The University of California, Riverside Botanic Gardens UCRBG Newsletter Volume 36, Number 4 Winter 2016

Butterfly Corner

The Checkered White

Article and Photos by Ann Platzer

he Checkered White, Pontia protodice, is medium-sized with a wingspan about 1.25 to 2 inches. It has a fast, erratic flight pattern and stays near the ground. The females are whitish with many distinct black and grey markings on the dorsal (upper) fore and hind wings (Photo 1: Female, dorsal view). Even the ventral (under) surfaces of the wings are well marked (Photo 2: Female, ventral view). In contrast, the males, which may be mistaken for a Cabbage White, are mainly white with only a few markings on the fore wings; the hind wings are white.

The eggs, laid singly, are first yellowish then turn orange. They are spindle-shaped with longitudinal ridges, and tapered at the apex; similar to the eggs of the Cloudless Sulfur.

The mature larvae are about one inch long. The body is greenish-gray with prominent, longitudinal, yellow stripes, small black spots and numerous short hairs. The pupae vary in color from blue-gray to cream and attach to their host plant by a cremaster (support hook) and silk girdle.

The host plants include more than 25 species of the Mustard Family,



Photo 1: Dorsal View of Female Checkered White

Brassicaceae, and include crop plants such as cabbage and broccoli. The larvae are occasionally considered minor pests on crop plants. However, the larvae only eat the outer leaves in contrast to the Cabbage White that bores into the heads. Many entomologists consider the Checkered White butterflies beneficial insects, as they are widespread pollinators.

Checkered Whites are found in a wide variety of sites including dry weedy areas, open areas including desert, plains and vacant lots, railroads and airports where they take nectar from a large variety of plants. They produce a number of

broods in our warm climate.

This butterfly occurs in the southern United States and also reaches our northern States and occasionally southern Canada. Unfortunately, the Checkered Whites are becoming less frequent due to increasing urbanization and loss of open spaces. I have not seen a single one since October of 2015; a pity since I wanted to photograph a male.

Thanks to Edward Platzer for reviewing this article.

Happy Butterfly Gardening. AP



Photo 2: Ventral View of Female Checkered White



s someone who grew up in the southern US where the four seasons impact all our senses in a profound way, I've come to appreciate how seasonal changes in southern California are subtle, sometimes delayed, and often fleeting. Detecting seasonal shifts requires one to focus on small, rather muted cues-shifts in wind direction, plant fragrances, bloom times, and most reliably, shortening daylength. The UCR Botanic Gardens, with its unique topography and diverse microclimates, is a perfect location to experience and observe seasonal change into autumn and winter in southern California.

On a recent afternoon as I sat quietly on a bench near the BG entrance waiting for a visitor, a UCR graduate student ambled in looking tired and bleary eyed. He told me that the Botanic Gardens are a haven where he comes to take a break from his lab work. Our conversation reminded me of the incredible value of simply walking out in nature, especially during challenging and stressful times. The Botanic Gardens are a calm oasis for our campus and region where a visitor can relax, refresh, clear his or her mind, and

Director's Report

Dr. Jodie Holt

observe nature and the subtle signs of the season.

What might not be obvious to a visitor on a quiet afternoon is that beneath the calm serenity and rustic wildness of the Botanic Gardens is a vibrant, working garden and nature preserve. At seemingly all hours our incredible staff and many volunteers are working hard to cultivate, propagate, protect, understand and safeguard plant life now and into the future. In the face of pressing global challenges of relentless development and changing climate, it has never been more important to experience, value, cultivate, and protect nature. As recently stated in Scientific American (September 2016), "a healthy ecosystem-crucial to the survival of humans and other species-is not a 'special interest."

At the UCR Botanic Gardens we are dedicated to this goal, and to this end I have been reaching out to other botanic gardens and arboreta to learn how we can connect to global efforts to protect nature through the establishment and management of botanic gardens. Over the next few months at the BG you will see greater attention being paid to renewal and replanting of our essential core tree collection, restoration of our many legacy plant establishment of communities, important new gardens, enhancement of habitat for wildlife, and installation of new wayfinding, interpretive educational, and signage. I hope you will join me in making a renewed commitment to walking the trails of the Botanic Gardens, honing your observational

skills, learning something new, and helping cure the world of plant blindness for the goal of protecting nature now and into the future. I welcome your comments and suggestions and hope to enlist your support as we go forward with renewed vision to ensure that the UCR Botanic Gardens is more than a garden, rather a haven where we are nurturing and safeguarding life on our small piece of the planet. anytime Contact me at bgdirector@ucr.edu.

