. This sale we introduce two lavenders that we've not offered before.

*Lavandula angustifolia* 'Royal Velvet' is distinguished from other English lavenders by its extra long flower clusters that hold their color well when dried. The fragrant flower clusters are dark navy blue and lavender, and are produced on long, wand-like stems above a dense, gray-green foliage mound. It grows to two or three feet high. Another lavender that is new to the sales is *Lavandula stoechas* 'Anouk Supreme', Spanish



**Breath-of-heaven,**  
*Coleonema pulchellum* 'Red'

lavender. This has aromatic, gray-green foliage that is particularly resistant to diseases. Its dense, pineapple-shaped spikes of tiny, deep purple flowers topped by showy, lavender bracts appear earlier than those of the

cultivar, 'Anouk'. Spanish lavender is summer blooming and needs especially good drainage.

Of course there will be many California native shrubs like Cali-



**Balloon pea, *Lessertia montana***

wheat, *Eriogonum fasciculatum* 'Warriner Lytle', a low, wide-spreading form of this drought tolerant, butterfly attracting shrub. We are careful to offer only those California natives that are likely to succeed from a spring planting. *Ceanothus*, manzanitas, sages, and much more will be available – there isn't space to discuss them here, but you can check out the plant list for more information.

There will be a number of water-efficient, low-growing daisies at the sale. From the Atlas Mountains of Morocco comes **Moroccan daisy**, *Rhodanthemum hosmariense* (you may also find it listed under the synonyms, *Chrysanthemum hosmariense* and *Pyrethopsis hosmariensis*). We will be offering two cultivars. Both are subshrubs to eight inches high and two feet wide, with softly hairy, silvery, finely divided leaves and two-inch daisies most heavily in winter, but often at other times of the year. The cultivar,



**Narrow leaved mint-bush, *Prostanthera linearis***



**Desert carpet acacia, *Acacia redolens***

'Casablanca', has flower heads with white ray flowers; 'Marrakech' has flower heads with pink ray flowers. Both need to be planted in well-drained soil, in full sun. Also from the Mediterranean region is **gold coin**, *Pallenis maritima* (synonym *Asteriscus maritimus*). This shrubby perennial grows to a foot tall and three feet wide and has small, green, spoon-shaped leaves. The flower heads are 1.5-inch, golden yellow daisies that are produced much of the year. From California comes **San Bruno goldenaster**, *Heterotheca sessiliflora* 'San Bruno Mountain'. This is an herbaceous perennial that forms an eight-inch high mat of soft-fuzzy, light green, spoon-shaped leaves. The flowerheads are 1.5-inch, bright yellow daisies borne most heavily in spring, but sometimes into summer and fall.

There are several other herbaceous perennials to be offered -- here are some from South Africa. *Tulbaghia natalensis* is commonly called society garlic, but this is not the ubiquitous society garlic that one sees in



Coastal-rosemary, *Westringia fruticosa* 'Blue Gem'.



Moroccan daisy, *Rhodanthemum hosmariense* 'Casablanca'

many landscapes (that one is *T. violacea*); *T. natalensis* is a more refined and smaller species. It has gray-green, strap-like leaves and foot-tall stems

topped with clusters of light pink flowers with yellow centers. The flowers are deliciously fragrant in the evening. *Watsonia pillansii* 'Coral Spires' is a four-foot-tall *Gladiolus* relative. Like *Gladiolus*, *Watsonia* forms tall,

narrow fans of sword-shaped leaves arising from large, flat corms. Funnel-shaped flowers are produced sequentially in spikes at the top of the fan of leaves -- these appear in summer and are a rich shade of coral-orange. Both the *Tulbaghia* and the *Watsonia* are new to the sales. Needing at least part day shade is **shaving brush flower**, *Haemanthus albiflos*. This evergreen, bulbous perennial has broad, tongue-shaped leaves and brush-like clusters of white and gold flowers atop thick stalks. Shaving brush flower can be planted in the ground in a shaded, well-drained site, or it can be grown in containers.

