



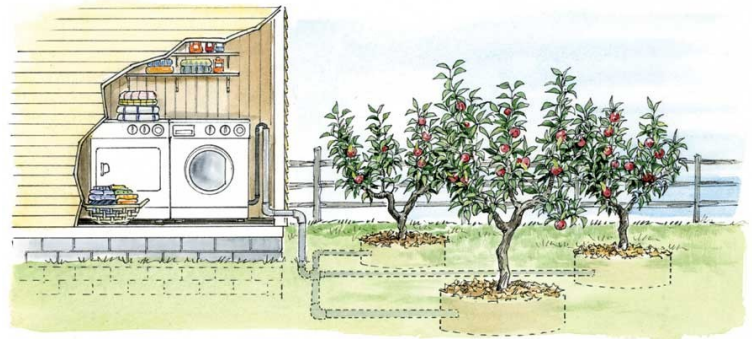
GREYWATER AND YOUR LANDSCAPE

Kathy Low, U.C. Master Gardener, Solano County

We're officially in a drought and you are doing your best to cut back on your water usage. You try to be green and recycle whenever possible. So you may be thinking about ways to reuse your water and use your graywater to keep your yard and garden green this summer. If so, there are some things about graywater you should know to keep you and your family safe, and your greenery healthy.

If you're unfamiliar with graywater, it's defined as "untreated wastewater that has not been contaminated by any toilet discharge, has not been affected by any infectious, contaminated, or unhealthy bodily wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes. 'Graywater' includes but is not limited to wastewater from bathtubs, showers, bathroom washbasins, clothes washing machines, and laundry tubs, but does not include wastewater from kitchen sinks or dishwashers." Water used to clean diapers, oils, grease, or clothing soiled with hazardous substances such as automotive fluids, paint, and other hazardous substances should never be reused.

Using graywater can help reduce your normal water usage. During a drought, graywater can provide a source of water to help keep some of your greenery alive. But graywater is not a substitute for clean water and should only be used under certain conditions.



drawing from Mother Earth News online

- ◆ Only use graywater to irrigate ornamental greenery. Graywater should not be used to irrigate vegetables or other edible plants or root crops. You should also be careful not to accidentally splash graywater on edible plants, or on your skin, because graywater can become contaminated with bacteria, posing a health hazard.
- ◆ Use graywater friendly soaps, shampoos and detergents. The quality of your graywater depends upon what goes into it. Avoid detergents with high levels of bleach, chlorine, boron, sodium, and alkyl benzene. The higher levels of these chemicals present in your graywater, the higher the risk of the graywater harming your greenery. Too much sodium, chlorine and boron can be toxic to many plants. Various chemicals found in laundry detergents can raise the alkalinity and sodium levels in your soil. So choose graywater friendly detergents with the lowest levels of

(Continued on page 9)

Greywater and Your Landscape	1	Irrigation & Landscape Tips to Save Water...	5
Preservation Pointers: Post Harvest Tips for		Cash for Your Grass	6
Fresh Produce	2	Drought Resistant Roses.....	7
Trendy Tillandsia	3	Spring Gardening Guide.....	8
Miniature Gardens	4		



POST-HARVEST TIPS FOR FRESH PRODUCE

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

I would like to share with you some ideas about how to care for the abundance of fresh fruit and vegetables that are available here, whether from the supermarket, farmers market or from our own yard. Harvest your fresh garden produce when the temperatures are cool, and protect them from the sun. Cool fresh produce quickly after picking, or purchasing. Don't wash store-bought produce before storage. You can lightly wash root vegetables from your garden to remove soil, then dry and store. Trim the green tops an inch away from root vegetables such as radishes and carrots.

Fresh produce is alive, breathes, releases heat, loses moisture, and can eventually rot. To preserve produce longer, we need to reduce the respiration rate and reduce heat by lowering the temperature and packaging correctly. Rapid-growing fruits and vegetables are more perishable than slow growers. Water loss affects texture, such as in celery and carrots. Cooling reduces water loss, as cool air takes less water from the produce because cooler air holds less water. Temperature affects all causes of deterioration. For example, broccoli and leafy green vegetables can be stored at 32-35 F. for up to 32 days, but only for 2 to 3 days at 68 F.

Ethylene gas, a ripening agent, is produced by a variety of fruits, including apples, pears, tomatoes and unripe bananas. It's important to separate these from gas sensitive produce such as leafy greens, carrots, cabbage, eggplant and broccoli. Ethylene causes bitterness in carrots, so don't store with apples. Ethylene also causes dark spots in eggplants, and the yellowing of cucumbers. To ripen avocados and bananas quickly, store in a bag with apples.

