



Garden Notes

with the San Joaquin County Master Gardeners



APRIL — JUNE 2016

San Joaquin County Master

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Celebrate Spring!

Marcy Sousa, Master Gardener Coordinator

Spring is the most exciting and busiest time to be a gardener. Plants are waking up, weeds need to be pulled, and winter clean-up has to be done. Spring is also a busy time for the Master Gardener Program. Our hotline office is receiving lots of calls, as the nice weather has people outdoors enjoying and exploring their yards and gardens.

The Master Gardeners are gearing up for a season of farmers' markets and our big bi-annual garden tour, which will be Sunday, May 1st. The theme for this year's tour is "Celebrate Spring." Tickets are only \$20.00 and may be purchased on our website.

Look for the Master Gardeners at many of the spring festivals through-out the county and don't forget to attend one of our monthly workshops in Lodi or Manteca. Come by and visit our Learning Landscape for some inspiration gardening ideas and low water using plants! The garden is located at the Master Gardener office.

This newsletter is full of great gardening tips and advice. We hope you enjoy reading it as much as we enjoyed putting it together. Remember, if you have a gardening question, give us a call. We're here to help! Our number is 953-6112. Our website has lots of helpful information as well. Happy Gardening!



Know Your Microclimates

Susan Mora Loyko, Master Gardener

Ever wonder why you just can't grow tomatoes in your backyard garden, no matter what you do but your next-door neighbor has no problem growing any and all varieties? Maybe it has nothing to do with your gardening skills but the different microclimates.

Most gardens have microclimates – small pockets that are seasonably colder, warmer, shadier or windier than the rest of the garden. The temperature may be several degrees cooler than your zone maps indicate. Understanding the microclimates in your garden can help you pick the best locations for your plants and structures.

Microclimates are important to consider when

planning your landscape or vegetable garden. Cold and heat tolerance, diseases and pests, and overall plant health can be impacted by even small variations in climate. Even a small yard or garden has variances in air, light, soil, and water.

Microclimates may be quite small - a protected courtyard next to a building, for example, that is warmer than an exposed field nearby. Or a microclimate may be extensive - a band extending several miles inland from a large body of water that moderates temperatures.

To better understand the impact of microclimates, look carefully at your yard several times

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Garden Chores Calendar

Sue Davis, Master Gardener

You can click on any of the blue underlined words in any of the articles to go to a web-page and learn more about that topic!



Salvia 'Hot Lips'

Spring Garden Chores April, May and June

Spring's emerging shoots of soft green and delicate flower heads celebrate the very idea of renewal. If your garden needs some renewing, now is the time.

April Ideas

Plant –

New trees and shrubs need a hole about twice the width of the root ball. Build a cone of soil in the center of the hole tall enough so the new plant will be level with the surrounding soil when placed on top of it. Gently knock the plant from its pot. Use your fingers to uncoil and separate any bunched-up roots. If the root-ball is solid, use a knife to score four 1/2-inch-deep cuts around the sides and one on the bottom (don't do this on bougainvillea). Set the roots atop the cone, refill the hole, and water thoroughly to eliminate air pockets. You should be able to see the beginning of the root flare on trees at or above the surrounding soil. Add a 2- to 3-inch layer of mulch around the plants, keeping it about 4-6 inches away from trunks and stems. This is a good time of year to plant citrus trees.

Salvias (sage) are available now in nurseries if you're looking for an easy-to-grow perennial. One that does well in our area is "hot lips" (*salvia microphylla*).

Freshen up your container gardens with new plantings of colorful annuals such as marigolds and petunias for sunny areas or impatiens and fuchsias in shady areas.

Tomatoes, peppers, eggplant, leeks, carrots, cucumber, corn, green beans, and squash can be planted in mid-April once the soil stays warm overnight.

Maintenance –

Add a layer of rich compost as you plant fruits and vegetables. It will give them a good start and help produce a larger yield.

Continue composting as you groom your garden. Add trimmings to the compost pile along with fruit and vegetable waste. To process your compost pile quickly, keep it as damp as a wrung-out sponge and turn it frequently. If you don't have time to turn your compost as frequently as you'd like, don't forget that the "let-it-rot" meth-

od also works; it just takes longer.

Thinning improves the size of fruit, reduces the risk of broken branches, and keeps trees producing annually rather than in alternate years. Before apples, Asian pears, nectarines, plums, apricots, and peaches reach an inch in diameter; gently twist off enough fruit to allow 4 to 6 inches between remaining fruit.

Weeds will flourish in spring if you don't keep at them. Remove them while they're in the small rosette stage before they set down a tap root.

Feed your houseplants on a monthly basis from March through October.

Check your sprinklers to be sure they are working properly and not wasting water. There is a comprehensive spring tune-up guide for sprinklers in the 2010 April - June Master Gardener Newsletter which can be found at <http://sjmastergardeners.ucanr.edu/newsletters>

As temperatures rise, increase the frequency of irrigation. Deep-water established plants often enough to prevent wilt and promote deep rooting, but save water by being sure you don't overwater. Check soil moisture around roots by using a moisture meter probe or by digging down with a trowel. Soaker hoses apply water directly to the soil with very little evaporation.

To maintain your lawn this year, fertilize now with a balanced slow release or organic fertilizer according to directions on the package. Organic fertilizers react more slowly, but will eventually provide a lush result. If crabgrass has been a problem in past years, you may want to consider treating lawn with pre-emergent/fertilizer mix. These are available at retail outlets to homeowners and through licensed professional applicators. Help preserve our waterways by avoiding getting granules on hardscape surfaces.

Great tips for drought watering can be [found here](#).

In May

Plant –

Annuals planted in May provide good summer color. Flowers in six packs are a good buy. They'll catch up quickly to those growing in 4-inch pots and jumbo packs. (However, to produce instant color for a special event, use 4-inch plants.)

Summer-blooming vines, grown up a narrow

[Cont. pg. 16](#)

Horticultural Therapy

Pegi Palms, Master Gardener

Does weeding in the garden help you feel more energetic? Does walking through a beautiful landscape leave you feeling more peaceful? Does an hour of pruning help relieve your anger or tension? If you can answer yes to any of these questions, you have experienced the therapeutic benefits of plants.

Did you know that the process of combining the life elements of plants and people is also part of a formal job description? The profession of Horticultural Therapy (HT) includes three main HT program types: Vocational, Therapeutic, and Social. Each has its own unique concepts, settings, populations, treatment teams, treatment goals, and benefits, yet all three of these programs are designed to use plants to improve the well-being and quality of life for the client. Each type of HT program relies on skilled therapists and uses techniques that enable participants to reach their maximum level of independence. Clients are empowered to be less dependent on professionals or facilities for support, and learn how to function in the least restrictive environments possible. The goal is to minimize the amount of intervention, structure, or support clients need to live useful, independent lives.



Community Garden

Vocational Horticultural Therapy

Vocational HT programs are primarily concerned with teaching or enhancing employment related skills and/or behaviors, (particularly independence and reliability) in jobs related to plants. The goal is to provide clients with the skills they need to gain employment. Participants usually receive on-the-job training working in greenhouses, outdoor vegetable or flower gardens, cut flower shops, or by performing general landscape chores.

Many correctional facilities in the United States have successful vocational HT programs that help increase post-incarceration job placement and lower rates of recidivism (return to prison). These programs focus on education, the care and production of plants, and plant-related professions, using hands-on work as a primary activity. Many correctional facilities require participants to have a high school diploma or to obtain a GED before participating in horticultural training programs, often because they are so

popular. Post incarceration job placement tends to be high; many garden centers, landscape companies, flower shops, and big box stores are willing to hire these usually well trained individuals. For those people who must re-start life outside of the correctional systems, working with plants and landscapes often increases their sense of self-worth and helps them successfully transition back into society.

