Spring is the most exciting and busiest time to be a gardener. Plants are waking up, weeds need to be pulled, and winter clean-up has to be done. A trip to the garden center at your local nursery is like a child taking a trip to a toy store… “I’ll take one of each please.”

Spring is also a busy time for the Master Gardener Program. Our hotline office is receiving lots of calls, as the nice weather has people outdoors enjoying and exploring their yards and gardens. The Master Gardeners are gearing up for a season of farmers’ markets, festivals and our big bi-annual garden tour, which will be Sunday, May 18th. The theme for this year’s tour is “Lovely to Look at, Delicious to Eat.” The Master Gardeners have recently started a blog, featured on the Stockton Record website, as well as our Master Gardener page. If you are a “pinner” on Pinterest, make sure you follow us for some great gardening resources, tips and tricks.

This edition of Garden Notes is FULL of other great timely chores, tips and information including several articles related to water conservation in the garden. We hope you enjoy reading it as much as we enjoyed putting it together. Remember, if you have a gardening question, give us a call. We’re here to help! Our number is 953-6112.

Our website has lots of helpful information as well. Happy Gardening!

Selecting Plants for Drought Conditions
Susan Price  Master Gardener

Using the WUCOLS Landscape Water-Use Planning Tool

Spring brings renewal; for us gardeners, that means replacing frost-damaged perennials and overgrown shrubs. Hopefully, for many, it means switching out our water-thirsty lawns with something more sustainable. With water more precious than ever, it’s important that we select plants that do well with minimal amounts of irrigation.

With the help of the WUCOLS water-use planning tool, making wise plant choices in a drought environment has gotten a whole lot easier. WUCOLS, which stands for Water Use Classifications of Landscape Species, is a University of California Cooperative Extension Publication which provides a guide to estimating irrigation water needs of landscape plantings in each of 6 distinct California Climate Regions. The plant list and guide for using it were updated in 2013, and can be found here. For a complete explanation of the method for
Spring means we get to be outside more often and have many opportunities to update and enjoy our gardens.

**April Ideas**

**Plant**

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

**Salvias (sage)** are available now in nurseries if you’re looking for an easy-to-grow perennial. One that does well in our area is “Hot Lips” (salvia microphylla).

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

**Tomatoes**, peppers, eggplant, leeks, carrots, cucumber, corn, green beans, and squash can be planted in mid-April.

**Maintenance**

**Resist** the urge to rototill excessively wet soil. This could compact the ground, destroying tiny air pockets necessary for plant root growth. Try "no till gardening." where a cover-crop is planted in fall and then just cut down in spring. Starts and seeds are planted in spring by just splitting the soil with a shovel. While not till ing may go against the grain for a lot of us, some farmers use this method with superior results.

**Continue composting** as you groom your garden. Add trimmings to the compost pile along with fruit and vegetable waste. To process your compost quickly, shred or chop trimmings to smaller pieces, keep it as damp as a wrung-out sponge and turn it frequently. Don’t forget that the “let-it-rot” method also works; it just takes longer.

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

**Weeds** will flourish in spring if you don’t keep at them. Remove them in the new, small rosette stage before they set down a tap root.

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

**Check** your sprinklers to be sure they are working properly and not wasting water. There is a comprehensive spring tune-up guide for sprinklers in the 2010 April - June Master Gardener Newsletter.

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

**Winter’s lack of rain** has been hard on many lawns, making them look bleached. To maintain your lawn this year, fertilize now with a balanced slow release or organic fertilizer according to directions on the package. Organic fertilizers react more slowly, but will eventually provide a lush result. If crabgrass has been a problem in past years, you may want to consider treating your lawn with pre-emergent/fertilizer mix. These are available to homeowners and through licensed professional applicators. Help preserve our waterways by avoiding getting granules on hardscape.
The Green Green Grass of Spring!

With the spring celebrations of Easter, Earth Day, brunches and Mother’s Day nothing brings to mind spring like sweet, green grass. Even as we look towards a year of drought and water restrictions, there is no reason to forgo one of our favorite things. Let’s just move it indoors to be our centerpiece, our very own homegrown bit of spring. There is plenty of time to grow some grass and clover in baskets and containers creating your own spring celebration, and it sure beats the shredded plastic Easter basket alternative!

The process is easy! I planned on giving myself a full two weeks to have a lush grass fill-in. Perhaps, the next part was the most creative — choosing the container. Scavenge your collectibles, garage, local thrift stores or perhaps make a trip to a dollar store. The choices are limitless and allow you to repurpose and recycle; what was once old now becomes new. The supplies also include some small pebbles, potting soil and grass seed. Because the grass is only short term, drainage is not crucial. If you choose to plant an Easter basket with grass, bring the basket to the store with you and find a plastic plant saucer that will accommodate the basket size.

You are now ready to plant! Just add a single layer of pebbles to the bottom of each container, fill with the potting soil and add the layer of grass seeds. I put a nice layer of seeds on the surface and then carefully raked it into the soil about a quarter to half inch in depth with my fingers. You can still see some seeds on the surface. Now add some water (sprinkle don’t drown) and place in a sunny window. Give a sprinkle of water every day or so to keep the soil damp. Rotate your container so you have even growth from the sunlight. Next is the fun part, watching it grow!

By day 5, I had some seeds sprouting and by day 7, the seed was filling in nicely. If your grass gets a little too high, you can always use some scissors and give it a haircut. Another tip is that you can cover your container lightly with some plastic wrap which helps to create a greenhouse effect and speeds up the process. Also, remember variety is fun, so be sure to try out clover, radish, wheat, lentil and assorted seeds. Not only is the price right, but it doesn’t take a green thumb to create a Pinterest-worthy project. Kids will love getting involved and neighbors will embrace a gift of seasonal décor. Welcome spring into your home.

For a step-by-step picture tutorial visit the “How Does She” blog here.

Social Media... Facebook, Blogs & Pinterest, Oh My!

Marcy Sousa Master Gardener Coordinator

Our program is always looking for new ways to connect with people in our community and recently we entered a whole new world... social media. See our links on page two or click on the blue underlined hyperlinks in this article.