Melons, grapes, pineapples, and strawberries do not actually ripen more after picking but can soften and may become more aromatic on a kitchen counter. The texture of Bartlett pears improves when picked early and ripened in a cool, dry area. The flavor and texture of tomatoes are affected if stored too cool, so leave them out of the refrigerator. Bananas can be refrigerated after ripening. The skin will blacken, but the inside will still be good. If a banana is



refrigerated when only partially ripe it won't ripen properly. You can freeze ripe bananas in the skins for later use in baking and shakes.

Winter squash stores well in a dark, cool, dry place. I place mine on the garage floor in shallow boxes which are lined with newspaper or paper grocery bags. Persimmons and pomegranates keep well on paper lined trays in a cool garage. For longer storage place them in the refrigerator. Store dry onions and garlic loosely in a cool, dry, well-ventilated place away from sunlight. Store unwashed potatoes in a similar area, away from bright light, which causes greening.

Mushrooms purchased in pre-packaged containers should keep well; however, mushrooms purchased in bulk should not be left in the store's plastic produce bags. Do not wash or clean them before time of use. Place them loosely in brown paper lunch bags in the refrigerator. After some time they may actually dehydrate without rotting. If so simply re-constitute in hot water before using in recipes.

It is estimated that every day a family will discard more than half a pound of fruits and veggies. In total, Americans chuck a fourth of all the produce they buy, mostly because it's gone bad. We can help prevent this waste by understanding more about preservation. Proper storage of all produce can save money, quality and nutrients. This article presents only a little of the information available on the internet. Just type in "Produce Storage" or a similar topic and you will find a great deal of detailed information which will be very useful to you. ✨

TRENDY TILLANDSIA

Launa Herrmann, U.C. Master Gardener, Solano County

Has your passion for gardening evaporated after this winter's lackluster rainfall and threats of summer water restrictions? Then maybe it's time to consider the Tillandsia, also known as an air plant. Once you understand its habitat, history and a few easy care tips, you'll discover why this genus of over 600 species is becoming a trendy accent for the home year around and for an outdoor summertime patio. After all, who can resist a forgiving plant that fends for itself while you work and won't require a plant sitter when you take a vacation.

Natural Habitat

A member of the Bromeliaceae family, the Tillandsia grows almost anywhere without soil and with little water. Depending on the species, it thrives throughout the deserts, rainforests and mountainous terrain of Central and South America, the West Indies and the southern United States. An air plant is also known as an epiphyte, obtaining moisture and nutrition not from soil but air through leaves with tiny scales called trichomes. Trichomes (microscopic hair-like structures) reflect intense sunlight away from the leaf's surface giving the plant its familiar gray color and enabling it to retain water for long time periods. A key to growing a Tillandsia is noting whether your plant is the thick-leafed variety that grows in drought-prone areas or the thinner-leafed variety found in tropical humid locations.



Historical Tidbit

This particular epiphyte was named Tillandsia after Dr. Elias Tillandz (originally Tillander), who was a Swedish physician and botanist (1640-1693). The scientific community remains captivated by the aerial lifestyle of this plant. Research reveals that an ingredient of the plant is used as an herbal supplement

for pollen allergies, and that in 2002 the Tillandsia was used to biomonitor air pollution in Florence, Italy because of its trichomes' ability "to catch aerosols and the particles dispersed in the air."

Blooms and Pups

Tillandsia bloom when mature, i.e., three to five years. In some species, the leaf color changes from green to pinkish-red before the flowering phase. Unfortunately, air plants are monocarpic, meaning they flower once in a lifetime and then, die. Brilliant day-glow colored flowers last from a week to months depending on the species.

Pups start to grow around the base of the parent plant approximately two months after the flowers shrivel up. Pups are new plants that can be twisted free when they are a third to half the size of the parent. Or you can leave the pups to clump together until all the leaves of the mother plant dry up, die back and are removed. Note: Don't toss out the parent before she produces all her pups.



Photos by Launa Herrmann

Care Tips

A Tillandsia needs protection from frost and prefers night temperatures 10-15 degrees cooler than daytime highs.

