



Garden notes

With the San Joaquin County
Master Gardeners



JANUARY — MARCH 2013

San Joaquin County Master Gardeners

INSIDE THIS ISSUE

Garden Chores	2
Firewood and Pests	3
Pests and Plants	4
Growing Knowledge Garden Home	6
Recommended Fruit Trees SJ County	8
Internet Resources	9
Ted & Chris Robb Garden	11
The Help Desk Pruning Frost Damaged Plants	12
Recipes Roasted Vegetables, Carmel Apple Dip, & Minestrone soup	13
Coming Events	14
2013 Workshops	18&19

2013... Exciting things are happening!

Marcy Sousa Master Gardener Coordinator

Happy New Year! As I was finalizing this edition of our newsletter, I realized this year marks three years since we sent out our first issue. It has developed into a publication that our program is quite proud of and we hope you enjoy! This year also marks the 6th anniversary of the Master Gardener Program in our county. We started off with less than 30 volunteers that I loaded onto a bus each week and shipped to Sacramento for our first training. Since then, over 150 people have gone through the program with active Master Gardeners volunteering over 16,000 hours on various projects in the County.

2013 brings another year of Master Gardener Training that will begin in February. I am excited about the experiences, enthusiasm and expertise this class will bring to the Master Gardener Program. It was a great group of applicants and I can't wait to get started. We will be hosting our Saturday Lodi workshops at a new location this year. Same day and time but the new location will be at the City of Stockton Delta Water Project, located off Eight Mile and Lower Sacramento Road. See the flyer at the end of this newsletter for the 2013 class topics for both Manteca and Lodi.

The weather may be cold and your garden may not be at its prime, but that doesn't mean there isn't work to be done. Winter is the perfect time to plan changes for next year, browse the garden catalogs for vegetable and flowers that you want to add, and make sure your tools are in tip-top shape. There is also planting and pruning to be done now. Make sure to read the garden chores list for our suggestions of garden tasks to be completed.

Don't forget that Master Gardeners are available to answer your gardening questions. The office is open Tuesday, Wednesday and Thursday from 9:00 am—Noon. If you reach our answering machine, make sure you leave us a message and a volunteer will get back to you. You can contact us at 953-6112. I hope you enjoy this edition of our newsletter. Happy Gardening!

Chill Out! Understanding Chill Hour Requirements

Marcy Sousa Master Gardener Coordinator



You're happily choosing your bare root fruit trees when you suddenly notice extra numbers in the tree descriptions. Number of chill hours? Isn't it enough to know [your USDA plant hardiness zone](#)? That's about cold temperatures—

why do you need another number? The USDA zone tells you the coldest temperatures in your area. Broadly speaking, the chill hours tell you how long the cold temperatures last.

The growth of deciduous fruit and nut trees follows an annual pattern that changes with the seasonal transitions in the surrounding environment. Typically, temperate fruit and nut trees

Garden Chores Calendar

Sue Davis Master Gardener

Winter is the time to plan and invest time in garden maintenance for a spectacular garden next year.

January ideas:

Plant – [Bare root roses](#) and [fruit trees](#) should be available in your local nursery for planting at this time. Bare root plants are less expensive now than they will be in a couple of months when they have been potted. Planning your spring and summer garden while you leaf through seed catalogs will make planting easier when the weather warms.



Determine the mature size of plants you are adding to your landscape so that you allow sufficient space when placing it in your garden. If it looks

sparse now, you can fill in with some annuals or small perennials that can be relocated later.

Camellias at the nurseries will be in bloom now; choose one that catches your eye. Don't let the flower color alone determine your choices, though; before purchasing a plant, make sure it's healthy and its leaves are lush and green. Avoid plants that have pale leaves, overly leggy growth, or roots protruding through drain holes.

Look for [Japanese maples](#) (*A. palmatum*) in nurseries now. These trees come in many varieties, including ones with deeply cut leaves or variegated foliage. They can range in height from 7 to 20 feet tall. The finer leaved varieties need protection from the wind.

Pest Control – [Snails and slugs](#) may be hiding under pots, wood, benches, and pavers. Check these areas regularly and dispose of these pests as you find them.

Maintenance – If you haven't already [sharpened your pruning tools](#), do it early this month because now is a great time to prune. Deciduous flowering vines, fruit and shade trees, grapes and roses all benefit from a pruning to remove dead, diseased, and broken branches, open their framework to the sun and improve air circulation. Disinfect your pruning tools as you work with a 20% bleach to water solution to prevent disease and

pests. Oil your tools immediately to prevent rust. You can also wipe your tools with rubbing alcohol (70%) as you go, and/or submerge and soak them for 1 minute between uses. Be sure to dry them with a clean rag after soaking.

Rake and discard all the fallen leaves around your rose bushes, which may be harboring next season's pests.

Be sure to remove all [mummified fruit](#) from your fruit trees, as well as any fruit or leaves still on the ground to discourage pests and diseases.



Mummified fruit

Apply dormant oil sprays to control pests as well as disease and infection specific dormant sprays if needed. Dormant sprays are labeled for specific diseases or pests as well as for the recommended amount and frequency of spraying.

Please read labels carefully. You'll get the best results from spraying after rain or foggy weather and not during or just prior to freezing weather.

Mulch around your plants at least as far as the drip line but not near the trunks. This will discourage weeds, prevent soil erosion and help regulate soil temperature. Work the compost you have ready into the soil around your plants and continue composting for your spring and summer gardens.

Use a balanced fertilizer for winter-flowering plants to keep them blooming in these cold months. Among those that should be fed: primroses, stock, calendula, snapdragons, poppies, pansies and



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!



Cont. pg. 16 & 17

Firewood and Pests

Pam Kan-Rice Univ. of CA

PAGE 3

As temperatures cool, many people like to warm themselves with a cozy fire. When choosing firewood, natural resources experts ask that people use local firewood to avoid moving harmful insects and plant diseases into and around California.

Why is moving firewood such a bad idea? Tree-killing insects and diseases can lurk in firewood. These insects and diseases can't move far on their own, but when people move firewood they can jump hundreds of miles. New infestations destroy our forests, property values, and cost huge sums of money to control.

“Buy firewood from a local source close to your home to prevent the spread of insects and diseases, such as the goldspotted oak borer, sudden oak death and emerald ash borer,” said Tom Scott, a UC Cooperative Extension specialist based at UC Riverside who studies these invasive pests.



“Firewood is one of the least-regulated natural resource industries in California,” said Scott, “but this is a situation where the university can play a critical role in changing behavior through research and education rather than regulation.” Scott and his UC Cooperative Extension colleagues are working with the U.S. Forest Service, the California Firewood Task Force and other agencies to educate and discourage woodcutters, arborists, firewood dealers and consumers from transporting infested wood.

“Many people don't realize that firewood can harbor harmful insects and plant pathogens. Moving around infested wood can introduce those pests and pathogens to new areas where they might take hold and could have devastating impacts to trees, our natural resources and local communities,” said Don Owen, California Firewood Task Force chair and CAL FIRE forest pest specialist based in Redding. “Even wood that looks safe can harbor destructive pests,” cautioned Janice Alexander, UC Cooperative Extension sudden oak death outreach coordinator in Marin County.

