



Photo by Melinda Nestlerode

Seeds For Thought

Solano County Master Gardeners

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THE WILLIS LINN JEPSON NATIVE GARDEN RENOVATION PROJECT - PART 2

Paula Pashby, U.C. Master Gardener, Solano County



Garden Dedication and Blessing
All Photos in this Article by Paula Pashby

To make this event even more moving, family members of Bob Allen were present at the ceremony to celebrate their father’s vision for this garden. Bob Allen, who passed away in 2016, designed and developed the Willis Linn Jepson Historical Garden to showcase California native plants. The family spoke about their father’s love for gardening and their own memories of helping with his planning and planting of the garden. A plaque was posted in the garden in memory of Bob.



In my last article on The Peña Adobe Willis Linn Jepson Native Garden Renovation Project, I wrote about a sweet little garden that had been overrun by weeds. Several passionate Master Gardeners took on the task of renovating this garden with hopes to bring it back to life for the community to enjoy.

To move this project forward, a partnership was established between the Peña Adobe Historical Society, Willis Linn Jepson California Native Plant Society, the Putah Creek Nursery, and the Master Gardeners programs from Solano and Yolo Counties. We received some wonderful plant donations from non-profit organizations for this project. Upon writing the first article, the last activity we completed was mulching, and then the area was ready for new irrigation and planting.

Today, I am happy to report that the team of enthusiastic volunteers was able to complete the renovation of the Willis Linn Jepson Memorial Garden! To celebrate this accomplishment, there was a lovely garden dedication ceremony during the June 4th Peña Adobe’s Native American Heritage Day. This included a special blessing given by Miwok Tribal Elder, Marge Grow Eppard.

One of the UCCE Master Gardeners-Solano, Janice Hartman, was instrumental in securing signage for the garden plants. She created the memorial plaque for Bob Allen and a plant legend with a garden map. Janice made sure that each plant has an identification sign with a QR (quick response) code. Using your smartphone, the QR code will take you to the California Native Plant Society (Calscape) website for more specific information on the plant. Calscape is a wonderful website with information to “help Californians restore nature and save water one garden at a time by showing



Master Gardeners Janice Hartman and Cheryl Obert

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people which plants are really native to any location in the state, helping you figure out which ones you want, where to buy them and how to grow them” (<https://calscape.org/>). The website also provides many pictures and details about the plants, such as bloom color, bloom time, water needs, and much more.

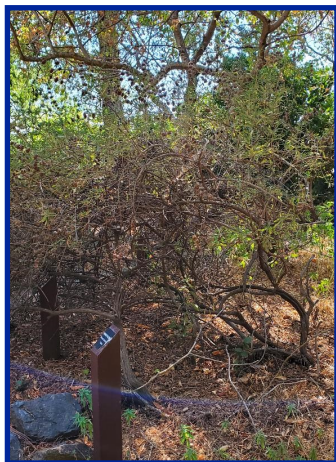
Cheryl Obert is another Master Gardener-Solano who put many hours into this garden project. On garden meeting days, she was always there early and ready to start. She would already complete many of the hard tasks before the rest of us even got to the project site. Cheryl describes her experience: “I have enjoyed being a part of this project, and with each step that we have taken, it will become a beautiful place for everyone to come and enjoy.”

It was such a pleasure working with Janice and Cheryl, and the many other hardworking volunteers. Cricket Kanouff, president of the Peña Adobe Historical Society, and Jess Hayden, also with the Historical Society, contributed many hours to make this project a reality. Together, we made this a very fulfilling achievement and hope others will enjoy the garden. We look forward to tending to the garden and watching the plants mature over time.

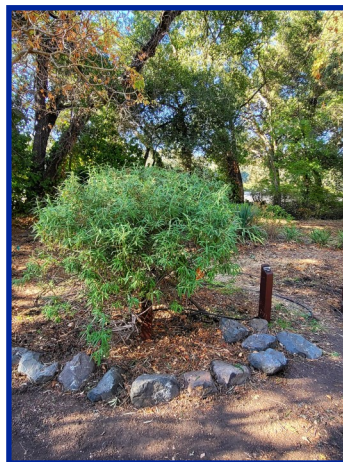
Going forward, Master Gardeners will educate the public on the features of the California native plants, their drought tolerance, and the pollinators we expect to attract. The Peña Adobe Historical Society indicated that they will also teach visitors about the historical uses of the plants.

Some of the many California native plants that can be found in the garden, include:

- ◆ Santa Rosa Island Sage (*Salvia brandegeei*)
- ◆ Alum Root (*Heuchera*)
- ◆ Sticky Monkey Flower (*Mimulus aurantiacus*)



Santa Rosa Island Sage (*Salvia Brandegeei*) - BEFORE



Santa Rosa Island Sage (*Salvia Brandegeei*) - AFTER



Bob Allen and Willis Linn Jepson Memorial

- ◆ Coyote Mint (*Monardella villosa*)
- ◆ Poso Blue Sage (*Salvia clevelandii*)
- ◆ CA Fuchsia (*Epilobium canum*)
- ◆ Columbine (*Aquilegia*)
- ◆ Yarrow (*Achillea millefolium*)
- ◆ Lupine (*Lupinus*)
- ◆ Santa Rosa Island Sage (*Salvia brandegeei*), the only surviving plant from the original garden

Come join us and see this garden come to life!

Peña Adobe Willis Linn Jepson Native Plant Garden
Peña Adobe Road, Vacaville, California
<https://www.penaadobe.org>

A background history video can be found at: https://youtu.be/dJZdEbP_njU



Willis Linn Jepson Native Plant Garden— BEFORE



Willis Linn Jepson Native Plant Garden— AFTER



PICKLING PLEASURES

Pearl Eddy, U.C. Master Gardener and U.C. Master Food Preserver, Solano County

Is your garden finally starting to produce, but more than you can conveniently use daily or even give away? Try pickling the excess.

The term “pickle” applies to foods that are preserved with salt or vinegar, either with or without the addition of spices and sugar. To me, “pickling” equates to adventure! The advantages of this method of preserving are that it is fun, safe, easy, colorful, and flavorful. Among the many foods I have pickled are okra, fish, grapes, grape leaves, eggs, artichoke hearts, zucchini, lemons, watermelon rind, and wild game (corned meats). With such a variety, you can always have instant appetizers and condiments.

There are two basic types of pickles. One type is preserved with vinegar or other acids, and the other is preserved with salt. Vinegar pickles usually also contain some salt for flavor and are sometimes called “quick” or “fresh” because they are not fermented. Fermented pickles, which are always made with salt, may also contain some vinegar for flavor. Fermented pickles may be “dry salted,” such as sauerkraut, or made with pre-mixed seasoned brine such as for kimchi. The salt helps control the fermentation process and the correct concentration in the brine is essential.