Optimum temperature is between 50-90 degrees. Avoid full sun or placement close to a sunny window as an air plant will not

(Continued on page 10)

MORE ABOUT BATH TIME

Here's what to do:

- ◆ Once a week submerge the plant in water for approximately two hours. Do not use distilled or softened water. Filtered water, bottled drinking water, rain water or water from a pond or aquarium are preferred. If you use tap water, allow water to sit overnight to dissipate the chlorine.
- ◆ Use a clean glass bowl. Add room-temperature water. Place the plant upside down with the roots sticking up out of the water.
- ◆ When the soak time is complete, shake off as much moisture as possible.
- ◆ Next, rest your Tillandsia with its roots in the air on a clean cotton towel until dry, approximately two to three hours. Notice the leaves are no longer gray but green.
- ◆ Reposition the plant in its holder or container.



MINIATURE GARDENS

Sharon Rico, U.C. Master Gardener, Solano County

Miniature gardens are a newer fad in the gardening world and have captivated my interest and the fascination of several of my friends. The term “miniature gardens” and “fairy gardens” is popping up in magazines and newly released books! Little accessories are everywhere; nurseries, grocery stores, hardware stores, aquariums, big box stores, and discount stores.

So what exactly is a miniature garden and how is it different from a ‘bonsai garden’ or a ‘terrarium garden’? A bonsai is the Japanese art of keeping a plant dwarfed by yearly root pruning and creating a desired top growth by wiring, training and pruning, to mimic the full grown shape in nature. Most bonsai soil is topped with moss, pebbles or rocks. Bonsai come in any size container depending upon the size of the plant being maintained. Although I have observed Bonsai gardens with tiny Japanese bridges and figurines, this is rare. The focus is on creating and guiding the shape of the bonsai plant. A terrarium garden is usually a garden planted in or enclosed in glass. Small plants are placed in these containers creating their own ecosystem. The addition of unusual rocks, driftwood, figurines, and shells adds to the interest of these gardens.

A miniature or fairy garden is a fantasy or whimsical garden. These tiny gardens appeal to small children and to the child in all of us. My favorite way of describing a miniature garden is to ask, “Have you looked through the opening in a sugar Easter egg to view the scene inside”? Well, that is what this type of garden represents—a sweet scene! It is similar to looking at a dollhouse from the back. There is a story waiting for each imagination.

Creating your own miniature garden can be an adventure. If you don’t feel adventurous, invite a friend or better yet, a child to assist you with ideas. Decide on a theme. Do fairies

entice you? How about gnomes? What about a little village or a garden sanctuary? Use your imagination. Have an idea in mind and draw a sketch of your proposed garden. Select and collect your accessories according to your design plan.

Any container would work, but you may want to place your accessories first to make sure you have enough room for your design plan. The container will need a drainage hole. Use a good potting soil and fill the container.



Miniature Garden (Photo by Sharon Rico)

Choose your plants, according to where the proposed garden will be located, (sun or shade). Your choices can be annuals, perennials or even houseplants. Gardens with succulents stay small and look neat. Place and dig holes for your plants. You can do minor root pruning to make every plant “fit” into your container. Water your plants well.

The plants you choose will need to be trimmed to keep their miniature appearance.

Create rock, bark or sand pathways and borders. Vessels that hold water mimic ponds or pools. You could even substitute blue rocks and not use water at all. Moss can be added for a “grassy” look. And now the fun part. Follow your theme or original ideas. Place your miniature accessories to tell your story. Create a forest retreat, a garden sanctuary, or anything that strikes your fancy. Most of all just have fun in the creation of your own ‘Miniature Garden’. 🌿

Resources for inspiration:

Gardening in Miniature by Janit Calvo

Miniature Gardening by Anne Schellman

Fairy Gardening by Julie Bawden

IRRIGATION AND LANDSCAPE TIPS TO SAVE WATER

Carolyn Allen, U.C. Master Gardener, Solano County

Most people water their landscape more than it needs. Water agency experts estimate that more than 50% of landscape water goes to waste by applying too much, too often. How does that water go to waste? It's due to



Lawn Watered by Sprinklers

evaporation, runoff, by watering too quickly, or giving more water than the plants need. Irrigation management is important anytime, regardless of water availability, but becomes essential during a time of drought.

You can have a healthy lawn and landscape, while conserving water (and saving money) if you use the following water-efficient tips and practices.