Activities and projects underway:

As a part of our "connectivity" project in the BG we will soon install a new outdoor signboard near the gate and reconfigure the entrance plaza to better guide and inform visitors.

Work is being initiated with consultants and volunteers to develop a more comprehensive, well labeled, interactive map of the BG with corresponding trail and garden signs.

Exhaustive research with campus architects and engineering experts has made it clear that construction of new facilities near the entrance would be virtually impossible. As a short-term solution we will soon install portable restrooms just inside the BG to provide essential services for the dozens of school tours as well as many regular and special events held annually in the BG.

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Work has begun to restore the UCR BG Subtropical Fruit Orchard in preparation for our collaboration with CNAS, CAFÉ, and R'Garden in agricultural outreach events.

- New connections have been forged with campus faculty and students:
- An Earth Sciences lab class used the sandy creek bed near the BG conference room to simulate, study, and model stream flow dynamics and landscape change.
- A Plant Biology graduate student will soon begin his Ph.D. research in the undeveloped south acreage of the BG on biology and management of Russian thistle

(Salsola), a widespread invasive weed.

- Description Botany and Plant Sciences faculty are using a part of the BG to study infection of ripgut brome (*Bromus diandrus*) by the smut fungus *Ustilago bullata*, a possible biocontrol agent for this invasive weed.
- Students and staff from UCR's Native American Student Programs are working with BG staff and volunteers to design a new Native American Plants Garden.
- Our student worker, Aram, who is an ASUCR Student Senator, has established a new student club on campus, Student Friends of the Botanic Gardens. We look forward to hearing more about

their initiatives in the coming months.



Finally, plans are actively underway for the ever-popular Spring Plant Sale, which will have a new look in 2017. Our intrepid Curator, Janine, and Manager, Theresa, are developing an updated inventory of BG plant offerings, planning for expanded propagation program with corresponding volunteer training, and reaching out to nurseries in the region who will participate as vendors. Steve Morgan, Curator Emeritus. remains an active volunteer and consultant to aid in this effort. Mark your calendars and plan to attend on April 1st & 2nd, 2017. Friends' members, of course, will enjoy the benefit of early admission! ANJH

Note From The President Amber Jones and we are so plea

Dear Friends,

The Gardens has been busy these last couple of months with a variety of events. Thanks to everyone who came out to support the Gardens at the Fall Plant Sale. The Plant Sales are one of most important fund raising events and we had a great turnout – thanks again for your support!

Welcome new members! Thanks to board member Lisa Lemoine for promoting the benefits of Friends Membership at the Fall Plant Sale this year. We had lots of new memberships and we are so pleased to have you as Friends.

Of course one of the benefits of membership is early admission to the Plant Sales, but please be sure to stop by more often than twice a year. The Gardens is always changing which means there is always something new in bloom. One of my favorite areas of the Gardens is the Rose Garden. Not only because it is full of color but the views from the Rose Garden are so special. There are benches here to sit and enjoy the views of the back drop of the Box Springs Mountains as well as the surrounding areas of the Gardens too. Visit the Rose Garden and

explore the other areas as well to find your own "special place".

As always, please send me mail (islandgrly@gmail.com) with any comments or suggestions for events, speakers, or topics that are of interest - I'd love to hear from you!

~ Amber



What to See in the Gardens

by Theresa McLemore

As we enter another season, more beauty is revealed around every turn in the Gardens. As you enter the gardens you will walk over a carpet of leaves in varying shades of yellow and gold. The *Plantanus racemosa*, *Acers*, and *Cercis* join together to create this beautiful welcome mat. That delightful and alluring fragrance that you notice as you walk through Alder Canyon is *Ozmanthus fragrans* or "Sweet Olive."

As you approach the transition of the Cactus Garden to South Africa you will notice the imposing Agave salmiana or "Pulque Agave," its inflorescence preparing to unfold. The entire lifespan of the Agave salmiana serves one purpose, which is to grow to its massive size in order to have enough energy to produce an

enormous flower spike. This plant will bloom once in its lifetime, insuring its relatives will continue its lineage into the future. The spike will take on a candelabra form reaching up to 20 feet. The spike will be covered with yellow flowers that will attract birds, bees, and the curious visitor. As this will be a once in a lifetime event for the *Agave salmiana*, it will also be a notable event for your life as well. Please visit the Botanic Gardens periodi-

cally in the next weeks to witness what we consider a monumental event in our Botanic Gardens.

