The year is halfway over and the Master Gardeners have already accomplished a lot within the program! We held our second garden tour in May selling over 350 tickets to 8 fabulous garden locations in Stockton. We are already thinking about the next tour scheduled for 2014. We have produced our first ever garden journal that will soon be available for sale on our website. Many hours of hard work went into creating this useful garden journal and we are pleased with the way the final product turned out! Read the journal review under Growing Knowledge for more info about this great gardening tool. We are in the early stages of planning our second annual Smart Garden Conference scheduled for this fall. More information on that will be coming out soon! We will be having a 2013 Master Gardener training. If you have been thinking about becoming a master gardener now is the time to get your application in. They can be found here on our website. Training occurs every other year, so don't miss out on your chance to become a master gardener! Our volunteer calendar has wrapped up as well. From July 1, 2011 to June 30, 2012, Master Gardeners contributed over 4,660 hours on projects within the program and the county. This brings our grand total of volunteer hours since July of 2007 to over 14,500 hours. Way to go SJ Master Gardeners!

We hope you are enjoying those summer veggies that are starting to ripen in your garden! Perhaps you are eating a fresh juicy tomato as you are reading this issue of Garden Notes. Happy Gardening!

As much as we all love our pets, they can present some unique challenges to maintaining a beautiful, well kept garden. Cats and dogs can designate an inopportune spot to do their business, and once they’ve made up their mind, it’s pretty hard to deter them.

Here are some ideas that may help you manage your best friend’s destructive behavior. Good luck!

**CATS.** Some cats are drawn to the same spot for their bathroom breaks because it smells like a bathroom. The first step in changing this...
July

**PLANT**

*Create a border to attract beneficials.* Keep your vegetable plot healthy this summer by planting flowers nearby that attract beneficial insects. Good options include Coreopsis, Cosmos, goldenrod, marigolds, Queen Anne’s lace, sunflowers, and yarrow.

*Plant a showy coleus.* Try experimenting with different types of coleus in a shady area. Provided you pinch off flower spikes as they develop coleus will add splashes of leaf color in both beds and pots. They need regular watering through the warm months. Coleus is considered an annual in our area, so be prepared to plant again next year.

**Start seeds.** Broccoli, cauliflower, cabbage, and Brussels sprouts should be seeded in flats around July 1st. They can be transplanted to the garden at the end of August or early September.

**MAINTENANCE**

**Lawns.** If your lawn develops brown spots, be sure that it isn’t an irrigation problem before assuming it is a pest or disease. Damage from lack of water will usually result in a faded edge with some gummetal gray turf around the perimeter. If your lawn looks like it needs more water, try irrigating it twice every other day, rather than every day. Daily irrigation encourages shallow, unhealthy rooting and encourages pests and diseases.

A quick irrigation audit may be worthwhile to determine if your sprinklers are matched and working properly. There have been numerous more efficient sprinklers introduced in the last few years. Some of them only require a change of the nozzle, not the entire sprinkler head. Check with your local water provider to see if they give partial or complete rebates for changes to efficient sprinklers. Information on checking the output of your lawn sprinklers can be found [here](#).

Disease or pest problems will usually be spotty in appearance and have a more defined edge to the damaged area. If you suspect a pest is the problem, they are most likely found along green grass just outside of the damage. Evidence of caterpillars, caterpillar scat, or grubs can be found just under the surface of the green grass right outside of the damaged area. If the damaged area is not spreading, treatment to destroy the pests is unnecessary. It won’t bring back dead spots and the pest is probably gone by the time you treat the lawn. If pest problems persist, look into what cultural changes you could make to reduce susceptibility in the future.

**Fertilize only if needed with either a slow release or organic fertilizer.** Shocking your lawn at this time of the year with a sudden input of high nitrogen can cause all sorts of negative results.

**Mulch.** If you didn’t already do so in spring, spread a 2- to 4-inch layer of organic matter (such as fine or shredded bark) over garden beds now to conserve moisture, cool plant roots, and discourage weeds. To prevent rot, don’t pile it against stems and trunks.

**Support fruit tree branches.** Apple, peach, pear, and plum trees may be laden with fruit this month. To prevent limb breakage, use wooden supports to brace sagging branches. Also, regularly clean up and discard fallen fruit, since it might harbor diseases and pests.

**Water.** Check container plants daily. Deeply irrigate mature fruiting and most ornamental trees every other week if you have clay-loam soil, more often if you are in an area with sandy or sandy-loam soil. Mature drought-tolerant trees need deep watering only once a month or so.
Research has shown that lawns generate approximately 300 pounds of grass clippings per 1,000 square feet annually. This amount to 6 1/2 tons per acre each year. One of the best ways to reduce yard work, reduce unnecessary waste, and provide a balanced amendment to your lawn is to mulch your lawn clippings rather than bagging and disposal. It is a practice of most professional lawn care services, even for some meticulous clients. While the elimination of many tons a year from our solid waste is a good motivator for those people with a high environmental conscience, my effort will be to gather information to show how grasscycling can save you both time and money and result in a healthier lawn. The keys, of course, are to mow at appropriate height, usually weekly, and to use and maintain a mower properly outfitted to mulch.

While you can achieve benefit of mulching with most any mower, those specifically designed to mulch will give the best results with the least trouble. Two things that help make a mower a mulcher are the doughnut shape of the deck and the multi-pitch blade. The outer section of the blade pulls grass up and cuts it. The air currents inside the deck then keep clippings swirling around long enough to be chopped into finer pieces. Finally, the blade's inner curve creates enough air pressure to force the now tiny clippings down into the turf, where they decompose. A higher horsepower motor is usually required to provide the above benefits. Five horsepower (5 hp) is considered to be the minimum required for a non self-propelled mower. You can’t change the deck of your mower to improve mulching, there are various mulching blade designs available. It would be best to ask your local lawn mower dealer to find out what blades would work best for your individual mower.

Ten tips for successful mulching provided by Messick’s professional mowing guide are below.

