Spring. It might just be here again after all. With the rain we’ve had it didn’t seem like it would ever warm up, though we all agree that we needed it. And now those winter rains are paying dividends. The nodes on the trees have swollen and burst with flowers and leaves. Magnolia, purple leaf plum and redbud are making grand displays. The place in the garden where bulbs were planted last fall has come alive with color. Daffodils, tulips, and hyacinth are giving us such a cheerful introduction to spring. After carefully making their choices this winter, vegetable gardeners have readied their seeds and starter packs and have begun to amend and turn the soil. Of course, the local nurseries have been busy and there are plants ready to be purchased and brought home to put in the ground. With so much going on in the garden it really is the most magical time for a gardener right now.

With spring in mind, we have packed this issue with articles on knowing your soil and amending it, a springtime irrigation tune up and recognizing the beneficial insects and their place in your garden. A review of Mediterranean gardening books will make you want to include these plants in your own yard. Our regular columns on plant selections, garden chores and coming events will give you great seasonal information. There is a recipe using early spring produce we think will make your mouth water.

Our biggest news for those that enjoy seeing how hard work and creativity can pay off in a landscape is our Garden Tour on May 2nd showcasing seven beautiful gardens in north Stockton and Lodi. This is the first of what we hope will become a Master Gardener tradition. In addition to opening these special gardens, we will feature informative displays and demonstrations on drip irrigation, composting and Integrated Pest Management [IPM] at various locations. Master Gardeners will be on hand at each garden to answer your questions. There will be a plant sale, fine art and handcrafted work for sale as well. You can go to our website for more information.

In the spectacular days ahead we wish you happy gardening.

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San Joaquin County Master Gardeners

**Garden Tour on May 2nd**

**San Joaquin County Master Gardeners**

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**Plant Selection Tips for San Joaquin Gardeners**

Spring is the perfect time to select new plants for your landscape. Nurseries are fully stocked with every plant imaginable, making avid gardeners practically giddy with anticipation. Before running out and buying everything that catches your fancy, however, be mindful of your garden site (sun, water, soil, etc.) and what will work best. A little “plotting” before planting is a great way to avoid frustration later. So many of us put plants in our landscape, only to have them die an early death because we didn’t do sufficient research. We end up wasting money and time replacing plants that don’t work out. We forgot to heed the successful gardener’s mantra, “right plant, right place.”

Before leaving your house for the nursery, take stock of your garden. (Cont. pg 3)
The intense period of gardening is here and there are too few hours in the day to get all done. As I am writing this in early March after lots of rain and possibly more on the way, I wonder when we will be able to till the vegetable garden and get the soil ready for those warm planting days in April. Discing or tilling wet soil results in deleterious compaction, so we need to wait until the soil is crumbly. My greenhouse is full of lettuce, tomatoes, peppers, eggplants and flowers in anticipation of transplanting. However, I know I must wait until the soil temperature is about 60 °F for these plants as well as for dahlias, corn, beans and summer squash. One option is to do some container gardening with herbs, flowers and even tomatoes and peppers if the garden is not readied.

My dahlia tubers arrived today and one way to start dahlias, according to the American Dahlia Society, is to sprout them in the greenhouse before planting them out in April. This assures that you received viable tubers and, with the TLC one can provide in the greenhouse, chances of success are improved. Using lots of compost in the garden rows and raised beds is a sure way to feed your soil and the plants. It is also a good time to make more compost using spent winter garden plants, like: turnips, cole crops, and the ever abundant weeds. I have part of the garden in cover crop which will enrich the soil when plowed under. Potatoes need to be planted, though early-March is best, early April is second best. Gladiolus should be planted throughout April, May and early June. Staged plantings will provide a summer of prolonged gorgeous blooms. Planting melons should be done when soil temperatures are 65 °F or above. I usually wait until early May, when the weather is more settled, to plant melons. You can get a slight jump on the season by using black plastic mulch to increase soil warmth. Pruning forsythia, mock orange and spiraea can be done after bloom to enhance next year’s production of new wood and flowers. Citrus is a good bet for planting in April or May. It is also a good time to prune out any frost damaged branches in established citrus as well as treat them to some fertilizer if you did not feed them earlier. Also it is now safe to plant non-hardy cultivars such as bougainvillea, hibiscus, and Mandevilla and either treat them as annuals or plan to winter them in a greenhouse or indoors. This year I have several moonflowers in the greenhouse, so I will need to get them planted where I can enjoy their wonderful fragrance in late summer.

Annual plants should be going in: impatiens, dianthus, cosmos, zinnias, marigolds, petunias, salvias and sunflowers. Perennials to plant include: daylilies, coreopsis, salvias, yarrow, celosias, portulaca, lavenders, dahlias, and lantanas (Cont. pg 6)

### Program Highlights

Recently I was asked to gather some statistics about the Master Gardener Program in San Joaquin County. As always I was impressed with the amount of work our volunteers have accomplished in such little time. The Master Gardener Program has trained 95 Master Gardeners since its inception in January of 2007. We began our volunteer time July 2007, to date the program has volunteered over 7,500 hours in the county. Master Gardeners are involved in community outreach and educational classes, school and community gardens, local fairs and festivals, the Master Gardener hotline office, and many other projects throughout the county.