We have had a Facebook page for quite a while now and it just received its 350th “like.” We give away a garden journal every 25 likes, the next journal will go out to number 375. Recently, we started a Master Gardener Pinterest page (pictured right). There is lots of information or “pins.” Make sure you check out our boards and follow us! The Master Gardener Blog is now live. This is a partnership with the Stockton Record. Our blogs will appear on their website along with our Master Gardener website. Make sure you subscribe to it so you don't miss out on the valuable and timely information that we post on a weekly basis.
Impatiens are dying from a relatively new plant disease called impatiens downy mildew, caused by the fungus-like, oomycete pathogen Plasmodpara obducens. The pathogen primarily affects varieties of Impatiens walleriana, or hybrids with an I. walleriana parent and wild impatiens (I. balsamina). Note that this pathogen does not affect New Guinea impatiens (Impatiens hawkeri) or other bedding plant genera. This disease develops rapidly, with a few leaves on apparently healthy impatiens beginning to show slight yellowing and stunting followed by development of white, powdery spores on the undersides of leaves, and later, by leaf and flower drop. Plants are likely to become completely defoliated within several weeks.

While there are fungicides available to treat this disease, their application can be tricky and many are not available to the homeowner. Your best bet is to find an alternative annual for the next several years. An additional lesson included with this subject is that it is risky to continually re-plant the same annuals every year. Diseases can build up and much like growing a vegetable garden rotating plant types is highly recommendable. For more information, click here.

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

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

Brown Marmorated Stink Bug
Steve Sanguinetti Master Gardener

A new pest has arrived from East Asia and flourishes as close to us as Sacramento. It is the Brown Marmorated Stink Bug, BMSB. While quite similar to the Rough Stink Bug and common Squash Stink Bug, it has a far greater variety of host plants which makes it a much greater threat. Threatened plants include everything from landscape shrubs and trees to many fruiting vegetable plants. It has only recently established itself as a nuisance pest in California, but has become a severe agricultural pest in the Eastern States of Pennsylvania, Maryland and Virginia. The BMSB also exhibits an unsightly swarming habit in which large numbers (thousands) of them can cover a tree or outside walls of homes. See below bulletins and video for further description and discussion.

UC Blog– BMSB UC IPM Pest Alert Stop BMSB Video available on Youtube
Flannel Bush & Manzanita
Adrian Anthony Master Gardener

TREE: Fremontodendron californicum (Flannel Bush)
*Family-Malvaceae* (previously Sterculiaceae)

**PLANT IDENTIFICATION:**
Named after explorer John C. Fremont, Fremontodendron is a native Californian evergreen that grows to 20 feet tall. Upright or spreading, can be grown as multi-trunked large shrub or trained as compact tree. Leaves are palmate lobed and covered in fuzzy hairs, with dark green upper surfaces and grey undersides. Bright yellow hibiscus-like flowers in Spring. Bark used by Native Americans for cordage.

**OPTIMUM CONDITIONS FOR GROWTH:** Fast growing, to 36” per year, in arid, dry, rocky, fast draining soil. Does not tolerate wet or clay soils. Handles a range of soil pH from 7.0 to 7.5 and requires full sun. Needs minimal to no water once established, and no fertilizer. Hardy to 23 °F.

Shrub: Arctostaphylos spp. (Manzanita)
*Family Ericaceae*

**PLANT IDENTIFICATION:**
Evergreen shrub native to California. Shrubs grow from 3 feet to 20 feet, depending on variety. Some species grow more prostrate and are good as low growing ground covers. There are over 60 varieties of Manzanita, and some are endangered. Silver grey-green ovate leaves, bell-shaped flowers in pink or white in spring, followed by edible berries, an important food source for wildlife and some birds. Manzanita means “little apple” in Spanish. Beautiful twisted multi-trunk growth with peeling smooth red bark. Slow growing and long lived.

**OPTIMUM CONDITIONS FOR GROWTH:** Prefers well draining sandy or rocky soil. Water every 4-7 days for the first summer, depending on weather, and monthly to only once or twice a summer once established. Grows best in full sun, but will tolerate some shade.

Silver Bush Lupine
Adrian Anthony Master Gardener

Perennial: Lupinus albifrons (silver bush lupine)
*Family: Fabaceae*

**PLANT IDENTIFICATION:**
A hardy evergreen native California perennial, with silvery palmate leaves and spikes of purple/blue flowers in Spring. Grows densely to 3 feet high and wide. Attracts beneficial insects, bees and butterflies.

**OPTIMUM CONDITIONS FOR GROWTH:**
Drought tolerant once established. Prefers full sun and fast draining soil. Plant slightly above soil grade and do not use fertilizers or amendments.

This is a ground-breaking book on roots, no pun intended, with lots of information presented on soil as well. In the introduction Kourik writes about the fact that roots are ugly, out of sight, too often out of mind and poorly understood. He paraphrases Rodney Dangerfield, “they don’t get no respect.” The first chapter is about how a root grows. He describes the birth of a root when a seed sprouts and its subsequent development and function in great detail.

In the next Chapter he describes in detail soil structure and how humus is formed and its importance and relationship to soil life. An excellent illustration shows how soil biota decreases rapidly with soil depth. Nutrients are obtained through the roots by a process of ion exchange between a solution surrounding the roots and insoluble solids, e.g. humus and clay particles. It is important to keep good pore space in the soil for moisture and air to keep roots healthy and functioning.

The third chapter deals with lawns and he points out that less time is spent on lawns than any other landscape type; something perhaps to keep in mind as we encourage folks to convert lawns to other landscapes to save water. However, vegetables certainly are more edible than lawns despite being more work. Most roots of grasses are located in the top 6-12 inches of soil, though they can grow deeper. Bermuda grass roots in sandy soil can go down 8 feet. No wonder it is difficult to get rid of it!

The chapter on vegetables is extensive and each vegetable type gets a section that tells us about the roots and how to grow with roots in mind. For example, he suggests that in dry climates, corn can be grown as the Hopi do with wide spacing so roots can have lots of room to find nutrients and moisture. This might not be a good option for the urban grower as land is too limited to even think about growing corn at any spacing.

Lettuce can be grown for mesclun salads. Mesclun means “mixture” in French and thus a mesclun salad contains a mixture of lettuces and other greens. He recommends planting each variety in separate beds for more efficient harvesting because of differing growth rates rather than using a mesclun seed mix.

Kourik describes various cultivation techniques, tilling and non-tilling practices that have come to us courtesy of various gardeners. He describes a profitable market garden in England that is surface cultivated no more than 4 inches deep. There is the Ruth Stout method of no-till gardening using organic mulches akin to sheet composting. This method increases soil organic matter from the top down and thus mimicks what happens in a forest or prairie environment. There is also the double-dig, bio-intensive method developed by Alan Chadwick and promoted today by John Jeavons of Ecology Action. He also describes the hay-bale method of growing potatoes above and beyond the reach of gophers.

