Fall Garden Market and Plant Sale
Theresa McLemore & Janine Almanzor
Friends Preview Sale: Saturday, October 21, 8 a.m. to 10 a.m.
Public Sale: Saturday, October 21, 10 a.m. to 4 p.m.
and Sunday, October 22, 9 a.m. to 3 p.m.
NOTE THAT THE FRIENDS PREVIEW SALE BEGINS AT 8 A.M.!

It’s that time of year in Southern California and the Inland Empire! Get out the shovels, trowels, sharpen your tools, and mark your calendars to include our Fall Garden Market and Plant Sale. With the success of our inaugural sale last spring we will be repeating the same format. Vendors are eager to join us, and they will offer a wide selection of plants to add to your garden. Here in the Botanic Garden we have been busy propagating for the past few months and as a result we will have many plants to add to your garden palette.

Theresa McLemore and Lois Whyde, along with volunteers and other staff have made great strides in transforming the Lath House and nurseries to be productive and efficient. Theresa and Lois have over 60 years of combined experience in the green industry. Theresa’s experience includes 4 years as student horticulture unit lead at Mt. San Antonio College, 12 years as the Plant Propagator/Nursery Manager at the Huntington Library, Art Collections, and Botanic Gardens, and 11 years at UCRBG. Lois’ background includes 24 years of experience with large wholesale nurseries, and 12 years teaching horticulture classes at an adult vocational school in Ohio. With their expertise in overseeing the propagation we are now able to produce an abundance of quality plants.

One of the many improvements behind the scenes has been the addition of a mist bench in the Lath House. With this efficient mist bench, the germination and rooting success rate has soared. The Lath House has also been organized which gives our new plants a place to acclimatize and transition to the outdoor benches. All containers of similar size are grouped together. This makes inventory and cultural care easier to address. With the consolidation and reorganization of the benches we have optimized watering and a regular fertilization schedule. A new soil mix is being used that was formulated to contain minerals which has benefitted the plants. Jorge Fregoso also constructed a container washing station.

Salvia ‘Indigo Spires’
Salvia x jamensis ‘Ann Platzer’
continued on page 2
Without the dedication and flexibility of our volunteers all of this plant production would not be possible. The list is long: Doug Holt, Brenda Bowers, Gail Watson, Barbara Hayes, Linda Schuler, Katherine Powell, Lauretta Kyle, Helga Stafford, Carol Haffter, Kirsten Tidwell, Jane Evans, Patricia Bartle, Heather Nichols, Suzy Vincente, Bob Banks, and Andrew Gruhn.

**Orchids by Zeny** have a variety of popular and easy to grow orchids including *Cymbidium*, *Cattleya*, and *Phalaenopsis*. They also have some specialty orchids and beautiful Clivia.

**Paradise Garden Center** will have a plethora of plants including Australian, California Natives, South African, and many more plants that are well suited for our Inland Valley gardens as they are grown here in Riverside.

**Resendiz Brothers** will offer fresh cut bouquets and *Protea* species. They will also have containerized plants that are native to Australia and South Africa. All of these are well suited for our local gardens.

**Stumps and Trunks** are a local business that turns tree stumps into colorful planters that will grace any patio.

**Wild Birds Unlimited** will bring just about everything related to birds including seed, houses, bird baths and accessories.
Spotlight On... the Interactive GIS App
By Janine Almanzor

Much discussion has taken place about the installation of an interactive map of the Botanic Gardens and plant collection on our website but we could never go forward due to our lack of understanding of the topic, or experts to help. Then one day at an ESRI seminar we met Mike Cohen. He had been volunteering at the UCR Herbarium, helping to support the GIS Consortium, and we didn’t even know it! Since his retirement as the GIS Team Leader for the County of San Bernardino in February of 2014, he has been volunteering, not only at the UCR Herbarium, but also with San Bernardino Valley College and the LA County Arboretum and Botanic Garden. He brings a wealth of knowledge and experience to our endeavor.