Pickling ingredients include pickling or canning salt. For quick pickles, iodized salt can be used but may cause cloudiness in the liquids. Iodine may affect the action in fermented pickles. Kosher salt may be used, but you may need more of it than the recommended amount of pickling salt, and it may be harder to dissolve in brine, so you can use warm water first to dissolve the salt and then cool it before pouring it over the vegetables. Vinegar acts as a preservative in quick pickles and gives a tart taste. It must be at least 5% acidity, so don’t use homemade vinegar unless the acidity is known. White distilled vinegar is often used for light-colored vegetables, but it has a fairly tart taste. A little bit of sugar can assist in overcoming the sharp taste. More flavorful kinds of vinegars include cider, malt, and wine vinegar. Spices are used for flavorings. Firming agents are not necessary, but sometimes alum or slaked lime is used for additional firmness and crispness. Hard water contains minerals that may affect resulting pickles, but



don’t use water from a water softener unless you check with the water softener agency.

For shelf-stable storage of pickles, it’s easy to process the jars in a water bath canner (except for low-acid olives, fish, and meats). Processing times and instructions have changed over the years, so we need to follow standard recipes which are proven safe. There are many chemical and physical factors involved in all types

of pickling. If you are in doubt about any recipe, don’t use it.

Reliable books include the Ball Blue Book of Preserving and the USDA Complete Guide to Home Canning, 2015 edition. An excellent website is the National Center for Home Food Preservation at <http://nchfp.uga.edu>.

We usually wonder what to do with all our zucchini, and the following is a very easy recipe. It is referred to as a “one-jar refrigerator pickle,” and I tried it for the first time recently because it doesn’t require actual canning. It turned out great!

When making pickles, dried herbs and spices may be exchanged or added to a recipe. I almost always stick a couple of dried, red chiles along the sides of each jar for additional flavor and color. Shelf-stable jars of pickles can be stored for a year or more and are best kept in a cool, dry, dark area away from sunlight. ☺

ONE JAR REFRIGERATOR PICKLE

In a pan make a brine out of :

- 1 cup water,
- 1 cup vinegar
- ¼ c. sugar
- 2 tsp. pickling salt
- 1 tsp mustard seed
- ½ tsp. whole coriander seed
- ½ tsp. whole black peppercorns
- ¼ tsp. turmeric
- 2 dried bay leaves

Bring to a boil, simmer until salt and sugar are dissolved, set aside. Slice the zucchini into ¼” pieces and place into one or more clean jars. Fill jars with brine almost to the top of rim, cool, cover with lids and refrigerate. Allow flavor to develop 1 -2 days. Use within 2 weeks.

A VISIT TO THE UC DAVIS HONEYBEE HAVEN

Dottie Deems and Julie Smith, U.C. Master Gardeners, Solano County



All Photos in this Article by Julie Smith

Tucked away and almost off the map of the UC Davis campus is the UC Davis Bee Haven, once known as the Häagen-Dazs Honeybee Haven. Have you visited the Haven? I hadn't until recently and I already know that I'll be going back.

Recently I had the opportunity to visit the Haven with fellow Master

Gardener, Julie Smith. She had visited before, but I had not. It's only a twenty

-minute drive to get to the half-acre site located at 1 Bee Biology Rd., on the UC Davis campus, yet it is a world away.

With the only sizeable campus building in sight being the Harry H. Laidlaw Jr. Research Facility, a part of the Department of Entomology and Nematology, you would think you were out in the country somewhere. Pulling off the narrow, paved, tree-lined road into an unmarked parking spot, we got out of my car and immediately heard... NOTHING. Perhaps it's that NOTHING that attracts people to the hobby of gardening. Although listening very carefully we heard the humming sound of the bees. The honeybees were at work along with quite a few other varieties of bees, hummingbirds, and other pollinators flying from bush to shrub and on towards patches of groundcover dotted with little flowers. They drank nectar as they picked up pollen on their bodies and then they moved on to doing the same thing at the next flower.

I am not going to tell you that everything is humming out there, I'm not a punster. I'll just tell you that the honeybee research facility is the largest and most comprehensive state-supported apiculture facility in North America and the only one in California. That should give you an idea of how important the work of the pollinators is.



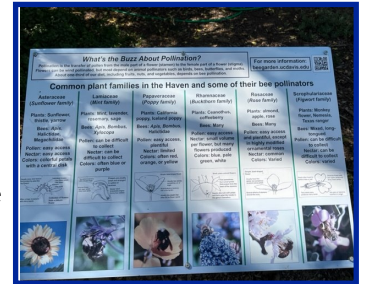
The facility provides leading cutting-edge research focusing on basic bee biology and genetics. The multi-billion-dollar agricultural industry in California relies on the research and expertise of those who work here. The world's pollinators are

responsible for providing us with one-third of the food we consume.

Okay, back to the Haven.

Inside the little garden gate, we met Dr. Christine Casey. Dr. Casey oversees the garden and was our personal tour guide.

She explained that the Häagen-Dazs Ice Cream Company provided the funds to establish the garden and it opened in 2009. She went on to tell us that there are over two hundred different plants in the garden and that they were chosen to provide nectar and pollen to the honeybees and native bees that live in the area all year round and the numerous pollinators, both insect and birds, that are migrating through the area.



The Haven is open to the public every day of the year between dawn and dusk, except Tuesday mornings. There are tables and benches, and trees for shade, but no drinking fountains or restrooms. Bring along a book and a bottle of water and revel in the soul-soothing quiet.

Or, take a self-guided tour through the garden and read the plant identification information posted for each plant. On the identification card, you will find the name of the plant in English and Latin along with the plant family it belongs to. The card also includes information about the water needs of each plant and identifies whether it provides nectar or pollen, or possibly both to pollinators. Other signs explain what you need to build your own haven.

There is no admission charge to spend some time in the garden and dogs are welcome provided they are kept on a leash. There are also a variety of guided tours and classes. For more information go to beegarden.ucdavis.edu. 🐝

Check out their blog at [The Bee Gardener https://ucanr.edu/blogs/TheBeeGardener/index.cfm](https://ucanr.edu/blogs/TheBeeGardener/index.cfm) and many videos on YouTube!

References:

- beegarden.ucdavis.edu
- www.facebook.com/HoneyBeeHaven.UCDavis
- ucanr.edu/blogs/TheBeeGardener/index.cfm

SALVIA MICROPHYLLA ‘HOT LIPS’

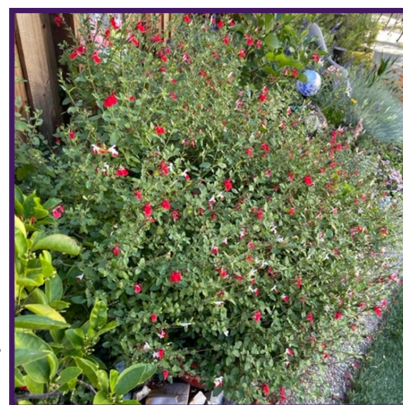
Cindy Yee, U.C. Master Gardener, Solano County



All Photos in this Article by Cindy Yee

Being an inexperienced gardener, I love to admire other people’s gardens not only for their beauty and ambiance but also to hopefully get ideas on what hardy perennials might do well in our own garden. My neighbor two doors down, an accomplished veteran master gardener, designed and maintains a most beautiful garden. In her front yard is a gorgeous

courtyard reminiscent of Moorish Spain, replete with striking tiles, ironwork balconies, and fountains, Turner’s attention was drawn to stunning two-toned salvia. The plant had been presented to his friends by their gracious housekeeper, Alta Gracia. He obtained



permission to take cuttings, and carefully brought them back to Don Mahoney, horticulturist at San Francisco’s Strybing Arboretum for propagation. Turner originally wanted to call the plant Alta Gracia, but the arboretum volunteers chose ‘Hot Lips’ instead. He likes to think Alta Gracia would be happy that so many people are enjoying the easy and enduring beauty of this plant.

