

RAIN GARDENS

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



Photo by Tina Saravia

My first experience with rain gardens was the front garden of the Daly City Public Library—Serramonte Branch, in San Mateo County.

I visited the library on a rainy day and saw first hand how it worked. There were several cut-outs in the parking lot directing the dirty rain water into the rain garden. Some parts of the garden were getting flooded and plants were sitting in water. It was both fascinating and worrisome to watch the water gushing through and drowning the plants.

I went back a week or two later; no more sign of water. The flooding was gone and the plants survived.

So what exactly is a rain garden?

The Solano County Water District defines Rain Gardens as "gardens containing flowering plants and grasses (preferably native species of both) that can survive in soil soaked with water

from rain storms. However they are not gardens that have standing water."

I wish I had photos of the library rain garden, but this was back when we didn't have digital cameras on our phones. Luckily, I happened to be in downtown Walnut Creek recently; and just around the corner from the Botelho Island sign, I noticed some excellent examples of rain gardens next to the street, with cutouts for water to enter the garden.

In residential properties, rain gardens can be used to capture storm run-off from roofs, driveways, or other impervious surfaces and allow water to SINK back into the ground.

Here are the basic site selection guidelines for a rain garden:

- Downslope rainwater collection surface put the garden where water will naturally flow
- Minimum 5 feet from structures without a basement and 10 feet from structures with a basement (check with local jurisdictions for specific requirement)
- Not over a septic tank
- Not over a place that is already soggy
- Ideally in full or partial sunlight
- Avoid large tree roots

A rain garden design can be as simple as a shallow depression filled with plants that can flourish in both moist and dry conditions. The required size, shape, and depth of the garden depend on how much water you are trying to capture.

Plants are a major feature of the rain garden as they are not only used for their beauty but they are also used to remove pollutants and improve infiltration allowing water to soak back into the landscape.

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Plants used for the base or the middle of the garden should be able to withstand flooding and also drier conditions in the summer; such as basket rush (*Juncus textilis*) and scouring rush (*Equisetum hyemale*). NOTE: scouring rush can be invasive!

For the mid slope, the plants should be small and also able to tolerate some flooding such as yellow monkeyflower (*Mimulus guttatus*) or California aster (*Aster chilensis*). And for the furthermost edges of the rain garden, use plants that prefer drier soil, such as yarrow (*Achillea millefolium*) and California lilac (*Ceanothus* spp.).

Rain gardens should be designed to drain within 48-72 hours to reduce the risk of mosquito breeding in standing water. They are a beautiful way to protect one's property from erosion and protect the water quality of local creeks. They are easily added into existing landscapes or open space.

The University of California Agricultural and Natural Resources website has a wonderful free publication with a more complete discussion on Rain Gardens: <u>http://anrcatalog.ucanr.edu/Details.aspx?itemNo=8531</u>

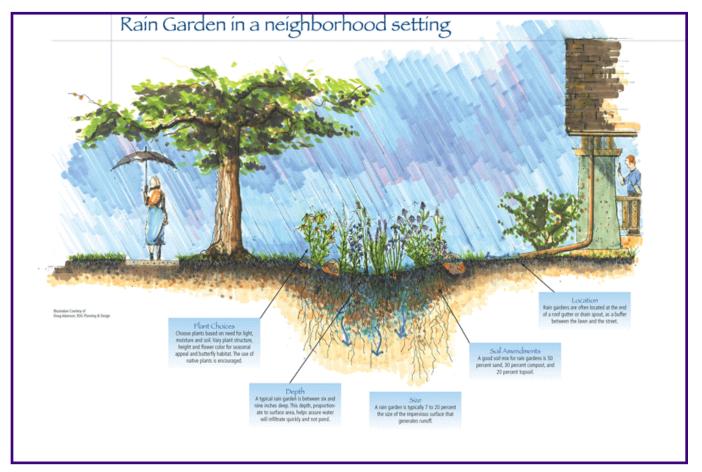


Illustration by Doug Adamson, RDG Planning & Design, provided by USDA-NRCS in Des Moines, Iowa





BRUSSELS SPROUTS: NUTRITIONAL POWERBALLS

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

For decades I considered Brussels sprouts very unappealing and unappetizing. It is interesting that these opinions have gradually changed for me and for many others. We now know that these little cabbage-like vegies are not only highly nutritional but also can be very tasty if prepared properly. These sprouts, *Brassica oleracea*, which look like miniature cabbages, are part of the Brassica family, also known as cruciferous vegetables. minerals such as folate, manganese, potassium, thiamine and iron. They also provide fiber, some protein, and omega-3. They also include a substance called sulforaphane, a phytochemical being researched for potential anticancer properties. The fat-soluble vitamins A and K can be more readily absorbed by the body when prepared with a small amount of oil. (I like olive oil).