The goal of his time working at the UCR Botanic Gardens is to create an ArcGIS Online application for our core collection. In layman’s terms, this means he will help to create an interactive map for our website where visitors can locate and learn about plants in the Botanic Gardens. We will also have an App for mobile devices so visitors who come to the Gardens can read about the plants and see a picture as they stand near a plant. This is a huge undertaking and will take some time to complete. We will start with a few hundred plants and hope to have that up and running by the end of the year. Mike will be supervising UCR Extension Interns to assist with mapping the plants. He will also train Botanic Gardens’ staff to be able to continue the project in the future. Like any Garden, this project will never be “complete” because of the changing nature of a living collection.
Hello Friends!

I want to share with you my message to the membership at the Annual Meeting in June. I was unable to attend, as described below, so this message was graciously presented on my behalf by Nancy Johnson.

Thank you for attending. As a “Friend” you have an important impact on the sustenance and the success of the UCR Botanic Gardens. I’m happy to report that we received notice that the Friends Support Group status was renewed for another year. The Friends are one of the longest standing Support Groups on campus and one of the most active Support Groups – which isn’t surprising. So many Friends are volunteers at the Gardens and/or Docents as well. Thanks for all you do! Which leads me to a recap of all we’ve done this past year.

- Fall dinner, Nan Simonsen gave us a great program
- Art in the Garden, lots of great items to shop/browse
- Winter Luncheon, a wonderful overview of the Wildlands Preserve System
- Spring Outing, A perfect day at the Oak Glen Wildlands Preserve
- Primavera – Food, Wine, Music, Fun!
- Plant Sales! Early Entrance hours make a difference!
- Adult Education and Garden Tour by Ann Platzer

Children’s Storytimes

None of these events/activities would be possible without the involvement of the Friends AND the Gardens Staff, who coordinate orders with campus facilities, make sure the Gardens entrance gates and conference room doors are open, set up events, and on and on and on!! I want to acknowledge the Gardens Staff: Director Jodie Holt for her support, oversight, and guidance. Janine, Pam, and Theresa for so many things (mentioned above) and for being such wonderful people too! These individuals make so much happen and make it look easy. There is a “can do”, “I’ll take care of it” atmosphere that makes it a pleasure to be involved with and a part of this great group of individuals.

Student workers – helpful AND hardworking

Administrative Staff – who make sure the bills are paid and we stay within budget.

Board Members who give their time to attend meetings and help with events – THANK YOU!

So far the meeting is moving along as it has in years past. We’ve had a Welcome and now this President’s Message. However, the format of the meeting will be a bit different this year, which is fitting, as you know there have been changes in the Gardens over the last year or so—Dr. Waines and Steve Morgan have both retired. Our administrative and business support oversight has changed (from the Botany Department to the BEEs Admin. Center) and other campus reorganizations have affected the Gardens too – in a positive way. With these changes to the Gardens, the College, and the Campus we’ve realized the Friends Bylaws will also need changing. So rather than elect a new board to take over for this next year we’ve decided not to have an election but rather take a hiatus, and during this upcoming year we will form a membership committee (from the current board members) to review the Bylaws and make recommendations of any needed edits to the Bylaws. Of course, we will keep you updated on this effort so please watch for email announcement about this subject.

I hope you’ll agree that this is sure to be an exciting time for both the Friends and the Gardens and I look forward to being a part of this along with all of you.

Finally, I want to apologize for missing this meeting and to thank Nancy Johnson for reading my message. There were last minute business plans that made it necessary for me to be out of the state and as you are here in this meeting I’m getting ready to board a 6:55 PM flight.

I know I will be seeing you in the upcoming months and at our events. Yes- we will be scheduling events for the upcoming year.

Fall Lecture, Art in the Gardens, Winter Luncheon, Spring Outing, Plant Sales, and Primavera, so please watch for announcements with dates for these events.

As always, I look forward to seeing you in the Gardens!

~ Amber Jones
Although most of us are no longer in school (and I am no longer teaching in UCR classrooms), summer is still a relatively quiet time for relaxing, catching up, and planning for the year ahead. I hope you all enjoyed a relaxing summer, respite from the heat, and perhaps a few travel adventures. Here at the UCR BG we are taking advantage of the slower pace of activities to engage in visioning, planning and organization as well as to focus on our core plant collection and new garden projects.