‘Hot Lips’ sage (*Salvia* spp.) that looks wonderful year-round. I found ‘Hot Lips’ at our local nursery, and planted two in the backyard. I love them! They are very low-maintenance, drought-tolerant pollinator superstars. One is three and a half feet tall, four feet in diameter, and very happy in its space. It is covered in red, white, and bicolored red/white blossoms. The bi-colored flowers are most often white with a red lip.

And now I am wondering where in my yard a third ‘Hot Lips’ could go. ☺

‘Hot Lips’ is the most popular pollinator plant in my garden, totally irresistible to the plump carpenter bees which are constantly buzzing around it. A few weeks ago in my yard, I noticed a continuous buzzing sound, and several bees were clustered around none other than ‘Hot Lips’. Our carpenter and other bees are not its only suitors; hummingbirds and butterflies also seem to be in love with ‘Hot Lips’. The second shrub is also doing well in a retaining wall, with much less water. Interestingly, it has significantly more white flowers and very few red ones. ‘Hot Lips’ grows in full sun to part shade, and does well with regular watering, but also tolerates minimal irrigation.

Apparently, my neighbor and I are not the only ones for whom this hard-working perennial shrub performs its magic. ‘Hot Lips’ is on the All-Stars list of UC Davis Arboretum. UC Landscape Plant Irrigation Trials in 2013 indicated that it bloomed from March to December with a really heavy bloom for the four months of June through September. There were no insect pests, and it was unaffected by disease symptoms.

In a 2004 Pacific Horticulture article (and reproduced by the California Horticulture Society) by Richard Turner titled “The Truth About *Salvia* ‘Hot Lips’”, the author described his discovery of this plant in San Miguel de Allende, Mexico. He and his family were visiting their friends at their 400-year-old home on Thanksgiving of 1999. In the picturesque ancient



REFERENCES

- Ucanr.edu
- California Horticulture Society
- Pacific Horticulture
- California Flora Nursery
- Gardenersworld.com (BBC)

WATER-WISE PLANTS

Maureen Clark, U.C. Master Gardener, Solano County

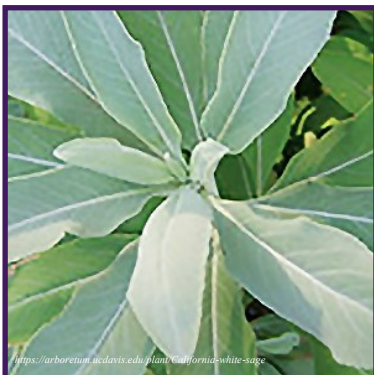
During these present-day climate conditions, we need to think about our current gardens and our future gardens. More people are starting to eliminate their lawns and plant water-conserving plants. When we create a design or a planting plan, this enables us to create an efficient water wise garden.



Arbutus 'Marina'

There are some important characteristics that drought-tolerant plants have in common. One is having unique leaf qualities.

- Gray or silver or blue-colored will reflect heat and light.
- Small leaves will discard heat and reduce evaporation and transpiration.
- Long and narrow leaves, such as grasses are good at casting away heat without losing water.
- Fleshy, succulent leaves store moisture.
- Aromatic leaves have scented compounds that we believe act to increase the air density around them and cool foliage as they evaporate.
- Waxy leaves will reflect light, hold water, and don't transpire much.
- Hairy or wooly leaves shade themselves. Hairs on the underside, raise the humidity of the surrounding area, it also slows down the air movement, which slows evaporation.
- Leather-like or thick leaves have a protective barrier from the sun.
- Spiny, few or no leaves means there is little to no transpiration.
- On the leaf surface, there are leaf pores called stomata. Sunken stomata that lie beneath the leaf surface are less vulnerable to transpiration than stomata that are directly accessible to the hot sun and dry air. Pine needles are a good example.



Salvia apiana

Other characteristics of water-wise plants are their water-holding abilities. Some examples are bulbs, corms, and rhizomes. Many

bulbs have adapted, and bloom in the spring and then shut down and go dormant during the hot summer months.

Additional characteristics are plants that have adapted roots to help them stay hydrated. Some plants have large tap roots that allow them to retrieve water that is stored deep in the ground. Others have bulb-like roots that store water and use it as needed. A third type has lateral spreading roots; these roots are shallow, seeking surface water and extending out for many feet. These types of roots can also help stabilize hillsides.

Drought tolerant plants can be useful in areas of high fire danger. Some plants are low growing with a creeping or spreading habit. These groundcovers and perennials with open branching, limited leaf litter, and low amounts of flammable oils or resins can contribute to fire resistance.

Installing plants that are natural to our Mediterranean area is wise. Our Mediterranean climate is used to having five to seven months with no water and hot temperatures during the summer months. Shop for plants that are native to the Mediterranean climates of Southern Europe, South Africa, the southwest coast of Australia, the central coast of Chile, and most of California. When using any non-native plants, care must be taken to choose species that will not escape into the wild and displace native species.



Heteromeles arbutifolia

California native plants use water-conserving techniques that allow them to withstand long, hot summers. Native species have evolved and adapted to the local weather for thousands of years. In their native habitat, they are tolerant of seasonal extremes, having adapted to survive cold winters, summer heat, periodic drought, wildfires, coastal conditions, and high

winds. If you live in Vacaville or Fairfield, it is important to choose plants that are local to your area and are used to the hot and windy conditions.

Some California native plants will avoid the drought by closing their stomata (leaf pores) during the day and opening them at night. Others will go dormant during the summer by losing their leaves, and wait for the fall rains to start to regrow. Once established, many native species require little or no additional irrigation beyond normal rainfall.

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(Continued from Page 6—Water-Wise Plants)

There are plants that put themselves into a condition of anhydrobiosis. This self-induced dehydrated state is to preserve itself. During the summer, rusty-colored moss can become a lush green color when it receives a summer rain and becomes rehydrated. Water wise plants are amazing!

Water-wise plants can be slow-growing. This natural restriction of leaf and stem growth can help conserve the limited supplies of water. Many cacti and succulents have utilized this strategy.

THE BENEFITS OF WATER-WISE PLANTS

- ◆ Many counties have a water-efficient landscape rebate program. Your county will reimburse you when you remove your lawn and restore it with water-wise trees and plants.
- ◆ Save yourself time. Installing water wise trees and plants require less maintenance, so we won't have to mow the lawn every week.
- ◆ Trees will absorb air pollutants and create CO₂.
- ◆ We won't have to buy chemical fertilizers or pesticides. This will minimize stormwater runoff and algae bloom.
- ◆ We will be watering less often which will save money and help the environment.
- ◆ Creates biodiversity for wildlife, birds, butterflies, and beneficial insects.
- ◆ Creates a relaxing environment.