Even more perennials will be offered for the first time -- these with their roots in Europe and the Mediterranean. **Serbian bellflower**, *Campanula poscharskyana* 'Blue Waterfall', is a vigorous, fast-spreading groundcover with bright green, heart-shaped leaves with toothed margins. From spring into summer arise spikes of star-shaped

flowers that, in this cultivar, are light blue with white centers. Serbian bellflower needs shade or part day sun and surprisingly little water. Another groundcover perennial is **lamb's ears**, *Stachys byzantina* 'Big Ears'. 'Big Ears' is an extra-large-leaved form of this favorite of children. It forms a mat of tongue-shaped, silvery-green, soft-woolly leaves that everyone loves to fondle. Though mostly grown for the foliage, lamb's ear's foot-tall, woolly spikes of small, pink to purple flowers are interesting in arrangements -- these are produced in summer. The last



Spanish lavender, *Lavandula stoechas* 'Anouk Supreme'

perennial to be discussed here is **dwarf Mediterranean spurge**, *Euphorbia characias* 'Humpty Dumpty'. 'Humpty Dumpty' is a compact form of this mounding perennial, growing to only two feet tall. It has narrow, blue-green leaves arranged foxtail fashion along the thick stems which are topped by long-lasting, clusters of chartreuse-yellow flower heads in summer.

As always, there will be a huge selection of cacti and succulents for landscape and containers. Here are a



Moroccan daisy, *Rhodanthemum hosmariense* 'Marrakech'

few that are being offered for the first time. **Aloe 'White Fox'** is a miniature at only 12 to 20 inches tall, in bloom. 'White Fox' forms many rosettes of long-triangular, sea green, succulent leaves with fine-toothed margins. The sea green base color of the leaves is

nearly obscured by parallel rows of narrow, white rectangles. The plant is grown primarily for its handsome foliage -- the spikes of tubular orange-red flowers are an added bonus. *Cotyledon orbiculata*, or **pig's ears**, is an extremely variable species with leaves that can be anything from pencil-like to paddle-like, green to white, all borne on stout stems. The sale will offer *Cotyledon orbiculata* 'Silver Storm'. 'Silver Storm' is a broad-leaf form with slightly cupped, rounded,



**Gold coin, *Pallenis maritima*, photo courtesy of Stan Shebs.**

succulent leaves covered in a waxy powder that makes them silvery-green; the leaf margins are red, especially in full sun. It grows to two or three feet high and produces long-stalked clusters of orange, pendulous, bell-shaped flowers. *Echeveria* 'Perle von Nurnberg' is a succulent perennial related to *Cotyledon*. It forms large, symmetrical rosettes of broad, waxy blue-gray leaves with pink overtones. Its coral and yellow, tubular flowers are borne on branching spikes in summer. The flowers of both *Cotyledon* and *Echeveria* attract hummingbirds. The last succulent to be discussed here is *Opuntia* 'Baby Rita', a dwarf hybrid of our native beavertail cactus. 'Baby Rita'



**Shaving brush flower, *Haemanthus albiflos*, photo courtesy of Wayne Boucher.**

is a spreading, succulent shrub with spiny, paddle-shaped, jointed stems that are gray-green blushed purple -- the blush becoming more pronounced during cold weather. The spring flowers are bowl-shaped with satiny, rose-purple petals.

There is only space in the newsletter to discuss a small sampling of the plants that will be available at the sale. Check out the plant list to read more about the many other plants to be offered. Not included on the list are many cacti and succulents in smaller sizes, hundreds of herbs, vegetables grown by the UC Master Gardeners, and wildflower seeds that will be available. Plan to spend some time perusing the huge selection. Be sure to tell your friends and relatives about the sale. And don't forget -- the **Friends Preview Sale begins at 8 A.M.** Thank you in advance for your support of this event and for your support of the Gardens. 🌿SM



**Society garlic, *Tulbaghia natalensis***



**Serbian bellflower, *Campanula poscharskyana* 'Blue Waterfall'**



**Lamb's ears, *Stachys byzantina* 'Big Ears'**

### About the Plant List

Friends can choose from several ways to obtain a plant list. You can call the office at **951.784.6962** or e-mail us at [ucrbg@ucr.edu](mailto:ucrbg@ucr.edu) to request a list be mailed to you. The list may be found online at the Gardens' website, to print or peruse in place. Go to [www.gardens.ucr.edu](http://www.gardens.ucr.edu) and follow the links to the calendar and plant sale. Copies of the list will also be available at the entrance to the sale.