Other vocational HT programs are located in public high schools serving children with special needs. These programs typically teach basic job skills like time card preparation, time management, appropriate work behavior, and skills specific to plants, plant production, and landscapes. Sheltered settings provide an opportunity for productive work to individuals who need supervision and support. Some sheltered workshops that serve people with developmental disabilities operate nurseries or greenhouse businesses.

Therapeutic Horticultural Therapy

Therapeutic HT helps people recover from illnesses, addiction, or injuries. Reentry into the mainstream of society at work, home, and/or leisure is the ultimate goal for these individuals. Services can include plant-related exercise, cognitive development, counseling, mental health services, communication skills, development and adaptations of structures, or tools and/or techniques. For example, the Craig Institute in Denver, Colorado, has developed adaptive farm machinery to assist farmers who have suffered limb loss or other injuries. Adaptive tractors, trucks, plows, etc., all allow injured farmers to continue their work, enabling them to have a purpose, be productive, and maintain their own source of income.

[Cont. pg. 13](#)

Pests of the Season

Christeen Ferree, Master Gardener



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Chilli thrips *Scirtothrips dorsalis*,
Andrew Derksen, Kevin Ong

Scientists believe that **chilli thrips**, *Scirtothrips dorsalis* (Hood) originated in either Southeast Asia or India. Chilli thrips are now widely distributed. In Thailand, they are abundant on sacred lotus; in India, on chili peppers and peanuts; and in Japan, on tea and citrus. In North America, chilli thrips were first detected in 2005 on landscape roses in Florida. Chilli thrips have also been discovered in Hawaii, Georgia, Texas, and Louisiana, but not in California until recently where it was reported in both Orange and Los Angeles Counties. As one of the 13 most dangerous, exotic pest threats to the ornamental industry according to the Nurserymen and Growers Association (FNGA 2003), it may just be a matter of time before this pest is confirmed in northern California.

The chilli thrips small size and rapid movement make it difficult to detect in fresh vegetation. Adults are less than 2mm in length, pale with dark wings. The life cycle stages of chilli thrips include egg, first and second instar larvae, prepupa, pupa, and adult. The microscopic eggs are inserted into soft plant tissues; the egg stage may last one week. In contrast to most other **thrips** species, chilli thrips complete their entire life cycle on the plant. The total life span of the chilli thrips is influenced by temperature and the host plant species. In all, it can complete a life cycle in 14 - 20 days and is capable of reproducing both sexually and asexually (parthenogenesis). Female chilli thrips generally deposit 60 to 200 eggs in their lifetime and it typically has 4 to 8 generations per year.

Chilli thrips has been reported to vector seven major plant pathogens: chilli leaf curl virus, peanut necrosis virus, melon yellow spot virus, watermelon silver mottle virus, capsicum chlorosis virus, and tomato spotted wilt virus. (<http://blogs.cdfa.ca.gov/Section3162/>)

Although the more commonly reported host plants are roses, chilli thrips can also be found on many other landscape plants – citrus, peppers, pittosporum, strawberry, and tomato, to name a few. This pest has been known to feed on more than 200 plant species in 70 families, representing a significant economic and environmental impact. Unlike other **thrips**, which may feed on fungal spores and pollen, pupae of chilli thrips are generally found on leaves, leaf litter or on the axils of leaves in curled leaves or under the calyces of flowers and fruits. Chilli thrips create damaging feeding scars; distortions of leaves; and discoloration of buds, flowers and young fruit by feeding on the meristems of the host plant's terminals and on other tender parts above the soil surface. Adults and nymphs suck the cell sap of leaves with their piercing and sucking mouthparts, causing rolling of the leaf upward and reduction of the leaf size. Feeding also causes plant tissues to turn bronze in color or to become brittle and drop.

If chilli thrips are suspected, samples from leaves or buds may be collected and sent to a laboratory that tests for plant pathogens for confirmation. The sample should be placed in a Ziploc bag to prevent the inadvertent spread of **thrips**. A dry paper towel or napkin should be added to the bag to reduce excessive moisture.

Thrips in general is difficult to control. If management is necessary, an integrated program that combines the use of good cultural practices, natural enemies and the most selective or least-toxic insecticides that are effective in that situation should be used. Infected portions of the plants (distorted leaves and brown blooms) can be pruned away. The pruned parts should be placed into a plastic bag, sealed and discarded. To help prevent **thrips**, avoid planting susceptible plants next to weedy or grassland areas as these areas may be alternate hosts of pest **thrips**. Also, provide appropriate cultural care to keep plants vigorous and increase their tolerance to **thrips** damage. Excessive applications of nitrogen fertilizer may promote higher populations of **thrips**. Because of their mobility, feeding behavior, and protected egg and pupal stages, **thrips** can be difficult to control with insecticides. If chilli thrips are confirmed, preliminary tests suggest that they may be controlled on ornamental landscape plants with foliar spray insecticides containing acephate, imidacloprid, or spinosad. The use of insecticides containing pyrethroids (such as bifenthrin, cyfluthrin and permethrin) is not recommended because they are not very effective against chilli thrips and are more damaging to beneficial insects.

References and Resources: [Thrips of California 2012 – Scirtothrips dorsalis](#), [Texas Cooperative Extension – Chilli Thrips](#), [University of Florida – IFAS Extension – Chilli Thrips](#)



Curved leaves on pepper caused by chilli thrips, Credit: M. A. Ciomperlik, APHIS, USDA

Plants of the Season

Susan Price, Master Gardener

Tree: Geijera parviflora (Australian Willow), Family: Rutaceae

PLANT IDENTIFICATION:

Australian willows are evergreen trees that grow up to 25-30' tall by 20' wide. Branches sweep up and out, and long, narrow leaves hang down giving the appearance of a weeping willow. The olive green leaves are fine textured and pleasantly aromatic. With age, the tree produces small clusters of creamy white flowers in the spring and fall.



OPTIMUM CONDITIONS FOR GROWTH

Australian willows are grown as patio trees or street trees. Their deep, noninvasive roots and minimal litter make them ideal for planting near sidewalks and pathways. They do well in full sun with little to moderate water and well-drained soils. These trouble-free trees only need occasional pruning to keep its shape.



Shrub: Anisodentea x hypomadara (Cape Mal- low), Family: Malvaceae

PLANT IDENTIFICATION:

Cape mallows are native to South Africa. They are fast growing, evergreen shrubs that typically grow to 4-6' x 4'. They have small, lobed, bright green leaves and pink, purple or magenta flowers that resemble miniature hollyhocks almost year-round. Popular choices are 'Tara Pink' with clear pink flowers and larger leaves, and 'Tara's Wonder' with deep rosy pink flowers and dark green leaves. 'Slightly Strawberry' is a compact (2-3' x 1-2') hybrid with silvery green foliage and bright pink flowers.

OPTIMUM CONDITIONS FOR GROWTH:

Plants are somewhat short-lived, but mostly carefree. They prefer full sun to light shade and little to moderate water. They can tolerate clay soils but prefer good drainage. They are tender in hard frosts. Plants are ideally suited to informal landscapes along with other water-thrifty plants like sages and yarrows.



Perennial: Penstemon (Beard Tongue), Family: Plantaginaceae

PLANT IDENTIFICATION:

Most of the over 250 species are native to the West, coming from widely varied topography—including mountains, deserts, foothills, and plains. This herbaceous perennial typically reaches 2-3 ft. tall by 1 ½- 2 ft. wide, depending on the species. Most species have narrow, pointed green leaves arranged in basal clumps with narrowly bell-shaped, lipped flowers that may be ¾ - 1 ½" long). Flowers, which come in a myriad of colors including purple, red, pink and white, typically bloom spring through fall. 'Margarita BOP' (P. heterophyllus), a California native and UC Davis All-Star plant, is a 1 ½ -2' x 2-3' bright blue bloomer that thrives here.

