Nov/Dec 2022

Garden Views

UC Master Gardener Program of Riverside County Newsletter

University of California
Agriculture and Natural Resources
UCCE Master Gardener Program

University of California Cooperative Extension

Master Gardener Program of Riverside County

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Advice to Grow By ... Ask Us!
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UC Master Gardener Program Mission Statement

"To extend research-based knowledge and information on home horticulture, pest management, and sustainable landscape practices to the residents of California and be guided by our core values and strategic initiatives."

UCANR Nondiscrimination Policy

Winter Awaits!

Master Gardeners Love Their Gardens!

Garden Views **is published bi-monthly by Riverside County UC Master Gardeners. In this issue:**

Reemergence of Palm Desert Charter Middle School Garden Program

Contributed by Jax Patterson, UCCE Master Gardener

Palm Desert Charter Middle School (PDCMS) has an amazing Garden facility. The original grant for this site project was awarded around 2015 to educator, Karen Wylie, by the California Women for Agriculture, Coachella Valley. With approximately ~3,500 sq. ft. of in-ground garden beds (including the odd trellis here and there), various sheds chock full of gardening equipment, a small shade structure with worktables, a greenhouse with running water, electricity, and a swamp cooler. All in need of TLC, but hey, *they exist!* It's a veritable dream come true for the Master Gardener who wants to focus their energy on school and community gardening! And that would *totally* be me, Master Gardener Jax Patterson.

I recently relocated to the Coachella Valley, and, as such, adjusted my plans to become a Master Gardener in Riverside County as opposed to L.A. I joined the Youth and School Garden Project early on in my training in hopes of being able to volunteer at this site once COVID restrictions eased.

In Fall 2021, Brad Hardison, School and Youth Coordinator for the Desert, reached out to the new administration at PDCMS and began working with a new 7th grade science teacher, Ms. Maxwell. Freshly in charge of the Garden, Ms. Maxwell started an after-school club on Mondays which expanded to the occasional Thursday during the students' lunch period.

At the end of January 2022, I became involved with the program; participating in garden activities with the students, in Mid-March Brad asked me to be the site lead for the project. A successful Fall planting with plant start donations from the grow lab was winding down; and our first big challenge of Spring were the weeds.

Common mallow (*Malva neglecta*) had taken hold of the site. I worked with the students on Mondays after school for several weeks clearing the beds as the mallow, nut grass, snapdragons and morning glories were about to overtake the entire installation (and parts of the neighborhood).

We had a lot on our plates in April. I got the permission from the administration to do some extra work to prepare the site for the new plants, but time wasn't on our side. The morning of Friday, April 8, I was met by the Administration team when I showed up to work in the garden. They spoke of bringing in a cleaning crew to clear cut the chin-high weeds, and I let them know we had volunteers assigned to assist with the 4-6 beds we had identified for planting the following Monday. Unexpectedly, the weekend prior to planting day the administration hired their landscaping team to clear the *entire* garden to my most humbled surprise. Younhee Choi, Brad Hardison, Jim Thompson, Linda Williams, and I were able to concentrate solely on getting the six beds ready for planting, as opposed to removing literally pounds of weed seed and other debris adjacent to our planting areas.

I invited my classmate, Master Gardener Vivian Yturralde, to assist me with site coordination, as by this point the administration had become quite invested in what Master Gardeners had to offer. Brad dropped off two different sets of plant donations from the Grow Lab, and Vivian and I were able to “gamify” two separate planting events. Garden Club lunch meetings (which were initially poorly attended) became regular events since the students weren't just on weed and trash detail. We engendered camaraderie in our students through both competition as well as teamwork.

Vivian and I arranged to monitor the new seedlings and watering system over spring break, so when the students returned, the Garden had a host of strong new plants. The very next week, we began the fight for those same plants against the club's newest member - an extremely brazen gopher that the students named "Ruler.” Ruler took out the vast majority of our squash plants; he seems to prefer the scallop squash and positively decimated those plants (my favorite, sorry to say.)

Vivian and I were able to share treats with the students from our own gardens (picante salsa and peach/orange jam), and Vivian taught hand pollination of squash blossoms and buzz pollination of tomato blossoms. We went over all the particulars of the flowers and how the processes differ between species. The students learned to identify male/female squash blossoms and even helped nature along with the buzz pollination (electric toothbrush) technique on the tomatoes.

Our final meeting dates in May set the students out on their task of measuring all the garden beds to help plan for materials we needed for summer and upcoming season. As the heat rose and the season wound down, students were able to harvest zucchini; find and identify hornworms and "put them in timeout"; and even take home plants to put in their own gardens.

We had several graduating eighth graders representing two different high schools in the area returning to become mentors.

