



MY LAWN IS BROWNER THAN YOUR LAWN

Cheryl Potts, U.C. Master Gardener, Solano County

Ambivalence is the true flavor of the dilemma so many of us are currently faced with by just walking through any of our local neighborhoods. Nice green lawn, next to brownish-green lawn, next to neat very brown lawn, next to a pebble lawn, next to an overly messy, "what the heck, we've just given up" lawn. Somewhat early in our current



Healthy green lawn
All photos in this article by Cheryl Potts

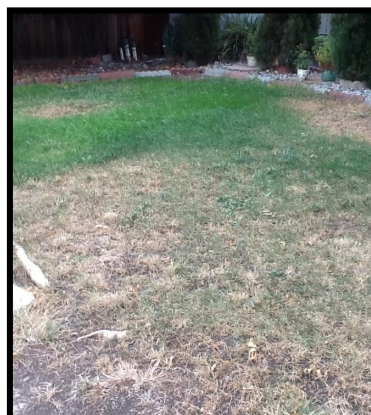
water crisis, it was considered politically correct to let the green turn to brown, and lazier gardeners were finally able to scoff at those lush, perfectly manicured super green turfs maintained by those over achieving neighbors. The heroes of the neighborhood were those that took the plunge, removed the grass altogether, and put in pretty rocks arranged in attractive patterns with a few water tolerant plants scattered here and there.

But currently, the breadth of our ambivalence is growing beyond the simple "let it go or not" question. Like with so many issues of our day, a knee jerk answer to a problem leads to short term solutions, and probably irresponsible consequences. If we all pulled out our lawns and landscaped with just gravel or mulch, we would be killing the important community that lives within that soil, therefore diminishing the diversity such as worms, millipedes, and good spiders; just to name a few of

the beings that reside in and benefit our soil. Also, we would be losing a lot of carbon from under the soil back into the atmosphere, according to UC Davis scientist, Biochemist William Horwath.

Another issue to consider is the fact that if we pull out our current lawn and try to replace it with drought tolerant plants, we are planting new plants in the middle of a very hot summer season. I have noticed that a number of the low water use plants my neighbors added to their pretty pebble landscape are currently very dead.

So, you have come to your senses and decided not to cover



Lawn transitioning to brown

the front yard with concrete. What are your alternatives? One, you could simply let the lawn go brown, and hope for rain this winter. However, be aware that if you are not watering the lawn, your trees, shrubs, and other plants are also not getting watered. Trees can be watered by a drip system. Be careful not to water the trunk of the tree and to water to the drip-line.

Now, if you really still want a decent looking lawn, you could consider changing your existing turf to warm season turf grass

(Continued on Page 9)

My Lawn is Browner Than Your Lawn	1
Preservation Pointers: Citrus Treats	2
How Did They Do That?	3
Zinnias.....	4

Quarterly Pest Notes	5
You Say Tomato, I Say Solanum Lycopersicum....	6
Fall Gardening Guide	8
Become a Master Gardener	10

CITRUS TREATS

Pearl Eddy, U.C. Master Gardener and U.C. Master Food Preserver, Solano County

Marmalade is a term used for soft fruit jellies containing small pieces of fruit or peel evenly suspended in transparent jelly. They often contain citrus fruit. When placed in small sealed glass jars, they make colorful, tasty gifts for many occasions.

Selecting a recipe for marmalade can be very confusing as various kinds of fruits can be used, and there are many methods for preparation. There are bitter oranges such as the Seville, and sweet oranges such as the Valencia. Also, one can use grapefruit and lemons.

It is important to realize that the white pith between the rind and the fruit pulp is the source of the bitter flavor which is characteristic, and also a source of the pectin which is necessary for the jelling action. Some recipes use only a portion of the pith. There are differences in soaking and differences in preparing the fruit for the soaking method or the actual cooking stage. Soaking makes the fruit swell and soften, and is completed before sugar is added for the boiling stage. You can also find recipes which do not require soaking. The following recipe is adapted from the Ball Blue Book of Preserving and includes one soaking period.

ORANGE MARMALADE

Remove the peel from about 10 medium oranges, and slice peels thinly to make about 2 cups peel. Chop the orange pulp and remove seeds to make about 4 cups. Thinly slice about 2 lemons (remove seeds) to make about 1 cup. Place citrus in pan, cover with 6 cups water and simmer 5 minutes. Remove from heat. Cover and let stand 12 to 18 hours in a cool place. Then cook rapidly until peel is tender. Remove from heat and measure fruit and liquid that is in the pan. Add one cup granulated sugar for each cup of fruit, stirring until sugar dissolves. Bring to a boil over high heat, stirring constantly. When jelling point (220 F.) is reached remove from heat, ladle into hot half-pint jars, seal with 2-piece lids and process 10 minutes in a boiling water bath. (Makes about 7 half-pints.) If you do not have a thermometer, try the "plate test." Place a small amount of the spread on a small chilled plate; set plate in a freezer for a few minutes until spread is cooled to room temperature. If the mixture is set, it is ready to process.