When preparing sprouts, be aware that overcooking

Brussels sprouts were first mentioned as being in the Belgium area many centuries ago, and were mentioned in Thomas Jefferson's garden book of 1812. They had been introduced to North America by the French, and in the early 1900's they were grown by artichoke growers in San Mateo County, and then in Monterey County where they thrive along the cool, foggy coast. In Solano County, they will grow much better in the

cooler Benicia and Vallejo areas than in the hotter, drier Fairfield, Vacaville, and Dixon areas. The plants mature 80 to 100 days after transplanting, and plants can be set out in late summer or early fall in well-drained soil. The variety 'Jade Cross' is more heat tolerant than most. There is no need to rush the harvest in the late fall or early winter as they can handle mild frost and, in fact, may be even sweeter after a frost.

Brussels sprouts mature from the bottom of a central stem upward. You can sometimes purchase these entire stems in the markets, and they are best stored in a plastic bag in the refrigerator. Pluck the sprouts as you need to use them, leaving others attached to the stem where they will continue to absorb nutrients. If you purchase individual sprouts in the market, look for those that are firm and have a uniform texture and color across the sprouts, and select the same sizes so that they cook uniformly. I look for the small ones. If you select larger fresh sprouts, the stems can be trimmed off and a couple of outer loose leaves can be pulled off. Also, I have found packaged frozen sprouts that are excellent and ready to cook in many ways

I use many more Brussels sprouts now that I have discovered how very good they are for us. They are excellent sources of vitamins A, C, K and B6, and



causes the sprouts to develop a strong flavor and odor that many people don't like because of a sulfur-containing ingredient. I test the tenderness with an ice pick or wire cake tester, and remove from the heat source early. They can be steamed, sautéed, stir fried, grilled or roasted. Oven-roasting with chunks of other vegetables, with oil and a few herbs and spices, is especially easy and delicious. Large sizes can be sliced in half or chopped or shredded. Look for

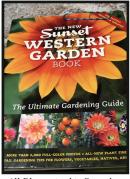
easy recipes with assorted ingredients such as some olive or coconut oil, balsamic vinegar, chopped apple or onion, chopped toasted walnuts or pine nuts, or whole or sliced chestnuts, and perhaps some lime, lemon or orange juice.

My favorite sprouts recipe is adapted from an old microwave cookbook, but I often make it, at least partially, on the stove top if I have a large quantity to prepare. Gently cook about 10 ounces of sprouts, covered, in a pan with a cup of broth for about 5 minutes until almost tender. Add ½ cup pre-cooked chestnuts (sliced, if desired) and heat through. At this point you can add black pepper, 1 Tbsp. extra virgin olive oil, chopped walnuts or pine nuts, and chopped red bell peppers (either fresh or from a jar) for color. The broth can be drained, if desired. I have taken this recipe to potluck dinners, and people were pleasantly surprised to find that the brown chunks were chestnuts, not mushrooms. I think mushrooms would be really good, too.

I hope that you are able to find ways to make Brussels sprouts an important part of your menus since they are almost always available in different forms and are so very nutritious. \Leftrightarrow

SALVIAS: SO MANY TO CHOOSE FROM

Trishae Rose, U.C. Master Gardener, Solano County



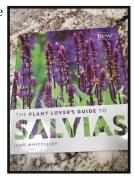
All Photos in this Story by Trishae Rose

Salvias are a genus of plants within the *Lamiaceae* family; this is the mint family of plants so they share the characteristic of square stems. There are approximately 1,000 different salvias within this genus. Many but not all salvias are drought tolerant and do well in our Zone 9b climate. The popular garden guide, <u>The New Sunset Western</u> <u>Garden Book</u>, current edition, actually devotes more than five pages of text and photos to this genus.