The list includes trees, shrubs, vines, herbaceous plants, most of our landscape-size succulents and cacti, shade plants, house and patio plants, and water plants. To help you prioritize your shopping, the list also includes the number of plants we expect to have available. The list is continuously being updated as the inventory changes, so check in periodically and get an updated list. Note that containerized plants are a perishable commodity and are subject to watering problems and weather issues, so check the updated list close to the sale to make sure your choices are still available. Make use of this informative publication! S.M.



**Clockwise from upper left: Dwarf Mediterranean spurge, *Euphorbia characias* 'Humpty Dumpty'; *Echeveria* 'Perle von Nurnberg'; *Aloe* 'White Fox' foliage and flower views.**

## State of the Gardens

**PLANTS TO SEE:** ‘Tecate Gold’ chuparosa (*Justicia californica*) scrambling over the fence north of the entrance gate, orange-flowered Mexican honeysuckle (*Justicia spicigera*) near the restrooms, white-flowered chilicothe or wild cucumber (*Marah macrocarpa*) along the north edge of the main drive, white snowflake (*Leucojum aestivum*) across the drive, orange-flowered, weedy Kalanchoe species in the desert garden, blue-flowered *Ruellia peninsularis* across from the Duggar Ramada, various *Aloe* species and ice plants on the South African slope, low-chill true lilac cultivars across from the South African slope, California-lilac or *Ceanothus* species along the north coast pathway, hybrid roses in the rose gardens, lots of different butterfly attracting flowers in the butterfly garden, many different herbs in the Colonial Herb Garden, South African jasmine climbing over the belvedere in the Herb Garden, flowering Japanese quince, peach trees and redbuds in Alder Canyon.

**Dean Urich visits Botanic Gardens:** On February 8, Theresa and I toured CNAS Dean Kathryn Urich around the Gardens. Student Assistant Arthur Sprunger accompanied us until he had to go to class. In the rose gardens Dean Urich spoke with volunteers weeding between bushes. We also visited the greenhouse, Butterfly Garden, Herb Garden and pond on the way back to Alder Canyon.

**Upgrades to the Facilities:** Speed bumps which are more pedestrian friendly will be installed at the entrance gates, in the hope that folks

will not trip. The speed bumps do slow vehicular traffic at the entrance and help protect children waiting for docent-led school nature tours.

A land survey and utilities/drain survey were carried out at the entrance area in preparation for a decision on the exact site of the new ADA restrooms. A survey was also made in early February along the ADA pathway on the South African slope.

With assistance from Drs. Ann and Edward Platzner, signage has been ordered for the different species of butterflies that might be seen in the Butterfly Garden.

Trees in the desert gardens will be pruned in March paid for by The Arbor Fund (see below).

**Ethnobotany Garden:** Volunteers Marsia Edwards and Lynn Fumey, who look after the Herb Garden, suggested we should use the empty beds at the south end of the herb Garden for displays of plants used by Native Americans in Southern California. This would provide in one place a collection of plants that school children wish to see when they visit on school tours. This garden will be across the drive from the proposed location of the Children’s Garden that will be nearer to the Schneider-House fence, where the present nursery is located.

**Children’s Garden Fund:** Over \$12,500 were raised by the recent matching appeal to develop an area where children might learn the pleasures of gardening with vegetables and flowers.

**Passing:** Robert Giese, retired Friends’ board member and campus landscape architect, died recently in Hawaii.

Robert Tank, who volunteered for 25 years in the Garden’s office, passed in January. We shall miss both, for they contributed many hours to the Garden’s maintenance and development.