After the close of school for the summer, a solarization project was proposed and implemented to ensure the work everyone had done to keep the weeds down wasn’t wasted over the break. Prior to the landscapers coming to lay out the plastic per our instructions, Vivian and I removed the last of the viable produce from the site as there was no real shelter from the heat. We had over eight pounds of green tomatoes (they did not go to waste).

Master Gardener Christine Curtis taught me to always involve the principal to ensure success. We are so uniquely blessed with Principal Deborah Dolan. She formed the Panther Gardening Communication Team and appointed a parent foundation volunteer, Kristine Daly, to source grants applicable to our project. On August 23, we were notified by the Team at Kids Gardening that we were selected for our first grant of $500 for a pollinator garden. It is so extremely gratifying to see that once they witnessed the effort we were willing to put in to

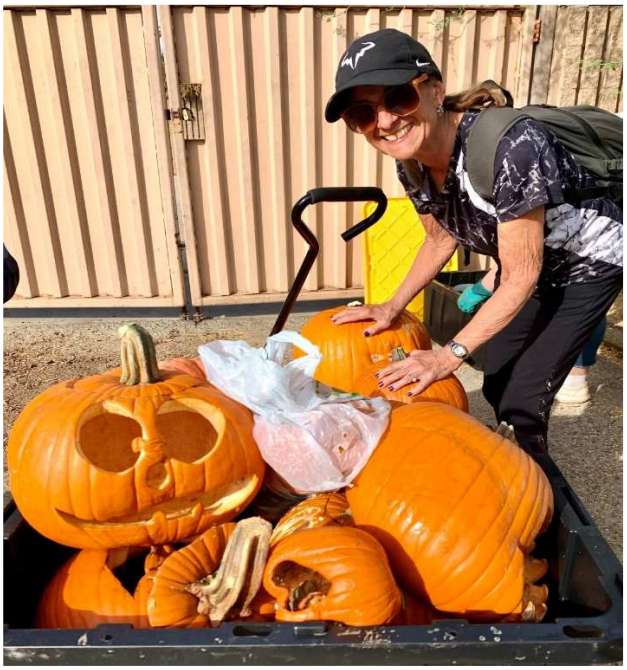
help clear the space, the administration became fully invested in revitalizing an environment that will be used to both educate and build community. Please stay tuned for more awesomeness to come during our 2022-23 season at the Palm Desert Charter Middle School Garden. Feel free to connect with us if you've an interest in joining one of our project teams. This next season is going to be amazing!

Special thanks to the Ma'ams and friends without whose assistance, guidance, love and support, none of this would have been accomplished. I simply could not have done this without you: Peggy Bakke, Carolyn Daniels, Marsha McNamara, Marcia Stone, Martha Tureen, and Vivian Yturralde.

Smashing Pumpkins: Our First Desert Compost Project!

Contributed by Rita Kraus, UCCE Master Gardener

Master Gardeners, Rita Kraus and Dee Kongslie met up with our new partner, DesertCompost, on Nov 4th for the First Dead Pumpkin Drop-off event. Turned out to be a smashing good time! Who knew composting could be so much fun!



Rita Kraus, Master Gardener Coordinator

The Dead Pumpkin Drop-Off bin, located at Rancho Mirage Farmers Market, encouraged families to drop off those fuzzy, rotting pumpkins instead of throwing them out. All fuzzy pumpkins were then transported to the College of the Desert to become part of a brand-new compost pile that will serve the school garden.

Master Gardeners and DesertCompost volunteers had fun smashing pumpkins together. Once smashed into small pieces, the pile was covered with mulch, watered, then covered with a tarp. It won't be long before those decaying pumpkins will start nourishing the soil. 391.85 pounds of pumpkin were quickly composted by 8 volunteers.This compost will eventually become nutritious food for the McCarthy Child Development Center's school garden, planned for 2023.

Watch for future events to assist Desert Compost. Together we will inform and help our community learn the benefits of composting.

Save the Date! All County Master Gardeners Event

RCRCD's Greenbelt Monarch Habitat 2020-2022

Contributed by Michelle Felix-Derbarmdiker, Naturalist Riverside Corona Resource Conservation District

Once millions of Monarch Butterflies would overwinter on the Pacific West Coast, but their population is on a drastic decline since the 1980's. In the winters of 2018 and 2019, just 30,000 Monarchs were counted at overwintering sites. This drastic decline is due to many factors including loss of habitat, pesticide use, and climate change. With the population at just 1% of its historic size, it is now critical to take appropriate actions to support Monarch populations. Beginning 2019, RCRCD decided to throw its hat into the ring and begin efforts to support Monarch conservation through public education.