Water-efficient Irrigation:

- ◆ Have your irrigation system audited. Solano County Water Agency will conduct a free home and irrigation audit for you. (<http://solanosaveswater.org/Contact.html>) The audit report will detail the condition of your system and recommend repairs and improvements.
- ◆ Monthly, adjust your irrigation controller (timer) run times for seasonal changes in weather. Put a reminder on your calendar. Simply making a monthly change to the irrigation operation times can save more water and money than any other thing you can do.
- ◆ Run your irrigation system during the early morning hours, especially if you use sprinklers. Less water is lost to evaporation when the temperature is cooler, plus in most areas the wind doesn't blow as hard in the mornings. Watering in the evenings can lead to turf and plant disease problems because the water sits on plants all night.
- ◆ If you irrigate your lawn with automatic sprinklers, program your timer so that it waters in 2-3 short cycles rather than a single long period of time. Allow the water to soak in to the ground between the cycles. For example, if you normally water for 15 minutes, try this; water for 4 minutes, wait 30 minutes or more for it to soak in, then water another 4 minutes, then wait again,

then water another 4 minutes. Now you have watered a total of 12 minutes rather than 15. (The reason cycling works so well is that almost all brands and types of sprinklers apply water much faster than it can actually soak into the ground.) Cycling the irrigation gives the water time to soak into the ground.

- ◆ Give your sprinkler system an annual tune up: Replace the battery in your controller, clean the nozzle head and screen of sprinklers, check/adjust the spray radius, stop leaking drip emitters and hose bibs. Replace/repair leaking hose bibs, nozzles, and hoses. Check your tuned-up system monthly.
- ◆ Fix leaking valves. Clean, or simply replace, the valve.
- ◆ Keep an emergency repair kit on hand with irrigation items needed to keep your system in good working order.
- ◆ Monthly, make sure tall grass, groundcovers, or shrubs are not blocking or deflecting the water spraying out of the sprinklers.



Drought Tolerant Plants

◆ Relocate sprinklers so that they are between 4 and 6 inches from the edge of sidewalks, curbs, patios, etc. in lawn areas. In shrub areas they can be 12 inches from the edge,

especially with a mature landscape. This will reduce the amount of spray onto the paved surface and will not create a dry area along the edge of the lawn. It will also reduce the amount of damage that lawn mowers and trimmers cause to the sprinkler heads.

- ◆ Install a Smart controller. A Smart controller does the work of periodically adjusting the sprinkler operating times for you. It changes the run times to reflect the current water needs of the plants.
- ◆ Install a rain switch. A rain switch is a simple rain sensor. When it detects measurable rainfall, it turns off the automatic irrigation valves. You can buy a rain switch almost anywhere irrigation products are sold,

(Continued on page 11)

CASH FOR YOUR GRASS -HOW THE SOLANO WATER AGENCY REBATE (UP TO \$1,000) TRANSFORMED MY GARDEN

Winona Victory, U.C. Master Gardener, Solano County



Lawn Before (Photos in this article taken by Winona Victory)

Is this too good to be true? Last spring, we heard about the Solano County Water Agency workshops on planting a drought-tolerant garden where lawns used to be. Now, we have a new front yard in place and the \$1000 check is in the bank. The process is really quite simple and you can do it too.

See the before picture of the 20-year old landscaping. It is overgrown and requires maintenance by the blow-and-go yard care guys. The lawn was in particularly bad shape with irrigation issues and lots of plants that served as grass but not really a lawn.

STEP 1: Visit the SolanoSavesWater.org/ rebates website for instructions. Your lawn must still be living and you submit a simple application to the Agency. Interns come out to measure the amount of living lawn and certify it. Three months are given to complete the installation. If you are running late, let them know and they will give you an extension.

STEP 2: Figure out your new landscape plan. In the event you live in an area with Home Owner's Association, check out the process for approval of a landscape redo. We had to go through that but it was relatively painless because we hired a professional landscape designer who knew the ropes and presented the design at a Review Committee meeting. With a few changes, we were ready to find a contractor who is familiar with the Bay-Friendly Landscape principles. We found that most are not!

STEP 3: Read up about sheet-mulching and drip irrigation principles to set up a new irrigation system and planting scheme. When the bids come back, examine whether the contractor wants to carry the lawn to the dump—if so, look



again at other contractors. Learn about different drought-tolerant plants and think about colors and textures that appeal to you. Check the local library and bookstores and garden supply stores for ideas. Also, visit local gardens and garden tours. You will be amazed at the variety of unusual plants that can look interesting and are attractive throughout the year with different foliage, flowers, and berries. See construction in progress picture.



STEP 4: Call the Water Agency for a verification visit after the installation is complete. They will check your irrigation system, mulching, and drought-tolerant plants.



During the Transformation

Sign off, and wait for the check in the mail. I took a picture to prove it was real and then stuck in the bank. It was for the full \$1000 since we had slightly more than 1000 square feet of lawn.