### Donations:

#### **Botanic Gardens Children’s Fund:**

Thank you to the following 86 friends who contributed to this matching appeal fund. Over \$12,500 was raised since October, 2015: Eugene Anderson, Jennifer Anderson, Gerald Armour, Serafina Barrie, Lewis Blodgett, Fredrick Boutin, Paula Bramlett, Hilary Brown, Cynthia Buchanan, Cecilia Burch, Linda Burn, Susan Van Campen, Nancy Canter, Rita Chenoweth, Judith Cisar, Michael & Adriana Clegg, Nancy Crossfield, Bernice Curtis, Greg Daffin, Arturo Dassow, Pamela Devlin, Wilfred Elders, David Erickson, Jorge Ferreira, Karen Fleisher, Kimberly Foreman, Richard Francisco, Bill Gardner, Anna Gaydel, Raymond Gayk, Margaret Gross, Johanna Grosso, Mary Harris, Gloria Macias Harrison, Jesse Hatter, Barbara Hayes, Robert & Susan Heath, Jesus Hernandez, Nancy Higbee, Dee Hyding, Marianne Jaggars, William Keeler, Christine Keller, Jeanne Kataoka, Lawrence La Pre, Susan Lennan, Robert Lock, Beverly Maloof, Tania Marien, Donald Martin, Les Martin, Marjorie McCall, Bob McKenzie, Gayle Meehan, James Monroe, Cara Moon, Lee Moore, Raymond Mont-

gomery, Phyllis Nash, Susan Paasch-Williams, Margaret Park, Mark Patterson, Robert Pepper, Ann Platzer, Dennis & Janice Ponsor, Felice Pope, Maya Poulson, Gordon Pratt, Sally Quay, Dallas & Gloria Rabenstein, Gloria Regier, Janet Robinson, C.P. Rowlands, Kenny Ryan, Nancy Ryan, Gerald Saks, Maria Sanchez, Jeffrey Simons, Albert Stralker, Sue Struthers, Elwyn Spaulding, James Su, Steve Tavaglione, Barry Taylor, Patricia Taylor, Gary Tranbarger, Cecelia Traugh, Celeste Tubman, Nancy Waldner, Edith Wilkin, Ruth Winchester, Richard Wing.

**Botanic Gardens General:** Song Bi & Xumei Chen, Jan Boyno, Dr. & Mrs. Jerry Carlson, Dennis &

Brenda Focht, Leslie Hicks, Claire & Brian Federici, David Glidden & Susan Carpenter, Anthony & Louise Huang, Kunling & Betty Lu, Adam Lukaszewski, Marion McCarthy, Mr. & Mrs. Neil Snyder, Tamara McReynolds, Joseph & Charlann Vander Pluym, Connie & Roger Ransom, Hunter Tank, The Arbor Fund, a Donor Advised Fund at The Community Foundation, Strengthening Inland Southern California through Philanthropy. J.G. Waines, Jack Wayne Ward, WRG.

**Botanic Gardens Memorial Fund for Robert Tank:** Fidelity Charitable Gift Fund, Carol Haftner, Frances Hensley, Ann Platzer, JG Waines.

**Botanic Gardens Endowment:** Tracy Kahn & Norman Ellstrand.

**Friends of Botanic Gardens:** Charles Beaty, Peter Brabant, Donald Britt, Hilary Brown, Alejandro Cortez, Exequiel Ezcurra, W.C. Fidler, Gary Gehley, Jennifer Katz, Robert Maan, Douglas McLaughlin, Stephen Morgan, David Pankratz, Mikeal Roose, Hal Snyder, Kim Wilcox & Diane del Buono. Mr. & Mrs. Norton Younglove.

**Friends Projects Fund:** Concepcion Rivera

**Kristine M. Scarano Memorial Endowed Fund for the Botanic Gardens:** Col. Vincent Scarano.

**Butterfly Garden Endowment:** Ann Platzer.

If I failed to mention your name, please advise me. 🍷GW.



**Food! Wine! Music! Fun!**

*Come and Enjoy Riverside's Premier Food and Wine Tasting Event*

**Primavera in the Gardens** is the major fundraiser for our Botanic Gardens. Proceeds from the event are used to further our children's education program. Please bring your friends for a lovely afternoon of music, delicious food from Riverside's best restaurants paired with wines from Temecula Valley, Cucamonga Valley, Central Coast and Northern California, as well as regional craft beers. Enjoy browsing the offerings of our Silent Auction- including contributions from many local artists and vendors. Great fun for a worthy cause!