Some of you began your summer by attending the June Friends Annual Meeting, where I delivered my State of the Gardens address. For those who did not, I will take this opportunity to summarize my address here as a way to share our history, accomplishments over the first year of my directorship, and plans for the future.

The UCR Botanic Gardens Past, Present, and Future

The UCR Botanic Gardens is part of a network of over 2,000 botanic gardens and arboreta worldwide, including six in the UC system. As such we are more than a park, rather we are devoted to the culture, study, and exhibition of documented collections of living plants. By doing so we join other gardens in identification, dissemination, and conservation of plant species throughout the world.

The UCR BG Past: History and Growth

The UCR BG was established in 1963 as a garden for research and teaching, designated the “Life Science Experimental Area.” Over the next five years it developed into a botanic garden under the directorship of Dr. Frank Vasek (1962-1967), a UCR faculty member. Subsequent faculty directors greatly expanded and enhanced the Gardens. Dr. George Gillett (1967-1973) facilitated the paved road, parking lot, garage office, and turtle pond; Dr. Louis Erickson (1973-1981) was responsible for additional buildings and focused strongly on outreach, forming the Friends Affiliate Group in 1980. Dr. Giles Wainse directed the UCR BG for 35 years (1981-2016), growing the collections, memorials, and endowments.

The UCR BG Present

The UCR BG today comprises 40 hilly, rocky acres centered on two arroyos on the eastern boundary of UCR, about two-thirds of which are developed into gardens. The range of elevations (1100 to 1450 ft.) and topography create diverse microclimates suitable for a variety of plant species from around the world. Our gardens are grouped into thematic (rose, herb, iris, lilac, butterfly, shade, and subtropical fruit) and geographic gardens. Although the latter gardens were created over decades, they fit into an emergent theme of Mediterranean and arid land ecosystems, a focus that we will develop more fully in the future. The UCR BG is also notable for its rock formations and miles of paved and unpaved trails, unique structures such as the dome, and several buildings that house people and plants.

Year 1 Accomplishments 2016-17:

When I began my term as Interim Director I looked forward to a year of listening and learning from the BG staff and experiencing a full year of activities and events. Below I summarize some of the many things our staff has accomplished this year with help from our many campus partners, volunteers, members and supporters.

Build partnerships with campus support units:

The UCR BG is an integral and valued part of UCR and its primary linkage with the public. We greatly appreciate the working relationships we have developed with many campus units, including University Advancement, UCR Foundation, Strat Comm (Strategic Communications), Facilities,
Develop a sustainable operating budget in compliance with UCR standards:

The UCR BG is funded from several sources including UCR (through CNAS), donations to current use and endowed funds, memberships, endowed payouts, and event and conference room revenue, with the largest source (nearly 50%) coming from CNAS. Expenses are categorized into salaries and benefits, garden and infrastructure maintenance, events, and administration, with the largest by far being salaries and the smallest being administration since we receive significant admin support from BEES.

Over the past decades a large sum of gift funds had accumulated that was not earning interest, so with the advice of the UCR Foundation we embarked on a program to augment staffing, conduct deferred maintenance on structures and gardens, and initiate new projects. These funds are non-recurring so with the help of our BEES financial team we have developed an operating budget that allows us to both maintain and grow the Gardens while planning for the future. Going forward we will work to grow our operating budget to better protect the Gardens against economic downturns.

With help from our many volunteers and members the UCR BG staff hosts activities and events throughout the year. Over the past year we evaluated each event to clarify goals, audience, and impact and to obtain an accurate financial assessment of revenue and cost. Surprisingly, most of our events intended as fund-raisers and even those that are solely outreach or member events generally cost us money, especially when the hundreds of hours of staff time are factored in. As a result we are revamping many events to better achieve our goals while reducing costs. Our new "Garden Market & Plant Sale" was our first such project that we hope to build on in the future.

Begin deferred maintenance and arbor renewal programs:

The buildings in the UCR BG have been improved over the past year and now include offices for the management team (Jodie, Janine, Theresa, and Pam) in Schneider House as well as an updated horticultural library, offices for horticultural staff in the Garage Office, a new bottom-heated misted propagation bed in the Lath House, and new tinted glass on the entrance gatehouse windows. Many large trees have been pruned and several near the lawn that were compromised by disease have been removed. We have also repaired gazebos, arbors, and other structures to eliminate termites and repair damage.