Site Conditions October 2020

In the spring of 2020, RCRCD received a grant from the Wildlife Conservation Board in partnership with the California Association of Resource Conservation Districts, to establish 2 acres of Monarch breeding and foraging habitat. In addition, funds were allocated towards community education on the plight and conservation efforts related to Western Monarchs. RCRCD has a relatively small staff, so a large band of volunteers was needed to reach our goals. This was going to be quite a challenge considering the grant was awarded in the infamous March 2020. Once it was clear that the pandemic was here to stay like a wad of gum stuck in the grove of a hiking boot, we knew it was going to be challenging to reach and retain volunteers. This is where the UC Master Gardeners of Riverside County stepped in to save the day. RCRCD staff reached out to this MG community, and we quickly had a list of enthusiastic volunteers. A great big thank you to UCCE Master Gardener Linda Powell for her efforts in broadcasting our call out to rally the

troops! With the help of these Master Gardeners and other community members, we were able to plant almost 2,000 nectar and native milkweed plants over two acres! In addition to planting, our amazing volunteers helped us manage weeds at the site. Thanks to their efforts, we can say that zero herbicides were used in the two years since we broke ground on the project. We cannot convey our thanks enough to the over 130 volunteers that have dedicated their time to our site and Monarch conservation.

In spring 2022 we hit another milestone! Our site was established long enough to begin Monarch surveys and welcome community science efforts. To search over two acres for Monarchs in all life stages was going to be no small task. Again, we put the call out to the MG community, and they did not disappoint. To date, over 70 community members, many of whom are Master Gardeners, were trained to be community scientists and conduct Monarch surveys at our site.

First Monarch Survey, April 2022

With the site still being so young, we were unsure of how successful surveys would be in 2022. Even with this uncertainty, volunteers dove in headfirst and maintained their enthusiasm even on the hottest days. With their support, several surveys were conducted each month from April to September. In total these community scientists documented 144 Monarch eggs, 26 caterpillars and 10 adults!

Monarch Egg

Monarch 2nd Instar leaving molt

Their efforts created invaluable data for scientists. Our data was shared with iNaturalist, Monarch Larval Monitoring Project and Western Monarch Milkweed Mapper. As our site continues to mature, we are sure there is more excitement to come!

Monarch 5th Instar on Milkweed

We have a long uphill battle to save the Monarch, but through community education and outreach, partnerships and conservation efforts, RCRCD will continue to strengthen our endeavors. Despite the hurdles we faced with the Covid-19 pandemic, we reached all the goals set out in our grant. This will be an ongoing effort. It is our hope that not only will we provide critical foraging and breeding habitat for Monarch butterflies, but also our site will be an educational resource for our entire community. If you would like to join in our efforts, please contact the Greenbelt Monarch Habitat Site Manager, Michele Felix-Derbarmdiker, at Felix-Derbarmdiker@rcrcd.org.

Youth-School Project: STEPCon22

Contributed by Kim Coons-Leonard, UCCE Master Gardener

Master Gardeners' Youth-School Project provided both in-person and virtual exhibits for the twenty-second annual STEPCon event held in October. STEPCon is considered the premier student science, technology, engineering and mathematics (STEM) conference in the Inland Empire. The in-person conference was held October 6, 2022 at Bourns Technology Center in Riverside and hosted approximately 1,000 fourth through twelfth grade students. The online conference ran through November reaching an estimated 20,000 students.

Both our in-person and online exhibits focused on the science of soil aligned to the Next Generation Science Education Standards. The in-person exhibit engaged students with both a hands-on vermiculture experience and exploring the microscopic world of soil organisms. Amidst a sea of engineering and tech-based exhibits, students had the opportunity to handle soil, worms and peer into the world of microorganisms. Our exhibit was included in a video recently posted on YouTube (STEPCON22 Recap Video) highlighting the Oct. 6 event. (Look for students engaged in vermiculture at the 30 second mark.)

The online-line exhibit provided students grades 4-5 and grades 6-8 learning pathways following the theme, *"If You Dig a Little, You'll Learn a Lot!"* This exhibit featured in-depth PowerPoint lessons which included video overviews on soil formation and life in the soil from the perspective of soil scientists and interactive soil games. These lessons will also be featured on the Riverside County Office of Education website beginning in December.

Dr. Clifford Morrison

This was the largest, single outreach event for the Youth-School Garden Project, and it could not have been accomplished without the help of volunteers! Special thanks go to UCCE Master Gardener, Dr. Clifford Morrison, who provided input on the type of microscope needed to view soil organisms, in-depth training on how to use the microscope, the types of organisms to feature and very engaging vermiculture resources. His expertise was invaluable.

Thanks also go to an amazing team of exhibit volunteers who quickly set up all our equipment, mastered not only use of the microscope, but also how to identify the types of organisms being viewed, plus enthusiastically sharing the information with students, teachers, and parents. Many thanks to UCCE Master Gardeners Brad Hardison, Rose Morisoli, Steve Moreno, Jasmine Ocegueda, Georgia Renne, Janice Rosner, and Kathy Steckman.