Following chapters cover fruit tree roots, ornamental trees and natives, the good fungus among us, trees and hardscapes, selecting trees and shrubs, and finally planting them. The final chapter is on planting root-bound plants, if you are so unfortunate to buy some. There is lots of useful information in these chapters. The appendices have information on setting up a landscape drip system, cover crops to plant, shrub plant lists and a list of trees that grow successfully in lawns.

The book is nicely illustrated throughout. Some are 1920’s and 1930’s root profiles made by John Weaver, a plant ecologist at the University of Nebraska, who took the time to tease out and depict the root structures of prairie vegetation and vegetables. Without this work we would not have the knowledge of just how extensive roots are, especially tree roots.

Following each section, there is often a section on Tips for Gardeners, where practical applications of knowledge are presented that will help gardeners with soil/root-related problems. This is a book that every gardener should read to better understand the underground plant parts and how they interact with soil.
Most devoted gardeners are familiar with ladybugs and native bees, two beneficial insects covered in prior columns. However, the syrphid fly (also known as the “hover fly” or “flower fly”) is not nearly as well known.

Ironically, most of us have probably seen syrphid flies in our yards without realizing what they truly are. Many syrphid fly adults are strikingly similar in appearance to honeybees; some common species have a dark head and thorax, yellow-and-black banded abdomens, and transparent wings. Also like bees, syrphid flies consume flower pollen and/or nectar and help serve as pollinators. Fortunately, although they mimic bees in appearance and function, syrphid flies don’t have stingers.

Adult syrphid flies are strong fliers, and because they can hover, they’re very effective at locating appropriate places to lay their eggs. Once the eggs hatch, they go through three larval stages. The larvae serve another very important role in the garden: many kinds are aphidophagous, which means they are specialized predators that feed mostly on aphids. Studies have shown that they can dramatically and quickly reduce aphid infestations on various types of vegetable crops.

The natural predation activities of syrphid fly larvae are invaluable to gardeners and farmers alike. To avoid inadvertently harming them, reduce or eliminate the use of pesticides, and become familiar with the appearance of the flies and their eggs, larvae, and pupae. It’s also helpful to grow plants that attract adult syrphid flies, including California lilacs (Ceanothus spp.), California poppy (Eschscholzia californica), sweet alyssum (Lobularia maritima), yarrow (Achillea millefolium), and culinary herbs such as coriander, sage, thyme, lemon verbena, and oregano.

In our area, larger syrphid flies are active in late spring and early summer, and smaller ones are more frequently seen in the summer. If you look closely, you might see one or more of the 1000 species that live in North America!

For more information:

**UC IPM Natural Enemies Gallery: Syrphid, flower, or hover flies**

**Cornell University Department of Entomology, Biological Control: Syrphid Flies**

**Flower Flies (Syrphidae) and Other Biological Control Agents for Aphids in Vegetable Crops**
As California’s winter winds down as the driest in modern times you can’t miss the news, noting that many Northern California communities are calling for 20 to 40% reduction in water usage by homeowners. And, that for many homes, yard and landscape irrigation alone uses up to 65% of a home’s total water use.

If you are like me, it seems outrageous to waste that much water! And I am still one who mows his own lawn, and would love to cut the mow time by about half. So, solution to both challenges – remake that yard into one with less grass, and replace it with California native plants that take much less water, yet leave us with an attractive yard!

Of course, there are immediate methods to reduce water usage on lawns:

- **Check all your sprinkler heads:** Ensure that they aren’t dumping water on your driveway, sidewalk or shrubs.

- **Check for slow leaks in your system:** Check for leaks in the lines that feed your sprinkler heads and check each head itself. A head may be leaking at the base, or missing and shooting straight up into the air. If you have old brass heads, these are notorious for leaking around the pop-up stem.

- **Rethink your watering schedule** (both time of day, and duration/frequency of watering): Experts suggest watering in the very early morning hours, like 4 to 5 AM. Water pressure then is good, and you won’t suffer evaporation that takes place during sunny hours.

- **Water less, but deeper:** Almost all turf doctors will tell you to deep-water your turf grass at most two times a week – not every day, as my spouse seems to think. Better to have a circuit come on every four days for 18 minutes, rather than daily for 10. And, such watering trains your lawn’s roots to reach deep underground, making the turf grass more drought-resistant.

- **Optimize tree and shrub irrigation:** Move to drip irrigation for trees and shrubs; sprinkler spraying is highly inefficient for landscapes, and drip irrigation will often cut water consumption by up to 75%.

More drastic, is remaking your front yard. Some key steps to a real makeover:

- **Plan your remake:** Master Gardeners and their website can offer an assist! When you are at the [website](#), click on the options of Gardening with California Natives and Lawn Care Management – there you will find easy to use advice and plant recommendations. Visit the Demonstration Garden at the San Joaquin County Agricultural Center, 2102 E Earhart Ave, Stockton, 95206, to see these California native plants “in the flesh”! Pick California native plants that require greatly reduced water, and are colorful and friendly to wildlife, like bees and hummingbirds!

- **Get approval from your homeowner’s association (if you are in one).** With many of these associations you merely need to get a copy of the architectural change request, fill it out, submit a sketch of the new plan and a listing of the replacement plants. Better to do this before you begin work, lest one finishes a yard makeover, finds it is not approved by the association and be forced to remove much of your work.
• Don’t overlook the likelihood of needing to remake your irrigation system. The sjmastergardenerers.ucanr.edu site also has a section, Water Conservation in the Home Landscape, that offers plenty of helpful advice!

Good choices for California native plants and trees abound.

Many of the low-water landscape plants serve an important second function; they support wildlife! Some of these native shrubs include currants (Ribes malvaceum, Ribes viburnifolium, manzanitas (Arctostaphylos) and silk tassel (Garrya elliptica).

Evergreen shrubs will provide birds with shelter from inclement weather and places to hide and nest.

Recommendations from the UC Demo Garden include Iris douglasiana; Arctostaphylos densiflora ‘Howard McMinn’; Mimulus aurantiacus (its hybrids bloom spring to fall in shades from gold to rose); Epilobium canum, and California fuchsia, which is a favorite of hummingbirds.

Plants that produce seeds or berries will help feed birds: California lilac (Ceanothus), coffeeberry (Rhamnus californica), mountain mahogany (Cercocarpus betuloides), Oregon grape (Mahonia aquifolium), and redbud (Cercis occidentalis).

Native oaks provide acorns for birds and can give your landscape remake needed vertical height, as well as shade for plants in the hottest of San Joaquin summer days. Many of these plants will be on display in this year’s Spring Garden Tour, “Lovely to Look at, Delicious to Eat”, scheduled for Sunday, March 18.