Under Theresa's direction the horticultural and student staff have made tremendous progress pruning, weeding, and cleaning up many of the geographic gardens along the west side of the Gardens. Recently we held a meeting with faculty experts in the Department of Environmental Sciences to discuss the decades-old irrigation system of the UCR BG as well as our water sources, needs, constraints, and goals for the future. We are pleased that they fully endorse our plan to continue transitioning gardens to drip irrigation whenever possible as a means of improving delivery while reducing water use.

Address safety, security, parking, and restroom issues:

A tour by campus police and meetings with Risk Management resulted in many improvements to our safety and security, including new locks and key inventory system, improvement to remote gates, more walkie-talkies and uniform vests for staff, clearer parking signs, revamping of parking near Schneider House to minimize cars driving in the Gardens, and updated policies about pets, wildlife, and other
potential hazards. Working with TAPS we created Volunteer Parking Placards for use when volunteers park in the lower BG lot. We are unable to expand or add restrooms due to engineering and funding constraints so we have added two portable restrooms on a long-term lease while we plan for future growth and expansion.

Make progress on projects underway and begin new ones:

The list of projects we are undertaking and planning is too long to include! Currently we are designing the Children’s Garden and working with UCR students from the Native American Studies Program and local tribal experts to design a Native American Plants Garden, both of which will be located near the Herb Garden. We are working with CNAS faculty to plan a research demonstration garden below the dome and with a donor to plan a native bee garden. Most importantly, we are working with a GIS expert to update our collection database, inventory and map the plants in the Gardens, install missing plant labels, and eventually produce an interactive map and app of the UCR BG. See the related article in this issue for more information about this exciting project.

We are also actively working on non-plant projects. UCR Computing & Communications experts improved our Wi-Fi signal in our buildings and brought access to the lawn and turnaround area in time for the Spring Garden Market & Plant Sale. Additional projects focus on the theme of “Connectivity” and include our entrance signboard, garden signs, trail markers, and new maps in development. Finally, we are thrilled to roll out our new signature brand image and logo, created by Strat Comm in response to our visioning session where they truly captured the essence of the UCR Botanic Gardens. We are using their work on our emails and documents, and you will see more in the coming months as we roll out new brochures and signs.

The UCR BG Future: Strategic Planning

**Our Vision:** The UCR Botanic Gardens is a living museum, curated to inspire and facilitate education, research, and interpretation of the natural world.

**Our Mission:** We wish to serve as UCR's focal point for campus and community engagement in the science of nature, gardens, and conservation.

**Our Goals:** Enhance the core collection and gardens for teaching and research, conduct garden and infrastructure maintenance and plan for growth, expand education and engagement activities, and raise funds to support our staff, gardens, and activities.

**Long Term:** With support from the Chancellor, Advancement, and CNAS we have developed a vision, concept, site, and functional description for a new building to become the new entrance for the UCR BG. Located at the intersection of campus and the Gardens, the building will house a “Tree of Life Museum” to showcase UCRs many collections, demonstration laboratories, and meeting rooms and have ample parking and other facilities outside the current boundary of the UCR BG. We hope to share more information as plans for this project evolve.

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**Twilight Tours**

Even though the daytime temperature may be in the upper 90’s or even triple digits, the evenings bring much cooler weather to the UCR Botanic Gardens. Many people enjoyed experiencing the Botanic Gardens in the evening at our two Twilight Tours this summer. Led by our volunteer docents, the visitors were guided on a one-and-a-half-hour tour through the most popular areas of the Garden. Some energetic groups ventured up higher into the trails enjoying the beautiful Riverside sunset as they descended. There were plenty of cold drinks and refreshments awaiting their return. The August tour was more popular than the July tour because of the nice article in the Press-Enterprise. Regretfully, we had to limit the August tour to 100 people because of docent availability. Next summer we may need to schedule three Twilight Tours.
Butterfly Corner

White-lined Sphinx Moth

Article and Photos by Ann Platzer


It is a large moth with a wingspan of two to three inches. The forewing is dark brown with a diagonal yellow to tan stripe that extends from the base to the apex. White lines cover the veins. The black hind-wing has a broad rose median band (Photo 1: Adult dorsal view).