# Around the Gardens

## Rose Pruning Demonstration

January 10

What makes these events so enjoyable is not only the beautiful setting of the Rose Garden, or the perfect weather. What makes these events inspiring are the volunteers and public that attend. Once again we had the congenial presence of Master Gardeners, Mountain View Rose Society, and other UCRBG volunteers and staff. As public arrived, the generous volunteers were eager to help our visitors learn rose pruning techniques through live demonstrations. As pruning can be intimidating to the some gardeners, these interfaces provided the information and techniques needed to prune with ease. There were plentiful donations made available from Cherry Valley Nursery, Corona Tools, Louie's Nursery, Milfields Nursery, Moon Valley Nursery, Paradise Garden Center, Parkview Nursery-Canyon Crest, Sunshine Growers, and Gail Watson. Great progress was made in the pruning of the Rose Garden with the help of all involved. Thanks to all that participated in helping the "Queen of Flowers" look her best. 🌹TM

## Native Plant Lecture

February 20

Lisa Novick, of the Theodore Payne Foundation, presented a lecture entitled 'California Native Plants and the Southern California Garden'. Lisa was a dynamic speaker, and made a compelling case for the use of native plants in our gardens. She touched on the many benefits, including the wise use of water resources, the benefit for native species, including our birds, bees, butterflies and other pollinators, and the reduced need for pesticide use.



*Lisa Novick of the Theodore Payne Foundation*

She provided examples of native plantings that complemented a wide range of garden styles. She showed us photos of the transformation of her own garden to native plantings. The focus of her talk was on natives that work well in the inland region, and she brought samples of many of these plants.

## Birdwalk and Breakfast

February 27

Our 'Gourmet' Birdwalk was quite successful, in spite of the unseasonably warm temperatures for late February. The birding group documented nearly 50 species of birds, and visited many of the 'secret' birding sites on campus, in addition to the wonderful locations within our Gardens. See our list of upcoming events to learn about the next birdwalk - you won't want to miss this chance to see the migratory birds of Riverside.

## Winter Lecture

February 28

For our Winter Friends Lecture, Paul Sternberg, of Living Cycads, presented a lecture introducing us to the many types of cycads. We were given a world tour of the different and varied environments to which

cycads have adapted. We learned that the world of cycad collecting is every bit as intriguing as that of collecting orchids; Paul has been directly involved in attempting to stop poaching and the destruction of natural plantings. Paul showed us images of the plants in their natural environments as well as the extensive plantings at their nursery in Vista, California. Paul and his wife, Karen, brought some specimens to give as door prizes; these were much appreciated.

## UPCOMING EVENTS

### Spring Plant Sale

April 2nd and 3rd

See cover article for general information about the plant sale.

We will have presentations and special events at the plant sale. Please check the website for updates and additions to the schedule.

**Saturday, April 2, at 11:30 a.m.**

### Make Room for Vegetables

Master Gardener Debbra Cobrin-Euston discusses how to have a garden if you have limited space—even just a patio.

**Sunday, April 3 at 1:00 p.m.**

### Water Conservation for Kids: A Hands-on Program for Kids and Their Parents.

Find out what you can do to reduce storm water pollution and preserve our water resources.

Resource Educator Erin Snyder, of the Riverside-Corona Resource Conservation District, presents a creative, hands-on, interactive program for children that address subjects such as the water cycle, the concepts of "watershed", "waterways" and "underground water basin"; where we get

*continued on page 8*

# Around the Gardens

## UPCOMING EVENTS

*continued*

our water; simple ways to conserve water; and storm water pollutants and how you can reduce them.