Good luck on rethinking and retooling your landscaping plan! Call on the Master Gardener for resources!

UC Master Gardeners
2101 E Earhart Ave
Suite 200, Stockton, CA, 95206
Phone: 209-953-6112
E-mail: anrmgsanjoaquin@ucanr.edu
Web-site: http://sjmastergardeners.ucdavis.edu
Find us on Facebook!
Coordinator: Marcy Sousa 953-6100
For nondiscrimination policy, click here
calculating landscape water needs, refer to the Guide to Estimating Irrigation Water Needs of Landscape Plantings. The WUCOLS plant search information is also available through the Water Wonk website. I used Water Wonk to do my plant searches for this article. It was introduced first and includes photos. The UC site does not include photos, but it provides additional information about the WUCOLS list, including how it was derived and how to use it.

The WUCOLS list includes over 3,769 plants (species, cultivars, and hybrids) with 2,062 of those recommended for the Central Valley Region. Plants are identified by botanical and common names, broken down by water needs. The beauty of this comprehensive plant data base is that it is tailor-made for searching out low water use plants for our new water conserving landscapes.

Searching the Water Wonk data base was a satisfying experience. I liked the extensive plant list and that (for most plants) there were multiple pictures available to add a much-appreciated visual. I began by selecting Region 2, for Central Valley (you can also search by city). Next I chose “Groundcovers” from a list of 11 different “Vegetation Types.” An impressive 253 plants met my criteria. Adding “Low Water Use” reduced that number to 69 plants. I wanted to expand my research to a specific plant species, choosing one of my favorites, Salvia. A whopping 93 salvias were listed in the data base for the Central Valley. The extensive list proved useful as it showed which Salvia species and cultivars required moderate water versus those that did well with low water. Knowing that some plants of the same genus can have different water needs depending on the species and cultivar can really guide our plant choices, often allowing us to have some variation of our favorites.

Unlike the UC website, to create plant lists in the Water Wonk site, you need to sign up to access the data base. The process is quite simple, however. Once you’ve narrowed down your plant choices, you can personalize the list and print it or download it to an Excel spreadsheet.

The data base is the result of comprehensive research and expertise that assigned water needs categories to each plant species expressed as a percentage of reference evapotranspiration (ET\textsubscript{0}). To access monthly averages for San Joaquin Valley (Zones 12 and 14), refer to: http://www.cimis.water.ca.gov/cimis/pdf/etomap1.pdf. Evapotranspiration is the total amount of water lost through evaporation in the soil and transpiration of plant tissues. Categories were quantitatively defined as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage of ET\textsubscript{0}</th>
</tr>
</thead>
<tbody>
<tr>
<td>High (H)</td>
<td>70-90% ET\textsubscript{0}</td>
</tr>
<tr>
<td>Low (L)</td>
<td>10-30% ET\textsubscript{0}</td>
</tr>
<tr>
<td>Moderate (M)</td>
<td>40-60% ET\textsubscript{0}</td>
</tr>
<tr>
<td>Very Low (VL)</td>
<td>&lt;10% ET\textsubscript{0}</td>
</tr>
</tbody>
</table>

WUCOLS does not define the above values in terms of number of times a plant should be irrigated in a given length of time. However, it does provide numerical values for each rating that can then be used in an equation to create quick and accurate water needs calculations. As an example, if for the month of July the ET\textsubscript{0} is 6 inches, a plant in the “moderate” (40-60% ET\textsubscript{0}) category would need between 2.4 inches and 3.6 inches of irrigation for the month to maintain good health once it is well established. To figure out how many gallons per month that would be per square foot of soil, multiply by 0.623, or 1.5 – 2.2 gallons. Many of our Mediterranean climate plants fall into this category, with a great number of our California natives occupying the “low” and “very low” categories. Examples include Arbutus unedo (strawberry tree), which requires “low” water and Romneya coulteri (matilija poppy), which requires “Very Low” water. Both would be excellent choices for drought conditions. Plants categorized as needing “low water” are particularly appealing, as they require no irrigation at all except during years of below-average rainfall for the region and during their first establishment year. (Larger woody species, like Arbutus, especially when planted from 5-gallon containers or larger, will require two or more years of careful watering to establish their root systems before they become truly drought tolerant.)
In California’s thirsty Central Valley, many gardeners have already implemented water-wise strategies, but the dry conditions of the past few years create the looming challenge of being even more frugal with our precious water. With that in mind, here are some definitions that might help as you consider how to meet this challenge.

**Graywater collection**: water collected from showers, tubs, washing machines, and bathroom sinks. Graywater collection is a heavily regulated process and suitable only for irrigating ornamental plants. Start by checking with your city and/or county building department before installing a graywater collection system.

**Hydrozone**: a garden area where plants are grouped according to their water needs. Hydrozoning prevents the over-watering that can happen when drought-tolerant plants grow in close proximity to thirstier ornamentals.

**Microclimate**: the climate of a smaller area that differs from the larger surrounding area. Garden microclimates can differ greatly in temperature, sun exposure, moisture, drainage and wind speed. Using a microclimate assessment can be helpful when analyzing and responding to the water needs of your garden:

**Permeable surface**: a paved surface that allows water to seep through it to soil underneath. Permeable surfaces are an efficient and attractive alternative to traditional non-porous paving materials.

**Precipitation Rate**: the rate at which water is delivered to a landscaped area and is measured in inches per hour. Using the “catch can test” can help you determine the efficiency of your landscape watering regimen.

**QWEL**: Qualified Water Efficient Landscaper. A QWEL consultant is trained in water-wise landscape practices for plant selection, irrigation system design, and water management. Find a QWEL consultant who can help you create a more water efficient garden.

**Rainwater harvesting**: capturing rainwater to store for future use. Rainwater harvesting is an idea whose time has come, and there are several ways to accomplish this (including redirecting the rainwater that flows from your roof).

**Swale**: a depression that follows the contour of a natural or man-made slope. Water from higher elevations or stormwater runoff from a roof can be redirected to a swale where it can sink into the soil or be redistributed into a garden.

**Xeriscape**: a garden landscape that reduces or eliminates the need for supplemental irrigation. Xeriscaping is no longer considered the sere, unattractive water-wise option for conscientious gardeners. Instead, it is one of several gardening strategies that represent the best in sustainability, and it can offer beautiful drought-tolerant alternatives.