Another easy to make delicacy is lemon curd. You simply must serve it along with tea and scones. Of course, it is excellent on top of meringues, little cakes, etc. The following is a recipe that the Master Food Preservers included in their presentations

of Gifts from the Kitchen.

LEMON CURD

In the container of a blender, combine 4 tsp. grated lemon peel, 2/3 cup lemon juice, 5 eggs, and 1 cup sugar; whirl until smooth. With the motor at lowest setting, gradually add 1/2 cup melted butter, pouring in a steady stream; whirl just until blended. Transfer mixture to a small heavy pan and cook over medium heat, stirring constantly, about 5 minutes or until it begins to bubble and thickens. Remove from heat. Ladle hot mixture into half-pint jars to within 1/4 inch of rim. Seal and process in a simmering water bath. Will store in a dark place for several months. The mixture tends to become spongy when canned but will keep nicely in the refrigerator for 1 week or in the freezer for up to 1 year. Thaw in the refrigerator before use. (There are other recipes available with fewer eggs or no butter.) We are lucky that citrus is easily grown in our area and that there are so many ways to use this healthful fruit. ☀



HOW DID THEY DO THAT?

Gene Ekenstam, U.C. Master Gardener, Solano County

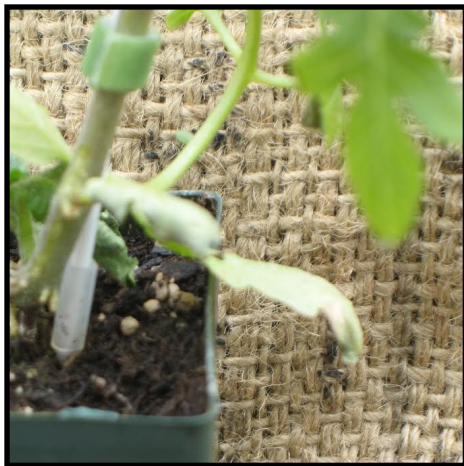
I suppose it began years ago that, while browsing a seed catalogue, I noticed the Armenian cucumber. This was before they were available in the local supermarket and before the development of boutique health-conscious markets. So, I bought some seed and grew one.

Since then, the vegetable garden has usually had something growing that was just slightly, or even greatly, unusual. Right now, we have *Cucurbita moschata* the Tromboncino squash (yep, shaped like the horn portion of a trombone), *Brassica napus*, rutabagas (though I have never even tasted one), and *Runder Schwarzwinter*, a German winter turnip that is said to be used as a snack with beer (well, the beer part is fine with me).

So it was not out of character that while ordering seeds for this last spring's growing season that I noticed an ad for a most unusual plant—*Solanum lycopersicum*, *Solanum tuberosum*. The idea that such a plant even existed had never occurred to me.

This plant, developed by an British nursery firm, has been called a "TomTato." It was offered in the U.S. by only one vendor, Territorial Seeds, in the Pacific Northwest. Simply put, it is a tomato grafted on to a potato plant. That's possible because tomatoes and potatoes are both members of the Nightshade family. But if you think about it, that process had to be a very painstaking one because of the small, tender stems of both plants. Not at all like grafting a bud or a stem on an apple tree, this was 15 years in development. Since the plant produces both tomatoes and potatoes, its marketing name was a natural—'Ketchup and Fries.'

Naturally, I had to give it a try. I received the plant in the mail and promptly planted it according to the instructions. I grew it in a half wine barrel so that I could be assured I had harvested all the potatoes when they matured. The plant thrived along with the rest of the garden.



Green band marks the site of the graft.
All photos in this article by Gene Ekenstam

The tomatoes developed at the same time as all the other ones in the garden. The fruit grew in clusters of 8-12 tomatoes, and the vines were very vigorous. I did nothing to shape the plant by way of pinching or pruning; as a result, as my mother would have said, it "spraddled out all over the place." In other words, it was semi-determinant, never getting taller than about 5 feet. The fruit was medium size and quite sweet. They were not as sweet as the 'Matts Wild' tomatoes growing elsewhere in the garden, but about twice or three times the size. The skin was firm, though not tough. They were a very welcome addition to our salads. We harvested about 4 ½ pounds of fruit.



Size of the TomTato as it arrived in the mail.

The potato part did not do quite as well as the tomato. We harvested 9 tubers, most of fairly small size. They have a very nice taste, but we didn't get quite enough to experiment with the many ways a potato can be cooked.



