Coordinator Corner

Marcy Sousa, Master Gardener Coordinator

Trying to find something to do to beat the heat? Our Master Gardener newsletter is jammed packed with helpful tips and articles. Grab a cool drink, sit down and relax with the newest issue of Garden Notes.

We just completed a 19 week Master Gardener Training and I’m excited to have 43 new volunteers that have joined our program! Our Master Gardeners have been hosting information booths at the local farmers’ markets in Stockton and Tracy. If you are there, swing on by and say hello! Our public workshops are in full force (see the calendar at the end of this newsletter) We are getting ready plan our fall Open Garden Day and our next Smart Gardening Conference, so stay tuned for those details. July marks the beginning of a new calendar year for our program. Since July of 2007, our Master Gardeners have volunteered over 46,000 hours and have earned over 13,500 hours of continuing education. We are growing in our outreach and projects that we are involved in. Make sure to give us a call if you need help with a local gardening project.

Happy Gardening!

Class of 2017!

Pet Friendly

Corinne Bachle, Master Gardener

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 difficult 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 behavior is to remove all the urine and feces clumps from that area. Dirty job? Yes. Necessary? Absolutely! The website www.AlleyCat.org 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
Summer Garden Chores

Sue Davis, Master Gardener

A few ideas about timely things to do in your garden may help keep your garden and landscape healthy and attractive during our hot, dry summer.

July Ideas

**Plant**

*If you are growing your own vegetables,* keep your vegetable plot healthy by planting flowers nearby that attract beneficial insects. Good options include coreopsis, cosmos, goldenrod, marigolds, sunflowers, and yarrow. Dill, golden marguerite, coriander, and Queen Anne’s lace are especially attractive to lady bugs. Plant the flowers in clusters near your vegetable plot and water with a drip line. If you haven’t already set up a drip system with a controller, you’ll want to do so right away to conserve water and still enjoy delicious edibles.

*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**

*Mulch* if you haven’t already done so. 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 the mulch against stems and trunks of plants.

*Summer watering can kill mature native California oaks.* If you can’t keep the entire area under the tree dry, be sure no water gets within 10 feet of the trunk. The danger of root rot is greatest when the area near the trunk is wet.

*Every other week (14 days), deeply irrigate* mature fruiting and most ornamental trees if you have clay-loam soil. Irrigate 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. Check your container plants daily.

*Apple, peach, pear, and plum* trees may be laden with fruit this month. To prevent limb breakage, use wooden supports to brace sagging branches. Regularly clean up and discard fallen fruit to discourage diseases and pests.

*Mophead Hydrangeas* (those with the big, round blooms) produce flowers on the previous year’s growth – the “old wood.” To shape and control the size of a mature plant (5 years or more) and to avoid cutting off next year’s flower buds, prune stems back to 12 inches right after the blooms fade this month. Fewer, but larger flowers will grow next spring if you cut some of the stems back to the base of the plant.

*Prune flowering vines* such as wisteria, passion vine, or Hardenbergia. 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.

*A quick irrigation audit* of your lawn area will be worthwhile to determine if your sprinklers are matched and working properly. There have been numerous efficient sprinklers introduced in the last few years. Some only require a change of the nozzle, not the entire sprinkler head when repairs are needed. Check with your local water provider to see if they are offering partial or complete rebates for changes to efficient sprinklers. Information on checking the output of your lawn sprinklers can be found here.

*Lawn disease or pest problems* will usually appear as spots that have a more defined edge to the damaged area. If a pest is the problem, it will most likely be found in the green grass just outside of the damage. Evidence of caterpillars or their scat, or grubs can be found just under the surface of the green grass right outside of the damaged area. If the brown area is not spreading, treatment to destroy the pests is unnecessary. It won’t bring back dead spots and the pest is probably gone. If pest problems persist, look into what cultural changes you could make to reduce susceptibility in the future.

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

In August

**Plant**

*Choice perennials* for late-season color in our area include aster, chrysantheum, coreopsis, daylily, gaillardia, sage (such as *Salvia guaranitica*), summer phlox, and verbena.

*Sow root vegetable seeds* for fall and Continued on pg. 16
Barn Owls Find a Home at the Port of Stockton

Anyone traveling through the farmlands of the San Joaquin Valley will surely notice the large wooden boxes perched high above crop fields. Most likely those are owl boxes and are common on any farm.

In recent years, the Port of Stockton has gained notoriety for educating the community about the importance of those boxes and their inhabitants as part of its Barn Owl Nest Box Program. The program began in 2014 as an experiment to reduce the loss of barn owls and control the rodent population.