Roam up the hill to the Rose Garden where the color display continues into this season.

Stand in the Butterfly Garden and take in the splashes of color. Senna bicapsularis "Worley's Butter Cream," Lantana "Dallas Red," Antigonon leptopus "Coral Vine" and Aloysia virgata "Sweet Almond Bush" complete remarkable pallet. Through the trails, geographic gardens and specialty gardens there is much beauty to encounter. So be prepared, around every corner is another illustration of Nature's beauty.



Agave salmiana

Spotlight On... Aram Ayrapetyan By Janine Almanzor

It's not uncommon to hear of UCR students, faculty, and staff who have never visited or even know of the Botanic Gardens. Well, our new student worker and Communications

and Communications
Coordinator, Aram Ayrapetyan,
has made it his goal to end that
phenomenon. He discovered the
Gardens as a freshman two years
ago and visited it often to catch a
break from busy student life. He
enjoyed it so much, he called the
office this past June looking for a
job. He came to us with all kinds
of ideas about how to raise aware-



ness and get students involved in the Gardens. One of the first things he did was to work on diversifying and expanding the social media presence for the Botanic Gardens. It was very helpful for advertising for our Fall

Plant Sale and bringing in students who had previously been unaware of the Garden. We have increased to almost 1,000 followers on Facebook and have over 330 new followers on Instagram! In the past, we had people leaving reviews about us on Yelp but no one to moderate and interact with the people leaving them. Aram

checks the reviews often and interacts with Gardens visitors in order to figure out how we can improve the Gardens. He has also just started a club on campus called College Friends of the Botanic Gardens. He's hoping that this can be a visible way to reach out to students and bring the Botanic Gardens to the campus. In the office he is currently working on increasing our membership roster and re-registering Friends whose membership lapsed. Many of you may have already received a friendly phone call from him. We love his enthusiasm and the great contribution he is making to the Gardens.

Volunteer News

Karen Fleisher

Garden volunteers contributed over 2300 hours to the success of the Fall Plant Sale on October 22 and October 23. Preparations for the sale began over a month prior with the selection of plants, preparation of a detailed description of each plant, labeling and grooming of the plants, the setup on Thursday and Friday prior to the sale, and finally the plant sale itself with approximately 100 volunteers assisting customers at checkout, straightening plants, and answering questions about plants. The enthusiasm, dedication, experience and knowledge of all the volunteers, including the Master Gardeners and UCR student service organizations, contribute to the continued success of the plant sales.

If you are interested in volunteering at the Gardens, please join us at one of the volunteer orientations to learn more about the volunteer opportunities. Orientations are held on the second Tuesday of each month, meeting at 9 a.m. at the entrance to the Gardens. For more information, please contact the Gardens office at 951-784-6962.

Requests

There is a need in the Gardens for more volunteers who would like to propagate plants for the Plant Sales or wash pots. If you are available please contact the office at either ucrbg@ucr.edu or 951-784-6962.

Around the Gardens

PLANT SALE

The public responded with their usual enthusiasm to the 2016 Fall UCRBG Plant Sale, October 22-23. Steve Morgan, Emeritus Curator, and the UCRBG Staff worked hard to present a wide selection of plants for fall planting in our Mediterranean climate with limited water availability. Many interesting and hard-to-find California natives suitable to drought-tolerant, water efficient landscaping were available, but also others that can find a niche in more traditional garden conditions. There were plants for every need: slope stabilization, attractive groundcovers, plants that attract butterflies and hummingbirds, trees, shrubs, vegetables for fall vegetable gardens (produced by Grow Lab, a Riverside County UCCE Master Gardener project), herbs, succulents and cacti, and house plants.

Janine Almanzor, Curator, and Theresa McLemore, Gardens Manager, organized the army of volunteers it takes to water, groom, label, and organize the thousands of plants that make the UCRBG Sale a premier fall gardening event in Riverside County. They were also able to adjust the structure of the sale itself, so that customers were able to move more rapidly through the check-out process. Thus the wait time was much shorter, adding to the enjoyment of a beautiful day on Saturday-and also making it



Fall Plant Sale

easier to appreciate the rain we had on Sunday.

Kudos to the UCRBG staff and to the hard-working volunteers that contributed so many hours of time-without them the sale would not have been possible. Also, a special thanks to the UCR student volunteers who filled critical jobs during the sale weekend. They are from diverse backgrounds and have varied interests, but they are hard-working, intelligent, all capable, and willing to contribute their time and energy to a good cause. If ever you feel pessimistic about the future of America, spend a little time with these young people. You will immediately feel more optimistic!