This moth’s rapid wing movement and flight behavior is reminiscent of a hummingbird, hence the common name “hummingbird moth”. Moths hover over flowers while feeding and may also be seen darting in a back-and-forth pattern over nectar or larval food sources. Although it is active by night and is attracted to lights, it is often seen by day and at dusk nectaring at flowers.

The female lays greenish eggs singly on host plants. The larvae, however, are extremely variable in coloration and patterning. Many are black dorsally with longitudinal yellow-orange stripes. But the lateral view, wow! As one says “a picture says a thousand words”. I will leave it for you to describe two of the larvae: (Photo 2: Lime-green larva) and (Photo 3: Yellow larva). There is a decorative caudal horn that varies from either yellow or orange and sometimes has a black tip. The horn has the appearance of a stinger but the caterpillars are totally harmless. When mature, larvae burrow into the soil to pupate. The pupa is large brown and fusiform (cigar-shaped).

Depending on the region and time of year they may emerge as adults in several weeks to start another generation, or overwinter and emerge in late winter or early spring coinciding with fresh plant growth. Mass caterpillar movements sometimes occur as we witnessed in Joshua Tree National Park in late March 2017. What an amazing sight to see many hundreds of these large caterpillars migrating across fields and highway to look for soil to move into to create an underground chamber within which to pupate.

The caterpillars feed on many annual and perennial plants including apple (*Malus*), elm (*Ulmus*), grape (*Vitis*) and tomato (*Lycopersicon*). They particularly favor evening primrose (*Oenothera*) and willow weed (*Epilobium*).

This Sphinx Moth is without doubt the most widespread and abundant sphingid in North America. It extends north into southern and mid-western Canada and south into Mexico. It is common throughout the Pacific Northwest at all elevations from low-level grasslands to high mountain meadows and in all types of habitats including urban areas.

It has a long flight time in southern California, from March to October, with two broods.

Several people have asked me in the past to which “butterfly” this large caterpillar belonged, hence this article.

Enjoy these beautiful moths, as we do.

Many thanks to Marco Metzger and Edward Platzer for editing this article.

Happy Lepidoptera Gardening!

AP

Photo 1: Adult dorsal view

Photo 2: Lime-green larva

Photo 3: Yellow larva
Volunteer News
Karen Fleisher

Perhaps on your last weekend visit to the Gardens, you were greeted by one of our Garden Greeters and Stewards. The Gardens are fortunate to have a group of dedicated volunteers who are available on Saturdays and Sundays for a few hours each month to welcome visitors, and to answer questions about the Gardens such as, what events are coming up, what’s in bloom, what are the best walks and trails, and of what wildlife to be aware. Our current Garden Greeters and Steward team includes Susan Bookman, Pauline Calkin, Marcille Christian, Noriko Cuaron, Karen Fleisher, Paula Munoz, Sandra Starkey, and Yvonne Wilcznski.

Last year, from October through May, our weekend volunteers welcomed over 2000 visitors, many from the larger Southern California area, parents of students from all over the country, visiting professors, and, of course, families and Friends from the Riverside area who visit the Gardens on a regular basis to experience the natural beauty and tranquility.

If you enjoy meeting people and enjoy being outdoors, you are invited to attend an information session on becoming a visitor information volunteer on Saturday, October 28, 2017, from 9 a.m. to 10 a.m., to be held in the Conference Room near the entrance. The Gardens are experiencing an increase in visitors and the staff would like to have additional volunteers available on weekends to greet them and answer questions about the Gardens. This is a great opportunity to support the Gardens and meet interesting people, all while enjoying beautiful surroundings.

Please contact Pam Ferre at the UCR Botanic Gardens, 951-784-6962 or ucrbg@ucr.edu if you are interested in attending this information session or have any questions.

Presentations at the Fall Garden Market and Plant Sale
Please plan your time at the sale to benefit from these fun and educational events!