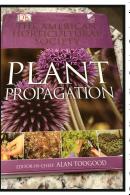
I first became familiar with salvias decades ago when I wanted a garden but had little time to care for plants that were needy. I found that once the salvias are placed in the garden there were few if any pest issues and occasional deep watering kept the plants healthy. Like many Mediterranean plants, salvias do not like "wet feet". Plant them high and dry with a good pruning to shape during the winter months.

The tubular flowers seem to be designed just for humming birds, with many varieties of red flowering plants available. There are salvias available in almost any color from white, yellow, reds, many blues and purples to an almost black variety. During the past 10 years, I have more time to spend in the garden but salvias still are among my favorites. I tend to like the bolder blues, purples and red flowering varieties with the *Salvia leucantha*, commonly known as Mexican bush sage, being a stunning low care choice.

One confusion for me is the common use of the term sage interchangeably with salvia. Salvia is the proper Latin term for plants in this genus but many of the salvias, particularly the herbal salvias are commonly referred to as sages. *Salvia officinalis* is the common garden sage originating from the Mediterranean that is the traditional culinary sage.



I recently purchased <u>The Plant Lover's Guide to Salvias</u> by John Whittlesey. Mr. Whittlesey is a nurseryman and designer in Northern California. it was refreshing to find an author on the West Coast. His book reads like an encyclopedia of salvias with good photos and specific cultivation and landscape notes.



<u>Plant Propagation</u>, published by the American Horticulture Society with editor Alan Toogood, was the text used in a course offered at Solano Community College this past summer. Salvias can be propagated in many ways. Methods for propagating salvias and many more plants are clearly described in this text. This reference text will sit alongside my copy of <u>The New Sunset Western</u> <u>Garden Book</u> for years to come. 🔆



BOTANICAL STAMMERING

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

When the nurserywoman approached me and asked, "May I help you?" I replied, "Yes. Can you direct me to your Hostas?"

"Our hosstas are over here," she said, leading the way.

"Why," I asked, "do most people pronounce the plant name 'hossta'? It was named in honor of an Austrian botanist, Nicolas Thomas Host—long o."

"Oh, I didn't know that," she responded. Another sales woman, walking by, overheard us and chimed in, "I didn't either. But that makes sense. From now on I'm saying 'Hosta'—long o."

"After all," I returned, "at Christmastime, if you're a believer, you wouldn't say 'And suddenly there was with the angel a multitude of the heavenly hosst'!" We all laughed. And I bought my Hōsta 'Patriot'.

Indeed, I try to remain patriotic to the correct pronunciation of botanical nomenclature, especially if it's based on a person's name. Granted, it's not easy. One has to attend not only to the first name, which is always in Latin and capitalized but also to the second and even a third name, which may be a form of any language. The surname in *Hosta sieboldiana*, for instance, refers to botanist Siebold; if you realize that name is German, then you know it's pronounced 'See-bold', not 'Sigh-bold'.

To pick up mispronunciations is not difficult if we hear a word or name repeatedly spoken incorrectly. But I do believe we should honor the name of those so honored whose names have been given to plants. Perhaps it's because I spoke German before English that I have invariably spoken of the dahlia as 'dall-ya', which honors the name of Dr. Dahl. Still, to be consistent, we should say 'kamelia' (kam-ELL-ya) for camellia, named for Father Kamel, not 'cameelia', but I have never heard it uttered 'kamelia', not even by me. The same is true for Deutzia, named for Johan van der Deutz: most of us say 'dootsia' when it should be 'doytsia'. I try.

Those lovely winter flowers that look like the Shooting Star wildflower but with marbled, heart-shaped leaves are Cyclamen, that is, 'SIK-lamen', not 'SIGH-klamen'. The name derives from the Greek kykleminos. That first syllable is a kick, not a sigh. Then there is Co-TŌN-e-aster (long o), often misspoken 'cotton-easter'. Now, I know that cottontails are familiar during Easter, but this plant has no relation to that holiday nor to little bunnies.