Stand back and watch what happens. The verbena (*Verbena lilacina* 'De La Mina') was almost immediately in bloom (early February), now the *Cotoneaster dammeri* and *Mimulus* x 'Georgie Yellow' and Coral Bells (*Heuchera* 'Canyon Pink'). Penstemon and Salvia are starting to bloom. I go out almost daily to "weed" and dead-head and admire. I put a chair out to sit and enjoy the garden.

The last picture shows how it looked about six weeks later in early March. The construction lasted two weeks and was complete by end of January and then the rains came. No water needed yet! No yard maintenance either.☀️



Lawn After

DROUGHT RESISTANT ROSES

Darrell g.h. Schramm, U.C. Master Gardener, Solano County



Madame Abel Chatenay

Despite recent rains, forecasters and certain scientists predict a severe drought, the worst drought we Californians will confront in decades if not in a century. Of course we are concerned, not only for our daily lives but also for our gardens and the roses in them. It really is time to sing another tune rather than “Water water water” to be given to our spoiled roses. I confess that I have generally ignored Consulting Rosarians and other speakers who have chanted that mantra; they simply weren’t speaking to me. My song was more like “Water deeply and mulch mulch mulch.”

Watering deeply and long has been my strategy to keep my roses healthy. By doing so, the rose roots penetrate even farther into the earth. Hybrid teas and other roses that are irrigated often and briefly develop shallow roots easily injured by heat and drought. Deprive them of their water fix, and they will go into withdrawal—and perhaps shrivel into good-bye. A thick layer of mulch keeps the soil damp. Think of the roots rather than the bloom, and all should go well. Roses with deep roots acquire endurance and strength.

While I suspect there are more, I know of only three hybrid teas that are fairly drought tolerant: the old apricot-pink ‘Madame Abel Chatenay’ of 1895, the climbing version of the famous ‘Peace’ of 1950, and ‘First Prize’, a pink rose with enormous flowers and prickles (1970).

Whole classes of roses, however, exist that in northern California are drought-resistant. Most ramblers are among them. One has only to ramble in the hills and draws and dales of the state, whether in Mendocino County and farther north or in the Sierra foothills, to chance across ramblers still thriving where homesteads and villages once stood.

Much the same is true of china roses and tea roses. It is these and noisettes that I will now address in more detail. Like most plants, roses do require some water, but many of them, like the chinas and teas, perform well with minimal irrigation, just a few gallons a month. (The exceptions are, naturally, roses in containers. But heavy mulching means they will do with less water than most people think.) My roses slake their thirst from soaker hoses for about two hours every ten or fourteen days. Additionally, a few months ago I began washing my dishes by hand in an enamel basin and, afterwards, tossing the soapy water under rose plants.

It was china roses that, when brought to Europe, introduced repeat-blooming into our once-blooming roses. ‘Old Blush’ was the first in 1752 and then ‘Slater’s Crimson China’ in 1790. ‘Old Blush’ being pink, has given us other pinks, such as ‘Napoleon’, ‘Catherine II’, and ‘Archduke Charles’ to name but a few. In hot sun, ‘Archduke Charles’ usually turns red. In fact, a trait of most china roses is a darkening with age or heat. ‘Slater’s Crimson’ has given us the red chinas such as ‘Cramoisi Superieure’, ‘Fabvier’, ‘Fellemburg’ (also classified as a noisette), ‘Louis Philippe’, and the reddish-purple ‘Eugene de Beauharnais’. I grow most of these, two of them in large pots; none have suffered for lack of water in my program.

‘Mutabilis’, a china rose of unknown origin and date, is a climber of buff yellow, peach and rose-colored blossoms all on the same plant at the same time. ‘Comtesse du Cayla’ is a large bush of flowers of blended coppery-orange-yellow-carmine. When picked in the bud stage, they last a long time in a vase.

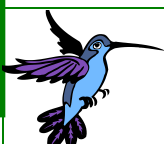
Tea roses (partly from which the early hybrid teas are derived), are among the roses most frequently found in pioneer cemeteries, Gold Rush towns, ghost towns, abandoned farms and waysides. Clearly those teas were (and are!) survivors, living on totally at the whim of Mother Nature, with no one constantly or consistently watering or caring for them in any way.

Unlike hybrid teas, tea roses are bushy and full—no naked legs appearing below a dress of leaves. Their stems are twiggy and arching or angular rather than stout and erect. With few exceptions, tea roses come in elegant pastel colors. It is that high-pointed center of some of them that was bred into the hybrid tea.