For example, female goldspotted oak borers lay eggs in cracks and crevices of oak bark, and the larvae burrow into the cambium of the tree to feed so they may not be visible. The goldspotted oak borer has killed more than 80,000 oak trees in San Diego County in the last decade and Scott hopes it can be contained in that region. The half-inch-long beetle is native to Arizona but not to California and likely traveled in a load of infested firewood, according to Scott.

In his research, Scott has found outbreaks of goldspotted oak borer 20 miles from the infested area, which leads him to believe movement in firewood is the most likely reason for the beetle leap-frogging miles of healthy oak woodlands to end up in places like La Jolla. In communities where people harvest local trees for firewood, oaks have remained relatively beetle-free, Scott said. In addition to concealing goldspotted oak borer, firewood may harbor other destructive invasive species such as emerald ash borer or the pathogen that causes sudden oak death. Sudden oak death has killed more than a million oak and tanoak trees in 14 coastal California counties, from Monterey to Humboldt. The highly destructive emerald ash borer has been identified in Michigan, Indiana, Ohio and Illinois, but not California.



“Our best defense against the GSOB outbreak is the enlightened self-interest of Californians purchasing firewood,” Scott added. “If you want to protect the oaks around your house, neighborhood, and nearby woodlands, make sure that you're not buying wood that could contain these beetles.” In a broader sense, buy firewood from reputable dealers, from local sources whenever possible – and try to make sure that the wood you buy has been properly seasoned and doesn't contain pests.

Tips for buying oak firewood: Don't buy green firewood from unknown sources, it has the highest chance of containing pests and pathogens.

Ask where the firewood originated. If it isn't local, ask what precautions the seller has taken to ensure that the firewood is free of harmful insects and disease or consider buying from another local source.

Wood should preferably be bark-free, or have been dried and cured for one year prior to movement.

If you see D-shaped exit holes, be reluctant to buy unless you know the wood has dried for at least a year or longer. **For more information on the [California Firewood Task Force](#), click here.**

A cross-section of an oak infested by the goldspotted oak borer shows the damage done by the non-native beetle.

Firewood Pests & Thousand Cankers Disease

Steve Sanguinetti Master Gardener

Pests and Plants of the Season

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 web-page and learn more about that topic!



Invasive pests transferred by firewood

A major portion of environmental and agricultural pests can be spread through transportation of firewood. [The California Firewood Task Force](#) "Buy It Where You Burn It" program is an effort to communicate this subject. For additional information on some of the specific pests which could be involved, see the below web sites.

[Longhorned Flat headed borer](#), [Gold spotted Oak Borer](#), [Bark Beetles](#), [Red Bay Ambrosia Beetle](#)



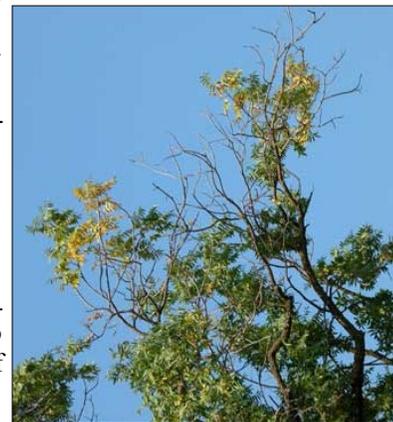
Gold Spotted Oak Borer



Tunnels in wood formed by beetles

Thousand cankers disease (TCD), caused by the fungus *Geosmithia morbida*, is killing walnut trees in California and threatens wildland and landscape trees as well as commercial walnuts. The fungus is spread by the feeding and reproductive activities of a tiny bark beetle, the Walnut Twig Beetle

(WTB). The disease is only known to occur in walnuts. WTB is believed to attack all species of walnut; however, TCD has primarily killed black walnut trees. It has been most frequently observed on the two California native species of black walnut, *Juglans californica* and *J. hindsii*. Eastern black walnut, *J. nigra*, and hybrids of that species or hybrids of California native walnuts such as the Paradox hybrid (*J. hindsii* x *J. regia*), which are important rootstocks for commercial walnuts, have also shown symptoms of the disease. From a distance, trees affected by TCD will show flagging and branch dieback. Close examination of the bark surface of tree branches will show pinhole-sized WTB entrance or emergence holes. Attacked branches are usually 1.5 cm or greater in diameter. For more information please [click here](#).



Invasive Woody Weeds

For homeowners, the control of weedy or invasive woody species and large perennial grasses, such as bamboo, can be difficult ([Table 1](#)). Although many of these troublesome species are not closely related, they share one very important characteristic: following mechanical removal of shoot material, resprouting can occur rapidly from root crowns, rhizomes, or basal and low-growing stems. In many cases, the resprouting shoots will outnumber the original plants. This increases the difficulty of control. Some of the plants that are commonly seen in urban environments are: Algerian and English ivy, bamboo, pampasgrass, tree-of-heaven, periwinkle, and many others. To learn how to control the spread of these aggressive plants, please [click here](#).



Copyright © 2007 The Regents of the University of California. All rights reserved.

Forsythia & Winter Daphne Marcy Sousa Master Gardener

Forsythia—*Forsythia* spp. Family Oleaceae (Olive family)

PLANT IDENTIFICATION

Forsythia spp. are fountain-shaped deciduous shrubs. Some species can be trained as a vine. During the growing season, shrubs produce rounded leaves with pointed tips. In late winter through early spring, yellow flowers form on bare branches.

OPTIMUM CONDITIONS FOR GROWTH

Forsythia spp. are planted in borders or can be used as a screen or ground cover. Plants do best in full sun with moderate to regular amounts of water. Flowers may be killed by frost in very cold climates. Forsythia spp. tolerate most soil types. Remove old branches and dead wood. For more information [click here](#).



Lilac Vine — *Hardenbergia violacea* Family Fabaceae (Pea Family)

An evergreen vine that climbs by twining stems to 12-16 feet. Can be used to cover an arbor, pergola or wall. Simple, oblong (2-4 inches) leaves clothe these stems. Pinkish-purple flowers with a chartreuse spot in center cascade like small Wisteria blossoms in the winter to early spring. Plant in sun or light shade in hot inland areas.



Tolerates and even prefers heavy soil so long as it drains well. Requires little water once established. Hardy to around 23° F and short duration dips to slightly lower – expect severe damage if temperatures drop below 20 F. Responds well to pruning and hard pruning can reinvigorate older plants.

Poplar —Tree of the Season

Poplar, cottonwood, and aspen—*Populus* spp.* Family Salicaceae (Willow family)

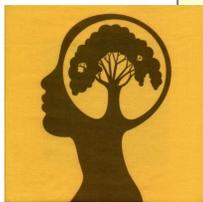
PLANT IDENTIFICATION

Populus spp. are fast-growing, tough trees. Grown primarily and especially appreciated in interior regions with hot summers and cold winters. They are deciduous trees growing from 40 to 60 feet tall. *Some species of *Populus* are [invasive weeds](#) and can have aggressive surface roots. Other types of plants may be better choices when planting.