SUGGESTED WATER-WISE TREES AND PLANTS

Trees

Arbutus 'Oktoberfest' (Strawberry Tree)
Ceanothus 'Cynthia Postan' (California Lilac Tree)
Heteromeles arbutifolia (Toyon)

Grass

Miscanthus sinensis 'Little Zebra' (Dwarf Zebra Grass)
Pennisetum 'Little Bunny' (Fountain Grass)
Muhlenbergia rigens (Deer Grass)

Ground Cover

Thymus x citriodorus (Lemon Thyme)
Achillea tomentosa (Woolly Yarrow)
Arctostaphylos 'Emerald Carpet'
Sedum lineare – Carpet Sedum

Perennials

Iris germanica (Bearded Iris)
Hibiscus syriacus (Rose of Sharon)
Salvia x sylvestris 'May Night'

SOME HELPFUL TIPS FOR YOUR NEW WATER-WISE PLANT

- ◆ Watering
 - Train your plants to use less water.
 - Water deep enough to wet the entire root zone.
 - Water for longer periods, and infrequently.
 - Roots will chase the water down as it percolates.
 - Apply the water evenly around the plant.
 - Water only as needed to keep plants healthy.
 - Install a rain check device on your irrigation controller.
 - Check the depth of the water infiltration. Use an 18" screwdriver or a soil probe.
 - Keep water-wise plants in the same hydrazone.
 - Consider slope, any strong prevailing winds, heavy shade, or microclimate areas that tend to be cooler or warmer.
 - Newly installed water-wise plants will need to be watered.
- ◆ Use less fertilizer, it is salt-based and makes plants thirsty
- ◆ Don't use artificial grass, plastic, or plastic weed cloth
 - Heats up the soil
 - Kills microorganisms, worms, beneficial insects, and the good bacteria
 - Does not let water infiltrate and percolate into the ground
 - Leads to compaction.
 - Surrounding trees are now super stressed
- ◆ Mulch with at least 2-3" of organic, natural bark on top of the soil. Keep it 4-5" away from the tree trunks and base of the plants to avoid stem and crown rot.
- ◆ Fertilize your plants 2" of organic compost several times a year. This helps with water infiltration and creates deeper plant roots.
- ◆ Refrain from tilling the soil.
- ◆ Don't use heavy machinery, it will compact the soil.
- ◆ Plants will need time to become established. Typically, it takes one to one and half years for a new plant to be rooted. Leave enough room around each plant to allow for future growth as the plant matures.
- ◆ Prune plants selectively each year to reduce excess growth, this can also help to reduce a plant's demand for water.
- ◆ Avoid over-pruning. ☞



Photo by Melinda Nestlerode

MOLES, VOLES, POCKET GOPHERS, CALIFORNIA GROUND SQUIRRELS, BIRDS ON TREE FRUIT AND VINES

Sherry Richards, U.C. Master Gardener, Solano County



Photo by Sherry Richards

I watched as more mockingbirds, and scrub jays began “showing up” each day, busily flying around my dwarf peach tree, squawking in delight - a buffet of ripe peaches would soon be ready!

I kept an eye on the bird population. As recommended by the University of California (UC) Statewide Integrated Pest

Management (IPM) Pest note, I put netting over the peach tree when the bird population increased. A small five-by-five-foot dwarf potted peach tree – geez birds ruin the “crop” quickly!

Has this happened to you?

- do plants die because roots disappear?
- are there damaged or missing: trees, plants, vegetables, or fruit?
- mounds of soil or surface tunnels of soil running through your garden/lawn?

To identify or narrow down any pest, ask these helpful questions:

- is damage on leaves, tree trunks, fruit/nuts, vegetables, or roots?
- what plant is being damaged?
- are there surface tunnels or mounds of soil in lawns and other places and what do they look like?
- Do you see poo “droppings” or tracks?

Master Gardeners are here to help you identify pests! Please contact us:

Solano Mgs Hotline (707) 784-1322

Email: mgsolano@ucanr.edu

Want to do a little research yourself? Here are helpful customer tools UC provides:

- Google: <http://www2.ipm.edu> “Wildlife-Pest-Identification Tool” There are pictures of a pest, tracks, damage, and droppings. The site includes pocket gophers, moles, voles, California ground squirrels, rats, deer, raccoons, and others.

-Google: <http://www.ipm.ucanr.edu> “Homes, garden, turf, and landscape pests” for helpful links to pests (including insects/weeds) in and around homes and gardens. Click on the “Quick Tips Library” link for abbreviated versions of many pest notes.

-Google: <http://www.ipm.ucanr.edu> “UC Plant Problem Diagnostic Tool” is a great site where you select: plant type (i.e., tree, shrub, flower, vegetable), plant name, plant part, damage, and likely culprit!

Below is a little information from UC IPM pest notes. The pest note has complete information about identification, behavior, damage, legal status, and management. Some birds are protected under the California Fish and Game Code and require “depredation permits” before removal.

Voles ‘meadow mice’ (*Microtus* – six species): are rodents living mostly underground. They are active night and day and year-round. Voles feed on diverse kinds of herbaceous plants, bulbs, tubers, and vegetables like lettuce and tomatoes, damage lawns, and gnaw on tree bark and turf. If they gnaw and girdle a tree’s bark it may cut off nutrients and water and could kill the tree. Read more here, Google: [UC IPM Publication 7439 Voles](#).

Moles (*Scapaus* species): are small mammals living mostly underground. These insectivores eat worms, grubs, and insects. Infrequently they may eat bulbs, roots, and other plant material. Mole mounds can have surface and underground runways to enable moles to cause damage and injury to plants and plant roots. Mole mounds look round (**Note:** gopher mounds look crescent/horseshoe-shaped.) Moles can be active year-round, particularly after rains or watering. For details Google: [UC IPM Publication 74115 Moles](#).

Pocket Gophers (commonly called just “gophers”): these rodents are active day and night, year-round pests. Living mostly underground they make crescent or horse-shoe-shaped mounds pushing up soil when making burrows.

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(Continued from Page 8—Moles, Voles, Pocket Gophers, California Ground Squirrels, Birds on Tree Fruit and Vines)

Pocket gophers have outside fur-lined cheek “pockets” used to carry food or nesting material. They have strong forequarters for burrowing and sensitive face whiskers to help move around in dark burrows. When burrowing they close their lips behind four incisor teeth to keep dirt out of their mouths! Feeding on taproots weakens trees and vines, causes plant damage chewing on roots may cause soil erosion making burrows, and chewing on irrigation lines damaging them. One gopher can quickly damage a garden pulling single plants into tunnels! Google: UC IPM Publication 7433 Pocket Gophers.