Full potato crop and some representative potatoes.

So the harvest fell short of the 500 tomatoes and 2 kg of potatoes the company advertised as possible. The fault was probably mine. I used a high-quality garden soil enriched with compost, but I added no nutrients during the production season as the vendor recommended. Nor did I pinch the stems to try and encourage formation of more flowers. Basically, I wanted

to see how the plant grew without any special care—probably an unwise decision.

So, did we realize a good return on our \$20 invested? We didn't break even, based on the summer prices of cherry tomatoes and potatoes. But every visitor who came to admire the garden and the grandchildren were treated to the sight of a botanical curiosity and forced to hear my explanation of how this marvel was possible. That's priceless. ☀

ZINNIAS

Tina Paris, U.C. Master Gardener, Solano County



Photo by Tina Paris

The almighty Zinnia (*Zinnia elegans*) is one of my best tried and true flowers of all time. It just never lets me down year after year. It helps to live in Vacaville where the flowers thrive in the hot (100 degrees F.) afternoon sun.

Zinnias are native to scrub lands and dry grass lands of Southwestern United States to South America. They

grow in average to slightly poor soils. I compost my soil for better thriving plants. I also mulch to help maintain a more consistent soil moisture. Mulching also assists in the evaporation process in our drought. I do water once a week and I use a soaker hose placed under the mulch to help with evaporation loss. My timer is set to run for 15 minutes. I conducted my own testing to determine exactly how much water that is. It filled a 5 gallon bucket almost full. Not bad, I would call that pretty drought tolerant. In the seedling stage I do sprinkle an additional watering in about twice weekly. But only early on in the beginning. Once established the soaker hose takes over.

If you are going to start your Zinnias from seeds, allow about two months before the weather is warm (70 to 75 degrees is best) enough for them. Zinnias need the heat and full sun to flower profusely. It also helps to dead head as they start to fade. This promotes more flowers. It also makes them branch off to add more stemmed flowers. Zinnias are a great cut flower for arrangements. They last for a long time in vases.



Photo by Tina Paris

There are a variety of colors, from red, pink, yellow, green, orange, magenta and shades of all colors. The flowers come in two different sizes called "dahlia-flowered" (most common) and single styles called "cactus-flowered". The heights can vary

from about 18" to 3' tall. Since I save my own seeds, I get all styles. As they readily hybridize. Butterflies and bees are particularly attracted to these beauties. I think it is very beautiful to see a mass of colors in my garden. A kind of accomplishment feeling.



Zinnias will last throughout the whole summer. Until the temperatures drop and the days are crisp or until a frost occurs.

As far as pests affecting Zinnias, there are a few things that can



affect them, such as bacterial and fungal diseases. Powdery mildew and bacterial wilt can be minimized by not wetting the plants from above. Aphids and white fly can get out of control if not caught early. Use a horticulture oil or insecticidal soap, such as Safer Soap. Apply it early morning or in the evening

to avoid burning. Try to pick a day when 100 degrees are not expected.

My admiration for these flowers comes from the abundance of summer time flowers and the ease of growing them. A simple recipe for gardening these wonders ... ☀



QUARTERLY PEST NOTES

Contributed by Dave Harper, U.C. Master Gardener, Solano County

MANAGING WEEDS UNDER DROUGHT CONDITIONS



Fig. 1—Some weeds thrive in drought conditions

While one of the best methods to reduce weeds is to not water them, there are some that survive even in drought conditions (Fig. 1). As we continue to be impacted by the drought in California, we need to consider our weed management strategies:

- Which weeds will survive?
- How do drought conditions affect control?

Which Weeds Will Survive?

Many weeds, once established, need very little water to survive. Weeds with extensive, deep root systems are able to “mine” water or otherwise have a physiological mechanism to survive under low soil moisture conditions. Many of these plants are perennials, but annuals, especially those that can quickly develop deep roots, can also be found in dry areas. For example, yellow starthistle (*Centaurea solstitialis*) (Fig. 2), is a winter annual that develops a taproot to 6 feet deep or more allowing it to access deep moisture in summer. Some weeds, such as yellow nutsedge (*Cyperus esculentus*) and broadleaf plantain (*Plantago major*) will establish best in wet areas, but after maturing can tolerate very dry conditions.



Fig. 2—Yellow starthistle

Other weeds that survive well in drought conditions include the mallows (*Malva spp.*), knotweed (*Polygonum aviculare L.*),

Find your pest at the pest notes library -

<http://www.ipm.ucdavis.edu/PMG/PESTNOTES/index.html>

horseweed and hairy fleabane (both *Conyza spp.*). Perennial weedy grasses that can survive in low soil moisture include dallisgrass (*Paspalum dilatatum*) (Fig. 3) and bermudagrass (*Cynodon dactylon*).