Occasionally, it’s necessary to demolish old and dilapidated Port buildings that often serve as nesting sites for barn owls. The Barn Owl Nest Box Program was implemented with the primary goal of providing suitable nesting locations to increase the barn owl population.

Rodent control is a serious issue at the Port where significant quantities of rice, corn, animal feed, etc., are transported and rodents feed upon. Additionally, the Port is surrounded by levees. Left unchecked, rodents such as gophers and ground squirrels dig holes that threaten the levees’ structural integrity. Promoting the owl population provides a natural control of the rodent population without toxic rodenticides.

Barn owls, known for their white, heart-shaped faces, are natural rodent predators. They hunt at night and seek prey by flying low over open ground, watching and listening. They have good eyesight but rely mostly on their sense of hearing with one ear located higher than the other. The left ear captures sounds below while the right ear focuses on sounds from above.

A male and female barn owl will mate for life. Their chicks will brood for about two weeks and are fledged in 50 to 55 days. They’ll remain near the nest to learn hunting skills before leaving. Young birds are able to breed at about 10 months.

Barn owl nesting season typically begins in November and baby owls usually leave the nest by June. On average, the Port’s barn owl population consumes approximately 40,000 rodents annually. Port employees have reported a noticeable decline in the rodent population since installation of the boxes.

The barn owl nest boxes are used year after year and the Port estimates the boxes have housed more than 300 new owls. Each nest box is inspected annually to assess its condition. They’re cleaned and if needed, repairs are made. Box inspections will determine if they were used to rear young during the previous breeding season and if not used, Port staff may decide to relocate the nest box to promote breeding.

Thus far, the Port has installed 20 barn owl nest boxes at various locations. The Port has found the nest boxes to be a very effective, environmentally friendly, and cost-efficient method to control the rodent population.

The Barn Owl Nest Box Program has resulted in much public interest. In the pilot project, the Port installed infrared video cameras in three of the nest boxes. In 2015, in response to overwhelming public interest, the Port added three exterior cameras to the same boxes. All cameras are equipped with infrared vision for night viewing when owls are most active.

Cameras stream live to the Port’s website so the public can follow the adult owls nesting and the growth of owl chicks in the safety and comfort of their nest boxes. The public can view live stream video of the owls in and outside of their boxes, here.
Blossom End Rot

Blossom end rot is not a disease but a very common environmental disorder many gardeners see every summer. It affects tomatoes, peppers, and cucurbits. Plants with blossom end rot show small, light brown spots at the blossom end of immature fruit. The affected area gradually expands into a sunken, leathery, brown or black lesion as the fruit ripens.

Blossom end rot results from a low level of calcium in the fruit and water balance in the plant. It is aggravated by high soil salt content or low soil moisture and is more common on sandier soils. To reduce rot, monitor soil moisture to make sure that the root zone neither dries out nor remains saturated. Follow recommended rates for fertilizers. Some varieties are more affected than others. The disease is not caused by a pathogen; there are no pesticide solutions. For more information, click here.

Stink Bugs

Two of the most common pests in California gardens are the consperse stink bug and the harlequin bug. Stink bugs attack a variety of fruits and vegetables from stone fruits to pears to beans to tomatoes, often leaving blemishes, depressions, or brown drops of excrement. On green tomatoes, damage appears as dark pinpricks surrounded by a light discolored area that remains green or turns yellow when fruit ripen. To manage these pests, handpick bugs or their eggs. Eliminate groundcovers or weedy areas to prevent population build up. Insecticides are generally not recommended in gardens for stink bugs. Parasites and general predators may contribute to control. For more information, click here.

Johnsongrass

Family: Poaceae

Johnsongrass, a coarse and generally clumping grass that can grow to 6 ft tall and has tillers that come from the crown. The seedlings resemble young corn seedlings. It is one of the most troublesome of perennial grasses. It grows best on fertile, moist, well-drained soils where some warm-season moisture is available. Johnsongrass reproduces both by seed and vegetatively from rhizomes. Dormant seed can survive for at least 6 years under prime conditions, and it has been estimated that some seed may remain viable for up to 15 years. Johnsongrass grows rapidly, is highly competitive with other plants, and can be difficult to control. Hand pulling is effective if all rhizomes are removed and new sprouts are controlled. Large mature plants are almost impossible to pull by hand. Rhizomes break easily and are often left in the soil where they will re-sprout. Best results are obtained in early spring when soil is moist and rhizomes are least likely to break. For more information, click here.
Tree:

**Pineapple Guava (Feijoa sellowiana)**

This small, multi-trunk tree has attractive, shiny, evergreen foliage (with whitish undersides), a rounded shape, pleasant fragrant flowers, and even edible fruit. Pineapple Guava grows at a rate of approximately 24 inches per year and will reach a height of 18 to 25 feet with a corresponding width of 18 to 25 feet. The tree flowers in spring with showy, fragrant purple, red, or white blooms. The 1.5- to 3-inch gray or mostly green edible berries ripen in fall or winter.