Brad Hardison

A Revived Partnership

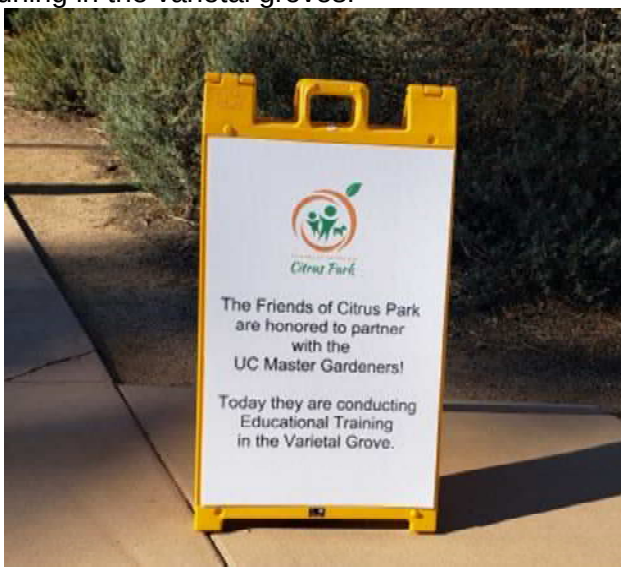
Contributed by Jolene Hancock, UCCE Master Gardener

The California Citrus State Historic Park is in the City of Riverside. This 250-acre hidden gem is an open-air museum in the state park system of California preserving the history and cultural landscapes of the great citrus boom of the 20th Century.

This park interprets the industry's role in the history and development of California through the stories of the diverse groups of people who made it all possible. The park recaptures the complexities of the time when "Citrus was King," exploring the significance of the citrus industry in Southern California. In 1873, the U.S. Department of Agriculture forever changed the history of Southern California when it sent two small navel orange trees to Riverside resident Eliza Tibbets. Those trees, growing in ideal soil and weather conditions, produced an especially sweet and flavorful winter harvest fruit. Word of this far superior orange quickly spread, and a great agricultural industry was born.

In the early 1900s, an effort to promote citrus ranching in the state brought hundreds of would-be citrus barons as well as thousands of migrant and immigrant agricultural workers to California for the "second Gold Rush." This resulted in the growth of cities and communities throughout Southern California most of which were segregated along class and racial lines. On the surface, however, the lush groves of oranges, lemons and grapefruit contributed to California's legacy with its lingering image as the Golden State, the land of sunshine and opportunity.

In 1994, when the park opened, they also created the Friends of the California Citrus Park, a nonprofit organization. A few members of the Board of Directors, namely Dr. Tracy Kahn and Tom Spellman reached out to the Riverside County UC Master Gardeners hoping for the opportunity to take advantage of this natural partnership. They held their first joint meeting in January 2022, and since have held five workshops in the park this year. This includes a morning discussion on education including tree health evaluation and hands on pruning in the varietal groves.



In October the workshop was taught by Dr. Ivan Milosavljevic from UCR explaining his research on the Argentine Ant with their impact on the Asian Citrus Psyllid (ACP) and Citrus and biocontrol methods for addressing ACP.

Executive Director of the Friends of California Citrus Park, Susan von Zabren, expressed her excitement and enthusiasm with what the future might hold for the park and the Riverside County Master Gardeners. “The park and the public both benefit from having a greater presence of the Master Gardeners here. The Master Gardeners bring a higher level of knowledge, a greater depth of information to our park. We want the park to be enjoyed and the public to learn.”

Tom Spellman giving us an introduction before leading out on our way to our workshop assignments.

During the pandemic, the park's docent program came to a stand-still. Right now, they are working with a limited number of volunteers. The idea of our Master Gardener program possibly providing docents for the park is very probable. It might be the very thing needed to revive the docent program for this historical site. The docent program with the park could mean direct involvement by providing interpretive tours at the park as well as service in the museum and visitors center.

Tom Spellman and Dr. Stacy Khan giving citrus instructions and information to Master Gardeners at the Park's amphitheater.

The park hours are 8-5 daily with interpretive tours by appointment for 1-hour Fridays through Sundays. The Visitor's Center and Museum are open Fridays through Sundays from 10-4pm. The park offers trails that provide all visitors active recreation, walking, hiking, running, mountain biking, bird watching, and equestrian use.

Join us at California Citrus State Historic Park Address: 9400 Dufferin Ave, Riverside, Ca, 92504. Website: californiacitruspark.com/

Pam Elias showing the Meyer Lemon fruits of her labor!

Master Gardeners Celebrate These New County Recognition Awards!