There are other terms that will come your way as you look for efficient and practical ways to improve drought mitigation strategies in your yard: French drains, rain barrels, and cisterns are among them. You can use these terms as a starting point to learn more about the water-wise possibilities for your yard, and you will be aligning yourself with all the gardeners who continue to seek ways to be even better stewards of our water resources.
The pleasant climate and the diversity of crops and landscape plants that appeal to residents of San Joaquin County also appeal to invasive and destructive insect pests and plant diseases. Pest Detection and Eradication programs are responsible for early detection and control of various pests not presently established within the state or the County, but which are known to be a threat to agriculture, forests, urban landscapes, open space, or the environment.

To protect our crops from non-native insects, a year round trapping program monitors for invasive pests. To maintain this program, the County employs 28 seasonal pest detection surveyors. These individuals are responsible for the placement, monitoring and identification of suspect pests from over 29,300 placed traps throughout the County. The Pest Exclusion unit has four full time and two part-time biologists as well as a Plant Detection dog. Responsibilities include daily inspections of arriving plant material at postal and parcel facilities, nurseries and private residences. Thousands of inspsections are performed annually to keep the County free of non-native pests. Here are some of the traps you might see around the County:

**Jackson traps** are a simple but effective means to trap a number of insects of concern, including the Oriental Fruit Fly, Mediterranean Fruit Fly, Melon Fruit Fly, and Light Brown Apple Moth (LBAM). A lure or bait specific to the insect of interest is placed in the trap, along with a sticky cardboard insert. During 2012, County trappers found several LBAM using these traps. No fruit flies of concern were detected.

**Red delta-shaped traps** are deployed specifically to monitor for presence of the European Grapevine Moth (EGVM), a serious invasive pest of grapes. During the 2012 EGVM detection season, over 5,000 traps were placed in the County and monitored by 10 trappers every 2 weeks from March through October. The European Gypsy Moth has been established in the eastern US since the mid 1800’s, but has so far been prevented from becoming established in California. Trappers deploy a green delta trap with a pheromone strip to attract male moths. In 2012, 246 Gypsy Moth traps were monitored throughout the county and no moths were found.

**Yellow panel traps** are primarily used for detection of the Asian Citrus Psyllid (ACP) and the Glassy-Winged Sharpshooter (GWSS). Both insects carry devastating plant diseases; ACP spreads Huanglongbing, or Citrus Greening Disease, and GWSS spreads Pierce’s Disease in grapes. ACP was first found in California in 2008. This is the twelfth year the County has had a GWSS prevention program. The GWSS unit monitors over 3,000 detection traps and inspected over 2,200 incoming plant shipments in 2012.

**Bell shaped glass traps**, known as McPhail traps, hold a water and yeast mixture which attracts flies such as the Caribbean Fruit Fly and Mexican Fruit Fly. These two species are capable of damaging most of the fruits and vegetables grown in California. Trappers choose trap locations carefully for maximum effectiveness, and check the traps weekly.

One of the biggest challenges the trappers face is finding locations to place their traps. Many houses located in subdivisions have tall fences with backyards that are nearly impossible to see what types of fruit trees or gardens residents may have. Gaining access to host trees and plants is vital in a successful trapping program.

Early detection efforts such as the ongoing trapping program protect local agriculture and common home grown fruits and vegetables by intercepting pests at their lowest populations. This increases the likelihood of successful eradication of pest introductions. Community participation strengthens the detection program, supports local agricultural producers and helps protect the environment. “Most people are very cooperative and supportive of the program,” stated trapper Jim Schardt.

If you have any fruit trees and/or a vegetable garden and are interested in volunteering your yard, please feel free to contact the County Ag Commissioner’s office at 209-953-6000.
I keep hearing people talk about CSAs. What is a CSA?

In recent years, there’s been an explosion of Community Supported Agriculture (CSA) programs as people yearn to eat healthy, seasonal, all natural produce. CSAs were first introduced to America from Europe in the 1980s, originating 20 years earlier in Switzerland and Japan by consumers seeking food that was safe to eat and farmers in search of a stable crop market. The two groups came together in economic partnerships known as CSAs.

CSA farmers offer “shares” or “memberships” of produce that may also include honey, coffee, eggs, cheese, preserved foods, homemade breads or other products. Delivery is usually on a weekly or bi-weekly basis. Most CSA farmers provide produce that is “organic” or all natural, seasonal and use sustainable farming practices. There are advantages for both farmers and members in a CSA program. This relationship often results in a strong sense of community between the two, with a strong commitment to healthy, all natural, seasonal produce.

Members get to know their farmer on a first-name basis, learn how their produce is grown, and have many opportunities to visit the farm. Members have the opportunity to eat just-picked produce with the benefits of great flavor and nutrients. For many members, they have the experience of trying new vegetables and learning how to cook them.

Likewise, CSA farmers get to know their members. The CSA model also gives farmers the opportunity to educate members about different vegetables, the nutritional importance of eating seasonal produce, and introduce tasty recipes. The CSA model can provide farmers the opportunity for a steady income stream, as well as the potential to expand their business.

Some farmers use a "mix and match" or "market-style" plan. Rather than providing a standard box of produce for all their members, the farmer will allow them to create their own boxes. Some farmers will form partnerships to offer a variety of their products together to their CSA members. When harvest is plenty, CSA farmers may donate extra produce to those in need.

Some CSAs boxes are delivered to the doorsteps of subscribers, while other operations establish centralized drop-off locations so members can pick up their boxes.

There is a “shared risk concept” woven into the CSA program beyond the usual commercial arrangement. Most members pay up front and the farmers do their best to provide an abundant box of produce each week. If harvests are light, members are not typically reimbursed. The result is a feeling of "we're in this together" which creates community between the members and “their farmer.” This also creates a sense of responsibility by the farmers to provide good produce in sufficient quantities.

It’s important to note that a CSA may not provide all the produce needed or wanted by members so it may be necessary to supplement veggies and fruits from a home garden or Farmers Market. CSA programs will vary so it’s important to do research to learn about the farms before subscribing.

