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Master Gardener

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University of California Agriculture and Natural Resources A Quarterly Newsletter Published by the University of California Cooperative Extension and the UC Master Gardeners of Placer and Nevada Counties

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Curious

## Salvia: Five All-Star Standouts

by Laurie McGonagill, Placer County Master Gardener

*Salvia* and sage: Love them but confused at the variety and difference in appearance? Don't worry, you have company. There are so many different *Salvia* species, commonly called sages, native throughout the world—nearly 1000 plants in the genus not including numerous hybrids—and they can be evergreen or de-

ciduous, woody shrubs or herbaceous sub shrubs, annuals, biennials, or perennials. Some are tender and require lots of care and some are tough and want only to be admired. There are salvias that have various shades of green leaves, silvery-white leaves, large and small, toothed or not, with blooms in every color. How is a person to get a grasp on them?



One thing they have in common is beauty—color, scent, form—they are stunning! We will take a look at those species of *Salvia* that have been recommended by the horticultural staff of the UC Davis Arboretum as Arboretum All-Stars: *Salvia microphylla* or mint bush sage, *Salvia apiana* or bee sage or white sage, *Salvia clevelandii* 'Winifred Gilman', and the hybrids of *Salvia greggii* and *Salvia* × *jamensis*, called autumn sage. But first let's learn about the origins of *Salvia*.

Salvia is the largest genus in the mint family, *Lamiaceae*. The name Salvia comes from salvere, which in Latin means "to heal." Sage comes from Middle English and also stems from the Latin salvere. Salvia and sage are used interchangeably though Salvia is the genus name and sage often is part of the common name as in Salvia spathacea or hummingbird sage.

The stems of *Salvia* species are square, as are other members of the mint family. Their leaves are opposite each other and emit a strong scent when handled. Many of the blooms rise on stalks in whorls with striking shades of blue, red, orange, and white. But it is the lever adaptation of their flower that ensures pollination that makes *Salvia* unique. Look closely at a *Salvia* bloom and a pollinator—bees are easiest to view close up—and you will see how this works. The bee lands on the lower lip of the corolla. The insect's weight lowers the lip and

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the pollen-laden anthers (male parts) on the upper lip automatically come together and deposit pollen on the body of the bee. When the bee goes on to the next flower of the same species, the pollen on its body brushes against the stigma (female part) of the new flower. Voila, pollination! You can also gently insert a toothpick or small straight twig and trigger this extraordinary action.

Now let's look at the five *Salvia* species that are Arboretum All-Stars. Technically they are shrubs but because all except mint bush sage require pruning after blooming to reinvigorate the plant, they get no larger than three feet tall and three feet wide.

These All-Star Salvias are native to our southwest and Mexico. They share similar characteristics but vary enough so that each can have a place in your garden. They were first tested in the Arboretum garden which means that they thrive in our Mediterranean climate, are attractive for most of the year, and have low maintenance needs. Since they are drought tolerant, they need water only once or twice a month in summer. Salvia blooms are attractive to beneficial pollinators. You can remove the finished flowering stems to encourage another bloom cycle although you may want to leave the spent stalks of Salvia clevelandii and Salvia apiana as they add structural interest to the garden.

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*Salvia microphylla*, mint bush sage (above), is an evergreen perennial which grows well under oak trees and though it likes sun, can tolerate part shade. It has red flowers which can bloom throughout the year and its leaves have a delicate fruity scent. You don't need to prune it much if at all.



The hybrids of **Salvia greggii** and **Salvia** x **jamensis**, known as autumn sage (above and below), bloom profusely in spring with colors ranging from red and magenta through purple, pale yellow, light orange, and white. Pruning hard in early spring encourages bushiness, compactness, and lots of flowers. These are beautiful plants which bely their toughness.



If you want to make a bold statement, *Salvia apiana*, also called bee (apis) sage and white sage, (below) is a prime candidate. The color, scent, and pollinator activity make it a stunner in your garden. This slow-growing compact evergreen shrub loves full sun. At night, its large silvery-white leaves reflect moonlight, which makes an ethereal sight. When it flowers in spring, it sends up tall spires covered with white flowers. Remove the spent stalks once a year. *S. apiana* likes well-drained soil.



Salvia clevelandii 'Winnifred Gilman', also known as Winnifred Gilman Cleveland sage (below), is a fastgrowing Salvia that has greenish-gray foliage and long stems with whorls of striking blue or purple blossoms. Its scent is strong—you either love it or you don't. A warm breeze can waft it throughout your yard. It likes soil that drains well.