Once established, the Pineapple Guava does not require a lot of care other than an occasional pruning to thin out excessive growth. The tree does best in full sun to partial shade with moist to dry soil. It can thrive in clay, loam, or sandy soils with a soil Ph ranging from slightly acidic to highly alkaline. Often used as a natural screen or a hedge, this beauty is drought tolerant and attractive to bees and birds.

Shrub:

**Valley Violet (Ceanothus maritimus)**

Valley Violet ceanothus is a California native shrub featured as a UC Davis Arboretum All-Star. The All-Stars are the top 100 recommended picks for California gardens. They are tough, reliable plants that are easy to grow, conserve water, are resistant to most pests and diseases, and support native birds and insects.

Valley Violet prefers full sun to partial shade and requires very little water once established. Although only growing to about 3 feet in height with a spread of 3 to 4 feet, it is covered in spectacular purple flowers in the spring while maintaining interest throughout the summer months with rich, green foliage. This mounding shrub needs no pruning and enhances the health of your garden by attracting beneficial insects, butterflies, and bees.

Bulb or Corm:

**Peacock Orchid (Gladiolus murielae)**

Planted in the spring, this tall (35") Gladiola produces multiple elegant white blooms with a deep burgundy blotch at the base of each petal on long, curving stems. The blooms are deeply scented adding an extra dimension to end-of-summer bouquets.

These plants produce a showy display when planted in groups of up to 9 bulbs per square foot in various spots around the garden or in strategically placed pots. They are easy to grow, excellent as cut flowers, have an extended bloom time of more than 4 weeks and even attract hummingbirds. They prefer full sun, average soil with good drainage, and like to be kept moist.
Anything used to cover the surface of the soil is called mulch. It may be inorganic, like rock or chipped rubber; it may be organic like straw, shredded leaves, chipped wood or bark. Mulch is often confused with compost, but while compost may be used as mulch, its primary use is as a soil amendment. Larger sized organic materials used for mulch, however, generally should not be dug into the soil.

**Why mulch?**

Much research has been done over the years to determine the effects of using different types of mulch. The following benefits of organic mulch have been repeatedly confirmed:

- **Less water is lost from the soil.** With the surface covered, less evaporation happens, thereby reducing your water need.
- **Soil temperatures fluctuate less.** Soil stays cooler in summer and warmer in winter. This is a healthier environment for root growth and function, and fewer plants die from heat stress or frost damage. This is especially important for shallow-rooted plants.
- **Weeds are reduced.** Excluding light reduces the number of weed seeds that sprout, and those that do are easier to remove.
- **Water infiltration increases.** Covering the soil surface prevents the crusting that causes water to run off before infiltrating.
- **Soil and plant health is improved.** Soil structure, nutrient levels, beneficial microbial activity, and other factors of soil health are all increased over time with the use of organic mulch.

**Organic vs. Inorganic**

Although inorganic mulch may have some of the same benefits as organic (reduced water loss and weeds), it does not add anything to the soil’s health over time.

Rocks are appropriate for specific landscape situations, such as dry river beds, sections for succulents and other rock garden plants, or gravel for paths that allow water to infiltrate. Rocks absorb and hold a great deal of heat, and care should be taken to locate only heat-tolerant plants in or adjacent to rocks.

Rubber mulch application should be reserved for under jungle gyms where its greatest feature, shock-absorbency, can be of use. It adds nothing beneficial to the soil, and may release toxic heavy metals into the soil or runoff water, especially if the source of the rubber is recycled truck tires.

**What’s the best source?**

**The North County Sanitary Landfill** contracts the recycling of all wood and green waste delivered to the site. A wide variety of high quality chipped and screened products is available for sale there at very reasonable prices. They are located at 17720 E. Harney Lane in Lodi, and are open the same hours as the dump: Monday - Friday, 7-4; Saturday, 8-4.

**Harney Lane** in Lodi, and are open the same hours as the dump: Monday - Friday, 7-4; Saturday, 8-4.

The best source is the one you can afford that also meets your needs. Several landscape supply businesses around the county have variously sized products for sale by the cubic yard. Most deliver and waive the delivery fee for yardages over a certain minimum. Additionally, many tree service companies will dump their chipped load for the day on your property at no cost. Contact local companies directly to make arrangements for when they are in your area.