### Medicinal Plant Walk and Lecture

**April 16; 10 a.m.**

Experienced herbalist **Will Broen** will lead an interactive garden walk and presentation highlighting the abundant medicinal plants growing at the Gardens. Participants will learn about traditional and modern uses of each plant, as well as fascinating folklore. Mr. Broen is a bioregionally focused herbalist and natural products educator. He has spent most of his adult life studying western and

California medicinal and edible plants. He conveys his subject in an easy-to-understand way and encourages interaction and discussion by participants. The garden walk lasts about an hour and a half and may include steps and steep terrain. Participants should wear sturdy walking shoes and bring a hat and a water bottle. A continental breakfast will be provided prior to the walk at 9:15 in the Botanic Gardens Conference Room.

The cost for the program is \$20 for Friends members and \$30 for non-members. Reservations are limited to 20 people and may be made by calling the office at 951-784-6962.

### Keep Our Gardens Clean & Beautiful

**April 23; 8:30-11:30**

A wonderful way to help the Gardens and enjoy the company of like-minded people. For more information, contact the office at 951-784-6962 or by email at [ucrbg@ucr.edu](mailto:ucrbg@ucr.edu).

### Spring Migration Birdwalk and Breakfast

**May 7 beginning at 6:30 a.m.**

This trip will be for no more than 20 birders who want to learn some of the tricks of the trade and take the opportunity to see the migratory birds that

*continued on page 9*



### Robert Tank

We are sad to report that longtime volunteer, Robert Tank, passed away on January 30, 2016 at 95 years of age. Bob began volunteering in the Botanic Gardens in September of 1988 and worked for more than 25 years, along with his wife, Bernice. He first worked two days a week propagating and organizing plants in the Gardens' nursery and it didn't take long for him to compile the 750

volunteer hours needed to become a Lifetime Member of the Master Gardeners. Among many other things, he designed and installed the lathhouse irrigation system that's still used today. He then began work with the Gardens' computer records. He soon became the Gardens in-house IT man. He was instrumental in the computerization of the plant collection records which, up until then, were largely hardcopy. He took over the Friends database and developed the system for tracking and generating membership renewals that is the basis for our current system. He developed and maintained an index database for more than 25 years of Friends Newsletters. He helped to develop and maintain eight databases for the Gardens. He was heavily involved in the development and expansion of the plant sales. For a period in the early 90's, Bob came in every morning and hiked to each of four, widely dispersed weather

stations in the Gardens to record high and low temperatures. Bob's many other accomplishments at the Gardens through the years are too numerous to list here, like his work mapping the rose gardens and taking pictures at events for the archives. In appreciation of his activities at the Gardens, he was named Honorary Friend for Life in 1996 and Volunteer of the Month for February 2013. Bob's name was added to the Gardens appreciation plaque in the Conference Room and Dr. Waines named one of his selections of autumn sage after him and Bernie. Bob was full of ideas and solutions and he had a profound affect on the development of the Gardens for more than 25 years. 🌿SM

Those Friends who wish to contribute to Bob's memory may send a check made out to UCR Foundation -- Botanic Gardens, in memory of Robert Tank.



## Rose Garden

By Janine Almanzor

Sparked by a donation of 50 roses by Weeks Roses, a long-needed renovation is underway in the Rose Gardens. Many of the roses in the Upper Rose Garden are very old and in poor condition and many had died. Janine Almanzor and Barbara Gable worked on the plan for replacing roses, and many people helped with the planting. Everyone was on call because we didn't know the exact day the roses would be arriving. They were coming bare root so they couldn't wait long to be planted. Lee Bayer, April Wilson, Barbara Gable, and Janine Almanzor dug most of the holes ahead of time with the help of Jorge Fregoso, who was able to dig more holes than all of us put together. Those involved with the planting process were April Wilson, Janice Ponsor, Sheila Bellew, Lee Bayer, Laura Afansev, Elsbe Read, Dolores Purther, Hillary Brown, Janine Almanzor, and Barbara Gable. Theresa McLemore was a huge help with her gardening expertise and Jorge and Abe made the gopher cages. Kristen Tidwell and Lois Whyde trimmed the roses before planting. The 50 roses were planted within two days thanks to all the help.



*Lee Bayer and Elsbe Read helping with the rose planting*

Walt and Diana Kilmer of the Mountain View Rose Society also donated many cuttings of miniature roses and Old Garden Roses from their own garden. These were potted by April Wilson, Lee Bayer, and Janine Almanzor. We're keeping our fingers crossed, hoping that we'll have many plants available to fill numerous empty spaces in the miniature bed and the Heritage Rose Garden in the future.