California Ground Squirrels: are rodent pests seen around many homes and gardens. Because they feed above ground it is easy to identify them. (They look different than tree squirrels see: UC IPM Pest Note “Tree Squirrels” Publication 74122.) Ground squirrels are busy during the day feeding on vegetable seedlings; damaging fruit, nut trees, and ornamental plants; gnawing on plastic sprinkler heads and irrigation lines. Their burrows and mounds are hazardous to people, animals, and machinery. Sometimes they burrow under buildings and other

structures. Google: UC IPM Publication 74122 Ground Squirrel.

Ground Squirrels can have diseases harmful to humans. If you find dead squirrels read the pest note under “Damage” for important information.

Birds: which cause damage to immature fruit and nuts-include crowned sparrows, house finch, American robin, scrub jay, crow, European starling, and yellow-billed magpie. The amount of damage, type and control methods vary by bird species.

Google: UC IPM 74152 “Birds on Tree Fruits and Vines. ☞

References:

- University of California Statewide Integrated Pest Management Program (IPM) Pest Notes: Moles - 12/2012 Publication 74115; Voles - 6/2010 Publication 7439; Birds on Tree Fruits and Vines Publication 74152; Ground Squirrels – 12/18 - Publication 7438, Pocket Gophers – 7/19 - Publication 7433
- **Online:** UCANR – IPM - “Home, garden, turf, and landscape pests;” UC IPM “Wildlife Pest Identification Tool” and “Plant Problem Diagnostic Tool.”

A MESSAGE FROM THE SOLANO COUNTY WATER AGENCY

PROTECTING OUR TREES By Elise Shtayyeh

Solano County is home to beautiful oak woodlands. These native oak woodlands provide a bustling habitat for local wildlife. In fact, oaks are considered a keystone species and are of cardinal importance (no pun intended). However, even on the smallest scale, a single tree can provide a wonderful habitat for species in your own neighborhood. With fragmented natural areas, neighborhoods can help bolster wildlife by creating wildlife corridors. So, if you have an oak tree in your yard, or for that matter, any tree, please do not forget to give it some extra TLC this season. If you do not have any trees around your home, consider planting native and climate appropriate trees in your neighborhood. By doing so, you could help create a habitat for all types of species!

California is in its third year of a historic drought. Even though local communities are encouraged to minimize water use, especially when it comes to lawns, The Department of Water Resources and your local water utility ask you to please remember your beautiful trees by continuing to water them. Trees provide crucial habitat for species, but also provide ecosystems services for people by helping provide shade for homes and allow for recreation opportunities such as birdwatching. If you are considering removing your lawn this season, remember to protect your trees. They are a vital part of our local ecosystem!

For more water conservation resources or information about local rebates, please visit: scwa2.com



CRASSULA OVATA-THE PLANT OF ENDLESS GROWTH

Michelle Krespi, U.C. Master Gardener, Solano County

In my former house in Oakland, my housemates had two very large *Crassulas* (*Crassula ovata*) living on either side of our front door like sentinels protecting our home. According to Feng Shui lore, (the practice of arranging pieces in a living space in order to create balance with the natural world), placing a



Photo in this Article is by Michelle Krespi

plant at the front entrance of your house or business will help bring prosperity. This is probably why this plant goes by the common names of the Money plant, dollar plant, or money tree. In China, it is believed that the leaves attract riches due to the roundish leaves that resemble jade coins, which are a symbol of wealth and success. We eventually sold the house but when it came time to pick our plants, I foolishly passed on taking one of those mighty Jades! From the moment I moved into my new house, I regretted that decision. One day while visiting an old friend I noticed her enormous Jade and the multiple plants she had propagated from her mother plant all over her yard. I asked if I could take a cutting. Her reply was “of course after all this is from your Jade plant!” She gave me a potted plant approximately a foot tall. I was overjoyed to have a piece of my old plant and felt like I was in possession of an old friend! This “good luck” plant is given as wedding gifts, housewarming, and at a new business launch.

Despite my history with this plant, I was still shocked at how quickly it grew. In just three short years my small plant has developed into a healthy shrub! After doing research on *Crassula ovata* I discovered that if kept in a pot this plant will stay relatively small but watch out if you place this plant in the ground, as it can reach heights of nine feet high and half that in width. This South African native is an evergreen with very thick branches (sometimes reaching thicknesses of 2.5” wide) with a rounded, upright growth habit. Its smooth leaves are oppositely arranged and are thick and shiny. If given enough light the leaf margins will become red-tinged. The leaves themselves will grow between 1.2”-1.5” wide and 1.2” to 3.5” long. There are many varieties of Jade plants, in fact approximately two hundred, but *Crassula ovata* has earned the Royal Horticultural Society’s Award of Garden Merit. But wait this succulent has other merits!

The many forms of Jade plants are known for their ease in propagation. I cut a small piece of mine, left it on the counter to callus over (or harden off), forgot about it for less than a week, and to my surprise, it already had roots growing from the bottom of the cutting. I planted it in a well-draining succulent mixture and saw new leaf growth within ten days! In fact, a 2:1 ratio of potting mix to perlite helps this plant avoid diseases such as fungal rot. As counterintuitive as it might seem, once you have transplanted a Jade it works best to wait between 3-7 days before watering, just to give the roots a chance to settle and recover from any shock or damage. Like many other succulents, this Jade plant can be propagated by just laying its leaves on top of slightly humid soil. They do like good ventilation though and soft, indirect light.

As hardy as this plant is- pet owners beware! This succulent is toxic to cats, dogs, and horses. Dermatitis can result in humans as well if they come in skin contact with the plant. They do like good ventilation so if possible, plant this succulent in a clay pot with good air permeability and avoid strong sunlight until established. Watch the leaves on this plant. If the plant gets too little water the leaves will develop wrinkles. That can be resolved by increasing its watering. It is important to note when watering a Jade plant, that in their natural desert environment they would receive infrequent downpours of water so they like being thoroughly drenched until water comes out of the bottom of the pot. This way you are assured the soil is soaked all the way through, promoting the growth of a strong root system that will anchor your plant allowing it to reach its maximum growth potential without becoming top-heavy. A good rule of thumb is to water every ten days and to check that the soil is dry before you do since they are prone to rot. The Crassulaceae family has evolved adaptations that prevent water loss. Such is the case for *Crassula ovata*. One adaptation is a special type of photosynthesis called CAM photosynthesis where they only open their pores at night to minimize water loss. Another protection is the waxy coat or sheen on the leaves. That thick waxy sheen on the leaves is called a “cuticle” and it prevents water from evaporating out of the leaves. You can grow this plant indoor or out since they thrive in Zone 10 or warmer but be on the lookout for colder temperatures. Be sure to bring them in when the temperatures drop below 50 degrees as they are susceptible to cold damage.

With the right care, a *Crassula ovata* can live for an entire human life span making it a perfect plant to pass on from one generation to the next! 🌱

TO PRUNE OR NOT TO PRUNE TOMATOES? THAT IS THE QUESTION!

Bob Labozetta, U.C. Master Gardener, Solano County

By now, area gardeners growing tomato plants hopefully have robust plants that are putting out multiple yellow blossoms and little green globes that will enlarge and ripen over the next few months.