‘Hume’s Blush’, a stud rose, was introduced to England in 1809 and lent the pink shades to successive roses such as ‘Madame Berkeley’ and ‘Maman Cochet’, both pale pink; ‘Duchesse de Brabant’, a medium pink; ‘Papa Gontier’, a deep pink; ‘Bon Silene’, a deep red-pink with occasional white stripes on a few petals; and ‘Archiduc Joseph’, a coppery pink.

‘Park’s Yellow Tea-scented China’, another rose used to induce recurrent blooming, was brought to England from China in 1824. It is the parent of such teas as ‘Lady Hillingdon’, apricot yellow; ‘Maria van Houtte’, light yellow and pink; and ‘Le Pactole’, pale yellow with a slightly deeper yellow center. A later tea rose is the wonderful orange-pink-salmon-Dijon-

(Continued on page 9)



SPRING GARDENING GUIDE



	APRIL	MAY	JUNE
P L A N T I N G	<ul style="list-style-type: none"> ◇ Edibles: Loose-leaf lettuce, culinary herbs, chard, carrots, radishes, spinach, sorrel ◇ Warm-season annuals: Ageratum, alyssum, bedding dahlias, impatiens, lobelia, petunia, phlox, portulaca, salvia, sunflower, zinnia ◇ Perennials: Ceanothus, lavender, coreopsis, penstamon, rudbeckia, dwarf plumbago, scabiosa, verbena 	<ul style="list-style-type: none"> ◇ Edibles: Beans, corn, cucumbers, eggplant, melons, okra, peppers, pumpkins, squash, tomatoes, watermelon ◇ Butterfly, bee and hummingbird attractions: Agastache, alstroemeria, bee balm, coneflower, coral bells, fuchsia, honeysuckle, penstamon, salvia ◇ Plant chrysanthemums for fall color ◇ Perennial shrubs, trees or vines ◇ Loosen roots of pot bound nursery plants before planting in garden 	<ul style="list-style-type: none"> ◇ Edibles: Melon, beans and corn from seed; tomato, squash and cucumber seedlings ◇ Successive plantings of basil and cilantro ◇ Summer annuals: Cosmos, marigolds, portulaca, sunflowers, zinnias ◇ Summer-blooming perennials: Daylilies, gloriosa daisy, Russian sage, salvia, yarrow
M A I N T E N A N C E	<ul style="list-style-type: none"> ◇ Control weeds—pull or hoe them as soon as they appear ◇ Fertilize and clean up around azaleas, camellias, and rhododendrons. ◇ Fertilize citrus ◇ Tune up motor and sharpen blades on lawn mower. Mow often enough that you cut no more than 1/3 the length of the grass blade in any one session ◇ Spray olives, liquidambar and other mess trees with fruit control hormone or blast with hose to curb fruit production 	<ul style="list-style-type: none"> ◇ Aerate and fertilize lawns ◇ Fertilize citrus and established perennials and vegetables ◇ Deadhead spent flowers to encourage new bloom; pinch back petunias and fuchsia ◇ Allow spring bulb foliage to yellow and dry out before removing 	<ul style="list-style-type: none"> ◇ Roses: Cut back faded blooms to 1/4" above first five leaflet that faces outside bush ◇ Fruit trees: Thin apples, pears, peaches and nectarines, leaving about 6" between fruit ◇ Sprinklers: Summer heat increases water needs by 2" per week. Adjust sprinklers for adequate coverage and irrigation* ◇ Fertilize annual flowers, vegetables, lawns and roses ◇ Dig and divide crowded bulbs; allow to dry before replanting ◇ Deep water trees to encourage deep, strong root growth
P R E V E N T I O N	<ul style="list-style-type: none"> ◇ Bait for snails and slugs, following all product instructions ◇ Rid new growth of aphids with a blast from the hose every few days ◇ Dump standing water to slow mosquito breeding 	<ul style="list-style-type: none"> ◇ Tune up drip irrigations systems ◇ Build basins around the bases of shrubs and trees; mulch those and garden plants to conserve moisture and reduce weeds, leaving a mulch-free margin around plant crowns and stems ◇ Stake tomatoes and perennials ◇ Remain vigilant against snails, slugs, and aphids 	<ul style="list-style-type: none"> ◇ Mulch to keep roots cool and to retain moisture ◇ Check underside of tomato leaves for hornworms ◇ Spray roses with Neem oil to help control aphids, black spot, whiteflies and powdery mildew ◇ Inspect garden for earwigs ◇ Remain vigilant against snails and slugs

*See Page 5 for more information on irrigation and landscape tips to save water

(Continued from page 1--Greywater and Your Landscape)

alkaline, sodium and boron. This generally takes some research since the labels on laundry detergent containers do not always list all of the ingredients and the amount of each chemical present in the detergent.