Salvia species hybridize easily in cultivation and in the wild. There are many to choose from but these All-Stars deserve a place in your garden!

# Hotline FAQs

I planted an apple tree that is about six feet tall but the trunk is very thin and the tree cannot stay upright on its own. Should I stake it? If so, how?

by Pauline Kuklis, Placer County Master Gardener

Ideally, it is best not to stake a new tree, as staking can actually cause problems, especially if not done properly. However, if a tree cannot support itself, as is the case with your apple tree, proper staking is advised. First, ensure the dirt around the tree is well tamped down to ensure there are no large air pockets around the roots. Air pockets can hold standing water around the roots and can also alDo you have gardening questions? Call the Master Gardener Hotline in your county

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Staffed Tuesdays and Thursdays, 9:00 am to noon



low the bottom of the tree to move, which is not healthy for the tree. Then, place two sturdy stakes on either side of the tree, approximately 8-12 inches from the trunk (outside the root ball). Using flexible ties (ideally rubber), attach the trunk to the stake as shown in the figure above. The ties should not be higher than 2/3 of the way up the trunk, or the tree top will not have enough movement. The trunk should be able to sway in the breeze, allowing the trunk to develop the strength to stay upright on its own. Make sure the ties are not too tight to bruise the trunk. You may need to add some padding underneath the ties to ensure the trunk is not damaged.

To further encourage trunk and leaf growth, be sure your tree is properly irrigated and that you apply a solid fertilization program. Refer to the following UC Davis publication for more information on tree staking: http://ucce.ucdavis.edu/files/filelibrary/5253/16819.pdf

The University of California also has some very informative articles and information regarding apple trees: http://homeorchard.ucanr.edu/Fruits\_&\_Nuts/Apple/

## Nevada County Master Gardeners' Fall Plant Sale September 21 9:00 am to Noon

Nevada County Master Gardeners are busy starting and growing plants for the fall plant sale, scheduled for Saturday, September 22 from 9:00 am to noon. The sale will take place at the Demonstration Garden on the Nevada Irrigation District Business grounds, at **1036 West Main Street in Grass Valley**. In time for fall planting, perennials, cool season vegetables and ornamentals will be offered for sale.

- Greens! Lettuce Mesclun mixed green and red varieties. Mizuna mustard greens – very cold tolerant, can be used in salads or cooked. Swiss Chard
- Milkweed- Asclepias fascicularis and A. speciosa.
- Various grasses and ornamentals.



## Magnificent Monarchs and Other Beauties Rely on Native Plants

by Ann Wright, Nevada County Master Gardener, photos by Tece Markel, Placer County Master Gardener



Monarch butterfly on Achillea, or yarrow (above), and the native plant Eriodictyon californicum, or Yerba Santa (below).



As metamorphosis is completed, a monarch butterfly with colorful orange, black and white wings emerges from a green egg-shaped chrysalis, once a yellow and black– striped caterpillar chewing mightily on leaves of milkweed plants. A beautiful sight to see! But, with recent, startling news of significant decline in the western the monarch population, experts have heralded a charge for further exploration of the decline. In 2018, the population of overwintering monarch butterflies on the central coast showed a decline of 86% from previous surveys. According to the Xerces Society, since the 1980's, the population of monarchs has declined by 99 percent.

In February this year, a group of invited guests met at UC Davis to explore the monarch's habitat in California's central valley. Professor Art Shapiro, who has been researching and monitoring the monarchs since 1972, was one of the speakers at the session. Professor Shapiro, who reports his research on the website http://butterfly.ucdavis. edu/, is concerned not just for the monarch, but for other butterfly populations as well— "Monarchs are in trouble in

California--but they're hardly alone. If we act as if this is a 'monarch problem,' we're in danger of missing the real causes of monarch decline—factors acting at a much broader scale." Since 1972 over 150 species of butterflies have been researched, with an alarming downward trend in populations. Shapiro states that in looking back, 2017 was a "terrible—perhaps even catastrophic—butterfly year" and that the reasons are not quite clear. With trends showing little recovery from drought-year population decreases at all elevations, monarchs were just one of many species in decline.