We will be having a 2011 training and are currently accepting applications for this training. If you are interested in becoming a UC Master Gardener fill out an application and mail it back to our office. You can find an application on-line here or by calling our office at 209-953-6112.
Know your sun exposure, water capability and soil condition. Look over your garden at different times of day to see where the sunlight hits. Where is the afternoon shade? This is where you want your camellias, hydrangeas and azaleas. Full sun areas scream for roses and crape myrtles. Is your soil clay, sandy or something in-between? How does it drain? Most of our Central Valley soils are clay-based, meaning they retain moisture and nutrients, but don’t drain very well. Adding compost helps. Watering is so often the critical factor in a plant’s success. Surprisingly, too much water is often the problem. Be sure to know how much water your plant requires and how much water your system delivers. Infrequent, but deep watering is preferable, but moisture loving plants may need supplemental water to thrive. Grouping plants according to their water needs (hydro-zoning) and setting up appropriate irrigation zones is a good plan.

Once you know the culture (sun, water and soil) your landscape can supply, you’re ready to find the “right plant” for your space. The easiest place to start is size. Are you looking for a tree, shrub, vine or groundcover? Knowing the ultimate height and width of the plant at maturity will help you decide on the best match. Read the plant labels. Remember, that two foot shrub may turn into a 30 foot tree so plan accordingly. How many homes in your neighborhood have trees that now block their windows and soar far above their rooflines? How many trees have you seen mercilessly pruned because they were planted too close to parking, walkways or power lines? This can be avoided if you do a little research before purchase.

Besides size, what other attributes do you want your plant to have? Are you looking for flowers, color or fragrance, evergreen or deciduous? What about bloom time? Consider the overall effect of the plant in your garden and how it complements your landscape. A plant’s shape, color, texture and leaf size combine to create a plant’s “essence.” The right plant for your garden is not only the one suited to your climate, soil and water capability, but the one that fits your garden’s aesthetic. Maybe your plant needs to perform a function like provide shade or privacy, or act as a barrier. Maybe you’re looking for a windbreak. There are wonderful plants to consider that attract birds or butterflies. Native plants may be the perfect choice. These plants, naturally suited to our climate, require very little care once established. If you’re looking to provide wildlife habitat and to create a natural landscape, natives are for you.

Don’t forget about maintenance. Are you willing to rake leaves or fallen fruit? How much pruning and deadheading are you willing to do? These are all considerations that will help you make the best plant choice for your garden. Once you have the type and size of plant in mind, now comes the fun part. You are now ready to decide which particular plant you want to buy. This is where the real research comes in. Sunset’s Western Garden Handbook is an excellent reference to use to find the plant varieties and cultivars that best fit your needs. The most basic information to have in hand is which hardiness zone our region falls into. (Hardiness generally refers to a plant’s frost tolerance.) The USDA divides the US into regions according to average minimum temperatures, placing San Joaquin County in Zone 9. Sunset goes beyond this information in its zone identification. It includes summer highs, lengths of growing seasons, humidity and rainfall patterns. By their criteria, our hot, dry summers and minimum temperatures of 16-25 F place us in Zone 14. Not only will you find plants for your zone that meet your size, function and appearance requirements, you can find out which plants have proven pest and disease resistance. For example, a quick study of the crape myrtle choices will tell you to favor those with Indian names like “Pecos” and “Zuni” because they have better powdery mildew resistance.

Look up plants to see their soil and water requirements and their ability to withstand frost. See their growth habit, their susceptibility to disease and pests, and any particular maintenance issues they may present. For example, if you look up Liquidamber, you’ll learn that it is beautiful for its fall color. However, it does present a bit of a maintenance challenge with its shallow roots (that can crack sidewalks) and its spiky seed pods (that can be a nuisance to clean up and step on).

Don’t overlook your neighborhood for plant selection ideas. Notice which plants you like, and how they do over time. Ask your neighbors about their experiences. When visiting nurseries, ask the staff about the plants you’re considering. Local nurseries carry plants best suited for our area and can offer local expertise. A little planning and research will go a long way towards making good plant choices. Selecting the right plant for the right place will make the difference between having a plant for a few months and having a plant for many years.

There are many gardening websites to help you on your plant quest. Sunset’s Plantfinder is a good general resource. The UC Davis Arboretum website offers a list of 100 recommended plants for our area. There are many additional resources, including those focused on specific plant categories, e.g., natives, roses, trees, etc. The UC IPM site has planting and maintenance information on trees, shrubs and plants. Two good references for tree selection are: Trees in Your Home Garden and Trees for Small Spaces.
Aphids are small, soft-bodied insects with long, slender mouth parts that they use to pierce stems, leaves, and other tender plant parts and suck out plant fluids. Aphids may be green, yellow, brown, red, or black depending on the species and the plants they feed on. A few species appear waxy or woolly due to the secretion of a waxy white or gray substance over their body surface. All are small, pear-shaped insects with long legs and antennae. Most species have a pair of tube-like structures called cornicles projecting backwards out of the hind end of their bodies. Low to moderate numbers of leaf-feeding aphids are usually not damaging in gardens or on trees. However, large populations cause curling, yellowing, and distortion of leaves and stunting of shoots; they can also produce large quantities of a sticky exudate known as honeydew, which often turns black with the growth of a sooty mold fungus. Aphid early outbreaks may be controlled by natural predators if you can be patient. Roses, in particular may not be amenable to patience. For more information on aphids and controlling them click here.

Common Groundsel

Common groundsel or old-man-of-the-spring (*Senecio vulgaris*) is found nearly everywhere in California. It is most prolific during the cooler times of the year, but can be found year-round near the coast or in shady areas. It is also one of the major weeds in nurseries. It is a competitive plant in landscaped areas and gardens, but it is generally not a problem in lawns. In addition to the general weediness of this plant, it also can cause chronic liver poisoning to horses, cattle, and swine, even if only a small amount is eaten over a few weeks time.