- ◆ Avoid soaps and detergents containing dye. Powdered laundry detergents tend to have higher levels of sodium than liquid detergents. And to decrease the amount of chemicals in your graywater, use fabric softener sheets instead of liquid fabric softener.
- ◆ Know what greenery will benefit from graywater, and what may be harmed by it. Take an inventory of the plants in your yard that are susceptible to either high alkalinity or sodium levels associated with graywater, especially resulting from the use of non-friendly graywater detergents. For example, crape myrtles (*Lagerstroemia indica* L.) are susceptible to high sodium levels, begonias (*Begonia* L.), camellias (*Camellia* L.), gardenias (*Gardenia* Ellis), hydrangeas (*Hydrangea* L.), and azaleas (*Rhododendron*) are susceptible to high alkalinity.
- ◆ Do not use graywater in a sprinkler system. Potentially harmful bacteria in graywater can be suspended in the air and inhaled if a sprinkler system is used.
- ◆ Make sure your graywater does not run off your

property onto sidewalks. It should also not be allowed pool, or puddle to prevent any potential harmful micro organisms in the graywater from remaining on the surface.

- ◆ Use a filter if drip irrigating with graywater. Lint, hair and other similar items in graywater can easily clog the emitters used in drip irrigation. If you decide to use drip irrigation for your graywater, you'll need to install a filter which will need to be cleaned regularly.

In some cases a permit is required for installation of a graywater irrigation system. Check with your local city or county for permit requirements.

For more information on graywater, check out the following resources:

Use of Graywater in Urban Landscapes

<http://ceriverside.ucanr.edu/files/183496.pdf>

Using Graywater in Your Home Landscape Graywater Guide

http://www.water.ca.gov/wateruseefficiency/docs/graywater_guide_book.pdf

Graywater Regulations <http://www.solanocounty.com/civicax/filebank/blobdload.aspx?blobid=13396> ☼

(Continued from page 7-Drought Resistant Roses)

mustard colored 'Clementina Carbonieri'. This barely begins the list of the many choices in tea roses.

In addition to being drought-resistant, chinas and teas have the added benefit of requiring very little labor. Aside from removal of dead, damaged, or diseased stems and canes, they do not need to be pruned. Speaking for myself, as my rose count grows larger and I grow older, freedom from the duty of pruning becomes a welcome gift.

One other class of roses is, for the most part, drought tolerant: the noisettes. This class originated in our country. These roses put forth clusters of blossoms on flexible canes, most of them eight to twenty feet tall. 'Lamarque' is one of the oldest, 1830, a creamy white beauty that reaches twelve to fifteen feet high. Popular with the early settlers and still popular today, old specimens continue to stand in Fort Bragg (planted in 1850) and on an abandoned estate outside Santa Cruz. 'Reve d'Or', as its name suggests, is golden yellow with paler edges, a rapidly growing rose fond of warm climates, stretching to about twelve feet. The white or blush-white 'Madame Alfred Carriere' is an enthusiastic grower, aiming for twenty feet. 'Crepuscule' is named for sunsets, which describes its colors. For some rosarians its loose and somewhat disordered flowers are an acquired taste, but a nine to twelve foot bush fully embroidered with the colors of sundown is stunning. And there are others.

Even without our current drought in California, the water tables across the country have been sinking, diminishing for years. To

(Continued on page 10)

(Continued from page 3-Trendy Tillandsia)

survive next to un-shaded glass in an overheated room. For further information on lighting, including the use of incandescent grow lights and high-pressure sodium lamps, log onto <http://www.airplantcity.com/care.htm>

A Tillandsia thrives with an occasional soaking, but can be a tad finicky about the timing of the bath, preferring morning to evening and weekly to daily. The reason for avoiding evening soaks is the plant's nightly preoccupation with transpiration and vaporization, opening their stomata to exchange gas and oxygen. In other words, if an air plant is wet, it can't breathe.