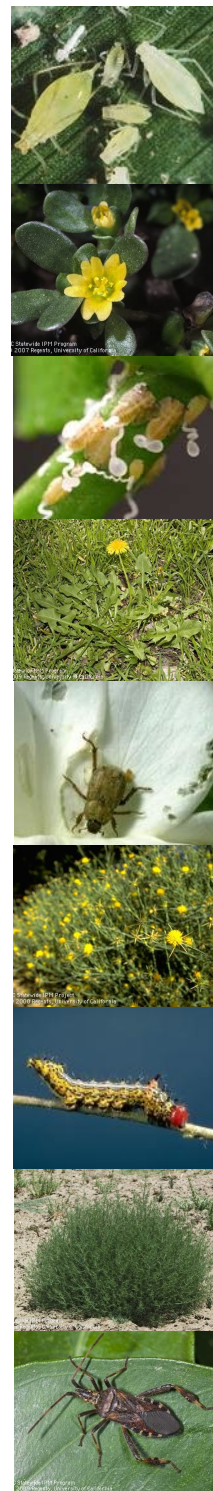
How Do Drought Conditions Affect Control?

Not only does low soil moisture affect weed establishment, weed control with herbicides is also affected. Soil moisture factors that affect herbicide activity include degradation rate (residual) and herbicide uptake. For a herbicide to be active it must be absorbed by the plant then translocated to the site of action in high enough quantities to be toxic.

The Effect of Drought on Preemergence Herbicides

Most preemergence herbicides need rain or irrigation within 3 weeks of application to be effective, but should optimally receive this “activating” moisture within a day or two of application. Herbicides that remain on a dry soil surface may degrade or volatilize off or can attach to soil particles and blow away.

The Web site <http://www.ipm.ucdavis.edu/index.html> can help you learn about Integrated Pest Management (IPM) and how you can apply it to your pest problems. Your local Cooperative Extension office can also help—(707) 784-1322

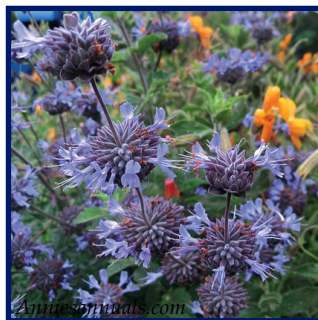


(Continued on page 7)

YOU SAY TOMATO, I SAY *SOLANUM LYCOPERSICUM*

Melinda Nestlerode, U.C. Master Gardener, Solano County

There was a time when I would skip over the botanical name of a plant when I found it written in a book or magazine. The inclusion of the Latin name seemed overly academic and vaguely annoying. Use of the botanical name of plants seemed as pointless as my college statistics class. I have since learned that I couldn't have been more wrong. While the only benefit to the statistics class was my ability to nod knowingly when I hear the term "standard deviation", using the scientific name of a plant has many practical advantages.



Salvia clevelandii

COMMON CONFUSION

Most people refer to plants by their common name, and in many circumstances common names are sufficient. If you ask a salesperson at a garden center where to find tomatoes, basil, or salvia plants, you will probably be directed to the correct plant. But, what if you are looking for a specific species, or variety? Salvia alone is estimated to have between 700 and 1000 species! If you are looking for a drought tolerant California native (and who isn't these days?), then *Salvia apiana* or fragrant *Salvia clevelandii* may fit the bill. But, *Salvia coccinea* is a tropical sage, which Sunset does not recommend for Solano County. *Salvia splendens* is usually a perennial only in Sunset Zones 21 through 24 (southern California), and is normally grown as an annual in Solano County.

The use of common names also causes confusion, because several plants may be known by the same common name, or different common names may be used based on locality. For instance, a friend has a plant in her front yard, which she refers to as "Mock Orange". If she were to purchase a few more of those plants by placing an order with a company based on the east coast, she would be very surprised with the plant she receives. On the east coast, the common name "mock orange" refers to *Philadelphus coronarius*, an ornamental shrub grown widely in the eastern United States and Canada, due to its ability to thrive in cold weather climates. Depending on where you live, "Mock Orange" may also refer to *Bursaria spinosa*, a small tree from Australia; *Choisya ternata*, an aromatic shrub; *Maclura pomifera*, a small tree native to North America; *Murraya paniculata*, a small tree indigenous to southeast Asia; or, *Pittosporum undulatum*, a small tree native to Australia. The plant growing in my friend's yard is, in fact, a *Pittosporum*

tobira "Wheeler's Dwarf", which Monrovia, a national garden center supplier, sells as Wheeler's Dwarf Japanese Mock Orange.