OPTIMUM CONDITIONS FOR GROWTH:

Penstemon prefer full sun to part shade and fast draining soil. Water regularly the first season but once established, most can get by with low water. These easy-care plants need little attention besides removing old flower stalks and dividing clumps every 2-3 years. Landscape uses include rock gardens, borders, and wildlife gardens. They are magnets for hummingbirds, butterflies, and other pollinators.

Sources: [UC Integrated Pest Management \(IPM\) website](#)

Sunset Western Garden Book Plants and Landscapes for Summer-Dry Climates, East Bay MUD

From the Garden—Wedding Favors

Kitty Walker, Master Gardener

Wedding season is upon us, and we are lucky to live in an area that is perfect for outdoor or garden weddings. Although there are countless options for outdoor weddings in our area, the backyard garden should not be ignored; it can be a convenient, affordable, and beautiful setting for a ceremony.

As garden lovers, we can utilize our skills to create a perfect backdrop for a memorable wedding. There are countless ideas on the Internet and in the library for decorating a backyard garden and creating garden-themed decorations for table settings and party favors. The custom of giving favors to wedding guests go back centuries and was a way to say thank you to invitees for helping to make the occasion special. The focus of this article is on creating garden-themed wedding favors.



You can use your talent as a gardener to create a variety of garden-themed wedding favors. Some take a long lead time to complete; others can be put together in a day or two. Materials for favors can be found at nurseries, home supply stores, floral supply retailers, and craft stores. Some of the best resources for inexpensive materials are thrift stores and yard sales. The current trend of “shabby chic” and “vintage” weddings lend themselves to the favor ideas described below.

The use of succulents for wedding favors is especially trendy right now. You can use a variety of cuttings and a wide variety of containers to fit the theme of the wedding. Teacups and saucers can be used as small planters for a vintage wedding; glue the saucer to the cup before planting.

Small, hand-painted pots can fit the theme of a rustic wedding are fun and easy to create. These containers can be planted with succulents to make quaint and beautiful gifts. [Succulent Gardens in Castroville](#) provides a special category for weddings, and sells cuttings that you can root in your own containers. They recommend *Sempervivums* and *Echeverias* in particular, but you can also use *Aeoniums*, *Crassulas*, and *Sedums*.

Take cuttings about 12 weeks ahead of the wedding, allowing the ends to dry out and callus before planting. Make sure you use a potting medium that provides good drainage; you can purchase special potting soil for cacti and succulents. If the container you choose for the succulent does not have any drainage such as the teacups shown in the picture, make sure to include a note on the care instructions that the plant should be moved into a pot with adequate drainage. Plant tags can be inserted that include the wedding couple’s name and date on one side, and plant/care instructions on the reverse. These tags can be homemade and handwritten or can be finished using custom-ordered stamps.

Seed-based products can also be wonderful wedding favors. Flower seed packets, seed balls, and seed tape (seeds embedded into paper strips, which can be planted directly into the soil) are great favors, and are easily transported by guests who might be traveling from long distances. You can choose from a



variety of seed-themed favors: wildflower seeds, bee-friendly flowers, herb seeds (good for apartment dwellers), or seeds unique or native to the wedding’s location. If you make these gifts yourself, be sure to stamp or label the packet or container with information on proper planting date and plant care needs (soil, sun exposure, etc.).

A forest-themed wedding can include burlap wrapped evergreen seedlings that can be planted once the guest has returned home. Tree variety can be themed to a wedding’s location; for example, redwood seedlings if a coastal location or incense cedar seedlings for foothill or valley locations.

For those gardeners who have access to food products from the garden, there is a variety of food-themed favors that can make a unique memory of that special day: small jars of honey, homemade preserves, or even jars of pickles! Just make sure to take into account the seasonality of the food, and allow adequate lead time for you or someone else to prepare the jars.



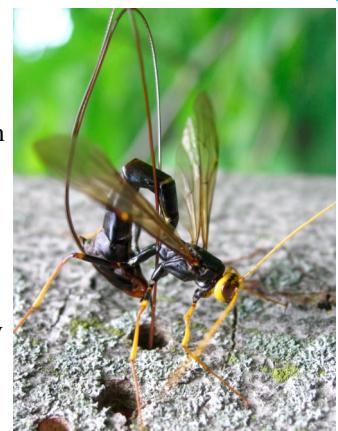
The trend of creating garden-themed wedding favors is fairly recent, and most ideas can be found on the Internet sites listed below. Try searching Pinterest using the words “rustic,” “country,” or “garden” in your search. Have fun!

Resources: <http://www.myweddingfavors.com> | <http://www.beau-coup.com/garden-favors>
<http://www.weddingsshop.theknot.com/favors> | <https://wedelectic.wordpress.com/2013/03/12/> | <http://www.etsy.com/listing/109316542/wedding-favor-tags-50-plant-stakes>

Beneficial Insects—Ichneumon Wasps

Kathy Ikeda, Master Gardener

Earlier articles in this column examined two unique types of beneficial wasps, the Trichogrammas and the Braconids. Now, we'll examine the fascinating third group, the Ichneumon wasps (pronounced ik-NEW-mun).



A giant ichneumonid wasp (genus *Megarhyssa*) using its ovipositor to lay an egg ~ From the [SciLogs website](#)

There are roughly 5,000 named species of Ichneumon wasps on the North American continent, with potentially thousands more not yet documented by scientists. The Ichneumonidae family to which these wasps belong is potentially the largest family within the animal kingdom, with an estimated 60,000 to 100,000 distinct species. (This is greater than that of all the known vertebrate species on earth!)

Ichneumon wasps are highly diverse insects. They can be anywhere from one-tenth of an inch long to more than five inches long, depending on the species, and they can be uniformly colored (usually yellow, brown, or black) or vividly patterned. They are usually delicate in appearance; most have long and slender abdomens, and the females of some species have extremely long, thin ovipositors (egg-laying structures) that are often mistaken for stingers. They also have very long antennae relative to their body size, each antenna having 16 or more segments (which distinguishes them from the separate families of stinging wasps). Unlike social, colony-forming wasps, Ichneumons are solitary and live most of their lives alone.



UC Statewide IPM Project
© 2000 Regents, University of California

The pupa of an Ichneumon wasp (*Hyposoter exiguae*) next to the empty shell of its host larva.

Although the adult wasps are light feeders—eating nectar or nothing at all—the wasps' larval stages feed voraciously on the larvae or pupae of beetles, moths, butterflies, ants, and flies; some species even search out adult spiders on which to lay their eggs. For this reason, Ichneumon wasps are classified as parasitoids: "insects whose larvae develop by feeding on the bodies of other arthropods, usually insects, resulting in the death of the host." This impassive definition doesn't conceal the gruesome nature of ichneumon wasp biology: their larvae literally eat their hosts alive. When fully grown, Ichneumon larvae spin cocoons, and pupate either inside or outside the empty shells of their now-dead hosts before becoming adult wasps.

The word *ichneumon* is Latin in origin, and is derived from two Greek words, one meaning "tracker" and the other meaning "footprint." This is an apt reference, since these wasps have sophisticated methods for hunting down their prey.

Some Ichneumon wasps lay their eggs inside wood-boring grubs, which means they must locate their targets while they are deep inside a plant's tissues. A female wasp does this by using her long and highly sensitive antennae, scanning a surface to detect a grub or insect larva deep below. She then uses her long ovipositor as both drill and syringe, using it first to penetrate the wood then to inject an egg into the hidden grub.