OPTIMUM CONDITIONS FOR GROWTH

Trees do best in full sun with regular deep irrigation. They grow rapidly and are best for low maintenance areas. For more info, [click here](#).





Growing Knowledge

Useful Books and Websites

Lynne and Bill Gowdy Master Gardeners

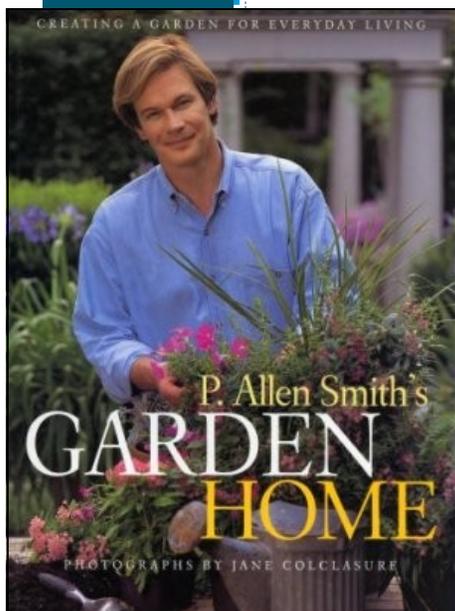
GARDEN HOME: Creating a Garden for Everyday Living

P. Allen Smith's The Twelve Principles of Design

Winter gives gardeners a chance to dream, plan, reflect and seek inspiration for springtime landscape designs or renovations. In the last Garden Notes, we wrote a review of P. Allen Smith's book, [GARDEN HOME: Creating a Garden for Everyday Living](#). Smith is one of America's most recognized garden design and lifestyle experts. His book is a valuable resource.

In his book, Smith identifies his "Twelve Principles of Design." They divide naturally into two categories. The first six elements are Enclosure, Shape and Form, Framing the View, Entry, Focal Point and Structures. They form the structural framework for gardens. The next six elements include Color, Texture, Pattern and Rhythm, Abundance, Whimsy, Mystery and Time. These elements add the decorative, finishing touches of charm, pleasure and personality. They will be covered in our next Newsletter.

In the first article we included an inventory of questions to help you survey and assess your landscape needs. This survey was intended to help you prioritize your garden goals and guide you towards visualizing your dream landscape. If you have not had a chance to complete the survey in our last newsletter, go to the [following link](#) and take a look at the survey on page 18 and identify the information that it provides for you. The survey will help you identify your garden style and "The Big Idea" unifying concepts. Think of how you enjoy your home inside and design complementary areas for your landscape so you can extend your indoor activities to your garden. To ensure success, don't rush the planning process and be sure to start off with a manageable area.

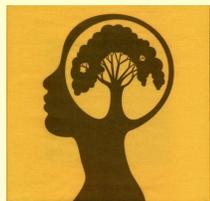


In this Newsletter, we will focus on Smith's first six "Principles" which form the structural elements of the landscape design. At the end of this article, there are Internet links to help visualize and extend each concept. Enjoy the links.

Smith skillfully demonstrates each of his design principles with text and photographic examples. When describing "Enclosures," he identifies them as a unifying bond between house and garden that creates a continuous and complementary living area-- an extension of your home. Enclosures include structures, walls, and pathways. "Enclosures," are garden rooms that add permanence and beauty to your landscape. They can be either formal or informal. Formal enclosures may include strong axial relationships between spaces, symmetry, straight lines, a geometric framework, orderly clipped hedges and topiaries, or plants with a strong architectural presence. Informal enclosures offer a flowing connection between spaces that include curving lines and asymmetrical designs. They consist of natural, relaxed plantings and natural plant shapes.

Think of enclosures as familiar rooms that provide you with comfort and security. Tall walls and smaller spaces provide a more intimate setting while larger areas with lower borders give a more open and informal feeling. Enclosures, garden rooms, or living spaces are inviting places of comfort where we want to spend time.

Smith's second Principle of Design is "Shape and Form." Plants come in many shapes. Normally when we look at plants we focus on the foliage, color, texture and flowers. However, when only shape is considered, we can see that shape defines the contour and three-dimensional characteristics of individual plants. Plant shapes include columnar, oval, round, mounded, spreading, conical, climbing, weeping, vase like, fountain, and vertical/grass-like. Words that describe these shapes include rigid, formal, casual, friendly, comforting, sheltering, stable, drooping, watery, lofty, regal, upright, wild, unpredictable and even romantic. These shapes create the style of your garden, the mood and personality of your landscape.



Growing Knowledge

Useful Books and Websites Continued

“Framing the View” involves making decisions about what to include and exclude from the landscape. Gardens become more room-like and cohesive when views are limited to one primary view and distractions are screened out. The principle goal is to draw attention to a specific component of the landscape. Smith provides readers with a quick and simple way to practice framing a view. He suggests creating a “viewfinder” using a rectangular piece of cardboard with a smaller rectangle cut out of the center. By looking through your “viewfinder,” Smith reminds us that we are able to focus more on the subject and not the surrounding distractions. You will be able to screen out and effectively block undesirable views and focus on the most vibrant aspects of your landscape.

Next, Smith explains that “Entry” is a welcome, first impression and invitation to what lies beyond. Visitors leave a public place and venture into your garden. The classic entry to your garden may be a door, arbor or gate. It enhances the architectural style of the home and sets the mood for the rest of the garden. It provides directional guides and transitional points within the landscape. Entry should be a part of every garden space and used as a transition from one garden room to another.

Focal Point means to position an object so that it creates a feature of attention. A single focal point object can transform an entire garden area by bringing other elements together in harmony. Smith states, “When a single object dominates a space, it has a way of radiating its own energy.” Other objects in the area are measured against it in some way. These elements of design can be made up of simple or ordinary objects such as a container of flowers, a bench or an architectural feature.

Finally, “Structures” concludes the Principles of Design for this Newsletter. Structures can be both functional and aesthetic. They can be a framework for visual garden interest, screen views, serve as transitions, provide areas for shelter and relaxation or provide storage. Examples of structures include patios, porches, loggias, gazebos, decks, playgrounds, terraces, planters, raised beds, arbors, trellises, potting sheds and storage structures.

In the next issue of Garden Notes we will cover the elements of Color, Texture, Pattern and Rhythm, Abundance, Whimsy, Mystery and Time. These elements provide the decorative, finishing touches of charm, pleasure and personality for your landscape design.

Enjoy learning about landscape design and creating the garden of your dreams!

Click the Internet links below for more information about each concept.