My education regarding the importance of using botanical names began with an Identification and Ecology of Landscape Plant Materials (Plant ID) class at Solano Community College. One of the instructors of this useful class, Sandy Diehl, is also a Landscape Designer. She relayed a story about a client who insisted that her garden design include Pampas Grass (*Cortaderia selloana*), because her neighbor grew it and it was beautiful. After careful questioning, Sandy discovered that the grass her client admired was actually a *Festuca*. Imagine how disappointed the client would have been with Pampas Grass, which can reach a height of 20 feet, and which the University of California considers to be an invasive species, when she actually wanted an adorable one-to-two foot tall ornamental grass.



Salvia apiana

Annie's Annuals and Perennials is a fabulous garden nursery in Richmond, CA, which, unlike most commercial growers, only uses the botanical name to describe their plants. The owner, Annie Hayes, states that the reason is to avoid confusion, and that, "As a grower, if we are buying a certain plant seed from two different

companies, we want to know that it is the exact same seed. Otherwise, we could be getting two different plants and one may be quite inferior to the other. This has happened to us more often than we would like. More than a few garden "plant brands" use common names or just the genus name and often leave off the species name to hide the source of their plant varieties from other growers who could then source and propagate them. Finally, experienced gardeners want a guarantee that they are buying the exact variety that they are looking for, whether they've seen it online, in someone else's garden, at a botanical garden, etc."

HISTORY OF SCIENTIFIC NAMES

The use of two-word, primarily Latin, terms to describe plants is known as binomial nomenclature – a fancy phrase which basically means "two-word names". The method of identifying and naming plants using binomial nomenclature was invented by Carl Linnaeus (1707 – 1778). Prior to Linnaeus' work, plants were named using Latin terms, but there was no limit to the number of descriptive words used, and no set of standards to

Continued on Page 7

Continued from Page 6—You Say Tomato, I Say Solanum Lycopersicum

adhere to. For example, the scientific name of the tomato was *Solanum caule inermi herbaceo, foliis pinnatis incis* which means the “solanum with the smooth stem which is herbaceous and has incised pinnate leaves.” Linnaeus recognized the need for systematic standards, especially given the number of new plants that were being discovered during exploratory voyages to Asia, Africa and the Americas.

The first word in binomial nomenclature refers to the plant’s genus, and is always capitalized when writing the plant name. The second word describes the plant’s species, and always starts with a lower case letter. Both the genus and species are written in italics, or underlined. In addition to the genus and species, a plant may have a specific variety or cultivar, which follows the scientific name, and is written in English, in single quotes. Therefore, a White Profusion Butterfly Bush would be written as *Buddleja davidii* ‘White Profusion’.

Hybrids are the result of cross pollination between two genetically different parent plants. Hybridization may occur naturally, or may be induced through the intervention of human breeders. Hybrid plants are indicated by a “x”. A “x” prior to the genus name means that the plant is a result of a cross between two genera (plural of genus). Similarly, a “x” before the species name indicates a hybrid between two different species. An example is *Escallonia x exoniensis*, where the species is a cross between *Escallonia rubra* and another species within the genus *Escallonia*.

REVEALING LATIN TERMS

Arguably, the most beneficial aspect to the use of Latin in plant names is their descriptive nature. The species name often describes aspects of the plants which are useful to the gardener. “Lutea” means yellow, for example, so *Rosa Banksiae* ‘Lutea’ tells me that this rose is yellow. “Flora” refers to the flower, “folia” or “phyllos” to the foliage, “grandi” means large, and “micro” means small. Therefore, I know that *Magnolia grandiflora* has large flowers, and *Buxus microphylla* ‘Japonica’, is a plant with small leaves, from Japan – Japanese Boxwood.

Understanding binomial nomenclature takes some practice, but embracing it leads to specificity, avoids misunderstandings, and may provide clues into the nature of a plant. ☼

Continued from Page 5—Quarterly Pest Notes

Rain or irrigation moves the herbicide down into the soil where germinating seeds will take it up. Because the preemergence herbicide must be at proper depth to work effectively, the amount of water applied must be enough to move the herbicide to that depth. Even though water use may be restricted, the herbicide application should be timed such that enough water is allocated to the area for good weed control.

It’s important to remember that preemergence herbicides generally will not control weeds that have already or are close to emerging so any weeds germinating between the time of herbicide application and delayed irrigation will not be controlled. Also, water stress may cause some weeds to germinate later than normal. In that case, a previously applied herbicide may not still be present in a high enough concentration to be effective. Overall, drought conditions can shift weed control to postemergence herbicides due to preemergence herbicide failure and late weed emergence.