CSAs have changed the way many purchase their produce. They have also contributed to consumers becoming more aware of how their food is grown, bringing us back to our agrarian roots. Now more than ever, there’s no reason not to do what our moms used to tell us and “eat our veggies.”
### Risotto Primavera

#### Ingredients
- 5 1/2 cups low sodium chicken broth
- 3 Tbsp olive oil
- 3 Tbsp butter
- 1 lg yellow onion finely chopped
- 2 cloves garlic minced
- 2 cups finely chopped carrots
- 1 ½ cups pieces of thinly sliced asparagus
- 1 medium leek sliced in small rings
- 1 ½ cups fresh shelled peas or petite frozen peas
- sliced mushrooms
- finely chopped red peppers
- or finely chopped zucchini
- 2 cups Arborio rice
- 1 ½ cups dry white wine
- 1 ½ tsp Kosher salt, plus more to taste
- ¼ cup chopped fresh parsley or basil
- ¾ cup grated Parmesan cheese, plus additional for serving

#### Directions
Pour chicken broth into a small saucepan. Heat to a simmer. In a large Dutch oven, heat 2 tablespoons olive oil and 2 tablespoons butter. Add diced onions, garlic and leeks. Sauté until barely wilted. Add carrots, asparagus, peppers or zucchini and sauté for 2 minutes. Add mushrooms sauté for 1 minute. Sprinkle in salt and stir. Remove from pan and put on a plate. Set aside.

Add 1 tablespoon olive oil and 1 tablespoon butter to the same pan. Heat over medium-low heat. Add rice and stir, cooking until edges are translucent, about 3 minutes. Add half the wine and 1 1/2 teaspoons kosher salt. Stir and cook until liquid is absorbed. Stir frequently as the rice will release starch and stick to pan! Over the next 30 to 45 minutes, add 1 cup of simmering broth at a time, stirring and cooking until each addition of broth has absorbed. Add other half of wine and cook until absorbed. Add green onions and peas, stirring to combine. Taste to make sure rice is the right texture; add another helping of broth if rice has too much bite to it. Check salt content and add more salt if necessary. Once rice is cooked, remove from heat. Stir in Parmesan cheese and sautéed vegetables until combined. Serve in a shallow bowl dressed with chopped parsley or basil. Pass additional Parmesan and a turn of fresh cracked pepper!
**Coming Events**

**April**

Friday, April 11, and every Friday during the growing season

**San Joaquin Delta College’s new Horticultural Department Nursery**

Open for retail business every Friday from 9 am to 3 pm
Burke Bradley Road, north side of Delta College campus, Stockton

Saturday, April 12

**Contra Costa Master Gardeners: The Great Tomato Plant Sale**

April 5: 10 am – 3 pm
April 12: 10 am – 2 pm
Sixty+ varieties of heirloom tomato plants--peppers and eggplants too. All plants $3 each (cash and check only). All your questions answered by UC Master Gardeners.
North Wiget Lane & Shadelands Drive, Walnut Creek

Saturday, April 12

**San Joaquin Master Gardener Workshop: Gardening for Life**

Saturday, April 19

**San Joaquin Master Gardener Workshop: Gardening for Life**

10 – 11:30 am
Tips and tricks for gardening in your “golden years.”
City of Stockton Delta Water Supply Project, 11373 N. Lower Sacramento Road, Lodi

**Saturday, April 12**

**Linden Garden Club Annual Plant Sale**

9 am to 3 pm
Refreshments, raffles, garden art, perennials, annuals, herbs, veggies, shrubs, trees, and a large selection of heirloom tomatoes.
7440 N. Jack Tone Road (SE corner of Comstock and Jack Tone)

**Sunday, April 13 (repeats Saturday, May 3)**

**Alden Lane Nursery: Orchids 101**

10 – 11:30 am
Learn wonderful things about orchids.
981 Alden Lane, Livermore
(925) 447-0280

**Saturday and Sunday, April 12 – 13**

**Annie’s Annuals Spring Planting Party!**

11 am (both days)
Saturday: Leslie Bennett and Stefani Bittner, authors of The Beautiful Edible Garden, share how to not only grow organic fruits and vegetables, but also make your garden a place of year-round beauty that is appealing, enjoyable, and fits your personal style.
Sunday: Kate Frey – Gardening in Drought. We are thrilled to have Kate talk about her favorite drought-tolerant plants and how you can responsibly create a gorgeous low-water garden.
740 Market Avenue, Richmond
1-888-266-4370 or (510) 215-3301

**Saturday, April 19**

**San Joaquin Master Gardener Workshop: Waterwise Gardening**

10:00 am—12:00 pm
Delta Tree Farm
12900 N Lower Sacramento Rd, Lodi

**April 26**

**San Joaquin Master Gardener Workshop: Waterwise Gardening**

10:30-12:00 pm
Learn simple tricks you can incorporate to have a waterwise landscape.
Lodi Public Library
201 W Locust St, Lodi
(209) 333-5566

**May**

Saturday, May 3

**Alden Lane Nursery: Orchids 101**

10 – 11:30 am
Learn wonderful things about orchids.
981 Alden Lane, Livermore
(925) 447-0280

Saturday and Sunday, May 3 – 4

**California Center for Urban Horticulture: Rose Days**

10 am – 4 pm
Come hear famous Rosarian Charles Boyd speak, and learn about roses. One free miniature rose per guest (while supplies last).
455 Hopkins Road, UC Davis
(530) 752-6642

Saturday, May 10

**San Joaquin Master Gardener Workshop: Picked at its Prime**

10 – 11:30 am
Ever wonder how to pick a fresh melon and the best way to store tomatoes?
City of Stockton Delta Water Supply Project, 11373 N. Lower Sacramento Road, Lodi
Class size is limited. Please RSVP by the Wednesday before the class at (209) 953-6100.

Saturday, May 11 (Mother’s Day)

**Annie’s Annuals guest speaker: Brad Gates of Wild Boar Farms**

11 am
Brad, an intrepid tomato breeder, will talk about his magnificent tomatoes. He has
Plant -

In May

**Annuals** find May to be the optimum time for planting. Flowers in six packs are a good buy. They’ll catch up quickly to those growing in 4-inch pots and jumbo packs. (To produce instant color for a special event, use 4-inch plants.)

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

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

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

**Tomato and pepper** transplants can be planted this month. Seeds of pumpkins, beans, corn, squash, cucumbers, and melons can be sown in the garden around the middle of this month. For interesting and unusual fall decorations, consider growing pumpkins or winter squash that are not your ordinary jack-o-lantern. **Zucchini** tastes best if you harvest it before it exceeds 8-10 inches. **Carrots** become sweeter with age, but harvest them before they take on a woody texture. **Snow peas** are ready to be picked when the peas are just beginning to swell in the pods. Snap peas taste best when the pod is plump, but the skin is still shiny, not dull.

**Maintenance** –

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

**Aerate** lawns that get a lot of heavy foot traffic and have compacted soil, making it difficult for water, fertilizer, and oxygen to reach the roots. If you can’t push a screwdriver up to its handle into the turf, it’s time to aerate. Besides compaction, lawns on heavy clay soil, or those on a steep slope (10:1) to the street should be aerated. Use an aerator that either produces a core or a water wash to dig holes. Spike aerators just add to compaction. If you are using a machine aerator, be sure to mark and avoid all sprinkler heads. Some machine aerators require a lawn to be moist, but not soggy. Irrigate a day or two before aeration if soil is dry.