Other Ichneumon wasps have equally intriguing habits. One species lives near ponds or small lakes and is covered with dense, air-trapping hairs; the female wasp crawls down plant stems into the water to lay her eggs into the water-dwelling larvae of aquatic insects. Another species is a hyperparasitoid (a parasitoid of a parasitoid); the female wasp flies into ant colonies to deposit her eggs in ant-eating moth larvae, emitting chemicals to confuse the ants and make them attack each other, not her.

Several kinds of Ichneumon wasps are bred commercially and used as biological control agents to combat crop-damaging agricultural pests (including boll weevils, cabbage loopers, and armyworms). And—as is typical in the web of life—Ichneumon wasps are themselves abundant and important food for larger creatures such as birds.



UC Statewide IPM Project
© 2000 Regents, University of California

An Ichneumon wasp (*Hyposoter exiguae*) attacking a beet armyworm larva.

If you're lucky enough to spot an egg-laying Ichneumon wasp female, stop for a minute, enjoy the show, and rest assured that she won't sting you. She's just one of many beneficial insects quietly helping to protect your garden.

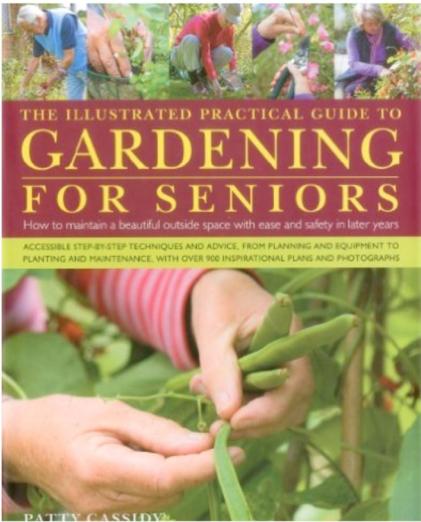
For a fascinating glimpse of an egg-laying female, watch this video: [Giant Ichneumon Wasp \(*Megarhyssa macrurus*\) Ovipositing](#)

For a wealth of photos showing the incredible diversity of Ichneumon wasps, visit the [BugGuide](#) of Iowa State University's Department of Entomology.



Growing Knowledge

Lynne & Bill Gowdy, Master Gardeners



The Illustrated Practical Guide to Gardening for Seniors reminds us that gardens are magical places that stimulate creativity, keep us physically fit, fill our lives with pleasure and keep us young at heart.

for simplifying the garden “without detracting from its aesthetic appeal.” One should consider low maintenance, sustainable plants and elimination of lawn areas. Patios, decks, balconies, and front porches are areas of low maintenance where drip irrigation can effectively be used with attractive containers. Containers are movable, easily changed and take minimal care.

Cassidy invites readers to explore the garden through their senses. These creative spaces should be a pleasurable place to spend time. Color and contrast, beautiful foliage, interesting textures, and intriguing smells make the garden a delight. The sounds of wildlife and water features relax visitors. Fruits, vegetables, herbs, and edible flowers entice gardeners to keep their sense of taste alive. The sense of touch, such as the ability to feel velvety plants or the mud between your toes, is retained throughout life and provides contact to the world.

The author covers the practical topics of safety and equipment. Safety includes suggestions for warm-up exercises and pacing activity strategies. A safe environment avoids accidents such as falls or injuries from lifting. Fatigue and weariness are responsible for many accidents. Maximizing comfort is about choices for appropriate clothing and the selection of the right tools and equipment to support activities. Cassidy features numerous adaptive tools that make gardening tasks easier. Ideas for tool care and storage are included.

In “Types of Gardens,” Cassidy includes ideas and projects that ease some of the more mundane tasks. Flower, fruit, vegetable, herb, raised beds, patio, vertical, indoor, and container gardens are covered. Projects, techniques and photographs help the reader adapt each type of garden to their unique needs.

Cassidy includes helpful reference sections and resources at the end of the book. The “Plant Directory” is a comprehensive list of plant choices selected for their appeal and ease of maintenance. It’s packed with garden plans, projects, and step-by-step instructions. Readers may likewise value the “Useful Addresses” and “Hardiness Zones” sections. Enjoy!

The Illustrated Practical Guide to Gardening for Seniors, How to Maintain a Beautiful Outside Space with Ease and Safety in Later Years, Patty Cassidy, Lorenz Books, 2011.

The Illustrated Practical Guide to Gardening for Seniors is an inspiring book that describes the basics of adaptive gardening. Patty Cassidy begins by explaining that there are many intangible benefits of gardening that one does not need to give up because of age. Gardeners need to assess spaces, prioritize tasks, implement labor saving strategies and use low maintenance plants. She wrote this book with the hope of providing a positive view of the aging process and encouraging seniors to be involved with the gratifying and healthy activity of gardening.

Cassidy skillfully lays out her book in six well-planned and beautifully illustrated sections that provide gardeners with a practical guide to success. First she discusses environments and how to define physical space. This space may be a backyard, an apartment patio, a senior community garden, or a receptive garden. Receptive gardens exist in care facilities to promote physical and mental health. They provide patients with attractive, comfortable, and serene settings.

Next, Cassidy addresses practical considerations and decision-making. She provides site analysis, taking into consideration space, climate, exposure, soil, and watering options. Health issues such as arthritis, hypertension, visual impairment, and balance are covered with safety suggestions for each issue. Planting options covered include flowers, vegetables, trees, and shrubs. She offers additional advice, such as how to attract wildlife to the garden. Cassidy speaks to the necessity for an adjustable design that can meet changing preferences or health demands. She offers suggestions



Patty Cassidy is a registered horticultural therapist and Master Gardener. She oversees therapeutic gardening programs for senior gardeners.

PAGE 9 **Community Connections—Teaching Garden**
Tim Viall, Master Gardener

Master Gardeners Assist Emergency Food Bank with Teaching Garden

Recipe: what do you get when you combine a dormant demonstration/teaching garden, University of California Master Gardener talent, and developmentally challenged young adults?

The end result is unfolding at the Emergency Food Bank as the agency utilizes the talents of Master Gardener Sheila Beauchamp and the JBallelos Community Integration Program, working with clients of Valley Mountain Regional Center to help them re-enter the community.

I visited recently with Florence Yalung of JBallelos Corporation, who was working with four clients on the food distribution line of the food bank. Florence noted "we work with our clients on their self-image, presentability, hygiene, confidence and working with other people as well as within the greater community."

Two days of the week, the individuals Florence is mentoring work with Sheila on the demonstration/teaching garden. Tasks include weeding, soil preparation, irrigation adjustment, and as the weather warms, planting seeds and seedlings. Sheila began working with food bank staff in 2015 and has lofty goals and high standards for the project.

The program's commitment is to offer those with disabilities, persons who are food insecure, and children the opportunity to learn gardening techniques and actually grow food at the Food Bank. Long term, it is anticipated that agency client families will learn to cultivate and grow food at home, improving their diets with quality produce.



The Emergency Food Bank started their demonstration/teaching garden shortly after the opening of the Thomas Wilson Nutrition Education Center in 2012. At the outset, the Leadership Stockton program (Greater Stockton Chamber of Commerce), the local Habitat for Humanity organization, and Lowe's Home Improvement were vital in getting components, building raised beds and irrigation systems, and a covered gazebo to host client gardening classes.

The food bank's goal at the time was to utilize gardening experts to teach basic gardening skills to food bank clients as well as appreciate fresh vegetables and fruit in everyday meals. A side benefit was to have produce from the garden supplement the already large percentage of fresh produce shared with food bank clients.