There is a debate—even among master gardeners—whether tomato plants need to be pruned. One such friendly debate involving yours truly can be viewed at <https://www.youtube.com/watch?v=0jSHiGKQkw&t=130s>. The video includes some reasons in favor of pruning and techniques for doing so.

Although it is not an *absolute must* technique for growing tomatoes, there are definite advantages to adopting this horticultural practice. Additionally, not all tomato varieties should be pruned. For example, since determinate varieties set and develop their fruit at the same time, pruning will lead to a loss of tomatoes with no apparent advantage.

However, indeterminate tomatoes produce fruit on a regular basis over the course of a season, and pruning them has definite benefits. Unpruned, indeterminate tomatoes will grow into shrubby, multi-stemmed plants that, unsupported, will topple under the weight of their fruit. Left to sprawl on the ground, the fruit and foliage are more susceptible to disease and pests.

The benefits of pruning indeterminate tomatoes include

- Larger, earlier tomatoes because pruning encourages the plant to bring forth large tomatoes instead of wads of foliage and numerous smaller tomatoes.
- Slimmer plants that are easier to grow vertically and can be planted closer together, thereby increasing the yield within the normal spacing area. Without pruning, you'd have to space tomato plants 2' - 3' apart. I plant them on one-foot centers.
- Healthier plants grow vertically, which increases air circulation between the leaves and keeps the leaves and fruit away from the ground creeping pests and harmful pathogens, and dirt splashing on plants during rain or overhead watering.
- Keeps plants compact and prevents sprawl.
- Although it reduces the number of tomatoes per plant, this is offset by increasing the overall yield (more tomatoes per area size planted). Pruned tomato plants will put out more and earlier blossoms per plant which in turn leads to earlier harvest and larger fruit.
- Makes it easy to support plants using tomato ladders and other supports.

- Shrewd pruning can improve the quality of the fruit you harvest.
- You can grow more varieties of tomatoes in the same space as unpruned tomatoes.

Be aware that there are some trade-offs when pruning:

- It removes leaves that would otherwise feed the plant.
- Removing foliage can expose fruit to sunscald.

There are two methodologies of pruning methods:

- 1) Pinching the suckers off at their bases, in the axil (or crotch) of the tomato plant, where the vertical stem meets the branch.
- 2) UC Davis recommends "Missouri pruning", whereby two leaves remain on the sucker and all growth above them is snipped off. This allows for more photosynthesis and more shade for the fruit (to keep the sunscald at bay). Refer to <http://ipm.ucanr.edu/PMG/GARDEN/VEGES/CULTURAL/tompruning.html>.



(https://ucanr.edu/sites/ucmgnapa/TomatoInfo/Tomato_Pruning/)

Whatever method you decide to use, figure to prune about once a week. If space in your garden is limited—or if you're supporting plants with tomato cages, ladders, or stakes—it's best to prune your tomatoes to one or two main stems. The remaining main stalks will grow strong and robust and will be easier to maintain in the supports' uprights. Some gardeners using supports often pinch or snip the suckers on the lower stems and allow suckers higher up on the plant to develop to supply needed shade.

So prune your indeterminate tomatoes and harvest bigger, tastier tomatoes this season. 🍅

THE DWARF TOMATO PROJECT

Nanelle Jones-Sullivan, U.C. Master Gardener, Solano County



*New Big Dwarf
All Photos in this Article by Nanelle Jones-Sullivan*

Tomatoes are one of the most popular home-grown vegetables. They have stories! But let's face it; they can also be frustrating. There are forums dedicated to them!



Craig LeHoullier was growing tomato seedlings for a Farmer's Market, and often got requests for interesting tomatoes you could grow in smaller places. He'd read a story about New Big Dwarf being listed in a 1915 [Isbell Seed Catalogue](#) which described crossing the largest tomato of the time with a dwarf plant: Ponderosa fruit on Dwarf Champion vines! On the [Gardenweb](#) forum, he shared his discovery with Patrina Nuske Small of Australia, who he knew from their chats was skillful at crossing tomatoes.

They ended up, in an up-and-coming forum, [Tomatoville](#), which dedicated a subforum for the group of volunteers who made up "The Dwarf Tomato Project". Volunteers would grow the many generations of plants that would be needed to stabilize new varieties. The goal was to create a selection of tastes, colors, and sizes that would equal heirloom varieties, with plants being smaller and more manageable. Volunteers were given the opportunity to name any new novel dwarf tomato type they discovered in appreciation for helping in the project.



Beautiful plants. Even the seedlings are adorable.



The plants are smaller, but not the tomatoes

Around 2006 they set up a project across the northern and southern hemispheres, covering two growing seasons in one calendar year, and reducing the time for new tomato variety development by half. By 2020 they had worked with more than seven hundred volunteers and distributed the seed of over 123 stabilized varieties, being sold by several companies.

Before we move on, let us review some basics.

Determinate Tomatoes:

- Have a "pre-determined size"- grows to a certain height of about four feet or less, then stops and makes flowers and fruits.
- Have a bush like habit, and are often called "bush" tomatoes.
- Crop bearing is over the course of four or five weeks and then it is done.
- Suitable for container planting and will perform well in 5-gallon pots.
- Determinate tomatoes do not require heavy pruning or sucker removal for good crop yield.
- Lots of yield over a short time, but because of leaf to fruit ratio, they may not have exceptional flavor.

Indeterminate Tomatoes:

- Often called "vining" tomatoes because they will continue to grow, flower, and bear fruit over the course of the season until the plant is killed by frost, pest, or disease.
- A lot of foliage means a lot of potential photosynthesis and flavor.
- Can easily grow to 8 feet or more.
- They require staking or caging for support, and removal of "suckers"

Did you know there is another category or growth type?

What makes "The Dwarf Tomato Project" tomatoes special, and why you should grow them; Dwarf Tomato Project facts:

- Low maintenance (no pruning!).
- It is the plant and not the tomatoes that are small.
- Plants have sturdy stems with short internodes, grow about half as tall as their indeterminate ancestors, have clusters of flowers/tomatoes, and the leaves are a "darker bluish-green and have a puckered, wrinkled characteristic that is known as "rugose".
- Most are indeterminate, so they grow until weather or disease kills them.
- Cherry, paste, salad, slicer, and beefsteak; round, oblate,

(Continued on Page 13)

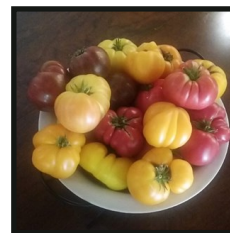
(Continued from Page 12—The Dwarf Tomato Project)

- heart-shaped, and oval!
- White, yellow, orange, pink, red, black, brown, striped, and bi-color!
- Open-pollinated! You can save the seed and it will grow to type. One day they will be heirlooms!
- It looks good! These are beautiful plants.