There are still many roses that need to be purchased or donated and labels need to be made, but



*Some of the rose garden volunteers. Left: Laura Afansev, Sheila Bellew, and Janice Ponsor; Above: Barbara Gable and Janine Almanzor*



we're on a roll and we can't stop now. Jorge and Theresa are in the process of changing the old rainbird watering system to drip and adding mulch. It has been and will continue to be a lot of work, but the reward of making a more beautiful Rose Garden for all to enjoy will be well worth it. 🌱JA

### UPCOMING EVENTS

*continued*

should be in the Gardens at this time. We will start at 6:30 a.m. and then bird for two hours. We will target migrants such as Western Tanager, several warbler and vireo species, all three species of goldfinches, grosbeaks, Rufous and, if we are lucky, Calliope Hummingbirds, and much more. We anticipate at least 35 interesting species. Following our bird-walk we will discuss our findings over a continental-style breakfast. For reservations, please contact the office at 951-784-6962 or by email at: [ucrbg@ucr.edu](mailto:ucrbg@ucr.edu)

**\$25 members; \$50 non-members**

### Friends of UCRBG Annual Meeting and Lecture

**Friday, June 3**

Save the date for our Friends Annual Meeting. This is always a wonderful time to reconnect with friends and learn about the activities and business of the Gardens. Look for more information as the time grows near, including an announcement about our lecture topic and presenter.

**For more information about all of our upcoming events and happenings, please visit our website:**  
[www.gardens.ucr.edu](http://www.gardens.ucr.edu)

# Butterfly Corner

## *How to Raise Butterflies*

Article and Photos by Ann Platzer

**W**ould you like to raise butterflies at your home or at a school? It's easy, fun, and the best way to learn about butterfly life cycles.

Before you begin, this is what you will need to do:

1. Familiarize yourself with the general life cycle of butterflies.
2. Determine which butterflies you want to raise. (I recommend rearing only native butterflies.)
3. Be sure you are growing the host plants your butterflies need.
4. If you aren't already growing a variety of nectar plants, plant them in your garden.
5. Collect the necessary supplies.

**Most importantly ~ Be Dedicated to Your Butterflies.**

The Cloudless Sulfur, *Phoebis sennae*, will be used as an example for several reasons. First: this common butterfly is present in

Southern California gardens most of the year. Second: one of its host plants, the popcorn cassia, *Cassia didymobotrya*, is a large, long lasting, perennial that provides



Photo 1: Cassia with Cloudless Sulfur eggs

plentiful food for many larvae. Third: popcorn cassia grows fast. Six months ago I gave a small plant to my friend down the street and it is now five feet tall, blooming, and already has cater-



Photo 2. Cassia with eggs

pillars on it! And fourth: the spindle-shaped eggs, although tiny, are not difficult to find on the maroon flower buds and green leaves (Photo 1: Cassia with Cloudless Sulfur eggs).

Normally, the time consuming task when raising butterflies is finding the eggs and providing enough **host food** for the larvae. But that is not the case with the Cloudless Sulfur. Also, most of the **supplies** needed to rear butterflies can be found around your home. And, don't forget, you can always improvise.

Let's get started. We'll make the convenient assumption that you already have a popcorn cassia. Thank goodness because for the initial

rearing stages, you don't even need to use a small container to store hatching eggs. (This is necessary with other butterfly species.) Rather, simply place several sprigs of the Cassia with the Cloudless Sulfur eggs in a narrow-necked jar with water and stuff the neck with tissues to prevent future larvae from drowning in the water (Photo 2).

**One Caution:** Argentine ants adore popcorn cassias and are notorious for eating eggs and tiny larvae. Use a strong stream of water to wash off ants from the sprigs. Don't worry, the butterfly eggs will hold on. You can place the jar on your kitchen windowsill for daily observation. The eggs change color during development, from white or cream to orange. The first instars are tiny and difficult to see. Generally, I only see evidence of hatchlings by the tiny black spots (frass or insect excrement) on the windowsill or floor.