After recent changes in agency leadership, the garden fell into disuse. Last year, JBallelos group approached the Master Gardener Program, and Sheila went to work developing class curriculum, workshop materials and handouts, facilitating workshops, and overseeing garden improvements including planning, weeding, and irrigation upgrades.

Classes include 6 to 8 one hour sessions, usually held on Fridays at the food bank's Nutrition Education Center and surrounding garden. Topics include introduction to vegetable gardening, soil and composting, and methods to grow a vegetable garden (including containers, vertical gardens, raised garden beds, and in the ground).

Other topics include integrated pest management (good bugs and bad bugs), fruit trees, meal and budget planning, meal preparation, and more. Sheila plans to enroll Master Gardener volunteers to assist in many aspects of the garden to include fixing the irrigation, teaching irrigation classes, teaching gardening classes, and other garden topics on an as-needed basis. Throughout the program, she will continually assess the garden needs and make recommendations to the agency and to JBallelos leaders, as well as advertise the project to both food bank clients and the overall benefit of the program to the greater community.

Class materials typically come from the University of California, providing researched and proven subject matter. Classes provide hands-on activities and materials to take home so that the students can share with the family the practices they have learned. We will bring you progress reports in upcoming issues of this publication. For more insight into the project, contact Sheila Beauchamp, sbeauchamp4450@gmail.com.

Know Your Microclimates

Continued from page 1



fence or a wall, such as your house, will be noticeably warmer than other parts of your yard. If you're trying to grow plants such as summer vegetables (tomatoes, eggplant and peppers), try planting them in this protected area. Decks or balconies can offer concentrated heat, making them wonderful for growing heat-loving crops as well. In hot summer areas, plant trees next to shade walls or screen them with heat-loving vines.

With little direct sun, north wall areas are ideal for plants such as ferns. The north side of the house is a good location for mild temperature plants such as hydrangeas that would burn from too much sun.

Because cold air is heavier than warm, low-lying areas allow cold air to pool. Cold air also collects behind structures, walls, and hedges that run across a slope. Avoid planting frost-tender plants in these areas. Cold spots are good locations for plants where the extra chill promotes tulips to bloom and apples, pears, cherries, apricots, and peaches to set fruit.

Cold air can also settle in areas in the garden where the air is still and unblocked by tree canopies. Try the following to find these locations: 1) Every evening, put one thermometer in a fixed location and a second in a different area. Compare the temperatures around sunrise when it's usually coldest, and 2) Walk your garden at dawn on a frosty morning. Frost is thickest where the air is coldest.

While an east wall can get lots of early morning sun, the temperature is not as warm as on a west-facing wall. These are perfect locations for plants such as azaleas and fuchsias that need light but not much heat.

Eaves can protect tender flowers like Camellias from turning to mush in the rain. It's easy to forget to water these plants under overhangs, so remember to irrigate.

Shade trees and arbors can cast shadows which makes these locations desirable for Hostas and Impatiens. On frosty nights, the air beneath the canopy stays a few degrees warmer than the air

throughout one day. Note the sun's angle at mid-day and observe what areas get the most sun. What's the direction of the wind? Understanding the rainfall in your yard is important. Keep in mind that these effects are seasonal. Early morning sun is gentler than the hot scorching afternoon sun. Areas that receive the most sun will be the warmest and driest and the shadier areas are generally cooler and wetter.

Wind can be hard on plants. High wind areas tend to dry out more quickly and are the perfect areas for wind-resistant trees, shrubs and perennials. Consider hedges or a windbreak with closely placed trees on the windward side.

While southern facing areas often get more sun, that sun may be blocked by buildings, trees, hills, or other obstructions. Masonry and stucco walls soak up heat during the day and release it at night. A sunny, protected area in front of a



Know Your Microclimates

Continued from page 10

above them.

Dry banks are prone to erosion that can be prevented by planting heat and drought tolerant groundcovers such as Lantana, rosemary, rockrose, wild lilac or Manzanita or Salvia.

Taking a walk around the yard on a rainy day can reveal a lot about variations in water and moisture. Different areas will be wetter or drier than others, particularly when it comes to:

- Soil drainage
- Humidity
- Grading and runoff
- Shelter from (or exposure to) rain
- Exposure to drying wind or sun
- Location of water table, surface water, and streams
- Competing plants that might hog the available water

Deciduous trees can create sunny areas in winter and shady areas in summer. Northern exposures can be shadier during the winter while southern exposures are downright ovens in summer.

Your home and other buildings create many microclimates around the yard. Just like urban areas, your house absorbs heat during the day and radiates it back at night. If your prevailing winds are from the northwest, this creates a warmer, more sheltered microclimate on the south and east sides of your house.

Keep in mind that when wind hits your house, it creates turbulence and higher wind speeds along the wall and as the wind goes around the corners of the building.

Fences, walls, and large rocks can protect plants from wind and radiate heat, creating sheltered spots. Sometimes, if fences block cold air drainage through your property, the cold air can pocket behind them causing localized frost damage on near-freezing nights.

Paved surfaces such as patios, driveways, and sidewalks can absorb heat and re-radiate it at night, moderating temperatures. Such impervious areas can't absorb water, and may create wet spots if the water that flows off of them is concentrated in one area. Watch for similar wet areas where water flows off roofs or out of downspouts.

Once you understand the principles of microclimates, you can create your own. Some common methods used include creating structures such as cold frames, hot frames, and greenhouses or using row covers or hoop houses.

You can also use supplies around your home as a windbreak or a backdrop to warm up a space. Any extra rock, wood, straw, hay, or a woodpile can be used to redirect sunlight or decrease a strong wind. Heavier materials such as rock or brick will hold the heat longer throughout the night.

Windbreaks, shade trees, masonry, and water features all have an impact on the surrounding area. These can be incorporated into your garden design not only as decorative features but as a way to grow the plants you want.

Choose plants that might benefit from creating microclimates in small pockets of your yard. You might extend your growing season by planting frost tender plants on the south side of your house.

With a little time and thought, you can figure out how to make a microclimate work for you and your garden.



The Help Desk—Huanglongbing

Trish Tremayne, Master Gardener

UC IPM website

Integrated pest management, or "IPM," is a process you can use to solve pest problems while minimizing risks to people and the environment. IPM can be used to manage all kinds of pests anywhere.

You can click on any of the blue underlined words in any of the articles to go to a webpage and learn more about that topic!



I have heard of a disease that has devastated citrus in Florida. Is it in California and if so, how can we protect the citrus trees in our yard?

The disease you are referring to is called **Huanglongbing**, HLB for short, also called citrus greening disease. The HLB disease has decimated the Florida citrus industry, causing billions of dollars in economic damage and thousands of lost jobs. Within four years, 60,000 acres of trees were affected with HLB. HLB has also been found in Southern California.

The bacterium is spread by the Asian citrus psyllid, *Diaphorina citri* Kuwayama. There is no cure for the disease; once the tree is infected, it will die within five years.

The Asian Citrus Psyllid has now been found in many parts of California, including Southern CA, the Central Coast, the San Joaquin Valley, and the Bay Area. The only way to stop the spread of the disease is to stop the spread of the Psyllid. Host plants are all citrus and ornamental plants in the Rutaceae family (e.g. box orange, Indian curry leaf, orange jasmine).

The best thing a home gardener can do is obey quarantines set in place and to keep a lookout for the insect and report it to the California Department of Food and Agriculture (CDFA) Asian Citrus Psyllid hotline at 1-800-491-1899.