**What type and how deep?**

Larger chunks stay put in windy areas and are perfect for large-scale landscapes and for under trees. The weight and size, however, can cause them to roll off steep slopes. With large shrubs and trees, a 3 to 4-inch layer should last about 3 years before needing to be topped off. Be sure to keep the mulch at least 3 to 12 inches from the base of the trunks to prevent rot.

The shredded “gorilla-hair” type product weaves together and holds best on slopes. Smaller bark nuggets or chipped wood work nicely in beds with smaller or delicate plants like annuals or tender perennials. A **Continued on pg. 11**
Praying mantises can be difficult to spot due to their superb camouflage colors: twig brown, leafy green, or mottled. But once you see a praying mantis, it’s unlikely you’ll mistake it for any other creature because its appearance is so distinctive and otherworldly. The large, triangular head with oversized compound eyes, long antennae, and powerful mandibles (chewing mouthparts) is almost alien in appearance. Match this with a thin, tapered body, powerful, spiny front legs, and long, spindly rear legs, and you have an insect that looks like no other.

Female praying mantises are generally much larger than the males, both in length and girth. A male praying mantis has a slim thorax (the middle body section to which all legs are attached) and abdomen (the third and last body section). A female praying mantis also has a slim thorax, but the abdomen is much thicker, and it will grow to be very bulbous when she is ready to lay eggs. The male member of a just-mated pair would be wise to run away quickly after “the act,” because female praying mantises are known to engage in the disturbing practice of sexual cannibalism, often biting off their partners’ heads then gobbling up the rest.

Shortly after mating, a female praying mantis searches for a sturdy twig, stem, or other surface on which to fashion an egg case or “ootheca,” a word that’s derived from the Greek word for egg (“oo”) and the Latin word for case or receptacle (“theca”). She slowly exudes a foamy substance from her ovipositor, laying eggs along with the foam to create a neatly formed capsule. Over a few hours, this hardens into a tan or brown protective covering containing numerous eggs. A female will deposit anywhere from one to five egg cases in her single year of life. Adult praying mantises die when temperatures drop below freezing, but the egg cases protect the new generation through the winter, and the eggs hatch when temperatures warm in the spring.

Praying mantises develop from egg to adult without undergoing a larval stage, in a process called incomplete metamorphosis. Each egg hatches to release a miniature praying mantis nymph that resembles a fully-grown adult. Approximately 100 to 200 baby mantises emerge from a single egg case. The little nymphs feed voraciously on any living morsel they can capture, including each other. They shed their hard exoskeletons many times over four to six months while maturing to full size.

Praying mantises belong to the order Mantidae (mantids), a collection of slow-moving insects with enlarged front legs. Ancient Greeks thought these creatures possessed magical powers, hence the name mantis, which means “diviner.” Their habit of resting motionless with front legs folded together, or swaying back and forth with “arms” outstretched, resembles an expression of reverence, but the synonyms “praying” and “preying” are both appropriate for this unique creature.

Praying mantises are generalist predators who wait for prey to approach; they will ambush, capture, and devour any insect that comes within grasping range. Unfortunately, this means that they will eat beneficial insects such as honeybees, native bees, lacewings, and butterflies. Despite this fact, they’re still considered to be helpful insects themselves, because they do help keep pest populations under control.

When immature, praying mantises feed on small, tender insects such as aphids, caterpillars, leafhoppers, mealybugs, thrips, and whiteflies. Fully-grown praying mantises will eat cockroaches, crickets, flies, grasshoppers, katydids, mosquitoes, moths, and an assortment of other prey. After snaring an insect in its powerful front arms and holding it tightly in a vise-like grip, a praying mantis will bite off its victim’s wings, then proceed to munch methodically on the rest of the body.

Although some species of praying mantises have wings, they prefer to walk slowly among sheltering plants, and will usually take to the air only if threatened (or, in the case of males, to find a mate). They can also sprint very quickly if disturbed, as anyone who has ever held a praying mantis can attest!

Remember that pesticides—particularly “broad spectrum” pesticides that target multiple pests—are harmful to these and all other beneficial insects. Minimize or eliminate the use of pesticides, and instead, implement sustainable gardening practices to encourage soil health, improve plant vigor, and protect helpful organisms. In this way, you can create a beautiful setting while avoiding many pest problems!

For more about praying mantises, see the Oregon State University publication “Praying Mantis.” For fascinating photography of praying mantis egg laying and hatching, see this YouTube video.
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 ageing 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 for simplifying the garden “without detracting from its aesthetic appeal.” One should consider low maintenance, sustainable plants and the 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 own 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.

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.

Enjoy!

Patty Cassidy is a registered horticultural therapist and master gardener. She oversees therapeutic gardening programs for senior gardeners.
Edible Flowers
Fresh flowers in a vase are common, but edible flowers are often overlooked as a tasty addition to your summer table. Now might be a great time to take advantage of opportunities for collecting and preparing edible flowers.