Beautiful plants

- Southern Exposure
- Casey’s
- Tomato Grower Supply
- Tatiana’s Tomatobase
- Sample Seed Shop



The ones I grow over and over are:

- Dwarf Rosella Purple
- Wild Fred
- Perfect Harmony
- Crimson Sockeye
- BrandyFred
- Mallee Rose
- Beauty King
- Sneaky Sauce ☘



These are awesomely diverse tomatoes for space-challenged gardeners, bred by a group of home gardening volunteers, open-pollinated and open-sourced. “Crowdbreeding” is a new name for the unique, altruistic, open-source collaborative Dwarf Tomato Project!

Dwarf tomatoes can be grown on patios, roof-top gardens, decks, and other urban settings. They are great for the community and school projects. The only downside is you will most likely need to grow from seeds, but tomato seeds are easy to start if you plan. So, start planning now, and you can save seeds and even sell extra plants as a fundraiser!



Where to buy seeds:

- Victory Seeds

REFERENCES:

- <http://www.ipm.ucdavis.edu/PMG/GARDEN/VEGES/CULTURAL/tompruning.html>
- <https://extension.psu.edu/dwarf-tomatoes-save-space-and-taste-great>
- <https://www.dwarftomato-project.net/>
- [What’s The Difference Between Determinate and Indeterminate Tomatoes? https://ucanr.edu/blogs/blogcore/postdetail.cfm?po=Gardeners!](https://ucanr.edu/blogs/blogcore/postdetail.cfm?po=Gardeners!)
- https://www.yakimaherald.com/explore_yakima/home_and_garden/master-gardeners-heres-a-little-info-on-dwarf-tomatoes-the-new-kid-on-the-block/article_d2dc4ff3-cedd-5dc8-beb9-423b028c7808.html
- Growing Tomatoes in the Home Garden - UCANR Catalog-
- <http://plantswithstories.com/tomatoes/new-big-dwarf>
- <https://extension.unh.edu/resource/growing-vegetables-tomatoes-fact-sheet-1>
- <https://ucanr.edu/sites/bcmg/index.cfm?blogpost=39243&blogasset=84641>

THE DECLINE OF THE MONARCH BUTTERFLY

Norma Martino, U.C. Master Gardener, Solano County



All Photos in this Article by Norma Marino

My fascination for butterflies started while growing up in a small town in Marin County. They are beautiful insects that seem to float in the air. They look so fragile and almost transparent, yet can travel thousands of miles. Suzy Kassem wrote in "Defenders of Wildlife" and said it so well, "*The smaller the creature,*

is if they survive the perilous journey. The butterfly might be eaten by predators or die while in flight. They travel to warm climates to hibernate and overwinter.

the bolder its spirit." The monarch is known by scientists as *Danaus plexippus*, which in Greek means “sleepy transformation”.

For several years now, I have noticed that only one monarch would visit our backyard. It would come and go, flitting about from plant to plant, or to the birdbath for a sip of water. It seemed so alone. Why weren’t there more butterflies? I had read that the monarch had diminished, much like bees. Why had this happened? I set out to find an answer. Their decline in certain areas was due to a number of reasons. However, the main reasons were global warming, overdevelopment, and pesticides. There has been a 50% loss of the monarch over the last 30 years. Some may ask, why do butterflies matter? Many people don’t realize that the butterfly is a pollinator of some plants and food source for other animals. They are very important to our ecosystem and are in trouble.

The life span of a monarch is 2 to 4 weeks during the summer months. However, the migratory monarch can live 6 to 9 months and are usually born late in August or September. That

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(Continued From Page 13—The Decline of the Monarch Butterfly)

So, I decided to embark on a study to possibly help in some small way. I found out that the milkweed plant is one that would attract the monarch. There are toxins in the milkweed plant called cardiac glycosides. A scientific definition of glycosides is an organic compound that yields sugar. Other animals or butterflies would be poisoned if they ate the milkweed. Somehow, the monarch has adapted, and become immune. When they store the glycosides, they have no competition for the food source.



warmer climates like Southern California or Central Mexico. I hope that they'll come back one day. In the meantime, I've planted lots of milkweeds. I'll be checking the undersides of leaves where they lay their eggs, which are very tiny. Then I can keep an eye on them and watch the miracle from the beginning. I'll never forget that feeling that perhaps I'd given Mother Nature a helping hand - and you can too. Start planting your butterfly gardens with California drought-resistant

native plants. I'm certain that many of you already have.

Off I went to the nursery and bought seeds. I followed the directions and planted the seeds in two pots. To my great surprise, tiny green sprouts popped up in a few weeks. My plants grew rapidly, and in the spring they blossomed with beautiful red clusters, with yellow centers. They also come in many different colors. One day I went out to check on my plants and found four chubby caterpillars voraciously eating the leaves of the milkweed plants. They were yellow with black stripes and very different from caterpillars I had previously seen. A quick search told me that these were indeed monarch caterpillars and I was thrilled. The metamorphosis had begun.

These are the reproductive stages of the monarch with its time span for each stage: From egg (3 to 7 days); to larva or caterpillars (9 to 14 days); to pupa or chrysalis (8 to 15 days); to an adult butterfly. Sadly, by the end of two weeks, the caterpillars were gone. They had left to other plants, shrubs, or windowsills to form into a chrysalis. They turn green and can easily blend in with plants where they can finish their development. The entire metamorphosis takes place within 28 to 32 days.

I didn't see any butterflies and it was now the middle of October. I would like to think that they had started their journey to

On an optimistic note, I just recently learned some groundbreaking conservation news from the World Wildlife Fund, in an article by Cathy Brown. She writes that the western monarch butterflies are making a spectacular recovery in California. More than 207,000 Monarchs over-wintered in California and were counted in 2021. This is up from 2,000 in 2020. Scientists can't quite be certain why the numbers rose, but think it's due to several environmental factors including climate and food sources. For example, it could be weather-related, which caused an increase in milkweed plants. Also, less agricultural activity during the Covid-19 Pandemic meant less pesticide use. California wildfires caused a great year for wildflowers, creating more food for butterflies. It was a population boom. What great and hopeful news. I'm reminded of the words of an anonymous author, "*If nothing changes, there would be no butterflies.*" ☞

Resources:

- Gardening for Butterflies: How You Can Attract and Protect them; by The Xerces Society
- Monarch and Milkweed; by Helen Frost
- The Art of Butterfly Gardening: How to Make Your Backyard Into a Beautiful Home for Butterflies; by Mathew Tekulsky
- The Butterfly Effect; by Rachel Mans McKenny

MASTER GARDENERS ARE A RESOURCE FOR YOUR GARDENING NEEDS

UC Master Gardeners of Solano County are located at 501 Texas Street, First Floor, Fairfield, CA 94533-4498

For more gardening and event information, visit our website <https://solanomg.ucanr.edu/>. UC Master Gardeners staff a Helpline serving Solano County which is available 24 hours a day, 7 days a week. Call 707-784-1322 or email: mgsolano@ucdavis.edu. Our message center will take your questions and information. Please leave your name, phone number, a description of your problem, and your address. A Master Gardener will research your problem and return your call/email. With email, you can attach pictures of the problem, which may aid in the diagnosis of your plant question.

UCCE MASTER GARDENERS AT WORK

By Ruth Clawson, U.C. Master Gardener, Solano County

Here is where you can find our busy Master Gardeners in the coming weeks and months...