So, what can be done? In a call to action, the Xerces Society lists five ways to address the situation, including protecting California's overwintering habitat; restoration of breeding and migratory habitat; protection from pesticides; restoring and protecting summer and fall breeding habitats; and to further research into how best to aid western monarch recovery. Much of what resonates is that citizens can help by planting native plants that are adapted to local environments—planting pollinator gardens that include milkweed and other nectar-rich plants. Emphasis should be placed on planting species which bloom in the spring and the later-summer, into fall.

Some of the plants listed on Shapiro's website (http://butterfly.ucdavis.edu/ doc/garden/foothill) include some that are considered host plants for native larval butterflies. Among the many listed for the northern California foothills, some examples are:

- Wild Lilacs (*Ceanothus*, all species)
- Bush Monkey Flower (*Mimulus* or *Diplacus aurantiacus*)
- Coyotebrush, *Baccharis pilularis* and *B. p. var. consanguinea* (autumn)
- Goldenrods, Solidago spp. (late summer-fall)
- Yerba Santa, *Eriodictyon californicum* (spring-early summer)
- Coffeeberry, *Rhamnus* or *Frangula spp*. (late spring-early summer)
- Buckeye, Aesculus californica (late spring-early summer)
- Brodiaea spp. in the broad sense, including Triteleia (spring)
- Coyote mint or western pennyroyal, Monardella spp. (summer)
- Wild buckwheats, *Eriogonum spp*. (spring-fall).

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Milkweed (*Asclepias spp.*) is also included on the butterfly garden list—and with the news of the decline in migratory monarch butterfly populations, has become a much sought-after plant for back yard gardeners and citizens interested in the fascinating world of the monarch butterfly. As the required host plant for the monarch butterfly, milkweed is essential to monarch survival. Monarchs lay their eggs on milkweed and the plant plays an important part in protection from predators as the milkweed contains compounds that create toxins distasteful to predators. Once the egg has been laid on the milkweed plant, usually on the bottom of a leaf, the egg will hatch in about four days. Life begins as the larva (caterpillar) eats the egg shell after which they move on to eating the leaves of the milkweed. It is during this stage (10 to 14 days) that the caterpillar grows the most.

The loss of milkweed and other nectar rich plants due to agriculture and urban development, with destruction by herbicidal spraying is a significant factor in the decline of monarch populations. Restoration of native milkweed habitats and protection of existing milkweed areas is one step in reversing the trend in butterfly loss. Additionally, the availability of high-quality nectar which milkweed produces supports many beneficial insects that are naturally predatory and may help control garden and crop pests. Studies have shown that showy milkweed (Asclepias speciosa) attracts a high number of beneficial insects, including ladybeetles and mature pirate bugs.

Although there are about 15 types of milkweed native to California, the following four species are native to our area and are recommended for restoration or creating habitat for monarchs: *Asclepias speciosa*, commonly called showy milkweed; *A. fasicularis*, also known as narrow leaf milkweed; *A. eriocarpa*, also called wooly pod or Indian milkweed; *A. cordifolia*, known as purple or heartleaf milkweed.

It is important to remember that when a species of plant or animal develops in a given area over time, that species tends to thrive when grown in its native habitat. In this case, the native milkweed is what the western monarchs "expect to find" in this area and are the best ones to benefit the health of the transient monarchs. Non-native milkweed species that DON'T die back can encourage monarchs to stay in the area, trying to breed, instead of migrating to the coast. This will endanger both adults and late hatching larvae from death by winter freezes in the area. Also, late growing milkweed presents a higher danger of the presence of monarch protozoan parasites which can weaken or kill both adults and larvae. To find further information, and more comprehensive lists of plants suitable for butterflies and other pollinators, please reference any of the websites listed in the references below.



Asclepias spp., milkweeds, are the larval host plants for monarch butterflies. Two native species recommended for the foothills are A. speciosa, showy milkweed (above) and A. cordifolia, heartleaf milkweed (below).



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- Gardening for Monarchs: Creating habitat for monarch butterflies and other pollinators. Monarch Joint Venture Project. The 2019 Monarch Conservation Webinar Series. https://monarchjointventure.org/news-events/news/the-2019-monarch-conservation-webinar-series

## Azolla filiculoides: Friend or Foe?

Article and photos by Julie Lowrie, Placer County Master Gardener

From a distance, have you ever noticed a pond or waterway in Placer County completely covered with a carpet of green, or sometimes red plants, giving the illusion that there is no water beneath that green or red plant carpet? That carpet of green or red plants is likely *Azolla filiculoides*, commonly referred to as azolla, and is pictured at right in a local pond.