1. Mow often, every 7 days under dry California conditions.
2. Mow slowly...walk at an easy, relaxed pace.
3. Mow with the engine at full throttle for best performance...the throttle controls the blade speed.
4. Mow with a clean mower ...avoid grass build-up under the deck.
5. Mow with a sharp blade ...a sharp blade cuts cleaner.
6. Mow only when grass is dry...wet grass causes clumping.
7. Mow at higher cutting heights...cut no more than 1” to 1.5” of grass length with each mowing.
8. Mow twice at different height settings (high, then low) if grass is extra tall.
10. Read your owner's manual carefully ...understanding your mower’s operation will help ensure optimum performance.

As an anecdotal final note, I received two responses from Master Gardeners on the fact that their electric mowers do a good job on mulching. Perhaps the manufacturers of electric mowers expect that their customers are going to be concerned about excess municipal waste as well as reducing air pollution. If mulching mowing is not practical, we advise adding grass clippings as the green waste portion of your compost pile. This will both reduce waste removal problems and eventually provide you with an excellent source of organic soil amendment.
Citrus Whitefly & Powdery Mildew

Steve Sanguinetti Master Gardener

Citrus Whitefly

This pest is a relatively new problem in California, but has become very common in some neighborhoods. Citrus Whitefly, Dialeurodes citri, is one of several whiteflies that can infest citrus, but unlike some of the others, this one’s high populations and the honeydew it emits can cause significant problems. Beyond the pest sucking on the sap of the citrus tree, the honeydew allows a thick growth of black sooty mold to form which blocks the light to the foliage and leaves a very undesirable stain on the fruit. One of the life stages of this whitefly is a scale-like stage which could easily mislead you into thinking it is a separate pest. The first UC-IPM reference below is for commercial fruit growers. Unfortunately we don’t have a homeowner pest note yet specifically dedicated to this pest. The second reference is on control of whiteflies in general and mentions one of the solutions I have found invaluable and organically certified, Neem Oil. Other alternatives are to harbor natural controls for this pest and even to vacuum them up as they fly once disturbed. Like most other honeydew-producing pests, ants usually accompany them and protect them, so control of the ants will help the control of the whitefly. If you do decide to control with pesticides, ants usually accompany them and protect them, so control of the ants will help the control of the whitefly. If you do decide to control with pesticides, ants usually accompany them and protect them, so control of the ants will help the control of the whitefly. If you do decide to control with pesticides, ants usually accompany them and protect them, so control of the ants will help the control of the whitefly.

Powdery mildew

first appears as white, powdery spots that may form on both surfaces of leaves, on shoots, and sometimes on flowers and fruit. These spots gradually spread over a large area of the leaves and stems.

Leaves infected with powdery mildew may gradually turn completely yellow, die, and fall off, which may expose fruit to sunburn. On some plants, powdery mildew may cause the leaves to twist, buckle, or otherwise distort.

The best method of control is prevention. Planting resistant vegetable varieties when available, or avoiding the most susceptible varieties, planting in the full sun, and following good cultural practices will adequately control powdery mildew in many cases. However, very susceptible vegetables such as cucurbits (cucumber, melons, squash, and pumpkins) may require fungicide treatment. For more info [click here].

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!
Tree of the Season

**Australian Willow—Geijera parviflora**

**Family Rutaceae (Rue family)**

**PLANT IDENTIFICATION**

Australian willows are evergreen trees that grow up to 25 to 30 feet tall. Branches sweep up and out and long, narrow leaves hang down giving the appearance of a weeping willow. Small white flowers are produced in the spring and fall.

**OPTIMUM CONDITIONS FOR GROWTH**

Australian willows are grown as patio trees or street trees. They do well in full sun with little to moderate water and well-drained soils. Some pruning is required to keep its shape. Little to moderate water once established. Resembles a weeping willow in appearance but has the advantage of roots that are deep and non-invasive. Frost sensitive, plant where it can be protected.

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**Coral Bells & Deer Grass**

**Star Flower** *Ipheion uniflorum*

Bearing pale blue blossoms on stems reaching 6 inches tall, spring star flower looks delicate. But as one of the easiest bulbs to grow, it tolerates a wide range of soils, takes sun or part shade, and lives for years with little care. It grows in all of California except *Sunset* climate zones 1a-2a.

Spring star flower looks good planted in drifts, tucked into rock gardens, or slipped between steppingstones. It also does well in containers — either beneath taller-growing plants or massed by itself — thriving for four or five years before it needs dividing. Plant in fall for spring bloom; set bulbs 2 inches deep and 2 inches apart. Water regularly during growth and bloom, then keep the soil fairly dry during summer. *(Sunset.com)*

**Deer Grass** *Muhlenbergia rigens*

California native plant that makes a low informal screen. Deer grass is a 3 foot perennial with 2 foot plumes rising above the plant. Slender yellow or purplish flower spikes in autumn are erect at first, then leaning.

It looks like a small pampas grass but without the bad leaf cuts and the aggressive seeding. Can be stunning as a vertical accent and adds texture and movement to the garden. Evergreen in mild winters but turn tan or brown with hard freezes.

**Pruning Needs:** cut to ground every three years and remove old leaves at any time

**Sun Exposure:** Full Sun/Part Shade

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**Star Flower** *Ipheion uniflorum*  
Foliage and new flowers of Australian willow, *Geijera parviflora*.  

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In his expanded and updated book, Toby Hemenway takes permaculture to new heights, showing us ways to integrate our ornamental and edibles garden into a more multi-dimensional, thriving backyard ecosystem. Defined as: “a set of techniques and principles for designing sustainable human settlements,” permaculture is a design approach based on connecting different disciplines, strategies and techniques. The author’s perspective is garden-focused, with emphasis on designing landscapes that work with nature. Experience and examples come from a broad range of properties—from the author’s previous home on 10 forested acres in rural Oregon, to his current property in the city. While few of us have enough land for a multi-storied forest garden, most of us will be able to incorporate some of the ideas described to make our garden more productive and earth-friendly.

The 313-page book begins with theoretical information but quickly moves on to practical ideas and design techniques. It offers tools to use in our landscapes to reduce our ecological footprint and become more self-reliant. There are chapters devoted to soil, water, plants and animals followed by ways to put them all together to create “plant communities.”

Many tables are provided that list plants and what they contribute to a plant community. This multi-functional approach is at the heart of permaculture design technique. Maximilian Sunflower provides an excellent example; it has pretty blooms, edible parts, attracts birds, generates mulch, stops grass invasion, repels deer and is very low maintenance. It is this type of plant, with its super-charged functionality, that forms the basis of a “guild,” a harmoniously interwoven group of plants and animals that benefits humans while creating habitat.