Here's what to look for:

The adult psyllid is about the size of an aphid, 1/6 to 1/8 of an inch long with mottled brown wings that have a clear margin that breaks up the pattern, red eyes, and a pointed rear end. The short antennae have black tips with two small, light brown spots on the middle segments. It feeds at a 45-degree angle with its tail end in the air. It lays its yellow or orange almond-shaped eggs on new growth, nestled in the crevices of unfolded leaves. The nymphs are wingless and will molt four times before becoming an adult. They feed on the young soft leaf tissue of the plant. As they feed, they produce a large amount of sugary liquid. They produce white, waxy curly tubules with a bulb on the end to help clear the sugary waste from their bodies. This is very unique to the Asian citrus psyllid.

Trees should be inspected on a monthly basis and especially during periods of active plant growth or "flushing." Due to the small size of the psyllid, using a magnifying glass or hand lens will make inspection easier. Trees infected with HLB produce small lopsided fruit that are poorly colored with greening on the blossom end, hence the name citrus greening disease. The leaves will have an asymmetrical yellow mottling. Juice and fruit from the infected fruit have a bitter, salty taste.

Encourage beneficial insects that eat the psyllid, including lady beetle adults and larvae, syrphid fly larvae, lacewing larvae, and minute pirate bugs. Some spiders, birds, and other general predators feed on adult psyllids.

Don't move citrus fruit or plants outside your area. The main way the insect spreads is from people transporting infested plant material. Buy citrus trees only from a reputable licensed nursery. Double bag plant clippings prior to disposal to avoid moving the psyllid and HLB infected plant material.

References:

[CDFA](#)
[UC IPM](#)

[Citrus Pest and Disease Prevention Program](#)
[Asian Citrus Psyllid UC Publication](#)

Therapeutic HT programs can also be found in rehabilitation hospitals, psychiatric hospitals, and long-term residential care facilities; sometimes therapy is even provided privately in a person's own garden. HT professionals often work with stroke victims or grieving widows/widowers, helping them become involved in a landscape or garden (either at a facility or at home), enabling them to regain enjoyment of their gardening hobby, or encouraging them to participate in their local garden club.

The first sites of horticultural therapy programs in the United States were mental health institutions in the 1790's when patients paid for their own psychiatric care by working in institutional gardens. Records note that patients working in the gardens were recovering much faster than patients working or staying indoors. In 1817, Friends Hospital in Philadelphia began the first formal gardening program for mentally impaired people. Contact with plants and nature in general improved patients' health, helped them to re-enter society, and allowed them to be more comfortable socializing. Today therapeutic HT is often incorporated into treatment services for people with mental illness, most commonly in community mental health centers offering out-patient therapy.

Long-term residential care facilities utilize therapeutic HT programs to aid those needing skilled nursing care or with limited mobility. Outdoor gardens, raised beds, container gardens and indoor gardens (windowsill plants, houseplants, and bonsai) help promote physical and mental wellbeing.

Therapeutic HT services can also be found in many recovery settings. In rehabilitation settings that provide modified tools and gardens, people with spinal cord injuries are trained to learn new ways of gardening or farming independently. Stroke survivors, people suffering memory loss, and chronically or terminally ill patients can also benefit from HT, especially through the use of sensory gardens. These gardens employ plants to stimulate the senses: Herbs for smell and taste, brightly colored flowers for sight, tall grasses that rustle in the breeze for sound and motion, and softly textured plants (e.g. Artemisia and lamb's ear) for touch. Time spent in a sensory garden can lift spirits, give pleasure and hope, provide a source of exercise and social interaction, and instill a sense of calm. Familiar fragrances can even trigger pleasant memories in dementia patients.

Social Horticultural Therapy

Social HT programs emphasize plant-based socialization to improve the general well-being of participants, to improve their nutrition and instill a sense of purpose, often through the use of gardening as a leisure activity. Interaction with others is encouraged as part of a process to increase life satisfaction, and to fight depression and isolation.

Settings for social HT can include both public and private facilities, such as retirement homes, community gardens, residential group homes, homeless shelters, and senior centers with day care.

Populations served by social HT include the elderly, the socially disadvantaged, the homeless, and the disabled.



One example of social HT is community gardens in low-income or immigrant neighborhoods. These gardens can empower residents by promoting community pride, and they educate people how to grow their own food, prepare healthy meals, and lower their food bills. Homeless individuals often participate in social HT programs that give them an opportunity to establish a sense of place and regain control over their lives.

Social HT programs also serve our country's elderly population, which is growing rapidly as Baby Boomers reach their senior years. Many elderly people become depressed, despondent or reclusive. They are losing people close to them, their physical abilities are declining, and their sense of purpose in life is often diminished. Garden-related exercise, fresh air, healthy food, and hobbies improve their quality of life by providing purpose and enjoyment. Connecting with other people and the earth can change their world for the better.

Horticultural Therapy has unlimited potential to help people improve their health and well-being by connecting with the earth, nature, and other people. Horticulture and gardening truly is *down-to-earth therapy!*

Horticultural Terms Explained

Julie Schardt, Master Gardener

Spring is ahead and our gardens beckon. As we ponder chores and challenges of gardening, we read everything we can so our work outdoors can bear fruit. Sometimes things as common as plant labels or magazine articles casually use terms that, while common, might need some explanation.

Cultivar (cultivated variety): A cultivar is a contraction of the terms “cultivated” and “variety.” Cultivars are plants selected and/or bred based on one or more specific traits, then propagated to maintain those traits. Hybridization, selection (choosing a plant that naturally exhibits an atypical - but horticulturally useful - appearance or behavior), and genetic engineering are the three ways cultivars are created.

Heirloom: Heirloom means an old, open pollinated variety that has been handed down from one generation to another. All heirloom varieties are open pollinated (see below).



Hybrid: A hybrid is the progeny of a cross between two individuals differing in one or more characteristics. Most modern hybrids have been developed for traits like vigor, disease resistance and/or insect resistance.

Open Pollination (OP): An open-pollinated variety is produced by a cross, but grown for generations so that seeds are stabilized and reproduce plants roughly identical to the parents. Most open pollinated varieties of fruits and vegetables have been selected for flavor.

Variety: A variety is a naturally-occurring variant of a species (rose *variety*, tomato *variety*, etc.). Although technically different, *variety* and *cultivar* are commonly used interchangeably.

F1: F1 indicates first generation hybrid, a cross between two dissimilar parents.



Useful Garden Websites



[San Joaquin County Master Gardeners](#)

Our site is full of information on gardening. We are continually adding information to this site. Have questions? We have answers!

[Pest Notes](#)

Integrated Pest Management (IPM) is a strategy that looks at the entire eco-system and focuses on long-term prevention of pests and their damage.

[California Natives](#)

- Save Water
- Lower Maintenance
- Reduce Pesticides
- Invite Wildlife
- Support Local Ecology

Recipes from the Garden: A Taste of the Season

Spring is here with sunshine, longer days and a new crop of fresh produce. It's a perfect time to "spring clean" and lighten up your menus with nutritional springtime fare. Enjoy!

Spinach Stuffed Mushrooms

Ingredients

24 medium mushrooms (about 1 1/2 pounds total)

2 tbsp olive oil, plus more for the baking sheet

2 cloves garlic, finely chopped

5-ounce baby spinach, chopped

1/4 tsp kosher salt

1/4 tsp black pepper

3/4 cup panko bread crumbs

1/2 cup Italian blend grated cheese (2 ounces)



Heat oven to 375° F. Remove the stems from the mushrooms; finely chop the stems and reserve. Coat a baking sheet with oil. Bake the mushroom caps, stem-side down, until just tender, 10 to 12 minutes.