The Effect of Drought on Postemergence Herbicides

As noted above, a herbicide must be absorbed into the weed and moved to the site of activity to be effective. Therefore,



Fig. 3—Dallisgrass can withstand drought conditions once established

anything that inhibits these steps will reduce a postemergence herbicide’s activity. Plant stress under drought conditions may result in a thickened cuticle, the waxy covering of a plant’s leaf. The thicker the cuticle, the harder it is for the herbicide to be

absorbed into the leaf. Additionally, plant leaves tend to get dustier in dry weather conditions, which can inhibit herbicide uptake. For example, glyphosate is very strongly adsorbed to organic soil particles. If the weeds are dusty, not only is it physically difficult for glyphosate to reach the leaf surface, it may also bind with the dust and the overall herbicidal activity is reduced.


Furthermore, plants that are actively growing will move the herbicide more effectively than those that are stressed. Under drought conditions, postemergence herbicides may not provide the kind of control you expect. ☼

Authors: John A Roncoroni and Cheryl A. Wilen



FALL GARDENING GUIDE



	OCTOBER	NOVEMBER	DECEMBER
P L A N T I N G	<ul style="list-style-type: none"> ◇ Edibles: Plant loose leaf lettuce and spinach, set out seedlings such as onion and garlic for next year's harvest. ◇ Ornamentals: Anything that's not frost-tender, including groundcovers, vines and perennials. ◇ Dig, divide and replant overgrown perennials after they finish blooming. ◇ Put tulip and hyacinth bulbs in the refrigerator for six weeks before planting. ◇ Buy and pot amaryllis or 'Paper White' narcissus bulbs for Christmas blooms. 	<ul style="list-style-type: none"> ◇ Edibles: Plant cool weather vegetable transplants such as broccoli, kale, chard and cauliflower. Plant radishes and peas from seed. Put in biennial and perennial herbs, such as chives, Greek oregano, parsley, marjoram, winter savory, lemon or common thyme. ◇ Plant spring-blooming bulbs and tubers. ◇ Winter and spring-blooming annuals available now include sweet peas, Iceland poppies, primroses, snapdragons, cyclamen, pansies and violas. ◇ Deciduous trees, shrubs and vines are often ablaze now, so shop nurseries for favorite color choices. Plant right away. 	<ul style="list-style-type: none"> ◇ Edibles: Plant bare-root berries and grapes, and dormant roots of asparagus and artichokes. Seeds of broccoli, cauliflower, cabbage and lettuce can be planted indoors. ◇ Plant for early spring color, with flowering quince, acacias, camellias, primroses and cyclamen. ◇ Decoratively pot living holiday gifts, including herbs, which grow well indoors in a sunny window. ◇ Plan spring deck, patio and porch plantings.
M A I N T E N A N C E	<ul style="list-style-type: none"> ◇ Keep deadheading shrubs and annuals. It will encourage annuals to bloom a bit longer and keep shrubs looking tidy. ◇ Fertilize roses for the last time this fall. ◇ Renovate a tired lawn by dethatching, aerating, fertilizing and over-seeding. Lower the blades of your mower to 1 inch after summer's heat. ◇ Add organic matter/compost to vegetable beds after double-digging and loosening soil to a depth of 24 inches. 	<ul style="list-style-type: none"> ◇ Adjust water schedule once rain begins. If no rain yet, keep vegetables irrigated. ◇ Apply dormant fruit spray to trees after leaves drop. Use 50 percent copper or lime sulfur product for peach leaf curl on peaches and nectarines. On apricots, use fixed copper spray rather than lime sulfur. ◇ Fertilize fall-planted annuals and vegetables with a high nitrogen fertilizer. Cut back mums to six inches above ground when they are finished blooming. 	<ul style="list-style-type: none"> ◇ Continue to fertilize fall-planted annuals and vegetables to provide needed nutrients for root development. ◇ Keep poinsettias in a warm, sunny location, away from drafts. Water weekly and feed monthly through April. ◇ Put your living Christmas tree outside until a few days before December 25, lessening stress. ◇ Before storing garden tools for winter, clean, sharpen and oil garden pruners and shears, and wash mud off shovels and rakes. Oil wooden handles of all tools.
P R E V E N T I O N	<ul style="list-style-type: none"> ◇ Remove fallen fruits, vegetables, diseased leaves and weeds from garden beds to reduce next year's garden pest and disease problems. ◇ If no rain yet, or very little, continue to irrigate. Once consistent rain begins, check for areas of standing water, the breeding ground for mosquitos. ◇ Apply copper or other recommended controls if you see brown rot or citrus blast on your citrus trees. 	<ul style="list-style-type: none"> ◇ Bait for snails and slugs with an iron phosphate-based bait. ◇ Fight cabbage loopers by using floating row covers to keep the adult white butterflies from laying eggs on leaves. ◇ Apply pre-emergent weed control among plantings and on your lawn.* <p><small>*See Quarterly Pest Notes beginning on Page 5 for the effects of drought on pre-emergent herbicides.</small></p>	<ul style="list-style-type: none"> ◇ Hoe and pull weeds diligently. Mulch to keep weeds down. ◇ Apply a dormant spray to kill insect eggs and pests such as aphids, mites and scale, as well as fungi and bacteria. ◇ If a freeze warning is in effect, turn off drip irrigation and remove the end plug for drainage. <div style="text-align: right;">  </div>