Sometimes a mispronunciation occurs because of a misplaced accented syllable. That rampant plant Oxalis, which is the bane of my spring garden and of our whole town, I've always heard called 'ox-alice'. Yet the correct pronunciation is 'OX-a-lis'. Nearly every word in Webster's 3210-page unabridged dictionary that beings with ox has the accent on the first syllable. Think: prickly ox-tongue, ox-eyed daisy, oxbane, oxberry, oxblood, oxbow, oxidation, Oxford, etc. However, since I've been mis-saying it for so long, can I teach this old dog a new trick (of the tongue)?

On the other hand, some botanical terms have two acceptable ways to utter them. Pittosporum, for example, can be pronounced 'PITT-o-sporum' or 'pit-TOS-porum (a half-rhyme with petroleum). Ah, a choice! Sometimes we needn't worry.



One pronunciation I find particularly distracting is the incorrect way to say Clematis. The name comes from the Greek klema, meaning a "vine-branch." Clematis does not rhyme with "running at us" or 'window lattice." It should be said CLEM-a-tis. Incidentally, this plant was first named

Photo by Melinda Nestlerode

and described in The Names of Herbes by William Turner in 1548.

Of course there are such tongue twisting plant designations as *Matteuccia struthiopteris* (the ostrich fern) or *Polystichum acrostichoïdes* (a sword fern), large enough mouthfuls to test the articulation of anyone but the most seasoned botanist. So perhaps we should be easy on ourselves and forgiving when using such less familiar terms.

But of the familiar we can surely be more attentive, careful, and correct. Most of all, I do believe we should give honor to whom honor is due. Those intrepid plant hunters and botanists who braved seas and mountain ranges and jungles and deserts and hostile peoples, and who discovered and described new plants, deserve to be remembered respectfully for what they gave to the horticultural world.

LONG FINGERS OF GARDENING

Sheila Clyatt, U.C. Master Gardener, Solano County



Photo by Sheila Clyatt

A new e-mail arrives in my inbox from the UC Master Gardeners-Solano County. I click on the message waiting for it to take shape. It turns out to be a link, which is often the first step in an internet treasure hunt. "Links" in the gardening world can be the doorway leading to brand new information or a clue in a long hunt, identification or opinion. Fellow gardeners often do offer hefty opinions. This particular link in front of me is intriguing. It is a message passed on from the Vallejo Gardening Club. I click again, leaning into the screen now for the full visual. It is an invitation to participate in their yearly contest. Now I am hooked. It is perfect: no entry fee, no prize, no risk and perhaps some fun. I begin to scroll.

Contests with gardening as a topic are viable; after all I am a Master Gardener, I know something about a few things. I know lots about worms, for example, ever since I volunteered at the county fairgrounds and showed hundreds of students our worm bin as a part of Youth Ag Day. Having to keep the students interested led me to learn tantalizing facts about worm biology, such as their sex life, their poop habits, and their lifestyle. Anyone who knows that much about worms should have a good chance of performing well in a gardening contest.

As I read down the computer screen, my momentary confidence is shattered. This is not a contest about worms, but instead a

photo gig designed for people with some experience and talent. The talent of snapping the perfect frame with the right lighting that occurs during that "one and only moment", like the "millisecond the earth parts and the baby green shoot reaches for the sky" type of moment.

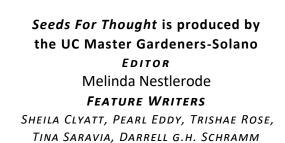
Then I remember I am a MG and I buck up. I might not own a camera but I am equipped with a cell phone and I sort of know how to use it. My best friend straightened me out on how to take selfies. I used to hold up the camera backwards and hit the button a bunch of times, checking the screen afterwards to see if anything got in the photo frame. Then she showed me how to push the little "camera" icon at the bottom of the screen and presto it reverses the camera lens. My daughter also taught me a couple of tips to take into this campaign. Tip one: don't use "square" icon, it's dumb. She did not elaborate but my finger isn't drawn to that option any longer. The second tip: put your feature image to the side not the center. Equipped with this immeasurable knowledge I head into my front yard, waiting for "the moment".

It wasn't until a week later that I saw a distressed ladybug in a bucket of water. I scooped it out, set it on a leaf and ran inside for my camera phone. Then two days later a hummingbird stopped by my pollinator bed. It was as if by opening up my mind to the possibility of "picture perfect" moments they were brought into fruition.