Enclosure	Shape and Form
Framing the View	Entry
Entry	Focal Point and Garden Ornaments
Structures	

Recommended Fruit Trees for San Joaquin County

Lee Miller Master Gardener

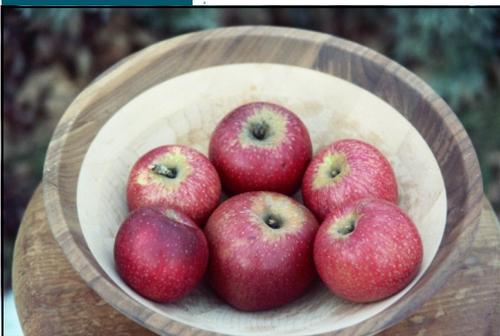
What to recommend, that is the question? With so many variables, it is hard to know what trees to recommend. Is your area for fruit trees large or small? What are your favorite fruits to eat or preserve? Do you have the patience to prune and care for trees? I can't answer these questions for you, but I can recommend some fruit trees based on my experience with a small family orchard.

Bare-root season is here and now is the time to buy and plant fruit trees. If you have limited space or dislike ladders there are often dwarf and semi-dwarf options available and trees can be kept somewhat smaller by summer pruning or planting two or more trees in the same spot. For more information on that, [click here](#). For more information about home orchards you can also go to the [UC Home Orchard Site](#).

I have fireblight problems where I live, so I have learned—the hard way—not to plant apples, pears and Asian pears that are highly susceptible to fireblight. Hence, I recommend avoiding fireblight-prone varieties. The Sunset Western Garden Book is a resource that recommends apples, apricots, Asian pears, cherries, peaches, pears, plums, and nectarines for our Sunset climate zone 14. Sometimes they also point out disease resistance or susceptibility when known. A [wholesale online catalogue](#) can give you a range of trees available and more information on orchard trees for the home gardener.

Apples: Hauer Pippin has become one of my favorite apples recommended to me by a fellow heirloom apple grower. It is good for dessert, cooking and cider. It is a late fall apple that keeps well and holds well on the tree--two characteristics I value highly. The background and source for this outstanding apple is [found here](#).

Hauer Pippin



Other apples I like are Arkansas Black, Braeburn, Granny Smith, Gala, Hudson Golden Gem, Enterprise, Liberty, Roxbury Russet, Newton Pippin, Red Delicious, Yellow Delicious, Golden Russet and Gravenstein. The Gravenstein is not really recommended for zone 14. The apples when ripe fall off, a bad characteristic in any apple. However, the Gravenstein makes such a fine apple sauce and jelly that I overlook this fault and compensate by picking the apples daily in mid-July until I have enough to make a large batch of apple sauce. In general, most summer-ripening apples are not great for the Valley, though Gala is one exception.

Apricots: The Royal Blenheim is the best tasting apricot, but it is susceptible to diseases. The Tilton is a more disease-resistant choice for canning, jam or drying. There are several other varieties available with which I have no experience. Most are self-fertile but a few require a pollinizer.

Asian pears: Most are more resistant to fireblight than many of the European pears. Hosui is fireblight-resistant and a recommended taste choice. I have grown 20th Century (Nijiseikii) successfully despite its susceptibility to fireblight. Shinko, Kikusui, Tsu Li and Ya Li are also said to be resistant to fireblight.

Cherries: There are many choices here. I would plant a Bing although Black Tartarian, Rainier, Lambert, Lapin, Stella, and Utah Giant, all do well here. Many are available on dwarfing rootstock. Stella is self-fertile but most cherries need a pollinizer variety. If you are short on room for two cherries, select dwarfs or a multi-grafted tree or do your own grafting to provide a pollinizer. As with all trees requiring pollinizers, make sure bloom times overlap to assure pollination.

Peaches: If I had only one peach tree to own, it would be a Red Haven because it ripens over a longer period than most peaches. It is delicious fresh and can be canned or frozen. Other peaches I like are O'Henry, Rio Oso Gem, Elberta and its close cousins, Kim Elberta, which ripens a little earlier and Fay Elberta, which is a little later. There are

newer offshoots of Elberta on the market that would be worth trying. These are all good for canning and freezing. The Strawberry Free peach is good if you want a sweet, white-fleshed freestone. It ripens in late June and is not sold in supermarkets. It is delicate, doesn't ship well, but is a tasty treat from the home orchard. For an early September peach, you might try the Indian Free which is a red-fleshed peach. This tree is resistant to peach leaf curl as is the Frost peach which ripens in early July. If you want an October ripening peach, I have had 'Somerset' recommended to me, but have no experience with it. I have an October peach named 'Halloween' that I haven't particularly liked and it is harder to enjoy peaches when apples are ripe.

Pears: Fireblight-resistant pears are a good idea although I have had some luck with Comice, a susceptible variety and Triumph and Warren, which are resistant. The Winter Nellis is somewhat resistant, but is not a great pear. Mine finally succumbed to fireblight after 25 years. There are new cultivars on the market that are resistant. Bartlett, Bosc, D'Anjou are fireblight-susceptible and are better avoided to save aggravation and money. I lost three Bartlett pear trees before I finally gave up.

Plums, Pluots and Plumcots: A good plum for jam and fresh eating is the Santa Rosa. Elephant Heart and Burgundy plums are excellent for eating and both hold well on the tree. Most plums can be found on semi-dwarf rootstocks. Pluots and Plumcots and other combinations are interspecific hybrids between plum, apricot and other species. They are tasty and hold better on the tree than some plums. New ones come on the market each year. I have Flavor King and Flavor Queen. Flavor Queen is a very sweet yellow fruit without much flavor, but Flavor King has excellent flavor as well as sweetness. For more information on these new and exciting fruits and other trees for the home orchard visit these sites: [Bay Laurel Nursery](#), [Port Stockton Nursery](#), [Rain Tree Nursery](#).



Flavor Queen Pluots

Persimmons: Two types, the Fuyu and Hachiya are common, but other variants such as 'Chocolate' are available. I have two mature Hachiya trees (about 25 ft.) that produce tons of fruit that is good for baking breads and cookies and to feed the birds as they get ripe. This year for the first time I have started drying the Hachiya, while firm. The drying takes care of the astringency leaving a sweet, tasty, dried fruit. The Fuyu is less astringent when firm and can be eaten like an apple if you love persimmons.

Pomegranates: There are lots of pomegranate varieties to choose from and the juice is useful for making jellies or for drinking. It contains several nutrients and antioxidants. Some pomegranates can be kept to a smaller size by summer pruning or espalier training. [Bay Laurel Nursery](#) lists 17 varieties to choose from.

I haven't mentioned all the trees that didn't work well for me nor have I suggested particular root stocks. For apples, I have had good success with M-26 dwarfing rootstock even though not recommended by some. This is another area where research is often warranted to make sure you have the right sized tree and one suitable for your soil conditions. Here are two references on rootstocks: [UC Home Orchard](#) and [Dave Wilson](#).

Unfortunately nurseries sometimes don't warn you about disease susceptibility or they may not even know exactly what rootstock their trees are grafted onto, so do your research and enjoy your fruit growing experience.

Useful Garden Websites



[San Joaquin County Master Gardeners](#)

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

[UC Cumulative and Modified Chill Hours](#)

A useful chart for anyone that is looking to plant fruit trees or has a home orchard established. Certain trees need a minimum amount of chill hours.