There are several ways to use flowers in food: freeze small flowers in ice cubes for herbal teas or lemonade, toss petals or leaves on fruit or green salad, float them on top of cold soups, add them to butter, or infuse them in vinegar or oil. Large blossoms lend themselves to being stuffed with cheese and herb mixtures, then served fresh, baked, or steamed.

Before you venture into any of the following ideas for preparing flowers for cooking or eating, be aware of these General Rules:

- Not every flower is edible; some can make you very sick. When in doubt, do NOT eat it.
- If you grow the flowers in your own garden, do not use chemicals and pesticides on them.
- Never collect flowers growing by the roadside.
- Use edible flowers sparingly; some of them can provoke digestive complications.
- Pick young flowers early in the day so the colors and flavors will be at their peak.
- Use flowers as soon as they are harvested.
- Beware of bees.
- Remove small insects by putting flowers in cold water with a dash of salt. Dry them on paper towels.
- Some can be dried or frozen for use later in desserts or infusions.
- People with pollen allergies should not eat flowers.

Edible flowers you might find in your garden:

- **Calendula** petals can be added to many foods, including muffins.
- **Chrysanthemum** is great for coloring cream soups egg dishes.
- Daisy petals make an interesting garnish for fresh salads and cakes.
- **Daylily (NOT other lilies)** enhances salads and omelets. Hibiscus makes a refreshing citrus tea.
- **Hollyhock**’s crystalized petals can be used to decorate cakes and other desserts. (See below for crystallization instructions.)
- **Lavender** is one of the most versatile of the edible flowers. It’s often used in shortbread cookies, cakes, and biscuits, as well as roast pork, lamb, or chicken. Keep a glass jar of powdered sugar with a few sprigs of lavender flowers -- it makes a nice ‘dust’ for many sweets.
- **Nasturtium**’s flowers are good in pasta and fresh salads.
- **Marigolds** are useful in soups and puddings. Dry the petals and make flavored vinegar, oil, or butter.
- **Rose petals** can be crystalized and used to flavor drinks, sugar and icing for cakes
- **Sweet Violet** is good for either sweet or savory dishes. Keep candied violets and pansies on hand as a garnish on soufflés and desserts.
- **Apple Blossoms** enhance fruit dishes and they can easily be candied and used as a garnish with many dishes.
- **Fuchsia blooms** have a slightly acidic flavor. The graceful shape and great colors make it an ideal garnish. The berries are also edible.
- **Squash Blossoms** can be fried (after either dipping in batter or stuffing with cheese and herbs) baked, or steamed (also stuffed with cheese and herbs); served over pasta, risotto, or salad; chopped and added to quesadillas; and as a topping for soups.

How to Crystalize or “Candy” Flowers

1 egg white (or powdered egg white, mixed according to directions).
1 cup superfine granulated sugar
Assorted blossoms and/or leaves
1 small artist’s paintbrush
Waxed paper

Beat egg white until frothy. Using paintbrush, paint egg white onto blossoms and leaves. Place on waxed paper. Sprinkle sugar over all. Let dry at least 24 hours. Store between layers of waxed paper in airtight container until needed.
Spring and fall are the best times for the showy flowers in our garden but there is still lots to enjoy during the summer heat! The Golden Rod is starting to push out vibrant yellow flowers and was covered in multiple pollinating insects when I took pictures. The ornamental grasses are also putting on quite the show! Stop by and see the beauty of our garden, come for a visit anytime! It is located at 2101 E. Earhart Avenue, Stockton, and is open to the public at no charge. Photos from left to right, **Oriental fountain grass**, *Pennisetum orientale*; **Feather Reed Grass**, *Calamagrostis x acutiflora ‘Karl Foster’*; **Goldenrod** *Solidago californica ‘Cascade Creek’.*

You May Be Addicted To Gardening If...

- You grab other people’s banana peels, coffee grinds, apple cores, etc. for your compost pile.
- You have to wash your hair to get your fingernails clean.
- Your boss makes “taking care of the office plants” an official part of your job description.
- You buy a bigger truck so that you can haul more mulch.
- You rejoice in rain…even after 10 straight days of it.
- You understand what IPM means and are happy about it.
- You can’t bear to thin seedlings and throw them away.
- Your preferred reading matter is seed catalogs.
- You’d rather go to a nursery to shop than a clothes store.
- You plan vacation trips around the locations of botanical gardens, arboreta, historic gardens, etc.

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. [Click here for more info.](#)
2- to 3-inch layer will provide benefits without smothering plants. Be aware that it will break down and need to be replaced about every other year. In very windy sites, it may also be prone to blowing away.