A month later, my amateur photo submission of a dragonfly won me a spot in this year's Vallejo Gardening Club calendar. My photo will also be displayed at the Heritage House in Vallejo. I'm invited to show my "portfolio" at the "meet the photographers" open house. So after I walk away from these keys I'll be heading into the garden with my camera phone poised.

Becoming an avid gardener has opened up a lot of doors for me and taken me down some beautiful new paths. Gardening has taught me to try things without being assured of the outcome. It has helped me relax my grip on what "perfect" looks like, as nature is always offering me new models for the definition of beauty. This willingness to explore and adjust has spilled over into my broader life. Similar to the garden I nurture outside my door, I keep evolving as well. Becoming a gardener has taught me that there is always something else to learn, something new to try, some new quest to follow. Like most seasoned gardeners, I have become cavalier enough to just grab a tool and be prepared to get dirty. 🔅

WINTER GARDENING GUIDE			
	JANUARY	FEBRUARY	MARCH
P L A N T I N G	 Sow California poppy (<i>Eschscholzia californica</i>) seeds for spring color Sow indoors cool-season edibles such as chard, kale, and lettuce Plant winter blooming shrubs; purchase now while in bloom to see what you are getting Harvest citrus as it ripens— taste for flavor 	 Plant summer bulbs such as gladioli, cannas, ranunculus, anemone, dahlia, lily, tuberous begonia and delphinium Plant leaf crops like lettuce, cilantro, beets, carrots, chard, peas, and spinach directly in the ground Indoors, start seeds of eggplant, peppers, and tomatoes. Transplant outdoors in 6 to 8 weeks Plant berries: raspberry, boysenberry, and blackberry 	 Almost any plant (except tropical) can be planted now. Start seeds of old-fashioned favorites such as apricot foxglove, bachelor's button, blue flax and Oriental poppies. Summer sizzlers like cosmos and zinnias also grow more vigorously from a seed start and catch up fast to nursery-started plants Plant warm season annuals like ageratum, marigold, petunia and sunflower Switch out cool-season vegetables for corn, beans, peppers and tomatoes
М А I N Т Е N А N С Е	 Prune deciduous plants while dormant to keep grapes, roses, fruit and shade trees shapely Check mulch. Add more to paths and beds for weed suppression Protect tender plants when cold nights are predicted. Water well—dry plants are more susceptible to frost damage Fertilize azaleas after bloom; cymbidiums with 1/2 strength fertilizer every week or so Collect rain water to use on your garden 	 Pinch fuchsias through March; for every stem you pinch, you'll get 2; for every 2 you'll get 4 Fertilize: citrus and fruit trees, cane berries, roses (only after you see new growth begin Fertilize fall planted annuals and perennials, and established trees and shrubs with an all-purpose fertilizer. Wait on azaleas, camellias, and rhododendrons until after bloom Mulch exposed areas to prevent weed seeds from germinating Repot cymbidiums if necessary 	 Fertilize almost everything Flowering and fruiting plants need phosphorus-rich fertilizer Green leafy plants such as lawns and lettuce require nitrogen Root plants such as potatoes, beets, and bulbs appreciate a handful of potassium. Read the labels. Once soils have dried out, give your irrigation system a tune up. Then set to water deeply and infrequently to encourage deep root growth
Р R E V E N T I 0 N	 Control snails and slugs by eliminating hiding places, or hand pick Use a dormant spray to control over-wintering insects on deciduous plants. Control peach leaf curl with lime sulfur or fixed copper. Follow directions for proper application Spray roses with dormant oil to control over-wintering insects such as aphids, mites and scale. Thoroughly coat trunk, branches, and twigs. 	 Snails and slugs are dormant two times a year, during the hottest part of summer and during the coldest weeks in winter. This is about the time they head out for feeding. Get out early and handpick Don't prune out any frost damaged growth for another month or so—the outer dead foliage may protect healthy growth beneath from further frost damage 	 Now is the time to get a jump on insect infestations; check for signs of aphids (distorted new growth and tiny, often green or black insects) and spittle bugs (under white foam on stems). Both can be effectively sprayed off with a garden hose Handpick snails at night, or use bait—follow all directions





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: UCCE-Solano County 501 Texas Street, 1st Floor Fairfield, CA 94533

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UJennifer M. Baumbach Master Gardener Program Coordinator