(Continued from page 1--My Lawn is Browner Than Your Lawn)
 such as Bermuda and Buffalo (*Buchloe dactyloites*) grass. These grasses go dormant in the winter, but use up to 25% less water than their cool weather counterparts. Be sure your sprinkler heads are not broken and you are irrigating the lawn according to your climate zone. For specific information regarding this, go to the University of California Agriculture and Natural Resources (UCANR) Lawn Water Guide found online (<http://www.ipm.ucdavis.edu/TOOLS/TURF/MAINTAIN/irrigate.html>).

But, if you have decided to go the "take out the lawn and maybe plant natives or cactus" track, here are some suggestions:

- 1) Know that even drought tolerant plants need water, especially when they are young and not yet established. So waiting for cooler, wetter weather to make the change may be a good plan. Be sure and pick plants that will do well in your area, and not just those that look pretty in a magazine. What does well in Phoenix may not do well here.
- 2) Keep your environment weeded whether it is pebble, grassy or in between. Weeds are great thieves of water.
- 3) Install a drip system. Mine is on a timer and my watering is systematic. Waste is held at a minimum
- 4) Use mulch. It is an insulator. Shredded bark or wood chips are good materials to use. Be careful using rock. Rocks hold heat and can actually harm the soil.
- 5) Limit or eliminate the use of fertilizers. Fertilizers increase a plant's growth, therefore requiring more water.
- 6) Know your drip system. Do you really know how to set your controller and/or make any needed changes as the weather changes? Read the instructions. If you have lost them, contact the company and request a reprint
- 7) Consider a "laundry to landscape" grey water

- system. This is becoming more and more popular in a number of communities.
- 8) Do not feel that you need to revamp your whole yard all at one time. This can be overwhelming and you might be tempted to just give up half way through. Start with small steps. Take out a portion of lawn and replace it with something appropriate. Then move on from there.

Gardening incorporates the responsibility of taking care of the soil and the earth. We need to be aware of the consequences of our actions, and to be fully informed before we take those actions. We do not know when the California drought will end. We must learn to live with it, and take as good of care of our environment as possible. Some knowledge and planning can be simple steps toward that care. ☀



Lawn has turned almost completely brown

In The Morning, When It Was Raining

In the morning, when it was raining,
 Then the birds were hectic and loudy;
 Through all the reign is fall's entertaining;
 Their singing was erratic and full of disorder:
 They did not remember the summer blue
 Or the orange of June. They did not think at all
 Of the great red and bursting ball
 Of the kingly sun's terror and tempest, blazing,
 Once the slanting rain threw over all

The colorless curtains of the ceaseless spontaneous fall.

-Delmore Schwartz



BECOME A MASTER GARDENER

Jennifer Baumbach, U.C. Master Gardener Program Coordinator, Solano County



Ever thought about becoming a Master Gardener? Do you know who the Master Gardeners are and what they do? Do you love to garden? Would you be interested in passing on your horticultural knowledge to others? Well, here's some information for you.

The requirements to become a Master Gardener are simple:

- You have some knowledge or experience in gardening or landscape
- You are willing to learn about horticulture and share this knowledge with others
- You are accepted into the local training program and can volunteer time conducting horticultural educational programming coordinated through the U.C. Cooperative Extension office in Fairfield.

To become a Master Gardener, you must first fill out and submit an application along with a fee to the U.C. Cooperative Extension office. After reviewing the application, you may be invited for a short interview. Following acceptance into the program, the trainee begins the core training.

The training includes daytime classes held once a week for approximately 15 weeks. The class begins in early January and goes through April. Class attendance is mandatory since each class is a stand-alone section. Class hours are from 9 a.m. until 1 p.m.

University of California specialists, horticultural professionals, and veteran Master Gardeners teach the classes. Class topics include, but aren't limited to-Botany, Soils, Vegetables, Fruit Trees, Trees and Shrubs, Plant Pathology, Insects, and Turf.

A fee, which is determined by the local coordinator, is charged for the training and includes a training manual, a pest resource guide and an official badge, once the training is completed successfully.