[American Rose Society](#)

—A collection of rose articles ranging from pest and fertilizing to planting and exhibiting. Perfect reference for a refresher before pruning your roses this year.

[San Joaquin County—Holiday Recycling Guide](#)

Now that the holidays are over this resource gives tips on what can be recycled, when to put your tree out as well as other helpful tips.

Chill Hours continued from page 1

grow rapidly during the spring and first half of the summer. Later in the season, the growth rate declines. In the fall, the growth of deciduous fruit and nut trees stops as length of day and temperatures decrease, and the trees drop their leaves. In a reaction to length of day and temperature, growth inhibitors (hormones) are produced in the tree that prevent it from growing. In the winter months, the tree's internal processes are in a state of rest, known as dormancy, due to the presence of growth inhibitors. Growth will not occur even under ideal temperature conditions. This prevents the trees from beginning to grow during atypical periods of warm weather only to become damaged by normal freezing temperatures later on in the winter or early spring.



Dormancy is broken when sufficient cold temperature breaks down the growth inhibitors within the tree. This is called vernalization, “chilling,” or “winter chill.” A specific number of cumulative hours of chilling (temperatures between 32°F–45°F), are required to break dormancy, which varies from variety to variety. Once the appropriate number of hours of chilling have been achieved by a variety, active growth resumes in the spring, but only after trees are exposed to warm enough temperatures for natural growth processes to begin. Most of Northern California receives between 800 and 1,500 hours of vernalization each winter. Southern California may only receive 100–400 hours. December and January are usually the most critical months. If each of these two months has approximately 400 hours of temperatures below 45°F distributed fairly evenly, then troubles related to mild winters are less likely.

Temperate trees and shrubs grow best in climates in which the winters are warm enough that plant tissue is not killed from extreme low temperatures, but not so warm that buds receive inadequate chilling to break dormancy. Flower and shoot buds of deciduous fruit trees and olives (evergreen) will grow normally in the spring only after exposure to sufficient winter cold. After winters with inadequate chilling, the plants leaf out late in the season (delayed foliation), blossoming is prolonged, buds may deteriorate, buds may drop, and few, if any, flowers are produced. Without flowers, there is no fruit to harvest. For a list of Temperate Fruit and Nut Trees that grow well in California, [click here](#).

Over the years, plant scientists and breeders around the world have been selecting and developing varieties that require less chilling to break dormancy and resume growth, usually <300 hours of cold temperatures <45°F. The development of these varieties has extended the range of climates and latitudes in which temperate tree fruits and nuts can be produced in California and elsewhere. Varieties that require fewer hours of winter cold temperatures to break dormancy in the spring are known as “low chill” varieties.

HOW TO COUNT CHILL HOURS Here's the best way to count chill hours: *get someone else to do it!* Luckily, there are institutions already tracking this information. Farmers and gardeners in most California counties have access to official data on chill hours through the [Pomology Weather Service](#) at the UC Fruit & Nut Research Information Center. This service records chill hours—so you don't have to. Just scroll down to our county and select the nearest CIMIS station closest to your location.

The chart is a sample of chill requirements for commonly grown fruit trees in our area. For a more complete list, [click here](#).

Type of fruit	Approx. hours at <45°F needed to break dormancy	Equiv. time if continuously exposed to <45°F
Almond	200-300	8-13 days
Apple	1200–1500	7–9 weeks
Apricot	700-1000	4-6 weeks
Cherry (sweet)	1100-1300	6-8 weeks
Peach/Nectarine	650-850	4-5 weeks
Pear	1200-1500	7-9 weeks
Persimmon	<100	4 days
Plum (Japanese)	700-1000	4-6 weeks

The Garden Gate - Opening Doors in the Community

Julie Hyske Master Gardener

Ted and Chris Robb Garden—University of the Pacific

After 2 years of dreaming of a campus garden, a dedication ceremony took place on October 4th for the new on-site organic garden on the Stockton campus of the University of the Pacific. Located near the DeMarcus Brown Studio, the garden provides a visual oasis against an urban backdrop. Imagine being able to eat fresh fruits and vegetables literally picked from the vine just hours before. Bon Appetit, Pacific's food service provider, will be using the harvested produce to create fresh healthy meals for campus dining. Meanwhile, the over-abundance of veggies will be harvested by the student garden club just hours before being sold at the weekly campus farmers market held in the Don and Karen DeRosa University Center from 11am - 2 pm each Wednesday along with recipes specific to that week's harvest.



Besides the University planting the seeds of learning and thinking to its students, the seeds sown at the garden will establish a deep connection within the community. It was thanks to an underwriting gift of \$100,000 from Regent and Whole Foods co-CEO Walter Robb that the garden was designed, constructed and received partial maintenance funding. The Ted and Chris Robb Garden is named in honor of his sons, Ted (2002) and Chris (2006), both Pacific Alumni.



Beyond the many beneficial aspects of a healthy campus dining experience, students will receive hands-on opportunities to learn how a garden is created and managed. Students become educated on the benefits of growing, shopping and eating locally. Slow Food movement concepts of eliminating transportation costs and harmful emissions also become realized. The concept of organic gardening promotes the principles of cultural and biological control by not utilizing poten-

tially harmful synthetic pesticides and fertilizers that can destroy beneficial insects and leech into groundwater contaminating local waterways.

Campus professors within the Humanities plan to integrate the garden into class curriculum and labs. The garden acts as a model of food systems and sustainability which demonstrate the principles of socioeconomics. While several campus professors will oversee the Ted and Chris Robb Garden design and expansion, it is truly a student-driven staff of gardeners performing maintenance and applying organic gardening principles. The garden has the added potential of serving the community through donations to our local food banks, on-site continuing education gardening classes and a living laboratory to local residents and school children.

Walter Robb aptly summed up the campus garden as a seed that has been planted that has become a realized miracle. The Robb garden potentially reflects the full cycle of life. The planting diversity of this fall garden includes lettuce, broccoli, kale, carrots, beets, peas, garlic, radish and grains, symbolizing the diversity of the University and the community blending together to provide a fruitful harvest.

Pictures courtesy of Big Monkey Group and UOP

The Help Desk

Susan Price Master Gardener

If you have a gardening question, call the Master Gardeners Tuesday-Thursday 9:00 am-12:00 pm at 209-953-6112 or by e-mail mgsanjoaquin@ucdavis.edu

When can I start pruning my frost damaged shrubs and perennials?

The best advice is to wait until early spring, when all danger of frost is past. Frost damage causes shoots, buds and flowers to wilt, turn brown or black, and die in frost-tender plants. Whole branches or entire plants may be killed. While the dead-looking plants may be a bit unsightly, resist the urge to dig them up or prune them prematurely. If



you do, the plants will put out new growth which will be especially susceptible to frost. Instead, leave the damaged stems and leaves in place, as they insulate plants from frost and further injury. Plants adapted to the local environment usually are not permanently harmed by frost. Most established woody species will survive light, short-term frost with minor or no injury, but many semi-tropical or tropical species will be severely injured or killed by prolonged freezing temperatures. In my own garden, I usually have some frost damage on my Mexican Bush Sage, Lantana and Pelargoniums. All come back to life by mid-spring. Of these, the Pelargoniums are probably the most frost sensitive, with some stems turning to mush. (Photo above shows frost damage on Pelargonium. Source: [Farmer Fred's website](#)).