The success of common groundsel as a weed lies in its seeds. It starts developing seeds very early in its life cycle and can produce 25,000 or more seeds per plant under optimal conditions, although about 1,700 seeds per plant are more likely. These seeds are easily spread by wind. Additionally, there can be three or more generations per year. Even when the plant is pulled from the ground or cut down, seeds from open flowers can still mature and germinate. This weed was also one of the first to have populations develop resistance to some common agricultural herbicides. For more info click here.

Crown rot/Root rot is the reason for death of most of newly planted plants. Plant crowns of plants at or above grade and DON'T over water. Almost all fruit and nut trees, as well as most ornamental trees and shrubs (including many California natives), can develop Phytophthora rot if soil around the base of the plant remains wet for prolonged periods, or when planted too deeply. Tomatoes, peppers, eggplant, and other vegetable crops can also be affected by Phytophthora rot. Losses to Phytophthora are minimized by providing good soil drainage and selecting the most tolerant rootstocks or varieties available. The leaves of plants affected by Phytophthora rot appear drought stressed. Trees or plants often wilt and die rapidly with the first warm weather of the season. For more information click here.

"Despite the gardener's best intentions, Nature will improvise.”
~Michael P. Garafalo

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!
Freesia & Redbud - Plants of the season

Freesia—*Freesia x hybrida*
Family Iridaceae (Iris family)

**PLANT IDENTIFICATION**
Freesias are fragrant perennial plants, grown from corms. They have long stems, sword-shaped leaves, and tubular flowers. Most common are hybrid forms. Flowers bloom in spring. Blossoms may be yellow, orange, red, pink, purple, blue, or white.

**OPTIMUM CONDITIONS FOR GROWTH**
Freesias will do well in full sun, but will also tolerate areas with partial shade. They need regular water during the growth and blooming period, but should not be watered during the summer when they are dormant. Be sure to plant in well-drained soil. Corms are typically planted in the fall. For more info on pests and disorders click here.

Redbud—*Cercis* spp.
Family Fabaceae (Pea family)

**PLANT IDENTIFICATION**
Redbuds are attractive deciduous trees or shrubs. Leaves are broad, rounded, and heart-shaped at the base. In the spring, clusters of sweet pea-shaped flowers bloom on bare twigs and branches. Blossoms are rose-colored or purplish-pink. Beanlike pods form after flowers. Leaves turn yellowish in fall before dropping.

**OPTIMUM CONDITIONS FOR GROWTH**
Redbuds do best in areas with full sun or with light shade. Most species require moderate to regular amounts of water. Plants need some winter chill for the best floral display. Prune during the dormant season or after bloom. For more info on pests and disorders click here.

Hydrangea —Plants of the season

Hydrangea—*Hydrangea* spp.
Family Saxifragaceae (Saxifrage family)

**PLANT IDENTIFICATION**
Hydrangeas are fast-growing deciduous shrubs and vines. Leaves are large and flowers are produced in clusters during the summer and fall. Flowers may be white, blue, pink, or red.

**OPTIMUM CONDITIONS FOR GROWTH**
Hydrangeas are often planted in containers. They do well in areas with full sun but require partial shade in very hot climates. Provide regular amounts of water. Hydrangeas are very sensitive to soil type. They need rich, porous soil. In some varieties, flower color can be affected by soil pH. Prune after bloom to maintain shape. Reduce the number of stems to get the largest flower clusters. For more info on pests and disorders click here.
Thinning fruit is tedious but essential in most cases to get good quality fruit and to avoid alternate-year bearing cycles, particularly in apples. One peach per 5-6 inches of branch is a good ratio. Apples and plums should be thinned to one per spur or one fruit every 4 inches. Be ruthless in thinning is a good rule. For more specific information consult the Home Orchard online. It is also a good time to set out those pheromone codling moth traps to reduce codling moths or you can also try codling moth confusion lures to mess up their sex life. For other codling moth control strategies, consult the Integrated Pest Management website.

If you planted bare-root fruit trees this winter, mulch them and keep them well watered until the roots are established, same for new roses and other perennials. Protect your investment and use my garden rule number one “Pay Attention.”

Useful UC Web-sites

UC Victory Garden Grower Victory Growers believe that community-based food security relies on home, school and community garden efforts. Learn about historical models that work! Start gardening today...

http://groups.ucanr.org/victorygrower/

UC Good Life Garden The mission of the UC Davis Good Life Garden at the Robert Mondavi Institute for Wine and Food Science is to expose and educate a wide audience to the relationship between good food and good health.

http://www.goodlifegarden.ucdavis.edu/

UC ANR Catalog Find free UC publications as well as many great ones to purchase for your home gardening collection. Look under “free publications” or “home and garden”

http://anrcatalog.ucdavis.edu/

San Joaquin County Master Gardeners Our county program web-site that is full of information on gardening. We are continually adding information to this site. Have questions? We have answers!

http://sjmastergardeners.ucdavis.edu

Garden Chores (continued from page 2)

to mention a few. I ordered lots of new perennials this year and now I need to find places for them. If you are like me making new beds and adding to old ones are annual spring chores. If you are planting natives or drought tolerant plants you will need to establish an irrigation plan that won’t kill them with too much water once they are established. Lawns should have their 2nd fertilization in late May to early June before heat sets in. Broadleaf weed control now may be sufficient for entire year. Avoid use of fertilizer/herbicide combination products which are less effective and more likely to cause problems. Aerate (core) lawns in April/early May for better vigor and more efficient use of irrigation water. Adjust Irrigation Timers, with seasonal function, at least monthly to avoid wasted water and to encourage deep turf roots (see article, Springtime Irrigation Tune-up, p. 7).