Upon successful completion of the classroom training and passing the final exam, you will become a Master Gardener trainee. From there, you will embark on an adventure of attaining volunteer hours. The volunteer hours can be accumulated through a variety of projects and activities, such as

presentations, workshops, Farmer's Markets, and the Master Gardener Hotline. An active Master Gardener must remain current in annual educational updates and volunteer service hours required by the UC Master Gardener program in Solano County. U.C. Master Gardener trainees are required to complete 50 hours after training. Veteran Master Gardeners are required to complete 25 volunteer hours and 12 continuing education hours per year to remain certified.

Master Gardener program first years (just graduated MGs) will have Master Gardener mentors. Mentors are experienced active Master Gardeners who are paired with trainees to help guide them through a successful volunteer experience.

Master Gardener volunteers work on behalf of and under the supervision of University of California Cooperative Extension. Volunteers are required to report to their Master Gardener coordinator about all planned activities prior to conducting the program.

Most of the volunteer work is conducted outside the UC Cooperative Extension Office; some projects involve interagency interaction with school gardening projects, parks and recreation departments, however, the list doesn't stop there. The Master Gardener program makes presentations to anyone in Solano County.

To receive an application, when they are available-which is now, for the U.C. Master Gardener Training Class you can:

- Pick up a yellow interest form at the Vacaville, Benicia, Vallejo or Dixon Farmer's Market
- Visit cesolano.ucanr.edu and the Master Gardener page
- Stop by the University of California Cooperative Extension Office, 501 Texas Street, 1st Floor, Fairfield
- Call the Master Gardener Hotline, 707-784-1322
- Send an email to me at jmbaumbach@ucanr.edu
- Call the program coordinator and chat about the application process, 707-784-1321 ☀



WREATH WORKSHOP 2015

Join the Solano County Master Gardeners for Our 21st Annual Wreath Workshop



Join the Master Gardeners for a festive afternoon of wreath-making on **December 5, 2015**. The **\$50** fee (per person) includes all materials to create one wreath from fresh redwood and a selection of ornamental greens; dried hydrangeas; pinecones; dried lemons, oranges and other fruits; dried lavender; many other organic decorations; ribbon and bows, and the wreath frame and wire. Master Gardeners provide wreath-making assistance and delicious refreshments.

This is a wonderful annual tradition for families! The Wreath Workshop will be held at Saint Mary’s Catholic Church outbuilding, 350 Stinson Avenue, Vacaville, CA

Contact Jennifer at (707) 784-1321 or [jimbaumach@ucanr.edu](mailto:jimbaumbach@ucanr.edu) to RSVP today

MASTER GARDENERS IN THE COMMUNITY

SOLANO COUNTY FARMERS MARKETS

Solano County Master Gardeners will be at the following Farmer’s Markets:

- Vacaville ☀ Saturdays through October 10, 2015 ☀ 8:00am to 12:00pm
- Benicia ☀ Thursdays through October 29, 2015 ☀ 4:00pm to 8:00pm
- Vallejo ☀ Saturdays All Year ☀ 9:00am to 1:00pm

29TH ANNUAL LAMBTOWN FESTIVAL

Dixon May Fair Grounds
655 South 1st Street, Dixon

Master Gardeners will be available on:
Saturday, October 3, 2015
from 9:00am to 6:00 pm, and
Sunday, October 4, 2015
From 9:00am to 4:00pm



LIBRARY PROGRAMS

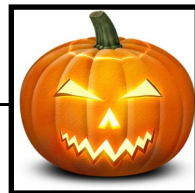
Vacaville Library Talk
“Mini-Gardening”
October 15, 2015
7:00pm to 8:00pm

Cordelia Library Kids Program
“Pumpkin Decorating”
October 20, 2015
3:30pm to 4:30pm



FAIRFIELD HOME DEPOT

2121 Cadenasso Drive
Fairfield
October 3rd and 17th
10:00am to 2:00pm



**Seeds For Thought is produced by
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Have a comment or question about *Seeds For Thought*?
Contact us!

By email: mgsolano@ucdavis.edu

Please put '*Seeds For Thought*' in the email Subject line.

U.S. mail:

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Seeds For Thought is a quarterly publication of the University of California Master Gardener Program of Solano County and is freely distributed to County residents.

It is available through the internet for free download:

<http://cesolano.ucdavis.edu/newsletterfiles/newsletter130.htm>

A handwritten signature in black ink that reads "Baumbach".

Jennifer M. Baumbach

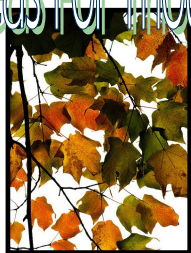
Master Gardener Program Coordinator



**U.C. Cooperative Extension
Solano County Master Gardeners**

501 Texas Street, 1st Floor
Fairfield, CA 94533

SEEDS FOR THOUGHT



Fall
2015