Once the frost season has ended, around mid to late March, you can safely do your winter "clean-up." Although foliage above ground may be damaged, often the crown and roots are healthy. As the weather warms, look for new growth to emerge at the base of your plants. The longer you're willing to wait, the more obvious the actual damage will be. Once it's safe to prune, cut back the branches and stems to green, living tissue, ideally an undamaged side shoot or bud. This will invigorate your plant, encouraging bud break and new growth. If no sign of new growth appears by late April, however, the plant may not have survived. Time to dig up the dead plant and replace it with something more suitable to our temperature zone, or accept that the plant be grown as an "annual."

For more information on after-freeze care, [click here](#). For detailed information on frost protection and pruning of citrus and other sub-tropical trees, [click here](#).



Frost-damaged
Lantana

Recipes of the Season

Julie Hyske, Sue Davis & Susan Price Master Gardeners

Roasted Winter Vegetables Serves 6

Ingredients:

2 turnips
4 carrots
2 rutabagas
1 large white onion
1 large russet potato
1 large Garnet yam – peeled
1 T olive oil
1 ½ tsp. dried rosemary
Salt and Pepper to taste
Non-stick spray

Wash the vegetables thoroughly, scrubbing skins of vegetables that are not peeled. Chop the vegetables into equal sized pieces (about 1”). Toss with olive oil and rosemary and add salt and pepper to taste. Place in a large roasting pan coated with the non-stick spray. Stir vegetables occasionally while baking. Bake at 350 degrees for 45 to 50 minutes or until vegetables are easily pierced with a fork.

Covered leftovers refrigerate well up to 4 days and microwave warm in a couple of minutes at half power.

Amounts of winter vegetables listed above can be adjusted to personal taste.

Hearty, Garlicky Minestrone Soup

Ingredients

1 lb. Italian sausage
1-16 oz. can Garbanzo beans
1-16 oz. can Cannellini beans
¼ cup peeled fresh garlic, chopped
1 large yellow onion, chopped
1 large green pepper, chopped
¼ cup olive oil
5 stalks celery, diced
1 bunch green Swiss chard or kale, washed and chopped
2 large carrots, peeled and diced
1-28 oz. can diced tomatoes in juice
3 pints chicken stock
1 cup red wine
2 bay leaves
1 teaspoon each dry basil, oregano and thyme
Salt and pepper to taste
Fresh Parmesan cheese for garnish



Directions

Heat oil in large heavy pot over medium-high heat. Remove sausage from casings and add sausage to pot, cooking 12-15 minutes. Add garlic, onion, bell pepper, celery and carrots. Cook 8-10 minutes. Add Swiss chard or kale and cook 4-5 minutes. Add wine, tomatoes and juice, chicken stock, both beans, dry spices and herbs. Lower heat, cover partially with lid, and simmer 25-30 minutes.

Serve topped with fresh Parmesan cheese and crusty French bread.



Simple and oh so sweet! Caramel Apple Dip

Ingredients

16 ounces, Philadelphia 1/3 Less Fat Cream Cheese, softened
½ cup powdered sugar
16 ounces, Old Fashioned Caramel Apple Dip (I used Marzettis)
1 cup Heath Bits-O-Brickle Toffee Bits
4 large Granny Smith apples, sliced thick

Preparation Instructions

In a medium bowl, beat together cream cheese and powdered sugar until fluffy. Spread mixture evenly onto a platter. Spread caramel apple dip on top of the cream cheese layer. Sprinkle the top generously with toffee bits. Serve with thick slices of Granny Smith apples.

*** I know this is sinfully easy; you can use any type of chopped nuts on top (chopped walnuts, peanuts, pecans).

Coming Events

Corinne Bachle Master Gardener

January

Friday thru Sunday, January 4, 5, and 6, 2013 (hours vary---click link below for details)

California State Home & Garden Show

Sacramento Convention Center
This is northern California's premier consumer event. Only the finest home improvement professionals are invited to participate. The show highlights the latest products and services in the remodeling industry with an emphasis on kitchen, bathroom, and interior design, as well as landscape services and gardening products.

January 12, 2013

San Joaquin Master Gardener Workshop "Making The Cut."

Learn how to prune landscape trees and shrubs including roses.
City of Stockton Delta Water Supply Project Building, 11373 N. Lower Sacramento Rd, Lodi.
Class is free but seating is limited. Reserve your seat at 953-6100 the Wednesday prior to the class.

January 19, 2013

San Joaquin Master Gardener Workshop "Making The Cut."

Learn how to prune landscape trees and shrubs including roses.
Manteca Library, 320 W. Center St. Manteca. 10:30 am—12:00 pm.
Class is free, please RSVP at 953-6100 the Wednesday prior to the class.

January 18, 19, and 20, 2013.

The 14th Annual Lodi Home and Garden Show.

Lodi Grape Festival Grounds
Hours: Friday 12:00pm-6:00pm; Saturday: 10:00am-5:00pm; Sunday: 10:00am-5:00pm
Admission: \$3.00

Saturday, January 19, 2013 at 10:00 a.m.

Rose Pruning and Care

Delta Tree Farms
12900 N. Lower Sacramento Road, Lodi
369-6797

Join the Consulting Rosarians from the Lodi Woodbridge Rose Society who will speak about proper pruning techniques, how to select and care for the tools needed, pruning vs. deadheading, and general rose care. Time permitting, there will be some hands-on practice, so bring your pruners.

Saturday, January 19, 2013, 9 a.m. to 12 p.m.

Fair Oaks Horticulture Center Workshop. Sponsored by Sacramento County Master Gardeners and Fair Oaks Boulevard Nursery

Fair Oaks Horticulture Center, 11549 Fair Oaks Boulevard, Fair Oaks
Workshop topics will include winter pruning of fruit trees, grapes, blueberries, cane berries, and ornamental grasses

- View tool displays and learn maintenance tips
- Get advice at the composting booth
- Bring your questions and samples (in a sealed bag please) to the plant clinic

For a map and directions to the FOHC click [here](#).

January 19, 2013 11:30 a.m. & 1:30 p.m.

Rose Pruning Demo Learn why its important to prune roses and how to do it. There will be 2 demonstrations at the times listed above. P&L Garden Center 1900 Roosevelt Ave, Escalon. (209) 838-1848

Friday thru Sunday, January 25, 26, and 27, 2013 (hours vary---click link below for details)

Northern California Home & Landscape Expo

Cal Expo (800) 343-1740
Admission: \$7.00
Come enjoy hundreds of exhibits featuring the finest products and services for your home and yard. Whether you are planning to build, remodel or simply redecorate, the Home & Landscape Expo promises to bring you the largest gathering of professionals to

help you with your home project.