In the orchard, it is time to thin out the apricots, apples, plums, peaches, Asian pears, and pears. This quote from the UC publication on home orchards is relevant. “The earlier that fruits are thinned and the leaf to fruit ratio is increased, the larger the fruits will be at harvest and the greater the effect on next year’s bloom.” Thinning fruit is tedious but essential in most cases to get good quality fruit and to avoid alternate-year bearing cycles, particularly in apples. One peach per 5-6 inches of branch is a good ratio. Apples and plums should be thinned to one per spur or one fruit every 4 inches. Be ruthless in thinning is a good rule. For more specific information consult the Home Orchard online.

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If you planted bare-root fruit trees this winter, mulch them and keep them well watered until the roots are established, same for new roses and other perennials. Protect your investment and use my garden rule number one “Pay Attention.”
Springtime Irrigation Tune-up

Steve Sanguinetti Master Gardener

Springtime Irrigation Tune-up

For anyone concerned about water conservation spring is the best time to inspect and adjust both your irrigation system and your watering habits. There are four basic parts to most any automatic irrigation system and your knowledge of how to judge if they are operating properly is critical to any effort to save water. You can hire a professional to evaluate, adjust or fix your system, but they can’t be there to monitor its operation. For most households saving on irrigation can mean a significant savings of money without sacrificing a green yard.

Timers

The first thing to look at is your irrigation control timer. When timers are turned back on or returned to regular schedule it is important to note that **NO lawn needs irrigation more than 3 times per week**. Diligent water savers may even be able to get by with one or two cycles per week. If you set the timer for daily watering now, your lawn will only get acclimated to this schedule and continue to require it throughout summer. Excessively frequent, daily, watering actually discourages proper deep root development. Additionally, daily watering and watering in early evening, before midnight, encourages several fungal disease problems. If you have problems with water runoff before you reach total time required it is better to set timer to operate a couple of times the same day as opposed to every day. Most modern electronic timers can accommodate this. The UC-IPM home and garden web site has recommendations for optimum water requirements for each month for several of California’s climates. While we are talking about electronic timers, now is the best time to replace their batteries. If batteries run low, many timers will either default to an everyday program or in some way not retain the optimum program you have spent so much time to set. Many modern timers come with a seasonal adjustment setting. This lets you adjust the entire program’s run time without having to change the time input for every station in that program when weather changes. Springtime adjustments can vary from 30% to 70% depending upon conditions, but a considerable amount of water can be saved with a minimum amount of effort. If you have a larger home landscape, you may want to consider one of the SMART timers recently introduced. Smart timers use either a connection to a local ET weather station or to some type of on-site monitor of irrigation needs, usually a moisture probe or small weather station.

Control Valves

The next item which may need some attention would be the automatic control valve. They usually have plastic bodies and multicolored wires leading to them from your timer. They may be either above ground, anti-siphon, valves or below ground simple shut off valves. Your primary concern here is that they are properly operating according to what your timer is telling them. One piece of evidence that they are not working properly is a continuously wet or soggy spot at one of the sprinkler heads. The sprinkler heads are not responsible for shutting off the water, so if they leak continuously, you need to check the control valve. If you have hard water or are on your own unfiltered well water, you may be able to solve this problem by simply cleaning out the flow path of valve. Be sure you shut off the water feed to valve prior to disassembling and cleaning.

Distribution piping

Distribution piping is rarely a cause of irrigation water waste unless some type of construction or underground maintenance has taken place since the irrigation system was last turned on. One reliable piece of evidence of a distribution leak is a lack of usual sprinkler head pressure and reach. Of course, if you see water bubbling up from the soil or a raised area in your lawn while sprinkler are on, a distribution leak would be main suspect.

Sprinkler Heads

Like timers, an entire article could be written on optimizing sprinkler heads, but here goes a brief effort. Of course you need to fix any broken heads as soon as you see the problem. I encourage homeowners to use at least a 4-inch pop-up height, professional grade, sprinkler head. If you consider the value of your time when you purchase a sprinkler head, the dollar you save by purchase of a light weight cheap head doesn’t make sense. If the head is along a walk or driveway and is continuingly breaking, consider a flex fitting. (See picture to left). These fixtures are threaded elbows connected by a flexible tube which can be stepped on and in some cases even run over. If water savings is any priority you need to pay close attention to the radius of the nozzle in the head. The nozzle spray radius is noted on the top of the nozzle usually along with the spray arc of the nozzle itself. As an example 15H means 15 ft. radius of spray in a half circle. Radii can vary from minimum of 4 ft. up to 18 ft. It is important to use a nozzle with, as near as possible, the proper radius and not adjust the nozzle more than 10-25% of its designed radius. Otherwise the nozzle is not likely to consistently work as it was designed.
The phrase *Mediterranean gardening* refers to a set of landscape practices adapted to a climate similar to that of much of California. Gardeners in Spain, Italy, the southern Balkans and Greece long ago developed ways for landscapes to thrive on rainy winters and long dry summers. To achieve this they use combinations of plants that complement each other and, once established, require little or no water through the dry season. While supplementary water use is low in gardens of this sort, they still provide shade and cool retreats from summer heat. Water is often present in fountains and pools. Water-loving plants are even used, sparingly, in planters or pots. Mediterranean gardening practices have been adopted in California, Australia, South Africa and other places where the rainfall patterns favor it. Recently it has moved to the forefront of ecology-conscious landscape planning. According to the Mediterranean Garden Society (MGS), an international group that promotes these practices,

The design of the garden is where the principles of Mediterranean gardening are rooted. Instead of rolling lawns and beds of plants all bursting into flower at once in the summer, a Mediterranean garden is a more complex collection of hard surfaces of local natural and man-made materials, shaded areas, water features and plants flowering in turn for all twelve months of the year. In some parts of the garden scent will be more important than flowers for the number of Mediterranean plants with scented leaves is amazing: not only herbs but geraniums, salvias, helichrysums, tanacetums and many more. Plant shape can also be an important design feature … Finally, … garden maintenance … center[s] on the subject of soil improvement, much more through mulching and composting than through digging.