Readers will especially appreciate Chapter 11, “Permaculture Gardening in the City.” It provides a myriad of ideas for those of us living on small, urban lots. While city permaculture gardens are unlikely to look like nature, the author believes they can still have the form and function of an ecosystem.

Finally, the author provides a sampling of useful plants in the appendix, followed by a glossary, extensive bibliography and a list of resources. With his wise and thoughtful book, Hemenway has done gardeners a huge service. His permaculture design ideas offer ways--big and small, for us to consume less and become more self-reliant.

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!

Sunset Western All Stars Perennials
Perennials are grouped by peak bloom. Most grow throughout the West; some of the early-flowering perennials don't bloom until summer in cooler climates.

Seed Savers Exchange
Seed Saver Exchange is dedicated to saving and sharing heirloom seeds. Order a catalog from their website.

River Friendly Landscaping Practices are designed to help you create a healthy, beautiful, vibrant yard while conserving water, reducing yard waste, and preventing pollution.
This publication was a labor of love for a number of San Joaquin Master Gardeners, including myself. It represents our best efforts to create an educational and inspirational gardening journal. As one of the contributing writers and advisors, I fully admit this review will be biased.

We worked for a year to create this flower-focused journal, which could be sold over several years and potentially throughout the San Joaquin Valley and other areas with a similar climate. This colorful journal provides lots of flower gardening information and space for recording monthly activities in the garden. It is so much more than a simple journal for record keeping. The purpose is to help us all be better gardeners by providing a useful tool to educate and to monitor our gardening progress. It includes a pocket at the beginning of each season for placing plant tags, plant lists, receipts, pictures, planting info or whatever the gardener wants to keep as a record. Also evident are some beautiful pictures of seasonal flowers/gardens for your inspiration.

I have kept a garden journal in the past, but it has always been a disjointed and disorganized jumble using a lined paper notebook with little structure to it. It was better than nothing and I have crammed into it all manner of nursery documentation, plant labels and landscape maps until it was an overstuffed, un-indexed tome. Despite keeping a journal of sorts, I have lost the name of that beautiful blue Penstemon and when and where I bought it, as well as the name of a gorgeous red daylily that everyone would like to have, just to mention two of many omissions. Consequently, when friends ask me for a name, I am often at a loss to name it and names are so important in our gardening endeavors. Our journal has a lot of names of flowers and their bloom times. All that is needed is remember to fill in the cultivar information in the journal sections or to put the plant’s label in the pocket for later reference.

The journal is a great way to record what works and doesn’t work in the garden. If a plant doesn’t perform well or worse, dies for no obvious reason, you can so note it as well as recording those that perform well or better than expected. Journaling your garden should be fun as well as a record of your garden successes and failures.

A few of the features of our Valley Journal of Year-Round Blooms are:

- Information on UC Davis Arboretum’s All-Stars for the valley.
- How to create your dream garden.
- Flower seed planting and transplant schedule for most of our perennials and annuals plus October bulb plantings.
- A list of good reference books and websites for finding the information you need to become a better gardener.
- Winter, spring, summer and autumn pest patrol activities and pest management tips.
- Using California natives to promote sustainability.
- Recycling and reusing materials in the garden as well as trellising information.
- Selecting garden tools and tips on caring for them.
- Suggestions to attract beneficial insects.

In addition for each month, there are the following sections: **What’s Blooming**; suggested **To Do** chores; and a **To Plant** list of plants appropriate for planting that month. There are blank pages and grid pages for you to write, list, record and map your garden. It is a fine publication that this Master Gardener considers well worth the price. We will have copies for sale at our Master Gardening workshops. You can find more information and purchase the journal on line at the [Master Gardener’s website](#).
behavior is to remove all the urine and feces clumps from that area. Dirty job? Yes. Necessary? Absolutely!

The website Alley Cat offers these additional options:
- Scatter fresh orange and lemon peels or spray with citrus-scented fragrances. Coffee grounds, vinegar, pipe tobacco, or oil of lavender, lemongrass, citronella, or eucalyptus also deter cats.
- Plant the herb rue to repel cats, or sprinkle dried rue over the garden.
- Use plastic carpet runners, spike-side up, covered lightly in soil. They can be found at local hardware or office supply stores. Or, set chicken wire firmly into the dirt with sharp edges rolled under.
- Artfully arrange branches in a lattice-type pattern or place wooden or plastic lattice fencing material over soil. You can disguise these by planting flowers and seeds in the openings. You can also try embedding wooden chopsticks, pinecones, or sticks with dull points deep into the soil with the tops exposed eight inches apart.
- Obtain Cat Scat™, a nonchemical cat and wildlife repellent consisting of plastic mats that are cut into smaller pieces and pressed into the soil. Each mat has flexible plastic spikes that are harmless to cats and other animals, but discourage digging. Available here.
- Cover exposed ground in flower beds with large, attractive river rocks to prevent cats from digging. (They have the added benefit of deterring weeds.)
- Establish a designated litter box area by tilling the soil or placing sand in an out-of-the-way spot in your yard. Keep it clean and free of deposits.
- Apply cat repellent fragrances liberally around the edges of the yard, the tops of fences, and on any favorite digging areas or plants. Some of these are geraniums, lavender, garlic, lemon thyme, lemon verbena, pennyroyal, or rue.
- Install an ultrasonic animal repellent or a motion-activated water sprinkler, such as CatStop™ or ScareCrow™, available here.

**DOGS**

Dog urine and feces can often be frustrating problems related to lawn care. Small amounts may produce a green-up or fertilizer effect, while large amounts often result in lawn burn and dead patches. While most burn spots will recover with time and regrowth, dead areas can be large enough to require reseeding or resodding.

A strong concentration of nitrogen in a dog’s urine or feces is what causes the brown spots in a lawn. Urine is a bigger problem because it is applied all at once through urination as a liquid fertilizer. Feces, on the other hand, slowly releases the waste products over time. Also, stools are typically solid and can be more easily removed from the lawn. (NOTE: Animal feces should be disposed of in a sealed bag of some sort in your household waste, not added to your garden waste can.)