**NEVER USE MULCH RIGHT NEXT TO THE STREET CURB.** This is a violation of the state’s Water Efficient Landscape Ordinance: In heavy rains the mulch floats away, clogging storm drains and adding an excess of solid material if carried into the stormwater system.

**USE BLACK-DYED MULCH ONLY IN SHADE.** If used in sun, the mulch absorbs heat and actually raises soil and surface temperatures high enough to scorch plant leaves it contacts.

**MULCH LARGE LANDSCAPE POTS AND PLANTERS.** Though often overlooked, large landscape pots used in commercial developments for small trees, shrubs, topiary, or seasonal color benefit greatly from the addition of a 1- to 2-inch layer of organic mulch. Water use is significantly reduced by covering the pot soil. It also hides drip heads and reduces losses from the occasional “shooting” dripper.

**How much do I need?**

There are on-line calculators that will tell you how many cubic yards you need depending on how deep you want the material. You can calculate it yourself easily if you know the area in sq. ft.:

\[
\text{CUBIC YARDS} = \left( \text{Area in sq. ft.} \times \text{(#in. deep)} \right) \div 324
\]

*Example*: \((9' \times 25') \times (3’ \text{ deep}) \div 324 = 225 \times 3 \div 324 \approx 2 \text{ cubic yards}\)

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**Horticultural Terms: Barriers**

Normally when we think of garden barriers, we may think of fencing as a way to keep children or pets out of our garden. For those of us who garden organically, keeping pests away from our fruits and vegetables is even more important.

There is a new product to foil the apple maggot and codling moth, so I thought I would try them. They are called Maggot Barriers. They look like pantyhose for apples. They are closed on one end and open on the other. After slipping the nylon cover over the apple, you will need to twist the top to secure it. I did this at the same time that I was thinning the fruit. They stretch as the fruit grows, and should protect it until harvest. I prune my trees to keep them small and to limit the amount of fruit I get from each variety. If they were large trees this product would not be practical.

Another item I’m trying this year is fabric insect netting which is a see-through mesh cloth. Sunlight and water can go through it, but insects and birds cannot. The barrier can stay on spinach, chard, brassicas, carrots, lettuce, beets, and other vegetables until harvest. On plants that set fruit, the barrier can be used at the beginning of the season to protect the plants while they are young. The fabric would need to be removed from the plants when they start to flower so the bees and other beneficial insects can pollinate the flowers.
What's Eating My Flower Buds?

During summer in San Joaquin Valley, bright flowers such as roses, geraniums, petunias, nicotiana, and bougainvillea attract compliments, but also attract some unwelcome pests. There are several species of caterpillar worms that wreak havoc by eating buds of these flowers from inside out.

**What are budworms and what do they do?**

After mating, a female moth lays her eggs on some of your pretty flowers, and when the eggs hatch a few days later they eat voraciously. While they are feeding, the caterpillars chew irregular holes in leaves or blossoms, or entirely eat flowers and flower buds. The first sign budworms have moved into your garden is buds that don't open into flowers, small holes in flowers or buds, or frass ("poop") on leaves.

**Treating for Budworms**

The first choice is to let nature take its course. Plants can tolerate substantial leaf damage, and natural predators may reduce budworm populations. A second step is to handpick caterpillars at dusk when they are most active and drop them in soapy water. If they are still intolerable, try a microbial insecticide that doesn't harm beneficial insects — Bacillus thuringiensis subspecies kurstaki (Btk) kills only caterpillars. However, Btk has a short life and requires frequent spraying. If nothing else seems effective, use synthetic pesticides early in the morning before pollinating bees are active. Replacing soil in containerized flowers discourages pupating in the soil. Keeping plants healthy with adequate water and fertilizer and deadheading spent blooms allows plants to outgrow damage and produce new blooms.

**Resources**

b) [http://www.ipm.ucdavis.edu/QT/lfcaterpillarscard.html](http://www.ipm.ucdavis.edu/QT/lfcaterpillarscard.html)
c) [http://Extension.colostate.edu/topic-areas/insects/tobacco-geranium-budworm-5-581/](http://Extension.colostate.edu/topic-areas/insects/tobacco-geranium-budworm-5-581/)
**Caprese Garlic Bread**

*Ingredients*

- 1 loaf French bread or baguette
- ½ cup salted butter, room temperature
- ¼ cup grated Parmesan cheese
- 2 garlic cloves, minced
- 1 tsp garlic powder
- 1 Tbsp chopped fresh parsley
- 1 tsp salt and pepper
- 10 oz. fresh mozzarella cheese, cut into ¼ inch thick slices
- 3-4 medium tomatoes, sliced
- ¾ cup balsamic vinegar
- 3 tsp honey
- ¼ cup chopped fresh basil