The focus of this review is two books by Heidi Gildemeister, author, lecturer, founding member and past President of MGS and a renowned gardener in her own right. Both are available in paperback at local and online bookstores. *Mediterranean Gardening: A Waterwise Approach* (Berkeley, Los Angeles, London: University of California Press, 1995, reprinted 2002 is a classic. Gildemeister’s interest includes gardening with drought-tolerant plants from Mediterranean climates worldwide, not just the Mediterranean basin. For a “waterwise approach,” she emphasizes—in addition to informed plant selection—the importance of mulching and of trees for a shade canopy. Her very useful plant selection list includes over a thousand drought-tolerant plants “chosen both for their beauty and for their easygoing ways” with comments on their preferred growing conditions, propagation, best use, and maintenance. She suggests alternatives to water-intensive lawns, "easy" plants for beginners, and new choices for garden planners interested in this approach to gardening.

The more recent book is Gildemeister’s *Gardening the Mediterranean Way: How to Create a Waterwise, Drought-Tolerant Garden* (New York: Abrams, 2004). It includes discussion of how to control invasive plants, incorporate features such as terracing in your garden, and techniques for container gardening. In addition there are discussions and pictures of twenty actual gardens in which it becomes clear that “Mediterranean-type climates” range from coastal to inland woodland, and from semi-tropical to near desert. Rainfall pattern is the same, but other aspects of climate, including mean temperature, differ enough that each garden presents unique challenges and opportunities. Gilde-meister provides plans, plant lists, and practical advice for each.
Adjustable arc, (Cont pg 9) VAN, nozzles, where one size fits all, have their place for use, but not where a fixed arc nozzle can be used. Their watering rate is usually higher and they don’t distribute the water as evenly as fixed nozzles. Landscape professionals usually buy the heads without a nozzle to maximize flexibility. Several new types of nozzles have been introduced in the last couple of years which have improved resistance to wind disruption and more even water distribution at a lower water output per minute. All of these factors contribute to water savings, but these heads are usually available from professional sources. Other factors which contribute to water continuity and savings are: not mixing type of sprinkler heads, making sure the head is at the proper height in the lawn and making sure that the head is in a completely vertical position. If you have a large lawn which uses rotor type sprinklers, it may be wise to consult a professional irrigation technician. All the options available in this type of system aren’t meant for the casual do-it-yourself fix, unless you are certain you can replace a problem head with the exact same type.

If your irrigation system is “way out of whack” you may need to call in either a professional or some insightful cities provide volunteer consultants for advice on watering solutions. Cities, garden groups and landscape professionals all need to work towards providing free or low cost evaluations of irrigation system efficiencies if we want the best results. We are rapidly approaching the limits of our water resources. If individual home owners continue to waste water through negligence, it will only lead to increasingly restrictive laws which can only complicate life.
The Help Desk  
Susan Price Master Gardener

This section will highlight frequently asked questions from the Master Gardener office.

How do I prepare my garden soil for planting vegetables this spring?
Let’s start with the basics. Plants need adequate air, moisture and nutrients to thrive. The goal is to provide soils that best meet these conditions. Ideal soil would offer nutrient and water holding capacity while providing good drainage and aeration. Few soils in San Joaquin County meet this “ideal” so amendments are usually required.

What’s my soil type? The first thing to do before planting is to understand your soil. Some information can be gathered by simply observing your soil. Is it waterlogged, droughty or compacted? You can also observe your plants to get an indication of your soil’s health. Are your plants thriving or are they showing signs of stress? Knowing your soil’s texture, the relative proportions of sand, silt and clay mineral particles, is an important piece of the puzzle. It will determine the tilth (fitness as a medium for growing plants) as well as the nutrient and water holding capacities. Soil structure is also important to understanding your soil needs. Soil structure refers to how the groups of particles (aggregates) are arranged. A soil with good structure will have good water infiltration, drainage, aeration and overall tilth.

Most San Joaquin soils have heavy clay content. Clay soils have excellent water and nutrient holding capacity but offer poor drainage and less permeability. Sandy soils offer great drainage and permeability but poor nutrient and water retention. The middle ground, loam and sandy loam soils, is the most desirable. Click here for more info on determining your soil type.

Where can I get my soil tested?
A large number of soil problems encountered by home gardeners are due to over-watering or over-fertilizing. These issues can be easily remedied by modifying irrigation and fertilization practices. If you suspect your soil has serious nutrient deficiencies or high toxicity levels, it may be worthwhile to get a soil analysis. A&L Western Agricultural Laboratories in Modesto is a local source. A complete soil analysis costs $17-$32 and includes recommendations. Alternatively, you can self-test your soil by purchasing a soil test kit from your local nursery. These kits are far less sophisticated, but can provide pH and basic nutrient levels.

What amendments do my plants need? Once you know your soil type, you can decide which amendments will best improve your soil. However, all soils will benefit from the addition of organic matter, such as compost, manure or leaf mold. Feed the soil and healthy soil will produce healthy plants is the mantra. To be assured of good quality compost, it is best to make your own, but if you do buy it, try to verify that it has not been contaminated by sewage sludge or bio-solids which may contain heavy metals or chemicals. Vegetables may require some fertilizer for best growth. For further details on organic and inorganic fertilizers and recommended rates click here.