Young dogs of either sex frequently squat to urinate. At about one year of age, male dogs will begin to hike their leg and urinate on trees or bushes. Castration or neutering does not change this behavior. Once they begin this marking behavior, they will select many scent posts resulting in numerous, small volume urinations rather than large puddles. These small volume bursts are easier for your lawn to handle, but unfortunately, your young shrubs and trees may die from nitrogen overload from the repeated markings. Because female dogs squat, they are the primary culprits of burn spots in a lawn.
Dr. A. W. Allard, a Colorado veterinarian, examined numerous variations in dog urine and the effects on several common lawn grasses. Of the four grasses tested, *Festuca sp. Var. Kentucky 31* (fescue) and *Lolium perrenne* (perennial ryegrass) were the most resistant to urine effects. *Poa pratensis* (Kentucky bluegrass) and *Cynodon sp. var. Fairway* (bermudagrass) were very sensitive to any urine concentration and severe burns resulted, persisting greater than 30 days after initial exposure to even four ounces of diluted urine. Even on the fescue, urine concentration was a bigger problem than urine volume.

Where applicable, fences can be used to keep the neighbors’ dogs out of your yard. A polite reminder about the legality of leash laws may also help. Unfortunately, no repellents are universally effective although a variety of home remedies have been tried. Hot and bitter products are most likely to have taste or odor aversive properties to dogs. Some odor repellents may actually encourage a dog to overmark the strange smell. Motion-activated sprinklers may help in some yards.

One possible solution is to train your pet to eliminate in a designated area of the yard. This can be a landscaped area specifically designed for this purpose. Pea gravel or mulch can be placed on the ground and a marking post, such as a large bolder, bird bath, or lawn ornament can be added. Your pet can be taken to this area repeatedly during the day and encouraged to eliminate in his special area. His urine then becomes an odor attractant. Consistency for at least two to three weeks is important to establish this as a routine, trained behavior. Many dog owners train their dogs to eliminate on command. Key words such as “potty,” “piddle,” or “go pee” can be used to trigger urination.

Many dietary modification of additives have been tried, often based on home remedies. A veterinarian should always be consulted prior to trying any of these things. It has been found that the pH of the urine has little or no effect on lawn damage. Adding acidifying agents, including nutritional supplements like DI, Methioform, Ascorbic Acid (Vitamin C), or fruit juices will have no benefit for this problem and may predispose the dog to an increased incidence of certain bladder stones. Likewise, alkalinizing agents, including baking soda and potassium citrate can lead to bladder stones or infections. The addition of any of these supplements has enough potential to cause harm, with limited to no known benefit for the lawn, and are not recommended. A safer way to cause the urine to be more diluted is to feed canned food or moisten dry food with water prior to feeding and add salt or garlic salt to the regular food. While salt will make the dog drink more which dilutes the urine, increased salt intake can cause problems for dogs with existing kidney or heart conditions. Owners should not alter their dog’s diet without consulting with their veterinarian. Dog owners who actually note that their dog’s urine is no longer causing lawn burn, without having made any changes, should have their dog examined and a urinalysis performed to make sure there are no medical conditions causing this change.

The average family dog does not have the activity level that requires as high a protein level as most commercial maintenance dog foods provide. Although dog food purchasing often reflects the consumer perception that high protein equals better food, moderate to low protein foods are often adequate for all but the most energetic working and hunting dogs. When examining a food label, protein content must be compared on a dry matter basis and unfortunately, it is not like comparing apples to apples. Dry foods vary in how much moisture they have, so protein percent listed can’t immediately be compared to all other foods. Canned foods will have a much lower protein percent listed than dry foods, but also have a much higher water content.

The quality of the protein also has an impact since some are highly digestible, meaning less is dumped in the feces and urine than other proteins. In general, the premium and super premium pet foods, available from pet stores and veterinarians, will have higher quality protein and more digestible proteins than standard grocery store brands. This higher digestibility translates into smaller fecal size as well. In many cases, if a dog food is currently providing good, overall nutritional support for the pet, diluting the urine by simply adding water to the food may be the easiest place to start.

While a high fence and dog-less lifestyle can ensure that “female dog spot disease” is not a problem in your yard, the rest of us can have several practical options available to manage this problem. Communications should remain open whenever conflicts arise in this area. Coordinating a comprehensive program with your Master Gardener office or lawn care resource, and your veterinarian can keep your four-legged friend on good terms and out of the dog house, so that she, too, can enjoy romping in your well manicured yard. For more information click here.

Sources: www.AlleyCat.org
Interior plants are an ideal way to create attractive and restful settings while enhancing our sense of well being. In addition, houseplants can be a satisfying hobby and can help purify the air in our homes. Indoor plants not only convert carbon dioxide to oxygen, but they also trap and absorb many pollutants.

**Shopping for plants:** Purchase only healthy looking plants with medium to dark green foliage (unless foliage is supposed to be a different color). Avoid plants with unnaturally spotted, yellow, or brown leaves. Look for pests on the undersides of leaves. Remove the plant from the pot and examine the root system. Healthy roots generally should be visible along the outside of the soil ball and should have an earthy smell. Any discolorations, generally brown or blackened roots, are signs of problems. Unhealthy roots also may smell foul.

**Factors affecting plant growth**

**Light:** Of all of the factors affecting plant growth in interiors, adequate light is by far the most important. Light is needed for plants to produce food and survive — generally, the more light available, the more food produced for growth.

How can you tell if your plant is not receiving adequate light?
- The plant does not grow.
- The internodes (spaces between the leaves) on the new growth are much longer than the internodes on the older part of the plant.
- The new leaves are smaller than the older leaves.
- The leaf color is a lighter green on the newer foliage than on the older foliage.
- The older leaves are dead.

**Water:** Over-watering and under-watering account for a large percentage of indoor plant losses. Never permit the soil to dry out completely between watering; and never allow plants to stand in water for an extended time. Insert your index finger to the 1- or 2-inch depth and feel the soil to check for moisture. If the soil feels damp, do not water. Always water until a little water runs out of the bottom of the pot. This technique serves two purposes. First, it washes all the excess salts (fertilizer residue) from the soil. Second, it guarantees that the bottom two-thirds of the pot, which contains most of the roots, receives sufficient water. Do not let the pot stand more than several minutes in the water that has run out. Empty the saucer.