Trendy Decorator Accents

Take a look around your home. Gather together several items that you enjoy displaying. Transform a wine goblet into an item of simple classic elegance by dropping an air plant inside. A Tillandsia nestled atop a layer of pink sand or crushed abalone shells looks spiffy on a bathroom counter top. Place a plant atop a candle holder or inside a shell or weave a clump or two into a grapevine wreath. Hanging glass globes are also popular containers for this epiphyte as are wall mounted pieces of driftwood. Design possibilities are only limited by your imagination — because a Tillandsia isn't restricted to a flower pot. However you display your air plant, you'll have a trendy



Tillandsia Bloom



Decorating with Tillandsia



Tillandsia in Sea Urchin Shell

(Continued from Page 9—Drought-Resistant Roses)

grow drought resistant roses is to do ourselves a favor and to do Mother Nature an act of kindness just short of the gift of life. Where to Buy China, Tea, and Noisette Roses

Generic nurseries cater to hybrid teas, floribundas, and patio roses. In most cases you will have to order china, tea, and noisettes online or over the telephone. Try any of the following:

Burlington Rose Nursery
24865 Road 164
Visalia, CA 93292
(559) 747-3624
BurlingtonRoses@aol.com
Burlingtonroses.com

Rosemary's Roses
12600 Yankee Hill Rd.
Columbia, CA 95310
(209) 536-9415
rosemarysroses@wildblue.net

Greenmantle Nursery
3010 Ettersburg Rd..
Garberville, CA 95542
(707) 986-7504
Greenmantlenursery.com

Rogue Valley Roses
Medford, OR 97504
(541) 535-1307
Roguevalleyroses.com



Rosa 'Crepuscula'

This article is not to be reprinted or published without permission of the author: schrammd@usfca.edu 🌿

(Continued from page 5-Irrigation and Landscape Tips to Save Water)

- most will work with any brand of irrigation controller or timer and any brand of valve.
- ◆ If you don't have a rain switch, be sure to turn your system off when it rains.
 - ◆ Switch to newer sprinkler heads. Technology in sprinklers has advanced over the last 20 years and many new sprinklers are more water efficient than the older models. Generally this option is only cost effective if you have a very old sprinkler system, or if your original sprinkler system was poorly designed.
 - ◆ Switch to drip irrigation for watering shrubs and groundcovers. Drip irrigation is 20% more water efficient than sprinklers.
 - ◆ Separate plants into hydro-zones. A hydro-zone is an area where all the plants use more or less the same amount of water and have the same sun and wind exposure.
 - ◆ Do you have an alternate source of irrigation water you could use? Water from creeks, ponds, and shallow wells are all examples. Greywater from roofs (rain barrel collection) and sinks is another source if you have very limited irrigation needs. Follow local and state ordinances when creating a greywater system. See article on Page 1 for more information about using greywater.

Water-saving Landscape Practices:

- ◆ Mow your grass at a higher length (so that it is longer.) While there is some debate about whether this saves much water, scalping the grass off at a low height is definitely not good for the vigor and health of the grass. Longer grass has deeper, stronger roots and is more resistant to disease and drought. Most grass should be mowed to a length of no less than 3 inches.
- ◆ Dethatch and/or aerate your lawn. Lawn aeration helps assure that the water can penetrate easily into the soil, over time the soil surface can become very compacted and water will not easily penetrate it. Aerating also provides air to the roots of the grass, which is necessary for healthy growth.
- ◆ Reduce the use of fertilizers. Fertilizers encourage rapid growth which results in higher water use.
- ◆ Add a layer of mulch to shrub beds. A 2 or 3 inches deep layer of mulch, such as wood chips, bark, almond hulls, or even decorative rock, reduces water use and also reduces the number of weeds.
- ◆ Reshape your landscape to use less water. Often a minor change can not only refresh and improve the appearance of your landscape, it can also save water. Look around at your yard layout, especially the size and location of lawns. Can you remove or shrink the size of the lawn areas? Lawn uses much more water than the same size area planted in shrubs or groundcover. How about replacing old high-water using shrubs with shrubs that are less thirsty?🌸

NOTICE
GREY WATER
USED ON
GARDENS & LAWNS





***Seeds For Thought* is produced by
the Solano County Master Gardeners**

Editor

Melinda Nestlerode

Feature Writers

Kathy Low, Pearl Eddy,

Launa Herrmann, Sharon Rico,

Carolyn Allen, Winona Victory, and

Darrell g.h. Schramm



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:

Solano County UCCE

501 Texas Street, 1st Floor

Fairfield, CA 94533

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 status as a covered veteran (covered veterans are special disabled veterans, recently separated veterans, Vietnam era veterans, or any other veterans who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized) in any of its programs or activities. 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/Staff Personnel Services Director, University of California, Agriculture and Natural Resources, 300 Lakeside Drive, 6th Floor, Oakland, CA 94612-3550 (510) 987-0096.

References in *Seeds For Thought* to trademarked products, commercial websites, and businesses are provided as a courtesy for the reader's consideration and do not constitute the endorsement of any products or services by the U.C. Master Gardeners.

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>

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



**Spring
2014**