How do I physically prepare the soil? The preparation of your soil is just as important as adding fertilizer and soil amendments. Prior to cultivation, make sure the soil is moist but not thoroughly wet. Then cultivate the top 1 to 2 inches of soil and rake the area to remove weeds and old crop debris. Be sure to dig out roots. Next, if the soil is dry, irrigate the plot deeply enough to encourage the germination of weed seeds. In a week or two, after a substantial number of weeds have germinated, cultivate the area again to kill the weed seedlings. You may use a shovel, rototiller, broad fork, metal bow rake, or a combination thereof. Be sure to break up the clods in the soil, as seeds planted in cloddy soil will germinate poorly and won’t live long because the soil dries too quickly. Form soil into beds if desired, and plant while soil is still moist. For more information on soil improvement click here. Another way to prepare soil is the double digging or bio-intensive growing, which involves loosening the soil to a considerable depth of two shovel blade lengths and thus increasing aeration depth. Although labor-intensive, these methods create loose soil for plant roots to thrive. These methods are advocated by John Jeavons and reference to his techniques can be found here. There are also no-till methods of planting gardens using mulch to smother weeds and encourage earthworms, but this topic is for another occasion. However you can find information on this here. Finally, if your garden has compacted clay soil and no amount of amendments and cultivation will do the trick, consider building raised beds. These should be filled with compost enriched, top soil. Raised beds maximize the use of growing space and allow gardener’s complete control of their soil. Other advantages are slightly warmer soil temperatures (which encourage early root development), higher yields and better drainage. Less maintenance, especially weed pulling, and comfortable access are other plus. This approach is a wonderful way to grow seasonal vegetables with ease.

GARDEN NOTES
Coming Events

April

April 8-11th
California State Flower and Garden Show
Cal Expo
1600 Exposition Blvd.
Sacramento, CA
Schedule: Thur. 10 a.m.–7 p.m., Fri. & Sat. 10 a.m.–8 p.m., Sun. 10 a.m.–6 p.m.
Cost: $15 at the gate; $13 in advance
Primary Phone: (877) 696-6668
Web site: www.calstategardenshow.com
California's diverse horticultural and gardening community is highlighted through plants, techniques, and products representative of the state's numerous micro-climates.

April 10th
Master Gardeners of San Joaquin County Garden Workshop
“Introduction to IPM” (Integrated Pest Management)
10:00—11:30 am
San Joaquin Historical Museum
11793 N Micke Grove Rd Lodi Ca
There is a $5.00 parking fee into Micke Grove Regional Park.
All participants must register prior to the class at (209) 331-2055.
Classes are free with regular museum admission.

April 10, 2010
Linden Garden Club Plant Sale
Saturday, April 10 from 9 AM to 4 PM
at the corner of Jack Tone Rd. and Comstock Rd.
Heirloom tomatoes, peppers, herbs, flowers and lots of plants will be on sale.

April 17 (10am – 5pm) and April 18 (10am – 4pm), 2010
The Sacramento Orchid Society presents ORCHID FEST 2010
Orchid Show & Plant Sales with plants from around the world. Two seminar programs featuring nationally recognized speakers
Educational exhibits to answer all your questions. Food & Live Music Walk-thru Butterfly habitat
Scottish Rite Temple  6151 H Street Sacramento, CA 95819
Just across from the entrance of Sac State University (entrance off H Street or Carlson Dr. at 61st Street) Plenty of free parking
Admission: $5.00 at the door ($3.00 in advance (children under 16 admitted free w/adult)

April 23 - 25, 2010
Asparagus Festival
Downtown Stockton, CA
Schedule: varies by day
Cost: $12, $7 seniors, teens under 18, and college students
Primary Phone: (209) 644-3740
Web site: www.asparagusfest.com
Close to 100,000 asparagus fans are expected for this annual, multi-event festival. Included are entertainment by nationally known performers, deep-fried asparagus–eating and celebrity spear-throwing contests, more than 100 crafters, cooking demos, a kids' play area, and boat cruises.

April 24-25 2010
“Springtime in the Garden Tour”
Various locations
Folsom, CA
Schedule: 11 a.m.–4 p.m.
Cost: $10
Primary Phone: (916) 989-1223
Web site: folsomgarden.org
The Folsom Garden Club's annual garden tour will showcase six gardens with a variety of features, such as flowers, vegetables, water elements, native plants, and beautiful valley oaks.

May

May 1, 2010
“Art in the Garden Tour”
Various locations in and around Roseville, CA
Schedule: 10 a.m.–4 p.m.
Cost: Advance $40, Day of $45
Primary Phone: (916) 783-4117 (Roseville Arts Center)
Web site: www.rosevillearts.org/tours.html
A self-guided tour of gardens and home interiors in the South Placer region. In each garden, you'll find live music and artists displaying, demonstrating, and selling their art, as well as food and wines from local restaurants and vintners. Proceeds benefit the Roseville Arts Center.

May 2, 2010
“San Joaquin Master Gardeners Garden Tour”
Join San Joaquin Master Gardeners on a fun and interesting garden tour of six unique homes from North Stockton to Acampo and the wonderful Wine and Roses Inn where you will be able to tour the gardens and speak with Master Gardeners about the highlights of each venue. In addition to a tour of their gardens, Wine and Roses will host an arts and crafts sale featuring local artists and craftspeople. These will be self-guided tours between 10:00 a.m. and 4:00 p.m. Cost is $20 in advance (before April 30) or $25 the day of the event. Tickets are available at the following:
Serventi's with Flair, 349 Lincoln Center, Stockton (209) 951-7090
Alpine Nursery and Tank House Gifts, 215 E. Alpine Avenue, Stockton (209) 466-3161
Regalo Bello, 5757 Pacific Avenue, Suite 150, Stockton (209) 951-4329
Park Greenhouse Nursery, 12813 W. Ripon Road, Ripon (209) 599-7545
Weigum’s Nursery, 401 N. Ham Lane, Lodi (209) 369-6288
Wine and Roses Inn, 2505 W. Turner Road, Lodi (209) 334-6988
Purchase on our web-site here

Corinne Bachle, Master Gardener
Earth Day turns 40 on April 22, 2010!