**Temperature:** In general, foliage plants grow best between 70º and 80ºF during the day and between 60º and 68ºF at night. Most indoor flowering plants prefer the same day-time range but grow best at nighttime temperatures of 55º to 60ºF. A cooler temperature at night is more desirable for plant growth.

**Fertilizer:** Commercial fertilizers used for house plants are sold as liquids, granules, crystals, or tablets that are mixed with water for application, or as slow-release crystals and pellets that are placed on the soil surface or incorporated into the soil. Each should be used according to the instructions on the package label.

**Soil:** The growing medium provides anchorage, water, and minerals. When repotting plants, make sure that the new mix is well drained and aerated, holds water and nutrients well, and is within the right pH range (5.0-6.5). A good potting mix provides ample amounts of oxygen to the root system. Most professional mixes are good to use. Some plants require special mixes, e.g., bromeliads, orchids, and African violets.

By following these guidelines you should have happy healthy houseplants. For more information on growing houseplants including plants lists, problems and other related topics [click here](#).
You don’t need a front row seat before the 6:00 o’clock news to know that the face of hunger within San Joaquin County has not only grown to epic proportions but may well include many who formerly considered themselves “middle class.” In the past year, there was a 20% increase in clients to the Emergency Food Bank from the prior year. In an economy that has spiraled downwards, our seniors, homeowners and working families have now become statistics of the growing number of “nontraditional” food pantry clients which are making difficult choices between the basic necessities of food, gas, health care and utility costs. Mounting food costs fueled by increasing transportation costs have left many in our area struggling to provide a basic three square meals a day.

The Emergency Food Bank of Stockton/San Joaquin County is not only fighting hunger, but feeding hope. This morning I am meeting Federico Navarro, the Nutrition Manager, and although the on-site food pantry opens at 10:00 a.m., the line is well established by 8:45 a.m. My first misconception becomes readily dispelled as I learn that this is much more than a center for handouts. The focus of operation here is to lend a hand through services that promote education and success. One such service is the Mobile Farmers’ Market which puts fresh produce out on the road to target the underserved population throughout our county five days a week. It visits 62 sites a month from Thornton to Tracy distributing seasonal produce including a 15 minute cooking demonstration of that month’s featured item. Creamy broccoli and cauliflower salad was the highlighted recipe for May while June highlights an Asian fusion inspired salad. There is also a program featuring “nutrition on the move” about making healthy eating choices and promoting a more active lifestyle to reduce disease and the mounting health risks of obesity, heart disease, and diabetes that plague our county.

The program that Federico has developed is the “growing greens eating lean program.” It is so easy to understand and one can’t help but become caught up in his passionate dedication towards promoting healthy food choices. This rapidly dispels my second misconception that food banks simply supply their clients with commodity foods that are often processed, nutritionally lacking and simply put for lack of a better term, filler foods. It is this newly established on-site program that truly can impact community members who seek food bank services by learning the basic skills and knowledge to create their own home garden. The newly constructed classroom has an adjoining state-of-the-art designed demonstration kitchen so that classes can transition from learning gardening techniques to the benefits of reaping the harvest. Clients can learn and listen to gardening and nutritional advice, and also taste the freshness of garden-to-table eating. Federico maintains choosing healthy lifestyle changes is all in the application and accessibility of making proper choices, and this program practices what they preach by providing local fruits and vegetables. The Emergency Food Bank is definitely promoting the concept of eating locally and growing your own.

The newly designed on-site demonstration garden is testimony that you can teach community members to garden and not only feed themselves but also their neighbors, who can then teach their neighbors to garden until you have a neighborhood of urban gardens all inspiring healthy eating and community pride. This demo garden is a work in progress of raised beds with drip irrigation illustrating that small space gardening maximizes production and varied produce whatever the season. Clients can take these sustainable gardening tips to their own backyards, small container gardens or even a culinary kitchen herb garden. This last day in May, the demo garden is showing the promise of corn, eggplant, watermelon, tomatoes, squash, rosemary, basil and mint, all the makings of a summer garden harvest! Currently Don Aguillard, a UC-trained Master Gardener, is collaborating with the Food Bank in promoting edible gardening.

In a county plagued by economic woes, I quickly understand that hunger does not take a holiday and that in these times it becomes essential to become more creative in not only securing food but providing nutritional choices central to healthy living. The collaboration of the Emergency Food Bank staff, board, volunteers and support of the community recognize that hunger and food insecurity are not a choice but a reality that they strive to diminish. Finally, the Food Bank is not a static system. They recognize the people they serve are in transition. The clients are in need of assistance, but are also hungry for knowledge, and that is also being fed. Providing educational services and assistance in making nutritionally healthy choices is the road to progress and feeds not only hunger but hope.

For more information on the  Emergency Food Bank Stockton/San Joaquin County
The Help Desk  Susan Price Master Gardener

Why am I getting so many weeds in my lawn? What can I do to prevent them from taking over?

New weeds show up in lawns with frustrating regularity. Weed seeds spread by wind, bird droppings, animals, vehicles and even the soles of your shoes. Shared lawn mowers and other garden equipment can also spread weed seeds between gardens. If your neighbor has a lawn full of California burclover, chances are some of those seeds have found their way to your lawn.

While a completely weed-free lawn is the stuff of dreams, if weeds are taking over your lawn there is usually an underlying problem. A healthy lawn, that is fertilized, mowed and watered properly, will naturally crowd out weeds. If weeds are invading your lawn, identify the weed species to get a clue to your specific site or soil problem. For example, crabgrass often takes hold in lawns that are overwatered, frequently light-watered, or mowed too short. These “hospitable” conditions cater to weeds that have shallow roots. The short mowing height allows light to hit the soil surface allowing the weeds seeds to sprout and grow. Correct the underlying problem by watering longer and less often and by increasing the mowing height. By contrast, other weeds might indicate low fertility, poor soil drainage or compaction.

Most weed invasions can be prevented with proper lawn care and good preventative practices or remedied with overseeding. Weeds have a hard time penetrating a thick, healthy lawn. A successful weed control program starts with knowing the weed you have and how it reproduces and spreads. Controlling occasional weeds by handpulling may be all that is necessary. Be sure to pull the entire weed, including the root. This is particularly important for preventing infestations of creeping wood sorrel, nutsedge, dandelion, spurge, dallisgrass, and bermudagrass. Remove weeds while they are still young and before they set seed or produce rhizomes or tubers. Remove small patches before they get large. Making this a regular habit will greatly reduce the number of weeds in your lawn.