Preheat oven to 400°. Line a baking sheet with aluminum foil or parchment paper. Cut the bread in half horizontally and place on baking sheet, cut side up. In a medium bowl, stir together the butter, parmesan, garlic, garlic powder, parsley, salt, and pepper. Spread the mixture on top of the bread. Arrange slices of mozzarella on top of the bread and then top with tomato slices. Season the tomatoes with salt and pepper. Bake for 10 minutes, or until the mozzarella has melted. Meanwhile, in a small saucepan, bring the vinegar to a simmer over medium heat. Stir in the honey. Simmer for 3-4 minutes or until the vinegar has reduced by about half and has the consistency of a thin syrup. Remove from the heat and place in a small bowl. Cut the bread into two-inch slices and serve hot.

Serves: 6-8

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**Summer Orzo Pasta Salad**

*Ingredients*

- 8 ounces orzo pasta, cooked according to package
- 1 cucumber, diced
- ½ cup crumbled feta cheese
- 1 - 15-ounce can garbanzo beans {chickpeas}, drained and rinsed
- 2 cups cherry tomatoes, halved
- 1 cup diced zucchini
- ½ cup chopped bell pepper
- 1 small red onion, chopped {about 2/3 cup}
- ¼ cup fresh basil leaves, chopped
- ¼ cup fresh mint leaves, chopped
- ¼ cup fresh parsley, chopped

*For the Red Wine Vinaigrette Dressing:*

- ⅛ cup red wine vinegar
- 2 lemons, juiced
- 2 teaspoons honey
- ½ teaspoons salt
- ⅛ teaspoons black pepper

Cook the orzo according to the package. Let cool completely or run under cold water until cooled. In large mixing bowl combine the cucumber, zucchini, bell pepper, feta cheese, garbanzo beans, tomatoes, and red onion; gently stir to combine. In a mason jar or salad dressing container, whisk together the red wine vinegar, lemon juice, honey, salt, pepper, and extra virgin oil. Add the orzo pasta to the vegetables and mix well. Pour half of the dressing over the salad and toss. Sprinkle the basil, mint and parsley over the salad and gently toss. If serving immediately add more dressing if you feel like the salad needs it. Otherwise refrigerate the remaining half of the dressing and the salad. When ready to serve, add the remaining dressing and toss.

Serves: 6

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**Thai Cucumber Salad**

*Ingredients*

- Dressing:
  - ⅓ cup rice vinegar
  - 2 Tbsp granulated sugar
  - ½ tsp toasted sesame oil
  - ¼ to ½ tsp red pepper flakes
  - ⅓ tsp salt

- Salad:
  - 2 large cucumbers
  - 3 green onions
  - ¼ cup chopped peanuts

In a small bowl, combine the rice vinegar, sugar, sesame oil, red pepper flakes, and salt. Set the dressing aside to give it time to blend. Peel and slice the cucumber, alternating peel and skin. Place the sliced cucumbers in a large bowl. Chop the peanuts into smaller pieces, if desired. Slice the green onions. Add the dressing, peanuts, and green onions to the sliced cucumbers. Stir to combine. Serve immediately or refrigerate until ready to eat, adding peanuts just before serving. Give the salad a brief stir before serving to redistribute the dressing and flavors.

Serves: 6
Coming Events
Corinne Bachle, Master Gardener

July
Saturday, July 8
San Joaquin Master Gardener Workshop: Battling Pesky Bugs I the Home and Landscape
10:30 – 12 noon
REI (Upstairs) 5757 Pacific Avenue, Stockton
Learn how to identify and manage several of the most common garden pests in an environmentally friendly way. The class is free, but seating is limited. Call the UC Cooperative Extension at (209) 953-6100 for reservations.

August
Saturday, August 5
Sacramento Master Gardeners’ Dream Day!
8:00 a.m. – 2:00 p.m.
Fair Oaks Horticulture Center
11549 Fair Oaks Blvd, Fair Oaks
Join the Sacramento Master Gardeners for their annual Harvest Day. This year’s event will include three garden-related seminars as well as many vendor and educational displays. In addition, there will be tours, talks, demonstrations, a plant clinic, grape tasting and grape plant sales, plus many other fun and interesting happenings. Food trucks will be offering refreshments. Click here for full details.

Saturday, August 12
Cool Season Vegetables
1:00 – 12 noon
REI (Upstairs) 5757 Pacific Avenue, Stockton
Time to change out your summer garden and plant the cool season vegetables. Learn which ones will thrive in our mild winters. The class is free, but seating is limited. Call the UC Cooperative Extension at (209) 953-6100 for reservations.