Farmer's Markets! Benicia, Fairfield, and Vallejo

Aaron G. is coordinating the Master Gardener info booth at the **Fairfield's Farmers Market**. There will be a booth from 3pm-7pm every Thursday until October 6th (<https://www.pcfma.org/fairfield>) on the 700 block of Texas Street in downtown. There are two shifts of Gardeners there to help anyone out with gardening questions, ideas, and resources.

The **Benicia Farmer's Market** is every Thursday, 4-7pm, at the Corner of First Street and D Street...in front of the Burmese restaurant. Monique M. is coordinating this event. Stop by!

Ward S. is coordinating the **Vallejo Farmer's Market** every Saturday from 9am to 2pm. The Market is located at 400 Georgia Street. You can't beat fresh produce and gardening information all in one stop!

Dunnell Nature Park Monthly Talks

The Second Saturday of each month at 9:30am you'll find Master Gardeners sharing great information at the Dunnell Nature Park, 3351 Hillridge Drive, Fairfield. If you haven't checked out these talks, now's the time. Upcoming topics:

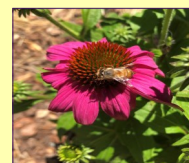
- July 9-Rose Parade Prep and Presentation
- August 13- Drip Irrigation, Putting together the Pieces
- September 10- Bulbs!!



Vacaville Library Talks

Stop by the Vacaville Library, 1020 Ulatis Drive, on the third Thursday of each month, 6-7pm, for an interesting gardening discussion. Deb G. and Christina R. will be presenting the following topics:

- July 21- Compost and Mulch
- August 18- Tools for the Job
- September 15- Bulbs
- October 20- Birds, Bees, and other beneficial insects you want as Guests



Home Depot, Fairfield

If you have garden questions, stop by Home Depot on Saturdays from 10-2 and get some answers. Betty V. and other Master Gardeners will be there with their knowledge and lots of helpful resources to help anyone find answers.

Children's Garden

Master Gardeners Jeff D. and Karen N. work monthly with other MGs at the Children's Memorial Garden, 275 Beck Avenue, Fairfield, CA, 94533. This might be a great place to visit or to stop by for some gardening inspiration.

The Sensory Garden behind Fairfield Civic Center Library

Drop by The Sensory Garden anytime at 1150 Kentucky Street near the Civic Center pond. Teresa L. coordinates gardening efforts here. There are an abundance of interesting plants to see, touch, and smell!

Holiday Succulent Cornucopia Craft Class



Date: Saturday, October 15, 2022

Where: 501 Texas Street, 1st Floor, Fairfield

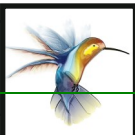
Time: 8:30 to 11:30 a.m.

Cost: \$15.00 per cornucopia, which includes a wicker cornucopia, succulents, moss, glue and other decorations. Learn how to "plant" succulents in moss and how to care for them at home.

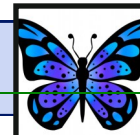
Please register in advance for class as seating is limited.

Email: jmbaumbach@ucanr.edu or Text 707-389-0645

NOTE: Please arrive by 8:30 a.m. to pay for the class. Payments by cash or check (made payable to UC REGENTS). Class begins at 9:00 a.m.



SUMMER GARDENING GUIDE



	JULY	AUGUST	SEPTEMBER
P L A N T I N G	<ul style="list-style-type: none"> ◇ For summer-to-fall color, choose ageratum, celosia, coleus, marigolds, and zinnias ◇ Continue planting warm-season vegetables until midmonth: beans, corn, tomatoes ◇ Start perennials from cuttings: dianthus, geraniums, verbena ◇ Sow seeds of columbine, coreopsis, forget-me-nots and foxglove 	<ul style="list-style-type: none"> ◇ Start seeds of cool-season crops: broccoli, cabbage, lettuce—to set out in August ◇ Direct-sow edibles: carrots, onions, peas, radishes ◇ Start sowing seeds of cool-weather bedding flowers in flats now: calendula, candytuft, pansies, snapdragons, stock 	<ul style="list-style-type: none"> ◇ Seed: try a selection of colorful salad greens, which are easy to grow at home ◇ Time to start thinking of what tree to buy. Consider fall color and shop when the leaves color up ◇ Shop for bulbs now to get the best selection ◇ After midmonth, sow seeds of California poppy and clarkia
M A I N T E N A N C E	<ul style="list-style-type: none"> ◇ Control weeds—pull or hoe them as soon as they appear ◇ Deadhead (remove old flowers) from dahlia, rudbeckia, rose and other perennials ◇ Fruit trees: brace limbs that are sagging with fruit. Clean up any fallen fruit ◇ Continue to irrigate plants, especially when hot and windy weather is forecast 	<ul style="list-style-type: none"> ◇ Deep-water trees. Use a soaker hose and place at drip line of tree ◇ Fertilize warm season annuals ◇ Deadhead spent blooms ◇ Refresh hanging baskets with new transplants. Succulents work well ◇ Continue to harvest vegetables for maximum production 	<ul style="list-style-type: none"> ◇ Get flowering annuals and perennials as well as fall-planted vegetables off to a strong start by incorporating a high-nitrogen fertilizer into the soil before planting. Fertilize again in 2–4 weeks, or follow label instructions ◇ Later this month is one of the best times to rejuvenate bluegrass, fescue, and rye grass lawns. Rake and reseed. Be sure to irrigate and keep moist
P R E V E N T I O N	<ul style="list-style-type: none"> ◇ Budworms—inspect plants for holes in buds and black droppings. Use organic pesticide, such as Bt (<i>Bacillus thuringiensis</i>), to control ◇ Deep water trees. Midsummer heat can cause drought stress. Deep water citrus, fruit and flowering trees once every week or two. Water less thirsty trees once a month ◇ When foliage dries completely, dig up spring-flowering bulbs and tubers. If daffodils and Dutch iris appear crowded, dig them up too. Store bulbs in a cool, dry place until fall planting ◇ Dig and divide overcrowded bearded iris clumps. Share with friends and neighbors 	<ul style="list-style-type: none"> ◇ Continue to deep water all plants to avoid sunburn and other damage from hot weather ◇ Continue garden clean up. Remove fallen fruit and garden debris ◇ Inspect plants for signs of spider mites. Apply a blast of water spray to undersides and tops of leaves to dislodge dust mites 	<ul style="list-style-type: none"> ◇ Use a selective pre-emergent herbicide on lawn to keep winter weeds under control ◇ Clean up fallen fruit and leaves to keep diseases at bay ◇ Clean up old vegetables to prevent over-wintering of insects and disease



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It is available through the internet for free download:

<http://cesolano.ucdavis.edu/newsletterfiles/newsletter130.htm>

A handwritten signature in black ink that reads "Baumbach".

Jennifer M. Baumbach
UCCE Master Gardener Program Coordinator



**U.C. Cooperative Extension
UCCE Master Gardeners-Solano**

501 Texas Street, 1st Floor
Fairfield, CA 94533

seeds FOR THOUGHT



**SUMMER
2022**