If cultural and physical controls do not take care of the problem, herbicides may need to be used. Use chemical controls as a last resort and make sure the herbicide is labeled for the species of weed you are trying to control and one that is safe for use on your turf type. If you are unsure of what you are doing regarding type or amount of pesticide to use, check with a knowledgeable Master Gardener or a reliable professional before proceeding.

For detailed information on weed management in lawns, refer to:
- Weed Management in Lawns
- Weed Management in Lawns and Landscapes

For a wonderful tool to use to identify the weed species in your lawn, refer to:
- Weed Photo Gallery
### Mixed Berry Galettes

adapted from Baking with Julia by Dorie Greenspan  
Makes four 5-inch galettes

#### Ingredients pâte sucrée (crust)
- 2 cups flour
- pinch of salt
- 4 tbs. sugar
- 1 egg
- 4 oz. butter
- 1 tsp. vanilla mixed with 3-4 tbs. cold water

#### Filling
- 2 cups mixed berries, fresh (raspberries, blueberries, blackberries)
- 2 tsp. sugar
- 2 tbs. cold butter, cut into 16 pieces
- water
- 2 tsp. turbino sugar

#### Directions:
Mix the flour, sugar, and salt in a large bowl. Cut the butter into the dry ingredients to resemble coarse crumbs. Make a well in the mixture and add the egg. Mix the flour into the egg, incorporating more flour mixture and adding a tablespoon of water/vanilla at a time until the dough is moist enough to come together. Wrap the dough in plastic and place in the refrigerator for 30 minutes. Preheat oven to 350°F (or for 8500 ft. 375°F). Line a baking sheet with parchment paper. Remove the dough from the refrigerator and cut into four pieces. Roll each dough ball on a lightly floured surface into a disk about 6-7 inches in diameter and 1/4 inch in thickness. Place the dough on the parchment and pile 1/2 cup of berries in the middle. Sprinkle with 1/2 teaspoon of sugar and dot with four pieces of butter. Fold the edges of the dough up and over the edge of the berries (but don’t cover them up entirely, they’re prettier with the guts showing). Brush water on the edges of the dough and sprinkle with 1/2 teaspoon of turbino sugar. Bake for 20 minutes (23 minutes at 8500 ft.). Serve warm.
Coming Events

July

Saturday July 7, 10:30-12:00
Night Gardening, How to Grow a Night Garden  Lodi Public Library
201 W. Locust St, Lodi. Free.

Saturday, July 14, 2012  10:00 – 11:30 a.m.
San Joaquin Master Gardener Workshop: The Grass Could Be Greener On Your Side
San Joaquin County Historical Museum ($5 parking fee if not a member)
11793 N. Micke Grove Road, Lodi
All participants must register a week prior to the class by calling (209) 953-2055.
How to have a healthy yet sustainable lawn.

July

Charles Harder from the Valley Bonsai Club will be on hand both days to demonstrate the art of Bonsai.
Admission is FREE, Parking is FREE. Additional FREE parking is available at Sunset Office Plaza located at the NE corner of Concannon and Holmes - FREE SHUTTLES.

August

Saturday, August 4, 2012  8 a.m. – 2 p.m
Fair Oaks Horticulture Center Harvest Day 2012
11549 Fair Oaks Boulevard, Fair Oaks, 95628
(916) 875-6913
Sacramento’s biggest one-day gardening event. Featured speakers, demonstrations, educational booths, open gardens, produce tastings, a plant clinic, and more. Bring your questions and enjoy.

Saturday, August 11, 2012
San Joaquin Master Gardeners Workshop: Bulbs to Bloom
San Joaquin County Historical Museum ($5 parking fee if not a member)
11793 N. Micke Grove Road, Lodi
All participants must register a week prior to the class by calling (209) 953-2055.
Learn how to plant and care for bulbs.

Saturday August 18, 2012
San Joaquin Master Gardeners Workshop: Bulbs to Bloom
Manteca Library 320 W. Center Street, Manteca
All participants must register a week prior to the class by calling (209) 953-6100.
Learn how to plant and care for bulbs.

September

Saturday, September 8, 2012  10:00 – 11:30 a.m.
San Joaquin Master Gardeners Workshop: Designing with California Friendly Plants
San Joaquin County Historical Museum ($5 parking fee if not a member)
11793 N. Micke Grove Road, Lodi
All participants must register a week prior to the class by calling (209) 331-2055.
Natural setting, less water, beautiful yard – a great combination for a stunning landscape!

Saturday, September 8, 2012  11:00 am
Annie’s Annuals Presentation: ROOTS: What Every Gardener Should Know
740 Market Ave. in Richmond, CA 1.888.266.4370 Website
Take a look at your garden from the plants’ perspective! Chris Finch of the East Bay Municipal Utility District will give you a tour of the secret gardens under our soil. She’ll tell us about how roots travel, how they communicate and how their partnership with mycorrhiza has been helping you all along. Fascinating!

Saturday, September 15, 2012  10:00 – 11:30 a.m.
San Joaquin Master Gardeners Workshop: Designing with California Friendly Plants
Manteca Library
320 W. Center Street, Manteca
All participants must register a week prior to the class by calling (209) 953-6100.
Natural setting, less water, beautiful yard – a great combination for a stunning landscape!

Saturday, September 15, 2012  8:30 – 11:00 a.m.
Sacramento Master Gardeners Workshop: Create a Beautiful Landscape without a High Water Bill
Fair Oaks Horticulture Center
11549 Fair Oaks Boulevard, Fair Oaks, 95628
(916) 875-6913 Sacramento MG Website
Learn water-saving gardening techniques for creating a new landscape or renovating an existing site. UC Master Gardeners will share tips on plant selection, soil preparation, and site design. Tour the water efficient gardens, view plant groupings featuring both seasonal and...
Coming Events (Cont. pg. 14)

Oriental fruit fly quarantine in S.J. declared over

The 118 mile Oriental Fruit Fly infestation in Stockton has been eradicated and an end has been declared to quarantine restrictions on the handling and movement of fruit and vegetables from area farms and backyard gardens.