1000 Hours Gold Badge
Nancy Johnson
500 Hours Watering Can Pin
Pam Elias
Sandra Leoni
250 Hours Gardeners' Trowel Pin
Marianne Donley
Cynthia Skye Freeman
Jill Hishmeh
Margi Jacobson
Carol Rochin
100 Hours Bumble Bee Pin
Linda Cummings
Bob Freel
Jennifer Hooper
Elizabeth Reade
Mona Swineheart
Roger Tansey

What are Home Gardening Basics Classes? West County Part 1

Contributed by Georgia Renne, UCCE Master Gardeners

Last summer I was so pleased when Linda Powell asked me if I would join her team of West County Master Gardeners who developed and presented the Home Gardening Basics (HGB) classes. Two years ago, I attended two of their series of workshops for the public and was most impressed with the relevant content and positive responses from the class members. At that time, I did not realize I was joining a team who had presented thirteen workshop series from 2018 to 2022 with fifty-two classes and over 1,250 participants some of whom took more than one series, and others who became Master Gardeners. wanted to know the story behind their success!

For this article I interviewed Linda Powell, the Project Coordinator. She clarified how well this project models our Master Gardener Mission.

The project itself is a prime example of the Mission of the Master Gardener Program. It gives research-based information to the home gardener in an informal class setting. It encourages sustainable gardening practices and provides healthy, realistic avenues to successful gardens. Questions are very much encouraged. Participants range from the very novice to master gardeners from other countries and states, all who are perplexed by our Riverside County growing conditions. A serendipitous result of the classes is the number of participants who have joined our Master Gardener Program!

She shared there was not much change in presenter over the years. Along with Linda Powell, Susan Cline, Becky Levers, Laura Simpson, and Lynn Coffman, this current team was also joined by Eben Longfellow and Thurman Howard. This team is very committed to the project with their involvement since 2018. During the fiscal year three to four series of classes (three to five classes per series) are taught to the general public. There is a small fee to register for the limited size classes, twenty-five to thirty members, and class materials are given to each participant.

The HGB team, Georgia, Susan, Linda, and Laura planning their next classes.

Linda Powell teaches Ecosystems to first class.

While most of the classes were presented in person over the five years, those scheduled during the pandemic were taught through Zoom sessions. The presenters shared with me they so preferred the in-person format since that was when their own gardening expertise was challenged with even more questions after the session ended. The team's expertise certainly comes from their own UCCE Master Gardener training but also from extended learning, additional research, and experience in many specialized areas. As a series of workshops designed for gardening basics necessary to the home gardener, the classes covered soil, water, irrigation, mulch, Mediterranean climate, drought, California natives, safety and tools, vegetables, flowers, trees, Integrated Pest Management, garden design, compost, wildfire season basics, and helpful hints. During 2021, the team offered HGB Plus with expanded workshops on Landscaping for the IE, The California Fall Garden, and Edible Gardening.

On the evaluations of the most recent workshops held in September 2022, two participants shared, "This class is awesome I'm excited to put what I learned into action at my home." "After being frustrated by a new home with completely different weather, the class helped me get excited about my garden again."

Lynn Coffman shared her expertise on water.

The team also gained insight from these evaluations in how to make future classes more relevant and inspirational for home gardeners. We discussed how we could develop presentations that would incorporate these suggestions in workshops we planned for January-February and May.

Clearly, I am enjoying deepening my own gardening learning and passion through my new membership on the HGB team!

(Part 2 Desert Home Gardening Classes, next issue)

Butterfly Corner: Gray Hairstreak

Article and Photos contributed by Ann Platzer, UCCE Master Gardener, Platinum Badge Holder

The lovely little Gray Hairstreak (*Strymon melinus*) with a 1-1.25 inch wingspan is common in Southern California. In fact, it is one of the most widely dispersed butterflies in North America. This is not surprising, since it feeds on numerous plant families. The flight time in Southern California is from February through November.

Hairstreaks belong to the Gossamer Wing family (Lycaenidae) and have evolved so that their hind wings look like their head. Why is this a successful adaptation? Let's look at the Gray Hairstreak. It has a large orange patch near the

back edge of its hind wings and two hair-like tails. So when the wings are closed, the orange spots look like eyes and the thin tailslook look like antennae, photo at left. Adding to the deception, when nectaring it perches with its head down and its false "head" upward giving the illusion that the head is the tail. Not only that, as it shuffles its closed hind wings back and forth it draws attention to the wrong end of its body. Thus a predator attacks the hind wings rather than the vital head area. The success of this adaptation is demonstrated by the many hairstreaks with nips out of their hind wings from failed bird attacks.

The female lays hard-to-see, pale green eggs singly on buds and flowers. The color of the larvae is variable, but on our coral vine they are rose-colored with short, tiny spines, photo left. They blend in with their host flowers and are devoured by the young larvae.

The pupae, photo, below left, is brownish with dark blotches and short spines, resembling dead leaves or bumps. on surrounding branches. These butterflies have many broods and hibernate over winter as pupae.