Elisa Moberly San Joaquin County Department of Public Works, Solid Waste

Celebrate by being green! If you follow the practices and advice of the Master Gardeners, you’ve already embraced environmental stewardship. Now take it inside!

Reduce, Reuse, Recycle, Rethink!

Reduce. #1 for a reason! Don’t buy what you don’t need. Get refills, try less toxic cleaners, or invest in a water filter system to replace bottled water. Look for products that were manufactured locally. Receive and pay bills online (it’s quicker and safer, too!). Get off those junk mail lists.

Reuse. Rent or borrow books and movies. Visit your local thrift stores and used book stores. Donate usable clothes to a homeless shelter. Bring your own cup to your favorite coffee shop.

Recycle. You’ll save energy (takes less to make a product with recycled content). You’ll improve air quality (no need to mine our natural resources or transport them). You’ll reduce landfills. Why throw it away when it can still be used?! When you compost, you recycle, too.

Rethink. Recycle your electronics with a certified recycler who dismantles locally. Don’t ship our toxic wastes overseas where they don’t get handled responsibly. Paints, CFLs, batteries, household chemicals, and prescription drugs need special disposal to protect our environment. Bring all these items for FREE to the County’s Household Hazardous Waste Facility. For location, a list of acceptable products, and hours, call 800-449-4840 or visit Be Green San Joaquin.

Some Local Earth Day Festivals & Events

Stockton Earth Day Festival: Sunday April 18th 11:00 am—4:00 pm Victory Park

San Joaquin Delta College: Wednesday April 22 Various activities happening campus wide

City of Lathrop Beautification Day and Recycling Fair on the 17th

Manteca Shred-It Event and free compost give-away on the 17th

Tracy will be doing a cleanup at Larsen Park on the 17th

Caswell Memorial State Park near Ripon will have their annual park cleanup on the 17th.
Attracting Beneficials

Laurie Berg  Master Gardener

It happens every year about this time. One day it seems as though winter will never end and the next day spring is bursting out everywhere with greenery and blooms. Then, before long, it seems as though every insect has also noticed the change in season, and they are covering our rosebuds or leveling our seedlings. Things can get ugly very quickly when we notice the damage that is being done to our garden. But before reaching for that stuff we’ve heard would kill -all-invaders- dead-in-seconds- guaranteed, let’s think about what’s going on in that little world that is our garden.

Most of us have gardens so we can grow some vegetables or colorful flowers or just to have a place to enjoy the outdoors. We don’t think about the fact that we are sharing this paradise with thousands of creatures that live in our garden, for the most part, unseen. It’s tempting to think that every crawling thing is a pest but many of those insects are actually what are known as beneficials. In a well balanced garden the beneficials, such as lady beetles, syrphid flies, parasitic wasps, soldier beetles, spiders and praying mantis are working hard to keep the damaging insects in check. Often we may not see the direct action of the beneficials, for example, the tiny parasitic wasp who lays its eggs in the aphid. The new wasps feed on their host then hatch out leaving a “mummy” aphid. These wasps are too small for us to notice yet the evidence can be seen with a loupe on the leaves of plants in our gardens.

One of the best things we can do to help these beneficials is to avoid the pesticides that can kill even more of them than the heartier and more abundant plant-eating pests we are trying to eradicate. By ridding the garden of these good insects there often follows a resurgence of the pesky ones in even greater numbers. It becomes a losing battle with the pests winning.

Identifying the beneficials in the garden is a good first step to creating a healthy and balanced garden. We can also do our part to find alternative ways to create an inviting habitat. By growing plants that attract and sustain these insects such as milkweed, wild fennel, marigold, and many California native plants we can encourage the colonies of beneficial insects to our yards. There is much to discover about these silent helpers and just knowing that they are out there working in our gardens makes them deserving of our respect.

For more information on Beneficial Insects please visit these sites:
UC IPM Natural Enemies
Farmer Fred’s Beneficial Insects

Lady bug larva
Green Lacewing

Coming Events  cont. from pg. 11

May 8th, 2010
Master Gardeners of San Joaquin
“Container Gardening and Gardening for Small Urban Spaces”
Kids class: Beneficial’s in the garden and a Special Craft
10:00—11:30 am
San Joaquin Historical Museum
11793 N Micke Grove Rd Lodi Ca

There is a $5.00 parking fee into Micke Grove Regional Park.
All participants must register prior to the class at (209) 331-2055.
Classes are free with regular museum admission.

June

June 4, 2010
Master Gardeners of Contra Costa County
“Growing Lavender”
10:00 am—12:00 pm
Contra Costa Times Parking Lot
2640 Shadelands Drive, Walnut Creek, California
Speaker from 10:00 - 11:00 AM: Kathy Southern
Gardening Help Table from 10:00 AM - Noon.

June 11, 2010
Master Gardeners of Contra Costa County
“Gophers” 10:00 am—12:00 pm
Contra Costa Times Parking Lot
2640 Shadelands Drive, Walnut Creek, California

June 12, 2010
Master Gardeners of San Joaquin
“Growing citrus in your backyard” 10:00 am—11:30 am
San Joaquin Historical Museum 11793 N Micke Grove Rd Lodi Ca

There is a $5.00 parking fee into Micke Grove Regional Park.
All participants must register prior to the class at (209) 331-2055.
Classes are free with regular museum admission.
Mel’s Asparagus Risotto
Laurie Berg Master Gardener

This is a recipe that we enjoy when asparagus is in season. It’s also very good with just the mushrooms or you can get creative and add other spring vegetables to the mix. The hardest part is the time stirring over the stove. When you taste it, I think you’ll agree it was worth it.