Meanwhile, heat the oil in a medium skillet over medium heat. Add the garlic and chopped mushroom stems and cook, stirring until tender, 3 to 5 minutes. Add the spinach, 1/4 teaspoon salt and 1/4 teaspoon pepper and cook, tossing until wilted, 2 to 3 minutes more.

In a bowl, combine the spinach mixture with the bread crumbs and cheese. Spoon filling into the mushroom caps and bake until golden brown, 12 to 15 minutes. Serves: 8

Key Lime Coolers

Ingredients

1 1/2 cups all-purpose flour

1/2 cup cornstarch

1 cup butter, softened

1/2 cup powdered sugar

2 tbsp key lime juice

3 tbsp key lime zest

plus more powdered sugar for dusting



Whisk together the flour and cornstarch. Set aside. Beat butter and powdered sugar together until light and fluffy. Beat in key lime juice and zest. Mix in flour mixture just until combined. Refrigerate dough for at least 1 hour.

Preheat oven to 350° F. Line cookie sheets with parchment paper or spray with cooking spray.

Scoop out cookie dough (about 1 1/2 tablespoons) and form into a ball. Place on prepared cookie sheet and bake for 17-19 minutes or just until tops begin to turn golden. Remove and promptly sift powdered sugar over the top of the cookies using lots of powdered sugar.

Let the cookies cool completely on the cookie sheets. Do not move them until they have cooled. Store in an airtight container for up to 1 week

Makes: 2 dozen cookies

Asparagus and Parmesan Tart

Ingredients

1 ready-to-use refrigerated pie crust

1 tbsp olive oil

2 yellow onions, thinly sliced, separated into rings

3/4 lb. fresh asparagus, trimmed, blanched and cut into 1-inch lengths

4 oz. (1/2 of 8-oz. pkg.) cream cheese, softened

1/2 cup sour cream

2 eggs (large)

1/2 tsp lemon zest

1/2 cup shredded Parmesan cheese, divided



Heat oven to 400° F. Line 9-1/2-inch tart pan with removable bottom with crust; trim edge. Prick bottom with fork. Bake 10 to 12 min. or until lightly browned. Cool.

Meanwhile, heat the oil in a nonstick skillet on medium heat. Add onions; cook 10 min. or until caramelized, stirring occasionally. Spoon into crust; top with asparagus. Beat next 4 ingredients with whisk until well blended. Add 1/4 cup Parmesan; mix well. Pour over asparagus; top with remaining Parmesan.

Bake 20 to 24 min. or until filling is slightly puffed and set in center.

Serves: 8

Garden Chores (continued from page 2)

structure, add color and height to even the smallest gardens. Before planting, set a sturdy structure with enough height and heft to support your vine (adding a structure later is difficult). As shoots grow, train them to the support with self-gripping Velcro, plant tape, or twist ties.

Vertical accents in borders can be achieved by growing tall, upright bedding plants behind shorter ones.

Chrysanthemums will provide beautiful fall flowers if you start seeds this month.

Tomato and pepper transplants can be planted this month. Seeds of pumpkins, beans, corn, squash, cucumbers, and melons can be sown in the garden around the middle of this month. For interesting and unusual fall decorations, consider growing pumpkins or winter squash that are not your ordinary jack-o-lantern.

Zucchini tastes best if you harvest it before it exceeds 8-10 inches. However, if some get away from you, you can always dice the meat and add to salads or use in baking.

Carrots become sweeter with age, but harvest them before they take on a woody texture.

Snow peas are ready to be picked when the peas are just beginning to swell in the pods. Snap peas taste best when the pod is plump, but the skin is still shiny, not dull.

Maintenance -

Bulbs should be left in the ground until the foliage is dry and crisp.

Aerate lawns that get a lot of heavy foot traffic and have compacted soil, which makes it difficult for water, fertilizer, and oxygen to reach the roots. If you can't push a screwdriver up to its handle into the turf, it's time to aerate. Besides compaction, lawns on heavy clay soil or those on a steep slope should be aerated. Use an aerator that either produces a core or a water wash to dig holes. Spike aerators just add to compaction. If you are using a machine aerator, be sure to mark and avoid all sprinkler heads. Some machine aerators require a lawn to be moist, but not soggy. Irrigate a day or two before aeration if soil is dry.

A mower set at the highest or next-to-the-highest blade setting will help keep your fescue lawn healthy and use less water through the summer. Mow your lawn regularly so that no more than 1/3 of the height is removed at a time.

Water your lawn in the morning to discourage fungal diseases. You'll also lose less water through evaporation. Follow the guidelines of your area regarding which days to water.

June Notes

Plant -

There's still time to get **beans**, **corn**, **cucumbers**, **eggplant**, **peppers**, **pumpkins** (start now for Halloween), **summer squash**, and **tomatoes** in the ground. These warm-season plants grow well as soil heats up but need lots of irrigation. Conserve water by only growing what your family can consume.

Instead of growing thirsty annual flowers in pots this summer, consider colorful perennial succulents that don't need a lot of water. Be sure to plant in fast-draining cactus potting soil.

Plant Thai basil and cilantro now and you'll have fresh herbs all summer. Both annuals love sun and ample water, and do well in pots so it is easier to control the water you use. Start basil from seedlings. Sow cilantro seeds directly in the container – it germinates quickly. Begin harvesting when plants reach 6 inches tall.

Attract bees with a variety of flower shapes and colors. Look for flowers and plants that are native to our area for growing ease and as an attractant for honey bees.

Maintenance -

Support tomato vines with wire cages, stakes or a trellis so the fruit won't rest on the ground and spoil. Feed the plants with a low-nitrogen fertilizer when the fruit starts to develop (too much nitrogen encourages rampant foliage rather than more fruit). Keep the soil damp but not soggy and mulch the tomato plants to conserve moisture.

Harvest garlic and onions this month as well as potatoes at the end of the month.

Water plants early in the day to conserve water, ensure maximum growth, and minimize disease problems. Plan to water deeply every 7 to 10 days or whenever the soil is dry at a depth of 3 inches.

Apply a 2-inch layer of mulch to conserve water. Wood chips used as mulch around plants can suppress weeds, conserve soil moisture, and enhance the plants' root growth. Keep mulch away from base of plants to prevent rot.

Fertilize both warm and cool season lawns this month.

Most lawns only need to be watered two or three times a week. A deep, thorough watering could lower that to once per week.

During the summer heat, lawns need about two inches of water per week. To determine your sprinklers output, place several flat bottomed containers (such as tuna fish cans) around your lawn; turn on the sprinklers for a half hour, then measure the water in the containers. Adjust your sprinkler coverage if needed and reset the amount of time you water according to the results of your timed test.

Information for this article was gathered from:

<http://www.ucanr.org>

<http://www.ipm.ucdavis.edu>

<http://www.sunset.com/garden>

<http://www.farmerfred.com>

Coming Events

Coming Events

April – June 2016 Corinne Bachle, Master Gardener

Saturday, April 9

San Joaquin Master Gardener Workshop: Irrigation.

10:00 – 11:30 a.m.

Come learn about the various types of irrigation available to the home gardener. Class size is limited to 30. All participants must register by the Wednesday before the class by calling (209) 953-6100.

City of Stockton Delta Water Supply Project, 11373 N. Lower Sacramento Road, Lodi

Saturday, April 9

Green Acres Nursery Workshop: The Wildlife Garden

9:00 – 10:00 a.m.

Learn how to attract and sustain wildlife such as birds, bees, and other creatures!

Green Acres Nursery, 9220 E. Stockton Blvd, Elk Grove

Wednesday, April 13

Sacramento Master Gardeners Grand Opening of the Ultra Water-Efficient Landscape

9:00 a.m. – 12 noon

Mini-tours of the water-efficient landscapes. Irrigation displays. Tips on beautifying and maintaining a landscape with herbs. Demos on thinning fruit tree crops and pruning citrus.