The Oriental fruit fly can target more than 230 fruits, vegetables and plant commodities. Damage occurs when the female lays eggs inside fruit, where they hatch into hungry maggots and tunnel through the fruit.

Homeowners no longer have to worry about spreading this unwanted pest by sharing home grown fruits and vegetables. Local farmers’ market attendees will also notice that growers will no longer be required to use netting around their booth and produce, which was part of the quarantine restrictions. For more info click here to go the Stockton Record article.

Saturday, September 29, 2012
San Joaquin Master Gardeners Smart Gardening Conference
Robert J. Cabral Center, 2101 E. Earhart Drive, Stockton 95206.
More information on this event will be coming soon on our website!!

Saturday and Sunday, September 22 and 23, 2012 11 a.m. – 5 p.m.
CA Native Plant Society Sacramento Chapter Plant Sale
Shepard Garden and Arts Center in McKinley Park, 3330 McKinley Blvd., Sacramento Website

Saturday and Sunday, September 22 and 23, 2012 11 a.m. – 5 p.m.
Livermore Amador Valley Garden Club Fall Garden Tour in conjunction with Quilting in the Garden at Alden Lane Nursery. 981 Alden Lane, Livermore (925) 447-0280 You can tour 10 gardens between 11 a.m. and 5 p.m. either day. Tickets are $25 and will benefit Livermore Amador Valley Garden Club. Watch for more information in coming newsletters and the Alden Lane website

Saturday, September 29, 2012 7:30 a.m. – 2 p.m.
Cornflower Farms Nursery Day
9811 Sheldon Road, Elk Grove
Shop from a selection of plants at the nursery
Talk to be announced at a later date.
(916) 689-1015 Website

Sacramento Master Gardeners Workshop: Herb Pruning, Worm Composting, Irrigation Tools
Fair Oaks Horticulture Center
11549 Fair Oaks Boulevard, Fair Oaks, 95628 (916) 875-6913 Website
Learn herb pruning techniques and all about composting with worms. Irrigation tools, focusing on meters, controllers, low volume systems, and scheduling. Learn why mulching your garden is important.

Saturday and Sunday, September 22 and 23, 2012 9 a.m. – 3 p.m.
CA Native Plant Society Sacramento Chapter Plant Sale
Shepard Garden and Arts Center in McKinley Park, 3330 McKinley Blvd., Sacramento Website

Saturday and Sunday, September 22 and 23, 2012 8:30 to 11:30 a.m.
Sacramento Master Gardeners Workshop: Herb Pruning, Worm Composting, Irrigation Tools
Fair Oaks Horticulture Center
11549 Fair Oaks Boulevard, Fair Oaks, 95628 (916) 875-6913 Website
Learn herb pruning techniques and all about composting with worms. Irrigation tools, focusing on meters, controllers, low volume systems, and scheduling. Learn why mulching your garden is important.

Saturday, September 29, 2012
San Joaquin Master Gardeners Smart Gardening Conference
Robert J. Cabral Center, 2101 E. Earhart Drive, Stockton 95206.
More information on this event will be coming soon on our website!!

Saturday and Sunday, September 22 and 30, 2012 10:00 a.m. – 5:00 p.m.
Annie’s Annuals Fall Planting Party
740 Market Ave. in Richmond, CA.
(510)215-3301 Website

year round beauty, and see examples of efficient irrigation. The workshops will feature key components of the 7 River Friendly Landscaping principles that enrich the home landscape, save water and reduce maintenance costs.
For additional information contact the UC Master Gardeners, 916-875-6913
Protect oaks. Make sure the ground under the canopy of mature native California oaks gets no irrigation, because summer watering can kill these trees. The danger of root rot is greatest when you water close to the trunk. If you can’t keep the entire area under the tree dry, be sure no water gets within 10 feet of the trunk.

Prune flowering vines. Summer pruning of new growth keeps vines under control and increases flowering next spring. To extend the height or length of the vine, select some of the new streamer-like stems and tie them to a support in the direction you wish to train the plant. Then cut back the rest to within 6 inches of the main branches.

Cut back Hydrangeas. Most Hydrangeas produce flowers on the previous year’s growth (a couple of exceptions are ‘All Summer Beauty’ and ‘Endless Summer,’ which bloom on new growth). To shape and control the plants’ size, and to avoid cutting off next year’s flower buds, prune stems back to 12 inches right after the blooms fade. Fewer, but larger flowers will grow next spring if you cut back some stems to the base of the plant.

Prepare beds. Before fall planting, amend soil with compost and soil conditioner. Worm castings, though expensive, are worth the price. Choose pure castings or a mix of castings and compost. Now is also a good time to start a worm bin, which will provide castings for spring soil amending. Information on worm composting can be found at our website.

Prune cane berries. Canes of single-crop blackberries and raspberries that have finished fruiting should be cut to the ground. Thin out the new growth, keeping the strongest canes — 5 to 8 per blackberry plant, 8 to 12 per raspberry plant — and removing the others. Prune ever-bearing varieties after the fall harvest.

Water citrus. Potted trees must be watered at least once a week, especially in summer heat, but mature citrus in the ground can go longer between watering. Check soil moisture at the root level — 18 or more inches down — with a moisture meter, and keep soil on the dry side of moist (the soil surface doesn’t need to be damp). Water deeply and slowly when necessary.

Plant more of your favorite perennials. Set out transplants of campanula, candytuft, catmint, Coreopsis, daylily, Gaillardia, sage (such as Salvia guaranitica), summer phlox, and Verbena.

Plant spring flower bulbs now. Bulbs appear in nurseries right after Labor Day. They’re most effective in big flower pots, and in kidney-shaped drifts at the front of garden beds. Some excellent choices include bluebells, daffodils, grape hyacinth, hyacinth, and yarrow.

Plant trees and shrubs. Shrubs, trees, and groundcovers get a head start when planted in fall: nature does most of the watering for you, and plants have fall (and winter in mild climates) to send out roots. Your plants will be well established by the time spring growth starts.
For cooling your house, plant a tree on the structure's southwest side, where it will provide the most-needed shade. Use a deciduous tree for summer shade and winter sun. Chinese hackberry, Chinese pistache, Gingko, Japanese pagoda tree, 'Raywood' ash, and red oak can be good choices.