Saturday, January 26, 2013 at 2:30 to 3:30 p.m. Cost is \$40.00 plus tax

Faerie Garden Workshop

Alden Lane Nursery, 981 Alden Lane, Livermore (925) 447-0280
\$40.00 plus tax

Come and make your own Faerie Garden - for kids and/or adults! We provide all the elements and inspiration you need to create a magical miniature garden in a 10" terracotta pot, including a tiny woodland faerie chair and plants. Invite a good luck Faerie into your own backyard to inhabit their own, specially designed real estate - faerie dust included!

[Click here to register for the Faery Garden Workshop](#)

February

February 9, 2013

San Joaquin Master Gardener Workshop "Making Every Drip Count."

Drip irrigation is efficient and easy to install. Learn the basics with a hands-on in this workshop.
City of Stockton Delta Water Supply Project Building, 11373 N. Lower Sacramento Rd, Lodi.
Class is free but seating is limited. Reserve your seat at 953-6100 the Wednesday prior to the class.

February 16, 2013

San Joaquin Master Gardener Workshop "Making Every Drip Count."

Drip irrigation is efficient and easy to install. Learn the basics with a hands-on in this workshop.
Manteca Library, 320 W. Center St. Manteca. 10:30 am—12:00 pm.
Class is free, please RSVP at 953-6100 the Wednesday prior to the class.

Saturday, February 16, 2013 at 10 a.m. - 3:30 p.m.

Inspiration By Invitation Seminars

Alden Lane Nursery, 981 Alden Lane, Livermore

[Cont. pg 15](#)

Coming Events (Cont. pg. 14)

(925) 447-0280

The cost is \$35.00 per ticket and includes lunch.

Alden Lane features a full day of Seminars for Gardening Enthusiasts. Attendees will be able to design their day according to their interests - and we have lots of incredible seminars and instructors to choose from!

[Click here to Register](#) or call and reserve your tickets soon with our Alden Lane cashiers (925) 447-0280.

March

March 1, 2 and 3, 2013.

31st Annual Stanislaus Home and Garden Show.

Friday 12:00pm-6:00pm; Saturday: 10:00am-5:00pm; Sunday: 10:00am-5:00pm

Admission: \$3.00. Location: Modesto Centre Plaza, Modesto California

March 9, 2013 10:00 a.m. - 11:30 a.m.

San Joaquin Master Gardener Workshop "Lovely To Look At, Delicious To Eat."

You can have a sustainable landscape by converting ornamental landscape into an edible landscape that is both beautiful and nutritious!

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

Class is free but seating is limited. Reserve your seat at 953-6100 the Wednesday prior to the class.

Saturday, March 9, 2013 9 a.m. - 1 p.m.

UC Davis Arboretum Member Appreciation Spring Plant Sale

Arboretum Teaching Nursery, Garrod Drive, UC Davis.

Get your yard ready by attending one of the Friends of the UC Davis Arboretum's seasonal plant sales where you can shop the AREA'S LARGEST SELECTION of attractive, low-water, easy-care, region-appropriate plants at the UC Davis Arboretum's Teaching Nursery. Several times each year, Friends of the UC Davis Arboretum holds plant sales at the Arboretum Teaching Nursery, offering hundreds of different kinds of uncommon garden plants that have been locally grown, including the [Arboretum All-Stars](#), our top recommended plants for Central Valley gardens. [Members](#) enjoy a special preview sale and receive a 10% discount. Dozens of volunteers work hard all year to grow plants for sale to support the Arboretum. Enjoy this members-only plant sale and get a \$10-off coupon as our "thank you" for supporting the Arboretum through your membership. Get the first pick of your favorite plants. Mem-

bers also save 10% off their purchases. Not a member? Join at the door! [Find out more about becoming a member here.](#) All sales are held at the Arboretum Teaching Nursery, Garrod Drive, UC Davis. Experienced gardeners will be on hand to help you choose the best plants for your garden design and conditions.

[Map](#)
[Directions](#)

Public sales will take place in April and May. Look in your Spring 2013 Garden Notes newsletter for details.

March 16, 2013 10:30 am—12:00 pm.

San Joaquin Master Gardener Workshop "Lovely To Look At, Delicious To Eat."

You can have a sustainable landscape by converting ornamental landscape into an edible landscape that is both beautiful and nutritious!

Manteca Library, 320 W. Center St. Manteca. Class is free, please RSVP at 953-6100 the Wednesday prior to the class.

March 20—24, 2013

28th Annual SF Flower & Garden Show

Americas 3rd largest flower show, this years theme is "Gardens Make the World Go Round" 70 seminars and 55 speakers on 4 stages as well as 18 unique garden displays.

Tickets are available at the door for \$20.00. Early bird tickets are available for \$16.00 if purchased before March 11. Wed-Sat 10am-7pm and Sunday 10am-6pm. San Mateo Event Center

UC Master Gardeners

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



Phone: 209-953-6112

E-mail: mgsanjoaquin@ucdavis.edu

Web-site:

<http://sjmastergardeners.ucdavis.edu>

Coordinator: Marcy Sousa 953-6100

Garden Chores (continued from page 2)

violas. Potting a few of these will add a splash of color to your porch or patio. Pre-emergent's applied now to your lawn can help stop the summertime onslaught of crabgrass.

In February:

Plant – This is a good time to start seeds indoors (see [Lee Miller's article on seed starting](#)). Peas can be planted outside; however, it is best to pre-germinate the pea seeds on moist paper towels in a warm room for a few days before you sow them.

Winter blooming annuals such as pansies and snapdragons can still be planted this month. Dahlia tubers are available in area nurseries. For best selection, choose them now then plant them in the garden in mid to late April (when the soil reaches 60 degrees) for a rich array of color and different flower forms. Tend to your summer shade garden this month. Tuberous begonia bulbs should be available at your nursery. Choose the largest and healthiest looking bulbs to start indoors now. Move them outside in late March.

[Azaleas](#) in bloom are arriving now. Your favorite garden center should have the best selection of these shade-loving plants early this month. Good choices for evergreen



vines include fragrant yellow-flowered Carolina jessamine (*Gelsemium sempervirens*); white-flowered evergreen clematis (*C. armandii*); purple *Hardenbergia violacea* 'Happy Wanderer'; pink *H. v. 'Rosea'*; fragrant pinkish white *Jasminum polyanthum*; pink or white *Pandorea jasminoides*; and violet trumpet vine (*Clytostoma callistegioides*). All of the above are easy to grow, reaching 15 to 20 feet long.

Pest Control - Snails will soon begin their yearly trek to your tender, young foliage. Look for them hiding beneath plants and lumber piles now before they get started munching. Eliminate mosquito breeding areas in your yard before the buzzing begins in earnest. Empty any rain-filled containers around the yard



Petal Blight

Maintenance – Remove old flowers on [Camellias](#) to reduce the chance of [petal blight](#). [Citrus trees](#) will appreciate a feeding of a nitrogen rich fertilizer 6 to 8 weeks before their spring bloom time. Citrus requires micronutrients not found in turf fertilizers. A good citrus

fertilizer will include additional nutrients like magnesium, boron, copper, and zinc. Mid month is a good time to apply your final application of dormant spray for [peach leaf curl](#), [brown rot](#) and [scale](#) on your stone fruit trees.