1 pound fresh asparagus
1 pound assorted mushrooms such as crimini, shiitake or portobello
1/2 medium yellow onion
2 TBSP butter
4 TBSP olive oil
5 cups chicken stock
1/2 cup white wine [optional]
1 1/2 cups Arborio rice
Parmesan cheese to taste

Steam or roast asparagus till tender. Cool with ice water to stop cooking. Drain. Then cut into pieces about 1 to 1 1/2 inch. Set aside.

Sauté sliced mushrooms of choice in about 3 TBSP of olive oil. Set aside.

Prepare 5 cups of chicken or mushroom broth, or use packaged. Heat to warm and keep at a simmer on a low burner.

In a heavy 4 quart casserole or seasoned cast iron pan, sauté half of a medium yellow onion in 2 TBSP unsalted butter and 1 TBSP olive oil over medium heat for one or two minutes until the onion begins to soften.

Add 1 1/2 cups of Arborio rice to the onion; using a wooden spoon, stir for 1 minute, making sure all the grains are well coated with the oil.

Add 1/2 cup of wine and stir until it is completely absorbed.

Begin to add the simmering broth, 1/2 cup at a time stirring frequently. Wait until each addition is almost completely absorbed before adding the next 1/2 cup, reserving about 1/2 cup to add at the end. Stir frequently to prevent sticking.

When you have added most of the broth and the rice is tender but still firm, and almost completely cooked through, approximately 18 minutes, add the mushrooms and asparagus to the rice and stir to combine. Add one more scoop of broth to the combination and continue to cook the rice while heating the mushrooms and asparagus. When most of the moisture is gone and the rice is almost creamy, you have risotto.

Serve immediately with parmesan cheese on the side.

Meyer Lemon Bars
Corinne Bachle Master Gardener

1 cup butter, softened
2 cups flour
1/2 cup powdered sugar

Cream together and press into a 9x13 glass baking dish. Bake @ 350° for 20 minutes.

2 cups sugar
4 T flour
1 tb baking powder
4 eggs (beaten)
6 T fresh Meyer lemon juice (2 lg or 3 sm lemons)

Mix above ingredients together and pour over crust. Bake @ 350° for 25 minutes.

Dust with powdered sugar while still warm. Cool and cut into squares.
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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.

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**Garden Humor**

The real meaning of plant catalog terminology: from http://www.gardendigest.com/humor.htm

"A favorite of birds" means to avoid planting near cars, sidewalks, or clotheslines.

"Grows more beautiful each year" means "Looks like road kill for the foreseeable future."

"Zone 5 with protection" is a variation on the phrase "Russian roulette."

"May require support" means your daughter's engineering degree will finally pay off.

"Moisture-loving" plants are ideal for landscaping all your bogs and swamps.

"Carefree" refers more to the plant's attitude than to your workload.

"Vigorous" is code for "has a Napoleonic compulsion to take over the world."

"Grandma's Favorite" -- until she discovered free-flowering, disease-resistant hybrids.

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**San Joaquin County Master Gardeners**

2101 E Earhart Ave, Ste 200
Stockton CA 95206
Phone: 209-953-6112
Fax: 209-953-6128
E-mail: mgsanjoaquin@ucdavis.edu
Web-site: http://sjmastergardeners.ucdavis.edu

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Have a gardening question? Ask us!

**http://sjmastergardeners.ucdavis.edu**

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The real meaning of plant catalog terminology:

- **"A favorite of birds"** means to avoid planting near cars, sidewalks, or clotheslines.
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- **"Grandma's Favorite"** -- until she discovered free-flowering, disease-resistant hybrids.
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<th>Month</th>
<th>Gardening Session with Master Gardeners</th>
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<td>Bare root season- Fruit trees/berries/grapes/roses for the home garden.</td>
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<td>February 13th</td>
<td>Landscape planning and eco-friendly landscapes.</td>
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<td>Container gardening and gardening for small urban spaces.</td>
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<td>June 12th</td>
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<td>August 14th</td>
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<td>October 9th</td>
<td>Create a more sustainable landscape with drought tolerant plants.</td>
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<td>November 13th</td>
<td>Planning the next vegetable garden of heirlooms</td>
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*Kids classes   Open to kids ages 5-10

Classes will be held at the

**San Joaquin County Historical Museum**
11793 North Micke Grove Road, Lodi, CA 95240-9426 • (209) 331-2055

Classes begin at 10:00 am and end at 11:30 am.
There is a $5.00 parking fee into Micke Grove Regional Park.
Classes are free with regular museum admission
All participants must register a week prior to the class at (209) 331-2055
SAN JOAQUIN MASTER GARDENER

GARDEN TOUR

Sunday, May 2
10 AM - 4 PM

Seven Beautiful Gardens in Lodi and North Stockton

PLANT SALE,
FINE ART AND
HANDCRAFTED WORK
FOR SALE

Master Gardeners on hand to discuss:
• Composting
• Pest Management
• General Gardening Questions

Ticket price:
$20 per person
$25 day of the tour

Tickets available for purchase at these locations:
Alpine Nursery Stockton
Serventi’s with Flair Stockton
Quail Lakes Nursery Stockton
Regalo Bello Stockton
Park Greenhouse Ripon
Weigums Nursery Lodi
Wine and Roses Lodi
UC Extension Office Stockton

Proceeds benefit the Master Gardener programs in San Joaquin County

Artwork by Theresa Bayaca, design by Laurie Berg