Apply several inches of organic mulch around the plants (don't let it touch the trunks) and keep roots moist if rainfall doesn't do it for you.

Grow your own salad. Tasty blends of young leaf vegetables are easy to grow. By sowing seeds every few weeks during fall and spring, you can harvest fresh salad greens over a long season.

MAINTENANCE
Fertilize the lawn. Early fall feeding thickens top growth to crowd out weeds and strengthens grass roots for winter. Combination lawn fertilizers are a good choice. They contain a small amount of fast-release nitrogen for a quick green-up, and a larger portion of slow-release nitrogen. By regularly using a mulching mower, which chops the grass blades into fine pieces, and leaving your grass clippings on the lawn to decompose and release nitrogen into the turf, you can eliminate one lawn feeding or more per year.

Melons may be at their peak this month, but when should they be harvested? Cantaloupe is fully ripe when it pulls off the stem easily (it “slips” from the vine). With other kinds of melons, a strong, pleasant aroma at the blossom (not stem) end is the best indicator of ripeness. A watermelon is a bit more difficult, but good indicators of ripeness include: The ground spot (the underside where the watermelon laid on the ground) turns from white to pale yellow; the tendril opposite the stem of the melon has dried and withered; the skin of the watermelon has turned from shiny to dull; and there is a dull “thunk” when the melon is rapped with your knuckles in the morning.

Information for this article has been gathered from:
www.ucanr.org
www.ipm.ucdavis.edu
www.sunset.com/garden
www.farmerfred.com

Do you enjoy gardening? Do you enjoy learning? Do you live in San Joaquin County? Are you willing to volunteer your time and talent?

If you answered yes to these questions the Master Gardener Program may be for you.

We are now accepting applications for the 2013 Master Gardener training. You can find an application and more program information here.

Details regarding the starting date, time and cost will be going out soon.
Send in your application and we will contact you with the specifics.
The University of California prohibits discrimination or harassment of any person on the basis of race, color, national origin, religion, sex, gender identity, pregnancy (including childbirth, and medical conditions related to pregnancy or childbirth), physical or mental disability, medical condition (cancer-related or genetic characteristics), ancestry, marital status, age, sexual orientation, citizenship, or service in the uniformed services (as defined by the Uniformed Services Employment and Reemployment Rights Act of 1994: service in the uniformed services includes membership, application for membership, performance of service, application for service, or obligation for service in the uniformed services) in any of its programs or activities.

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University policy is intended to be consistent with the provisions of applicable State and Federal laws.

Inquiries regarding the University’s nondiscrimination policies may be directed to the Affirmative Action/Equal Opportunity Director, University of California, Agriculture and Natural Resources, 1111 Franklin Street, 6th Floor, Oakland, CA 94607, (510) 987-0096.
Brown Marmorated Stink Bug

The brown marmorated stink bug (BMSB), Halyomorpha halys, has been detected in California. Wherever BMSB takes up residence, it causes severe crop and garden losses and becomes a nuisance to people. The ability of BMSB to hitchhike in vehicles and planes has allowed it to spread rapidly to new areas. Since it was introduced to the United States from Asia in the 1990s, BMSB has become established in the mid-Atlantic States as well as in Portland, Ore., and Los Angeles.

How to identify BMSB

- **EGGS** Laid in clusters of 20 to 30 on underside of leaves, barrel-shaped, white to pale green
- **YOUNG NYMPHS** Abdomen orange with brown markings
- **ADULT** Blue-green metallic depressions on head and shoulder
- **MATURE NYMPH** Spines in front of eyes and on shoulder edges, Rust color with broad brown markings
- **BANDED LEGS**
- **MARBEL LEGS**
- **SMOOTH "SHOULDER" EDGES**
- **BANDED ABDOMINAL EDGE EXTENDING BEYOND WINGS**
- **BANDED ANTENNAE**

Impact of BMSB on crops and people

- **CROP DAMAGE** BMSB may reach very high numbers, and since one bug can feed on many fruit, losses can be severe. Adults and nymphs suck juices from fruit and seeds, creating pockmarks and distortions that make fruit and vegetables unmarketable. Damaged flesh under the skin turns hard and pithy. BMSB damages fruits (e.g., apple, pear, citrus, stone fruits, and fig), berries, grapes, legumes, vegetables, and shade trees.

- **NUISANCE TO PEOPLE** BMSB seeks winter shelter, and large numbers may congregate on outside walls or invade homes by entering through small openings. It is also a pest in home gardens. These insects stink when disturbed.

How it spreads

BMSB travels long distances by hitching rides in vehicles or as stowaways when furniture or other articles are moved, often during winter months. As a result, most new infestations are found in urban areas.

Report any sightings

If you find a stink bug that you suspect might be a BMSB, place it in a container and carefully note where and when you collected it. Take the sealed container to your county agricultural commissioner or local UC Cooperative Extension office.

For more information, visit www.ipm.ucdavis.edu.
Law enforcement agencies throughout San Joaquin County will be hosting collection events on September 29, 2012. Prescription drugs and medical sharps will be accepted. Locations and instructions will be available at www.BeGreenSanJoaquin.org.

Unused or expired prescription medications are a public safety issue, leading to accidental poisoning, overdose, and abuse. Pharmaceutical drugs can be just as dangerous as street drugs when taken without a prescription or a doctor's supervision. The non-medical use of prescription drugs ranks second only to marijuana as the most common form of drug abuse in America. The majority of teenagers abusing prescription drugs get them from family and friends – and the home medicine cabinet. Unused prescription drugs thrown in the trash can be retrieved and abused or illegally sold. Unused drugs that are flushed contaminate the water supply. Proper disposal of unused drugs saves lives and protects the environment.

Take-back programs are the best way to dispose of old drugs. But if a program is not available:
- Take the meds out of their bottles;
- Mix them with something unappealing like used kitty litter or coffee grounds;
- Seal them in a bag or disposable container, and throw that away.

For more information on prescription drug abuse, go to:
- www.dea.gov
- www.getsmartaboutdrugs.com
- www.justthinktwice.com

Prescription drugs and medical sharps are accepted from County residents for FREE at the San Joaquin County Household Hazardous Waste (HHW) facility. Find directions and hours of operation at www.BeGreenSanJoaquin.org.