**A mower** set at the highest or next to the highest blade setting will help keep your fescue lawn healthy and use less water through the summer. **Water** your lawn in the morning to discourage fungus diseases and lose less water through evaporation.

June Notes

**Plant** -

**A variety** of flower shapes and colors, planted in clumps of the same type of flower, attracts bees. Look for flowers and plants that are native to our area for growing ease and as an attractant for honey bees.

**There’s still time** to get beans, corn, cucumbers, eggplant, peppers, pumpkins (start now for Halloween), summer squash, and tomatoes in the ground. These warm-season plants grow well as soil heats up but need lots of irrigation. Water consistently all summer, but grow only what you need to conserve water.

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

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

**Maintenance** -

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

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

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

**Apply a 2-inch** layer of mulch to conserve water. Wood chips, used as mulch around plants, can suppress weeds, conserve soil moisture and enhance the plants’ root growth.

**Fertilize** both warm and cool season lawns this month. Most lawns only need to be watered two or three times a week. A deep, thorough watering could lower that total to once per week.

**During the summer heat**, lawns need about two inches of water per week. To find out how much water your sprinklers output, place several flat bottomed containers (such as tuna fish cans) around your lawn, turn on the sprinklers for a half-hour, and then measure the water in the containers. Adjust your sprinkler time accordingly.
been breeding tomatoes from heirloom stock in an effort to create the most outrageous tomatoes in the world!
740 Market Avenue, Richmond
1-888-266-4370 or (510) 215-3301

Saturday, May 17
San Joaquin Master Gardener Workshop: Picked at its Prime
10 – 11:30 am
Ever wonder how to pick a fresh melon and the best way to store tomatoes? Manteca Library, 320 W. Center, Manteca Classes are free. All participants must register a week prior to the class at (209) 953-6100

Saturday, May 17
Fair Oaks Horticulture Center Workshop—sponsored by E. B. Stone & Son
8:30 – 11 am
Hear about water saving ideas for the garden and landscape. Get tips on irrigation systems and selecting a controller. Take a water efficient landscape tour.
11549 Fair Oaks Boulevard, Fair Oaks

Saturday, May 24
Alden Lane Nursery: Terrarium Workshop
1:30 to 3 pm
Incredible, miniature worlds of your creation that are VERY simple to care for and give years of satisfaction. Come and make one of these beauties with us. We provide all the elements and instruction, and you will go home with a stunning 1 1/2 to 2 gallon size terrarium. If you have a favorite rock or shell or bit of memorabilia you want to incorporate into your creation, bring it with you. These also make great gifts for seniors, as they are very easy to care for and bring a bit of the outdoors inside.
$40.00. Sign up soon as the class size is limited. Please prepay by May 20th 981 Alden Lane, Livermore (925) 447-0280

Saturday, May 31
San Joaquin Master Gardener Workshop: Attracting Pollinators
10:30-12:00 pm
Pollinators are beneficial in the garden. Join us and learn how you can attract them to your garden.
Lodi Public Library
201 W Locust St, Lodi
(209) 333-5566

June

Saturday, June 7
Annie's Annuals: Refresh Your Garden Design—Simple Strategies to Wake a Weary Garden
11 am
Author Rebecca Sweet will give tips to wake up your spring garden with some easy-to-implement strategies.
740 Market Avenue, Richmond
1-888-266-4370 or (510) 215-3301

Saturday, June 14
San Joaquin Master Gardener Workshop: Bees Wanted
10 – 11:30 am
Creating a buzz-worthy garden
City of Stockton Delta Water Supply Project, 11373 N. Lower Sacramento Road, Lodi
Class size is limited. Please RSVP by the Wednesday before the class at (209) 953-6100.

Saturday, June 14
Fair Oaks Horticulture Center Open Garden—sponsored by E. B. Stone & Son
8:30 – 11:30 am
Talk with Master Gardeners. See demonstrations on container gardening and succulents. Learn about espalier fruit trees, blueberries and cane berries. Watch a bud grafting demonstration.
11549 Fair Oaks Boulevard, Fair Oaks

Saturday and Sunday, June 14 – 15
Alden Lane Nursery: Berry Festival
All day

Berry tasting and berry education
981 Alden Lane, Livermore
(925) 447-0280

Saturday, June 21
Annie’s Annuals: Smashingly Successful Container Gardens with Ernesto Sandoval, Director of UC Davis Botanical Conservatory
11 am
Join Ernesto as he shares essentials about how to make the most of your containers in this fun and super-informative talk. He will cover soil texture, the importance of pH, temperature, pot size, and more.
740 Market Avenue, Richmond
1-888-266-4370 or (510) 215-3301

Saturday, June 21
San Joaquin Master Gardener Workshop: Bees Wanted
10:30 – 12 noon
Creating a buzz-worthy garden
Manteca Library, 320 W. Center, Manteca Classes are free. All participants must register a week prior to the class at (209) 953-6100

Saturday, June 28
San Joaquin Master Gardener Workshop: Edible Landscaping
10:30-12:00 pm
Interested in growing a garden but don't have the space? Learn how you can incorporate edibles into your existing landscape.
Lodi Public Library
201 W Locust St, Lodi
(209) 333-5566
UC Master Gardeners of San Joaquin

2014 Garden Tour
Sunday, May 18, 2014 ~ 10:00 a.m. to 4:00 p.m.

Lovely to Look at, Delicious to Eat

Join us for a tour of seven private gardens located in north Stockton, Morada, and Lodi. All are unique and diverse, both large and small, reflecting the owners’ unique personalities and styles.

With increasing water concerns for our area this year, tour-goers will appreciate examples of lawn conversions to no-mow lawns and California native plant gardens. One of the gardens will feature a water audit demonstration; another has a dry stream bed. Many gardens will provide examples of water-thrifty plants that thrive in our area.

Edibles share the stage this year with raised vegetable planters, herb gardens and citrus stealing the show. Still, there will be plenty of beautiful flowers on display along with striking foliage plants.

Master Gardeners will be on hand to answer questions and identify plants. Plus information will be available on environmentally-friendly pest control, efficient irrigation techniques, and other sustainable gardening practices.

Whether you’re looking to reduce water use and maintenance, attract wildlife, or grow more of what you eat, this year’s tour is for you!