Rebecca Levers

Around the Gardens

PRESENTATIONS AT THE PLANT SALE

We had several very informative presentations at the Fall Plant Sale. Master Gardener Lucy Heyming presented a talk on growing winter vegetables in our region. She provided information on the best plants for our climate; many of these were offered for purchase by Grow Lab, a Riverside County UCCE Master Gardener project. Master Gardener Susan Cline offered insights and advice on planting



Susan Cline



Lucy Heyming

native gardens in her presentation: Invite Native Wildlife into your Gardens with California Native Plants. We also had a presentation on composting, presented by Joe Milligan, a Riverside County Master Composter. Children and their families had the opportunity to learn about growing pumpkins from Master Gardener Nancy Johnson, and were able to decorate a pumpkin to take home. Children also had a chance to hear a story,

presented by the Riverside Public Library Services. A special thanks to Nancy Johnson who planned and coordinated all of the presentations and activites for the plant sale.



FALL DINNER

In early October over 50 friends attended the Fall Dinner. It was a beautiful evening in Alder Canyon with a delicious catered meal by Tamale Factory. Nan Simonsen was our guest speaker and her program highlighted great examples of landscape design for our Inland gardens. Thanks

to Nan for the informative and entertaining program!

STEVE MORGAN

Many people have asked me if Steve Morgan still comes around. The answer is, yes. He made himself a new name tag that says "Volunteer" since he plans on helping out indefinitely. He comes in two mornings a week and helps with a variety of things but mostly plant records. In preparation for the Plant Sale he worked almost every day ordering plants and making up the plant list and signs. He continues to be an incredible mentor and friend to all of us at the Gardens.

CHILDREN'S STORY TIME IN THE GARDEN

On October 29th we had our first Children's Story Time in the Garden by Nicole Ortega. She is a recent graduate of UCR and wanted to come back and volunteer in the Gardens. Since it was so close to Halloween she dressed up like a ladybug and read "Mrs. Spider's Tea Party". They also made bug masks and had a snack. The children loved it and the



Nicole Ortega reading at Children's Story Time

Around the Gardens

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parents and grandparents were happy to have a children's event in the beautiful setting of the Botanic Gardens. Future Story Time events are listed to the right.

ART IN THE GARDENS



On November 6 we hosted the 5th Annual Art in the Gardens event. Over twenty artists attended and there was an incredible selection of artisan crafts. Photo above by Jana Shaker.

HONORING DR. WAINES

A few weeks ago the Chancellor of UCR, the Dean of CNAS, and the Director of the Botanic Gardens honored Dr. Waines for 35 years of Service and also recognized the Friends as one of the oldest and most active support groups at UCR. This, of course, is your a c c o m p l i s h m e n t (Congratulations!) and with your continued support and involvement we hope to maintain this status for years to come!

Upcoming Events

Information for all events can be found at: gardens.ucr.edu, by emailing ucrbg@ucr.edu, or by calling 951-784-6962

ROSE PRUNING DEMONSTRATION

January 8, 2017 1 to 3 p.m.

In case of rain, event will be rescheduled for January 15th

Every winter since 1979 the Gardens has held a Rose Pruning Demonstration for the public. This is a great opportunity to get all your questions answered so you can have confidence that you're pruning your roses correctly. The Mountain View Rose Society will be co-hosting the event with the Gardens. Botanic Gardens staff, volunteers, and local experts will be answering questions and demonstrating how to prune hybrid teas, floribundas, miniature roses, and climbers. The demonstration is free, though donations are always gratefully accepted.

CHILDREN'S STORY TIME IN THE GARDEN

Please join us for upcoming Children's Story Time events. These are geared toward children under 9 years old but all ages are welcome. Please let us know if you would like to join us for the upcoming Story Times by either calling the office at 951-784-6962 or emailing us at ucrbg@ucr.edu.

December 3, 2016 January 21, 2017 February 4, 2017

All are from 11 a.m. - 12 p.m. If it's raining, we'll be in the conference room.

WINTER LECTURE Please save Sunday, February 26, 2017 for our annual Winter Lecture. Please see our website and watch your email for more information about this and other events.



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 Janine Almanzor, University of California, Botanic Gardens, Riverside, CA 92521, call 951.784.6962, e-mail ucrbg@ucr.edu or visit our website at www.gardens.ucr.edu for information.

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