Asparagus shoots are starting to pop up now and will appreciate a balanced fertilizer. Finish pruning your roses by mid-February.



Scale on a plum tree

Once all danger of a freeze has passed, stimulate lush new growth on plants like butterfly bush, fuchsia, and Mexican bush sage, by [cutting back woody stems](#) to within a few inches of the ground. If left unpruned, plants become leggy and scraggly-looking.

If your cymbidium [orchids](#) are bulging out of their containers or the bark has decomposed, it's time to repot them. Do this between mid-February and early July to assure bloom next season. Remove old bark, cut off dead roots, and discard soft or rotted bulbs. Repot the plant into a larger container, or divide plants into groups of three to five pseudobulbs (bulbs with leaves). Replant in medium-size bark or purchase a cymbidium mix.

Get your flower and vegetable beds ready by mixing in compost to help condition the soil.

Despite the warmer days, it's still winter. Leave freeze-damaged leaves on plants for a couple more weeks to protect and insulate any new growth from a March cold snap. [Sharpen lawn mower blades](#) and change the mower's oil before lawn cutting becomes a weekly job.

Garden Chores (continued from page 2)

March Reminders:

Plant –Beets, carrots, leeks, potatoes, and radishes can be planted from seed now. Wait until the soil is workable so your seeds don't rot in very cold or soggy soil.

Potatoes can carry soil-borne diseases which are harmless to humans but devastating for a potato plant. Buy seed potatoes from a nursery or a mail-order company that certifies the seed potatoes are disease free. Whole potatoes can be divided to give you a bigger crop by cutting the potatoes into chunks that each contain one or two eyes (the small depression where sprouts will form). To prevent rotting, store the freshly cut pieces at room temperature for three days before planting to allow the cut surfaces to dry and form a callus.

Pest Control – Empty any rain-filled containers around your yard to eliminate [mosquito](#) breeding areas.

Maintenance – [Prune](#) out suckers from trees and shrubs.

Check your existing drip irrigation. Flush out sediment from filters and check screens for algae; clean with a small brush, if necessary. Turn on the water and check for leaks in the lines; repair as needed. At the same time, make sure all emitters are dripping water. If some are clogged, replace them (if you can't remove one, install a new emitter next to it). You may also need to add emitters to some lines if plants have grown significantly since the system was installed.

Install new drip irrigation systems in your new landscaping.

Weather permitting, loosen your moist, not wet, vegetable garden soil to a depth of 6-10 inches and lightly work in compost and fertilizer. Rake and water the beds to be ready for planting in April.

Prune and clean up beneath flowering shrubs such as Camellias, Quince and Forsythia. Add mulch around shrubs and trees, out to the drip line. Leave a six-inch area clear adjacent to the trunk to prevent rot.



Tree Suckers

With the possible exception of young plants and fruit and nut trees, woody species in landscapes should not be routinely fertilized. As long as woody plants exhibit normal leaf size and color and desired growth, nutrients are probably adequate. For more information on recognizing when your landscape trees and shrubs might need nutrients, check the following [website](#).

Information gathered from

[UC IPM](#)

[Sunset Garden](#)

[Farmer Fred](#)

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

University policy also prohibits reprisal or retaliation against any person in any of its programs or activities for making a complaint of discrimination or sexual harassment or for using or participating in the investigation or resolution process of any such complaint.

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.



San Joaquin Master Gardeners 2013 Workshop Schedule

City of Stockton
Delta Water Supply Project Building

January 12: Making The Cut

Learn how to prune landscape trees and shrubs, including roses and fruit trees.

February 9: Making Every Drip Count

Drip irrigation is the most efficient and forgiving, easiest to design and install type of irrigation system. In this class we will have a hands-on demonstration of assembling a mini drip system, hopefully making your next walk down the irrigation aisle less intimidating!

March 9: Lovely To Look At, Delicious To Eat

You can have a sustainable landscape by converting ornamental landscaping into an edible landscape that is both beautiful and nutritious!

April 13: The War On Weeds

Learn how to identify common weeds from seedlings to mature ones and how to outsmart and control them.

May 11: "Herbalicious"

Join us and learn how to create a handy herb garden for zesty cooking.

June 8: Drops And Dollars, Saving Water, Saving Money

Want to save money in your wallet and water in the landscape? Don't miss this class!

July 13: Mow No More

Tired or bored with watering, mowing and dealing with a lawn? Come and learn how to convert a lawn into a low water and low maintenance space.

August 10: Healthy Soil, Happy Plants

Learn about building a healthy soil with amendments, composting and vermicomposting – or composting with worms!

September 14: Small Space Harvest

You don't need a large area to have a vegetable garden. Learn how to grow, making the most of containers and vertical structures.

October 12: Big Valley Winners

Learn how to choose plants that will do well in your backyard. Master Gardeners have picked some of their favorites for our area.

November 9: What Went Wrong And How To Fix It

We will discuss problems commonly found in the garden and how to solve them.

Classes will be held at the City of Stockton Delta Water Supply Project

11373 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.

Classes are free.





San Joaquin Master Gardeners 2013 Workshop Schedule

Manteca Library

Time 10:30 am -12:00 pm

January 19: Making The Cut

Learn how to prune landscape trees and shrubs including roses and fruit trees.

February 16: Making Every Drip Count

Drip irrigation is the most efficient and forgiving, easiest to design and install type of irrigation system. In this class we will have a hands-on demonstration of assembling a mini drip system, hopefully making your next walk down the irrigation aisle less intimidating!

March 16: Lovely To Look At, Delicious To Eat

You can have a sustainable landscape by converting ornamental landscaping into an edible landscape that is both beautiful and nutritious!

April 20: The War On Weeds

Learn how to identify common weeds from seedlings to mature ones and how to outsmart and control them.

May 18: "Herbalicious"

Join us and learn how to create a handy herb garden for zesty cooking.

June 15: Drops And Dollars, Saving Water, Saving Money

Want to save money in your wallet and water in the landscape? Don't miss this class!

July 20: Mow No More

Tired or bored with watering, mowing and dealing with a lawn? Come and learn how to convert a turf lawn into a low water and low maintenance space.

August 17: Healthy Soil, Happy Plants

Learn about building a healthy soil with amendments, composting and vermicomposting – or composting with worms!

September 21: Small Space Harvest

You don't need a large area to have a vegetable garden. Learn how to grow, making the most of containers and vertical structures.

October 19: Big Valley Winners

Learn how to choose plants that will do well in your backyard. Master Gardeners have picked some of their favorites for our area.

November 16: What Went Wrong And How To Fix It

We will discuss problems commonly found in the garden and how to solve them.

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.