Their host plants include an incredibly wide range of plants in many families, such as mallows (family *Malvaceae),* buckwheat *(Eriogonum),* coffeeberry (*Rhamnus californica*) and legumes such as clover and beans. It is easy to introduce this cute, little butterfly into your garden by planting a few of the above host plants. In fact, you probably already have a few of their host plants!

Please plant California native and butterfly friendly plants in your garden to help restore our native habitat.

Happy Butterfly Gardening !

Meet the Mealy Bugs!

Contributed by Betty Guida-Ingalls, UCCE Master Gardener

What could those soft, waxy, oval-shaped insects on your plants be? They could be mealybugs. There are 170 species in California, and they thrive in warm climates like ours. Mealybugs are in the insect family Pseudococcidae and superfamily Coccoidea, including armored scales, soft scales, and cottony cushion scale. They are found in groups or colonies in protected areas on the host plant. The insect prospers on citrus and fruit trees, grapes, woody ornamentals, perennials and even indoor plants.

Damage to the plant occurs when the mealybug sucks sap from the plant phloem (phloem can be compared to the circulatory system in humans.) reducing the plant's vigor. Large populations feeding on the plant will even cause leaf drop. However, a low population of mealybugs will not damage a healthy plant.

Regarding controlling the insect, the number can be reduced by simply using a high-pressure stream of water. It may be necessary to repeat the treatment for several days. Another simple remedy is to dab a solution of 70% alcohol mixed with water on the insect. Be sure to test the solution on a small part of the plant to check that the solution doesn't cause leaf burn.

Insecticidal soap, neem oil or horticultural oil applied directly on the insect may help control it. Mealybugs have several natural predators such as parasitic wasps, lady beetles, spiders, green and brown lacewings. Home and garden insecticides are not very effective for mealybugs. This is because of the mealybugs' waxy coatings and their habit of hidden locations.

Mealybugs are usually brought into the garden or household on new plants, tools, or pots. Be sure to inspect new plants. If you can't remove the mealybugs with water spray, you should take it back to where you obtained it or consider destroying the plant. A good policy is to inspect your current plants periodically for those soft, waxy, oval-shaped pests.

Resources:
ipm.ucanr.edu/PMG/PESTNOTES/pn74174
ipm.ucanr.edu/PMG/IMAGES/P/I-HO-PAFF-CO.011

Female longtailed mealybug, *Pseudococcus longispinus.*

Mealybugs, such as these obscure mealybugs, are usually found in groups feeding in protected areas.

West County Home Gardening Basics Classes

UNIVERSITY OF CALIFORNIA
Agriculture and Natural Resources
UC Master Gardener Program
Riverside County

UC Master Gardeners of Riverside County Is Pleased to Announce Home Gardening Basics Series 2023 For All Home Gardeners!

Due to high demand, an encore of the first workshop in this series, *Home Gardening 101,* will be offered in *three* sessions on Saturdays in January and February 2023 from 9:00 am-1 pm in person in Riverside.

- Cost for the 3 sessions is $50*, including all materials.
- Class size is limited to 30.
- **Registration Deadline: January 7, 2023.**
- For more information or to register, contact: Georgia Renne, HGB Coordinator, at grennemg@gmail.com.

ENCORE! HOME GARDENING 101: The Essentials for Drought-Tolerant Landscapes & Growing Fruits and Vegetables

Session 1: Saturday, January 28

California is in a Drought! The Basics of Irrigation in Your Landscape, plus Soils and Mulches, and an Introduction to Garden Tools and Safety. Exactly what you need to get started!

Session 2: Saturday, February 4

What to Plant: Drought-Tolerant Plants, California Native Plants and Trees, plus Wildfire Season Basics for Your Safety

Session 3: Saturday, February 11

Edible Landscaping: Cool Season & Warm Season, How to Handle Pests in Your Garden & Home, plus Helpful Gardening Tips

*(*The tuition covers expenses and supports the UCCE Master Gardener Program. UCCE Master Gardeners are volunteers and are not paid for their time.)*

Need an idea for a Holiday Gift for a friend or family member or neighbor in West County? Home Gardening Basics Classes in Riverside! Saturdays, 1/27, 2/4, 2/11 2023 9:00 AM-1:00 PM

- **Registration Deadline: January 7, 2023**
- **For more information or to register, contact: Georgia Renne, HGB Class Coordinator, at grennemg@gmail.com**

Desert Home Gardening Classes

UNIVERSITY OF CALIFORNIA
Agriculture and Natural Resources
UC Master Gardener Program

Desert Area Master Gardeners of Riverside County Present

Spring 2023 Desert Home Gardening Class

SIGN UP TODAY!