Enjoy complimentary pastries. Be sure to visit our garden-themed Craft faire.

Ticket Sales
Online at http://sjmastergardeners.ucanr.edu/

Stockton
Quail Lakes Nursery
3404 Shadowbrook Drive
473-8733

Regalo Bello
5757 Pacific Avenue
951-4329

With Garden Flair
2206 Pacific Avenue
933-9009

Lodi
Delta Tree Farms
12900 Lower Sacramento Road
334-4545

Hollandutch Nursery
11677 N. Davis Road
465-4542

Weigums Nursery
401 N. Ham Lane
369-6288

Ripon / Manteca
Park Greenhouse Nursery
12813 W. Ripon Road
Ripon 599-7545

UC Extension Office
2101 E. Earhart Avenue
Stockton 953-6112

Rain Forest Nursery
1982 W. Yosemite
Manteca 815-9483

$20 in advance
$25 on day of tour

UC Master Gardeners of San Joaquin County
2101 E. Earhart Avenue, Suite 200 Stockton, CA 95206 (209) 953-6112
San Joaquin Master Gardeners
2014 Workshop Schedule
City of Stockton
Delta Water Supply Project Building

January 11:
Behind the Greenhouse Door -
Creating the greenhouse that works for you.

February 8:
Veggies Gone Vintage -
Learn how to grow heirloom fruits and vegetables.

March 8:
Growing a Masterpiece Centerpiece -
From garden to vase, learn how to grow a cutting flower garden.

April 12:
Gardening For Life -
Tips and tricks to gardening in your “golden years.”

May 10:
Picked at its Prime -
Ever wonder how to pick a fresh melon and the best way to store tomatoes?

June 14:
Bees Wanted -
Creating a buzz-worthy garden.

July 12:
Seed Envy -
How to collect and store seeds to use in next year’s garden.

August 9:
Made in the Shade -
It is possible to have a successful shade garden, even in our climate.

September 13:
Art of Floral Design -
Learn how to make beautiful floral arrangements for yourself and as gifts.

October 11:
Gardening Tool Box -
Discover great gardening websites and resources that are available to add to your virtual tool box.

November 8:
Pruning With a Purpose -
Winter pruning chores.

December:
No class. Happy Holidays!

Classes will be held at the
City of Stockton Delta Water Supply Project
11375 North Lower Sacramento Road • Lodi, CA 95242
Classes begin at 10:00 am and end at 11:30 am.
Class size is limited to 30. You will need to RSVP by the Wednesday before the class to attend the workshop. Please call (209) 953-6100 to guarantee your seat.
San Joaquin Master Gardeners
2014 Workshop Schedule
Manteca Library
Time 10:30 am -12:00 pm

January 18:
Behind the Greenhouse Door -
Creating the greenhouse that works for you.

February 15:
Veggies Gone Vintage -
Learn how to grow heirloom fruits and vegetables.

March 15:
Growing a Masterpiece Centrepiece -
From garden to vase, learn how to grow a cutting flower garden.

April 19:
Gardening For Life -
Tips and tricks to gardening in your “golden years.”

May 17:
Picked at its Prime -
Ever wonder how to pick a fresh melon and the best way to store tomatoes?

June 21:
Bees Wanted -
Creating a buzz-worthy garden.

July 19:
Seed Envy -
How to collect and store seeds to use in next year’s garden.

August 16:
Made in the Shade -
It is possible to have a successful shade garden, even in our climate.

September 20:
Art of Floral Design -
Learn how to make beautiful floral arrangements for yourself and as gifts.

October 18:
Gardening Tool Box -
Discover great gardening websites and resources that are available to add to your virtual tool box.

November 15:
Pruning With a Purpose -
Winter pruning chores.

December:
No class. Happy Holidays!

Classes will be held at the
Manteca Library
320 W. Center Manteca, CA 95336 • (209) 937-8221
Classes begin at 10:30 am and end at 12:00 pm.
Classes are free.
All participants must register a week prior to the class at (209) 953-6100.
Law enforcement agencies throughout San Joaquin County will be hosting collection events on April 26, 2014. Prescription drugs and medical sharps will be accepted.

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

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

**LATHROP**
LATHROP SENIOR CENTER, 15707 5TH ST. (NO MEDICAL SHARPS)
LINDEN
HOLY CROSS CATHOLIC CHURCH, 18633 E. FRONT ST. (NO MEDICAL SHARPS)
LOCKEFORD
PAYLESS MARKET, 18980 N. HIGHWAY 88 (NO MEDICAL SHARPS)
LODI
POLICE DEPARTMENT, 215 W. ELM ST. (SHARPS ACCEPTED)
MANTECA
POLICE DEPARTMENT, 1001 W. CENTER ST. (SHARPS ACCEPTED)
RIPO
POLICE DEPARTMENT, 259 N. WILMA AVE. (SHARPS ACCEPTED)
STOCKTON
ARNOLD RUE COMM CENTER, 5758 LORRAINE AVE. (SHARPS ACCEPTED)
FRANKLIN HIGH SCHOOL, 300 GERTRUDE. (NO MEDICAL SHARPS)
RITE AID, LINCOLN CENTER SOUTH, 6455 PACIFIC AVE. (NO MEDICAL SHARPS)
SAN JOAQUIN DELTA COLLEGE, 5151 PACIFIC AVE. (SHARPS ACCEPTED)
UNIVERSITY OF THE PACIFIC, 757 BROOKSIDE RD. (SHARPS ACCEPTED)
TRACY
CITY HALL, 324 E. 11TH ST. (SHARPS ACCEPTED)
FREE PASSENGER TIRE RECYCLING
Recycle up to 4 passenger tires free any day!

FREE for residents of San Joaquin County and its Cities.
Not available for businesses.
Rims okay. Charges will apply to larger tires.

FOR ILLEGALLY DUMPED TIRES
Recycle up to 20 passenger tires (no truck tires).
BY APPOINTMENT ONLY!

#1: Call San Joaquin County Sheriff
to file a report at 468-4400
(if property is within city limits, please file with local police)

#2: Call San Joaquin County Public Works
Provide a report number to schedule
an appointment at (209) 468-3066

Just tell the cashier you saw it in the
Master Gardener Newsletter!

Find more information on RECYCLING at:
www.SJCRrecycle.org

Funded by a Grant from the Department of Resources Recycling and Recovery (CalRecycle).

- North County Landfill
  17720 E. Harney Lane, Lodi
- Lovelace Transfer Station
  2323 E. Lovelace Road, Manteca
- Foothill Sanitary Landfill
  6484 Waverly Road, Linden