Saturday, Oct. 21, 11:30 a.m., “Cool Season Vegetable Gardening” presented by Dave Danielski
Saturday, Oct. 21, 1:30 p.m., “Getting Ready for Bare Root Season” presented by Larry Dobson
Sunday, October 22, 11:30 a.m., “Citrus Greening Disease” presented by Laura Simpson
Sunday, October 22, 1:00 p.m., “Fall Story Program for Kids” presented by the Riverside Public Library.

For more information on the plant sale visit www.gardens.ucr.edu, contact the Botanic Gardens at 951-784-6962, or send an email to ucrbg@ucr.edu.
What to See in the Gardens
by Theresa McLemore

The UCR Botanic Garden is like a jewel that is always changing. With new vision and direction comes well needed change and this summer we have been very busy initiating that change. I urge you to head into the interior of the Botanic Garden where you will see our 4 miles of trails marked with trail numbers that will coordinate with the Botanic Garden Map that is in production. Those trails will lead you to areas that volunteers and staff have been busy trimming, establishing irrigation systems, and planting. You will see improved condition of plants and increased accessibility in many areas of the Botanic Gardens due to their hard work. Some areas of the Botanic Garden such as Lilac Lane, South Africa, Rose Garden, Alder Canyon, and Butterfly Garden have signs placed to keep our visitors informed and on track. With the addition of new plants and the trimming of the well-established plants, the Butterfly Garden is putting on a splashy show of color and butterflies. As you head up the drive you will see the *Hibiscus syriacus*, *Lagerstroemia indica*, and various *Salvia greggii* decorating the slopes with color. If you venture to the Ficus grove you can rest in the cool shade and see the magnificent display of yellow blooms on the *Cassia excelsa*. The entrance has had a makeover with the addition of drought tolerant plants such as *Hesperaloe* ‘Brake Lights’, *Dalea capitata* ‘Sierra Gold’ and *Dymondia margaretae*. Next to the Conference Room windows are *Echeveria* ‘Topsy Turvy’ and various *Sedum*. So join us to see all of the wonderful changes and beautiful plants, and stop to say hello to our dedicated staff and volunteers that help make the Botanic Gardens the unique jewel it is.

Calling all Volunteers!

The UCR BG has over 250 volunteers who make our Gardens possible! Over the next few months we will transition our volunteer database to a new online volunteer management system (VMS) that many organizations use (e.g., UCCE Master Gardeners). This system will allow you to develop a profile, add contact information, indicate areas of volunteering interest, show availability, and log volunteer hours. The system will not be mandatory of course but will improve your ability to learn about volunteering opportunities all in one place and improve our ability to contact you when volunteers are needed. We also hope to streamline and simplify the volunteer documentation process that is required by UCR when you first sign up.

Volunteers are already actively engaged and indispensable to the Gardens as docents, propagators, gardeners, greeters, librarians, and event volunteers. With our increasing visitor numbers and new projects underway we have other categories where volunteers are needed and we need a more efficient means of finding you! Until we have our new VMS in place, we invite you to let us know more about your interests as a volunteer. Please contact us at ucrbg@ucr.edu or 951-784-6962 if you would like to sign up or add volunteer area preferences to your current listing in our database.

Docent (training required)
Horticulture (propagation, gardening, pruning, weeding—training may be required)
Events (Garden Market & Plant Sale, Art in the Gardens, Primavera, Twilight Tours, Bird Walks)
Greeter and Steward (weekends)
Curatorial Assistant (identification, inventorying, mapping, labeling, using GIS)
Office support (data entry, label and sign making, librarian)

The UCRBG Management Team
(JH, JA, TM, and PF)
Western celebrates the UC Riverside Botanic Gardens

35th Annual Fall Garden Market & Plant Sale

October 21/22

Pick up your FREE landscape guide!

www.wmwd.com
Join us for

**Art in the Gardens**

**on Sunday, November 12, 2017,**

**from 10 a.m. to 3 p.m.**

Come spend the day strolling through shady tree-lined Alder Canyon where local artists will be showcased, representing various mediums, including ceramics, glass, jewelry, watercolors, and metal. This is a wonderful opportunity to view and purchase unique and beautiful art pieces.

This scenic setting will be the backdrop to approximately 15 artists exhibiting and selling their works.