Dates:
February 4, February 18, 25, March 4, 2023

Time
9:00 AM - 1:00 PM

Location:
UC Riverside/Palm Desert

Contact
Smoky Zeidel
smokyzeidel@gmail.com

RSVP BY:
January 15, 2023

Confused How to Grow a Garden in the Desert?

Getting things to grow in the desert is a challenge. With temperatures that can soar into the 120's in the summer and drop to the 30's on cold winter nights, plants have to be tough to survive here. Add to that little rainfall—we are a desert, after all—and the challenges of climate change, we gardeners have to be tough, and adaptable, as well.

That is where we Master Gardeners come in. We've done the work, experimented with plants and growing systems. We've studied the science. Grow a tomato in November? Sure! Plant squash and beans that survive our July heat? Why not? Grow landscape plants that offer shade but don't require drought-aggravating amounts of water? We can show you how.

TOPICS INCLUDE:

- Design & Layout
- Irrigation
- Soil
- Compost
- Tools
- Flowers/Shrubs
- Vegetables
- Pollinators
- Native Plants
- Citrus
- Palms

Need an idea for a Holiday Gift for a friend or family member or neighbor in the Desert? Home Gardening Basics Classes in Palm Desert! Saturdays, 2/4, 2/18, 2/25, 3/4 2023 9:00 AM-1:00 PM

- **Registration Deadline: January 15, 2023**
- **For more information or to register, contact: Smoky Zeidel HGC Class Coordinator, at smokyzeidel@gmail.com**

Janet's Jottings

Janet Hartin

Where Do Those Fall Colors Come From?

After a couple recent trips to the East Coast and many memories of beautiful splashes of fall color from growing up in the Midwest and moving further north to attend University of Minnesota, I remain in awe of the brilliant reds and oranges that many deciduous trees reward us with in the fall.

Did you ever wonder why trees 'turn' color in the fall? The short answer: It's primarily a function of long cool fall nights and short sunny days.

The longer answer? Chlorophyll is responsible for the basic green color of leaves we see in spring and summer and is a necessary component of photosynthesis which uses sunlight to manufacture sugar (food) that is stored during the dormant period of the year. Carotenoids produce yellow, orange, and even brown pigments in crops such as carrots, squash, bananas, and many ornamentals such as daffodils and poppies. Anthocyanins are red and orange in color and are most linked to lavish displays of brilliant fall foliage. They also give rise to coloring of strawberries, plums, and cherries.

Here's the kicker. While chlorophyll and carotenoids are present in leaf cell chloroplasts throughout the entire growing season, most anthocyanins are only produced in fall due to bright light and excess plant sugars within leaf cells.

So, in reality foliage doesn't 'turn' orange or red at all. Carotenoids and anthocyanins are always in the leaves; they are simply unmasked once the active growing season is finished, and chlorophyll is no longer produced. This happens when nights lengthen in fall.

Interestingly, the actual timing of color change varies across species and appears to be genetically inherited. The same species will exhibit a similar color scheme in cool temperatures in higher elevations at nearly the same time as it does in warmer lower elevation climates. The intensity can vary quite a bit, however.

Where do temperatures enter the picture? Both the amount of color and the overall intensity of fall color are very linked to weather conditions that occur prior to and during the actual time the chlorophyll in leaves winds down. The most brilliant displays occur after several warm, sunny days and cool, crisp (above freezing, however) nights. This is because although lots of sugars are made in leaves during sunny daytime hours, the corresponding cool nights prevent the sugars from moving out. The amount of soil moisture also helps ensure that from year-to-year fall colors vary even in the same trees. So, either a late spring or a prolonged drought can both delay the display of fall color by a few days or even a few weeks. What's the recipe for the most brilliant fall display? Most likely a warm moist spring followed by a warm summer and sunny fall with cool autumn nights.

Ginkgo biloba
(https:selectree.calpoly.edu)

In Sunset climate zones 18/19 *Pistacia chinensis* (Chinese pistache*), Liquidambar styraciflua (*American Sweetgum/liquidambar*)*, *Gingko biloba (*Maidenhair Tree*)*, and *Diospyros kaki (*Japanese persimmon*)* all offer bursts of fall color. While liquidambar live many years, they are unfortunately prone to invasive shot-hole borer, and even healthy trees are susceptible.

Enjoy Fall! Winter is around the corner.

25-year-old Liquidambar, G. Renne Home

News from Rosa!

Rosa Olaiz

2022 is full of exciting changes in the UCCE Master Gardener program! The second countywide virtual volunteer training class was held with 30 new Master Gardeners graduating. Several graduates are quite involved in different projects contributing their time to the Grow Lab, social media, composting**,** and information tables.