Sunday, August 20
Perennial Vegetables
11:30 – 1:30
PUENTES Farm, 466 S. Ventura Avenue, Stockton
Farm Educator and farmer Shayne Zurilgen will offer up many tips and suggestions on growing perennial veggies, including what to grow in this area. The class is free and the public is highly encouraged to attend.

September
Saturday, September 9
Growing Citrus
10:30 – 12 noon
REI (Upstairs) 5757 Pacific Avenue, Stockton
This workshop will focus exclusively on caring for citrus. Planting, common pests, pruning, watering, fertilizing, and frost protection will be discussed. The class is free, but seating is limited. Call the UC Cooperative Extension at (209) 953-6100 for reservations.

Tuesday, September 26
San Joaquin Master Gardener Workshop: Landscaping with Native Plants
10:30 – 12 noon
Robert J. Cabral Agricultural Center, 2101 E. Earhart Avenue, Stockton
Explore the benefits of gardening with native plants. Learn what plants do well here and planting tips that will help them thrive!
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 at www.gardeners.com.
- 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 sprinkle.

**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 re-sodding.

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.

*Festuca sp. Var. Kentucky 31* (fescue) and *Lolium perrenne* (perennial ryegrass) have been found to be 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.

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.

Many dietary modifications 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. 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 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.

Sources:

- www.AlleyCat.org
- “DOG-ON-IT” LAWN PROBLEMS by Dr. Steve Thompson, DVM – Director, Purdue University Veterinary Teaching Hospital Wellness Clinic
winter harvest. Beets, carrots, turnips, and fast-maturing potatoes planted now should yield a crop by Christmas. Beet varieties that do well in our area are those with 60 days or less from seed sowing to maturity (as listed on the seed packet). Carrot lovers might try growing white, yellow, orange-red, or purple varieties from seed. Lee Miller’s article, Planning and Planting a Cool Season Vegetable Garden, in the 2013 summer issue of this newsletter, provides additional information.

Lettuce, kale, and Chinese cabbage planted now will mature for fall salads. Try some heirloom lettuces this year to brighten both your garden and your salads.

Maintenance —

Mature citrus trees planted in the ground can generally go about 10 days between watering in the summer heat. Potted citrus trees will need water at least once a week during the summer. Although the soil surface doesn’t need to be damp, the soil needs to remain on the dry side of moist. Check soil moisture at the root level — 18 or more inches down — with a moisture meter. Water slowly and deeply when water is needed.

Before fall planting, amend soil with compost and soil conditioner. Worn 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 to provide castings for spring soil amending. Information on worm composting can be found at www.ucanr.org.

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. Remove all but 5 to 8 of the strongest blackberry canes and 8 to 12 strong raspberry canes per plant. Wait until after the fall harvest to prune ever-bearing varieties.

September Notes

Plant —

Set out transplants of campanula, candytuft, catmint, coreopsis, delphinium, dianthus, foxglove, penstemon, phlox, salvia, hollyhocks, and yarrow.

Plant spring flower bulbs now. Bulbs appear in nurseries right after Labor Day. They are most effective in big flower pots and in kidney-shaped drifts at the front of garden beds. Some excellent choices include bluebells, daffodils, hyacinth, grape hyacinth, and tulips. Bulbs should bloom beautifully in spring with just rain water.

Shrubs, trees, and groundcovers get a head start when planted in fall. Plants send out roots in fall and winter while nature does most of the watering for you. Plants will be well established by the time new growth starts in spring.

Plants a tree on the southwest side of your home where it will provide welcome shade during the summer months. 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 depending on the space available. Note the mature size of the tree before you purchase it to be sure there is ample room for it to grow into the beautiful specimen you expect.

Organic mulch applied several inches thick around plants will help keep roots moist if rainfall is sparse this year. Keep the mulch 3-5 inches from the trunks of your plants to avoid problems with rot.

Plant lettuce every few weeks to extend your harvest over a longer season. Tasty blends of leaf lettuce are easy to grow from seed.

Maintenance —

Harvest cantaloupe when it slips off the vine easily. A watermelon is a bit more difficult, but good indicators of ripeness include a pale yellow ground spot (where the melon laid on the ground), the tendril opposite the stem of the melon has dried and withered, the skin is dull rather than shiny, and, there is a dull “thunk” when you rap the melon with your knuckles in the morning.

If you still have lawn, now is the time to fertilize in order to thicken top growth, crowd out weeds, and strengthen grass roots for winter. Combination lawn fertilizers are a good choice. They contain a small amount of fast-release nitrogen for quick greening, 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.
The Master Food Preserver Summer Newsletter is out and full of great info!
Click on the picture below to read it!