Fair Oaks Horticulture Center
11549 Fair Oaks Blvd., Fair Oaks

Saturday, April 16

San Joaquin Master Gardener Workshop: Irrigation.

10:30 – 12 noon

Come learn about the various types of irrigation available to the home gardener.

Manteca Library
320 W. Center, Manteca.

Classes are free. All participants must register a week prior to the class by calling (209) 956-6100.

Saturday, April 16

Linden Community Garden Club's 9th Annual Plant Sale

9:00 a.m. – 3:00 p.m., rain or shine

Among those plants available will be dahlia tubers, heirloom tomatoes, peppers, herbs, assorted vegetables, succulents, cacti, shrubs, and trees.

NEW CONVENIENT LOCATION:

Linden United Methodist Church
19147 E. Highway 26, Linden (in parking lot at rear of Mission Hall)

Master Gardeners will be available to answer your questions.

Saturday, April 16

Green Acres Nursery Workshop: Success with Succulents

9:00 – 10:00 a.m.

Find the right succulent for every situation, and learn how to keep them happy in your garden.

Green Acres Nursery, 9220 E. Stockton Blvd, Elk Grove

Saturday, April 23

Green Acres Nursery Workshop: CA Landscape 2.0 Lite

9:00 – 10:00 a.m.

An overview of our design series that begins in the summer.

Green Acres Nursery, 9220 E. Stockton Blvd, Elk Grove

Sunday, April 24

Boggs Tract Community Farm Workshop: Composting

2:00 – 4:00 p.m., rain or shine

Learn how to turn your grass clippings, fallen leaves, and kitchen waste into compost to enrich your soil.

Boggs Tract Community Farm
466 S. Ventura Avenue, Stockton

Saturday, April 30

Green Acres Nursery Workshop: New for 2016!

9:00 – 10:00 a.m.

Get a sneak peek at what's next with recent plant introductions, design ideas, and gardening trends for 2016.

Sunday, May 1

San Joaquin Master Gardeners "Celebrate Spring!" Biennial Spring Garden Tour

10:00a.m.-4:00p.m.

Six private and one public garden showcasing a variety of garden styles will be featured in the central Stockton/UOP area. There will be demonstrations, educational displays, book sales, and handouts. Master Gardeners will be on hand at each site to answer your gardening questions.

Saturday, May 14

San Joaquin Master Gardener Workshop: Right Plant / Right Place

10:00 – 11:30 a.m.

Corinne Bachle, Master Gardener

Knowing the importance of planting the right plant in the right place will save you lots of time, money, and frustration!

Class size is limited to 30. All participants must register by the Wednesday before the class by calling (209) 953-6100.

City of Stockton Delta Water Supply Project, 11373 N. Lower Sacramento Road, Lodi

Saturday, May 21

San Joaquin Master Gardener Workshop: Right Plant / Right Place

10:30 – 12 noon

Knowing the importance of planting the right plant in the right place will save you lots of time, money, and frustration!

Manteca Library, 320 W. Center, Manteca. Classes are free. All participants must register a week prior to the class by calling (209) 956-6100.

Sunday, May 22

Chicken Keeping

8:00 – 10:00 a.m., rain or shine

Learn how to maintain a small flock of chickens at home.

Boggs Tract Community Farm, 466 S. Ventura Avenue, Stockton

Sunday, June 26

Boggs Tract Community Farm Workshop: Bee Keeping

8:00 – 10:00 a.m., rain or shine

Learn the basics of keeping bees to provide honey and pollination.

Boggs Tract Community Farm, 466 S. Ventura Avenue, Stockton

THERE WILL BE NO MASTER GARDENER WORKSHOPS IN JUNE. Go out and smell the flowers!

UC Master Gardeners

2101 E Earhart Ave
Suite 200, Stockton, CA,
95206

Phone: 209-953-6112

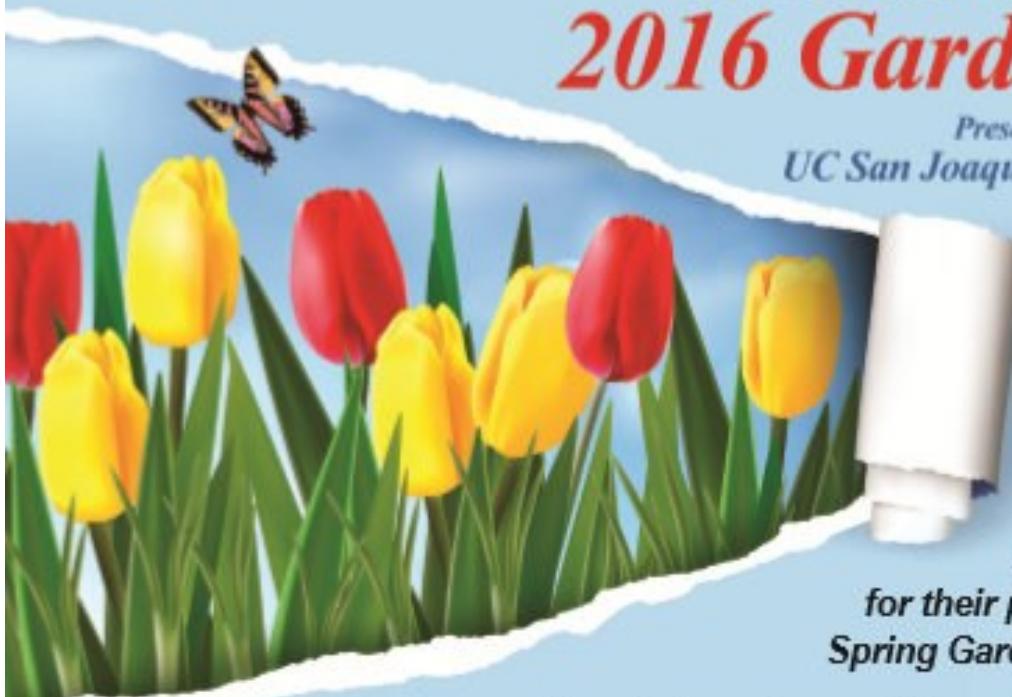
E-mail: anrmgsanjoaquin@ucanr.edu

Web-site: <http://sjmastergardeners.ucdavis.edu>

[Find us on Facebook!](#)

Coordinator: Marcy Sousa 953-6100





Celebrate Spring! 2016 Garden Tour

*Presented by the
UC San Joaquin Master Gardeners*

**Sunday
May 1, 2016
10 a.m. - 4 p.m.**

*Join the
Master Gardeners
for their premier, biennial
Spring Garden Tour.*

Six private and one public garden showcasing a variety of garden styles will be featured in the central Stockton/UOP area. There will be demonstrations, educational displays, book sales and handouts, with Master Gardeners on hand at each site to answer your gardening questions. Light refreshments will be available for your enjoyment.

Get Your Tickets Now!
\$20.00 in advance • \$25.00 day of the event

Online ticket sales are available at:

<http://ucanr.edu/sjmg>

Tickets may also be purchased at the Master Gardener Office.

Master Gardeners will have tickets available for sale April 23, 24, and 30, from 10 a.m. to 2 p.m., at two locations
Delta Tree Farms, 12900 N. Lower Sacramento Road, Lodi
Quail Lakes Nursery, 3404 Shadowbrook Drive, Stockton

UC Master Gardeners of San Joaquin County
2101 E. Earhart Avenue, Suite 200 • Stockton, CA 95206 (209) 953-8112