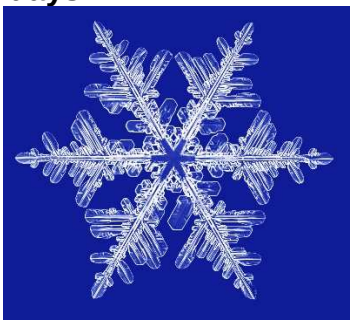
The yearlong Membership Initiative**,** "Growing Master Gardeners**,**" began in September. The goal is to inform and inspire Master Gardeners about the UCCE Master Gardener Program of Riverside County and its mission of "extending to the public research-based information verified by UC experts about home horticulture, pest management, and sustainable landscape**."** Past meeting**s** can be viewed on VMS under *Recordings for Past Continuing Education Presentations and Workshops*.

The UC Statewide Master Gardener Program redesigned the Master Gardener Badges last summer. If you have not received your new badge, contact me via email, rmolaiz@ucanr.edu, to make pick up arrangements.

Cooperative Extension Office has moved! Our new offices are in the City of Riverside, 2980 Washington Street, Riverside, 92504 (formerly the Riverside County Purchasing and Fleet Building). We expect to be operational by the end of the year. I want to acknowledge Master Gardeners who helped with the move: Debby Leuer, Jane Payne, Yvonne Wilczynski, and Patti Reiter. The Helpline is ready for in person activity, and the Master Gardener program has a spacious storage area with easy loading and unloading access.

A big thank you to all Master Gardeners and community members who donated during the online Giving Tuesday fundraiser. The UC Master Gardener Program statewide **raised $40,986 with 347 donations**. The individual county donor reports are expected next week.

Happy Holidays!



UC Master Gardener Program of Riverside County			
UCCE Riverside County Director		Rita Clemons	
UCCE Riverside MG Program Director		Janet Hartin	
Volunteer Services Coordinator		Rosa Olaiz	
West County Advisory Board		**Desert Advisory Board**	
Chair	Dave Brandtman	Chair	Jim Thompson
Chair Elect	Patti Bonawitz	Chair Elect	Brad Hardison
Past Chair	Darrilyn Erickson	Past Chair	Smoky Zeidel
Secretary	Judi Newby	Secretary	Open
Treasurer	Jonathan Crook	Treasurer	Jim Huberty
Community Gardens	Thurman Howard	Coachella Valley Preserve Docents	Marcia Stone
Diverse Community Projects	Thurman Howard	Coachella Valley Preserve Docents	David Lahti
Equipment & Inventory	Debbie Leuer	Composting	Rita Kraus
Gold Miners	Thurman Howard	Composting	Dee Kongslie
Grow Lab	Adrian Ceja	Continuing Education	Pat Clayes
Grow Lab	Steven Moreno	CREATE	Barbara Kay Levin
Help Line	Jane Payne	CREATE	Vivian Yturralde
Home Gardening Class	Linda Powell	Desert Home Gardening Class	Smoky Zeidel
Home Gardening Class	Georgia Renne	Event Tables	Open
Mentoring Program	Alba Good	Farmers Markets	Open
Membership	Sharon Sharpe	Help Line	Ralph Thompson
MG Logo Merchandise	Jennifer Hopper	Job Descriptions	Patty Reed
Newsletter	Georgia Renne	Job Descriptions	Marcia Stone
Parliamentarian	Cindy Peterson	Membership	Cynthia Morris-Sotelo
Public Relations eBlast	Susan Cline	Moorten's Botanical Gardens Docents	Cesar Lopez Barreras
Public Relations Social Media	Pam Elias	Moorten's Botanical Gardens Propagation	Barbara Kay-Levin
RCRCD Monarch Habitat	Linda Powell	Parliamentarian	Brad Hardison
School Gardens	Kim Coons-Leonard	New Projects	Marcia Stone
School Gardens	Brad Hardison	Newsletter	Georgia Renne
School Gardens	Janice Rosner	Publicity-eBlast	Jim Thompson
Social Recognition	Yvonne Wilczynski	Publicity-Social Media	Jim Thompson
Speaker's Bureau	Lynn Coffman	Raices Cultura's Tierra de Raíces	Cesar Lopez Barreras
Tours	Linda Carpenter	School Gardens	Brad Hardison
Training Class	Melody Knox	Social Events/Recognition	Kathy Miller
UCR Botanic Gardens Liaison	Yvonne Wilczynski	Speaker's Bureau	Gail Nottberg
Website (Countywide)	Ralph Thompson	Website	Ralph Thompson
Parliamentarian	Cindy Peterson		
Public Relations eBlast	Susan Cline		
Public Relations Social Media	Pam Elias		
WEL Liaison	Janice Rosner		

Over the past few weeks, I watched these white blobs on the leaves and stems of the pink salvia by the entrance to the UCR Botanic Gardens. I even touched one and came away with sticky, salvia-stinking slime on my finger. Oh dear! What did I touch? Master Gardeners help me! Please email me, grenne@earthlink.net, to let me know if I have been poisoned! Thanks. GR