Back to the eggs: within 4-6 days the eggs will hatch. The larvae are little munching machines and will soon need some fresh, tender food. This is the time you will need to place the jar with larvae in a terrarium or other large container, using a mesh lid to prevent them from wandering away (Photo 3). In addition, the container needs a towel hanging down on one side because the larvae (also adults) that fall onto the bottom can't climb up smooth surfaces like glass. **Also, think clean.** Remove frass, dried up leaves, etc.

The Cloudless Sulfur larvae molt 4 to 5 times. The larvae stop eating for a day as they go through each molt. **Please don't touch them during these very critical stages.**

*Butterflies, continued*

When they are ready to molt, especially for the final molt, they may move away from the host plant. They will need you to put twigs or wooden skewers in the jar for them to climb up. This allows adults to emerge from pupae with sufficient unobstructed space.

I never tire of watching this magical phase when an adult emerges from the pupal case. Initially, the butterfly appears with crumpled wings and pumps blood into its wings. You can watch as the wings miraculously expand and harden. It will hang there for a while (maybe to meditate), then start to climb up higher to admire the world. Fantasy aside, this is the final, and perhaps

most critical time for the emerging butterfly. Without sufficient room, the wings cannot expand completely and it will not be able to fly off into the wild blue yonder.

**To keep your adult butterflies in your garden, you must provide many types of flowering nectar plants.** I must confess that although we grow many California natives, we have non-native lantana and pentas that bloom and provide nectar over a long period.

At the Spring Plant Sale this April, you won't find any popcorn seedlings. However, there will be oodles of free popcorn seeds of these fast growing plants, which will soon provide homes for your Cloudless Sulfur butterflies.



Photo 3. Terrarium

Many thanks to Siri Dharma Khalsa and Edward Platzer for editing this article. Happy Butterfly Gardening!

AP

**Help the Botanic Gardens by Going Green.** The Friends of UCR Botanic Gardens, like many organizations, is always looking for more opportunities to be good stewards of resources. We use various ways to keep you informed of the happenings in your Gardens, including on our website, by email, by regular post, on our facebook page, and by posted notices on our bulletin board. The cost involved in sending notices by regular post cuts into our very tight budget. We would like to use these funds to better care for our Gardens, and distribute more of our information via email. We understand that emails can get to be overwhelming sometimes, and we plan to minimize these to keep from bombarding your inbox. At our upcoming plant sale we will be collecting email addresses, in exchange for free seed packets, in order to replace regular post as much as possible. Feel free to give us your ideas on this issue, what you think works well, what does not. Thank you so much for your help in keeping the Gardens beautiful.

*Katherine Kendrick, President of Friends of UCRBG*

### Spring Bus Trip to See Resendiz Brothers Proteas

Many of you enjoyed the wonderful fall lecture by Mel Resendiz, discussing proteas and his history as a grower. We plan to visit the farm for our Spring Bus Trip on **Sunday, April 10**. Details will be forthcoming on our website. Please contact the office and let them know of your interest in this trip - that will help us in our planning.

### U C Riverside Botanic Gardens

The UCR Botanic Gardens Newsletter is a quarterly journal published by the Friends of the UCR Botanic Gardens, UC Riverside Foundation, 900 University Ave., Riverside, CA 92521, and is one of the benefits of membership. Articles on various aspects of horticulture and its practice, history, or related subjects, especially as they apply to inland Southern California are welcomed. The selection of copy to print is at the discretion of the editors. Send copy to Katherine Kendrick, Botanic Gardens, University of California, Riverside, CA 92521-0124, call 951.784.6962, e-mail [ucrbg@ucr.edu](mailto:ucrbg@ucr.edu) or visit our website at [www.gardens.ucr.edu](http://www.gardens.ucr.edu) for information.

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## **SPRING PLANT SALE**

**Friends Preview Sale: Saturday, April 2, 8 a.m. to 11 a.m.**

**Public Sale: Saturday, April 2, 11 a.m. to 4 p.m.**

**and Sunday, April 3, 9 a.m. to 3 p.m.**