Azolla filiculoides, also known as mosquitofern, is, in fact, a free-floating aquatic fern that can form large mats in still or sluggish waters and belongs to the six species of waterfern in the world (University of Florida, n.d.).

Azolla can be found throughout Asia, Africa, Australia, Europe, and North America. With favorable conditions, it grows very quickly and can

double in area every four to five days. While *Azolla filiculoides* currently is not listed as an invasive plant in California, its relative, *Azolla pinnata*, is listed as a Federal and state listed Noxious Weed in California (DiTomaso, page 52).

Similar to land plants' soil microbial relationships, *Azolla filiculoides* has its own special symbiotic relationship with a nitrogen-fixing bacterium called *Nostoc azollae* resident in every photosynthetic leaf (Eily, 2019). The symbiosis gives *Azolla filiculoides* the ability to "fix so much nitrogen that it has been used as a 'green fertilizer in rice farming for over 1,500 years in Asia" (Eily, 2019, pp.2). Besides its nitrogen-fixing qualities, current research into *A. filiculoides* suggests its possible use as a biofuel source, as an aid in environmental remediation, and to combat climate change due to its ability to remove large amounts of carbon dioxide from the air (Eily, 2019).

*A. filiculoides* can be controlled through biological methods, such as a native frond-feeding weevil, *Stenopelmus rufinasus*, and the triploid grass carp (DiTomaso, 2013, pp. 52). While *Stenopelmus rufinasus* is native to California, it has not been found to effectively control azolla (Roncoroni, 2011). In California, you must obtain a permit with California Fish and Game in order to have triploid grass carp in your pond as non-triploid grass carp are considered invasive species in most states, including California. Herbicides are not an effective method in controlling azolla because you have to spray each tiny frond leaf and an overspray may cause more harm than good.

If you have a pond with fish and have *Azolla filiculoides* floating on your pond, you may want to manage it by removing as much as possible. Sometimes, this may mean engaging a professional contractor to help you, or using a large, movable aerator which will allow you to direct the azolla to a



more convenient collection location in the pond where you can remove it more effectively. Because of its high nitrogen content, you can use the collected azolla as green or brown compost for your hot or cold compost piles. It can be spread around your land plants as mulch when green to help your plants stay cool and moist. As it decomposes, it provides nitrogen to your plants and adds organic material to your soil.

So, while a bloom of *Azolla filiculoides* may give you additional work, use what you remove as compost, mulch, and fertilizer for your overall home ornamental and vegetable gardening and you will see why this special plant has much to offer to sustainable gardening, and perhaps to the future of our planet!



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## Available September 1, from the Master Gardeners of Placer County: 2020 Gardening Guide and Calendar!

This year's gardening guide and 13-month calendar, "Gardening with Purpose, Enrich your Yard and Our Community" is filled with fascinating articles and beautiful pictures. The Guide is sure to inspire veteran and novice gardeners alike in creating and maintaining beautiful gardens while enhancing the community environment.

Features of the 2020 Gardening Guide and Calendar include:

- Monthly "what to plant" and "in season at the market" lists.
- Daily research-based gardening tips to remind gardeners of what to do and when to do it.
- References and resources for more gardening information.
- QR codes for quick access to online resources.

The guide and calendar will be available beginning September 1 at many nurseries and businesses in Placer, Nevada, and El Dorado counties, at the Placer County Master Gardener office, and on our website. A list of vendors and how-to-order details are listed online at pcmg.ucanr.org/2020calendar/. They will also be for sale at the master gardener booths at the following:

- Auburn Fall Home Show (September 27-29, 2019)
- Mountain Mandarin Festival (November 22-24, 2019)
- Auburn Farmers' Market (1st and 3rd Saturdays September through October)
- Farmers' Market at the Fountains in Roseville (every Tuesday, September through October)

agri-cola, ae *m* tiller of the field, farmer, husbandm caulis, is *m* stalk, stem of a plant; cabbage colo, colui, cultum 3 to care for; a) to till, culti farm; b) to tend; *adf* cultus 3 cultivated, i ta, orum *n/pl* tilled land, gardens, plan cresco, crevi, (cretum) 3 to grow cultus *m* cultivation, labor, tilling; a b) care, training, education; c) florens, tis blooming, flowering florens, ti 2 to bloom, blossor flos, oris *m* flower, blossor fodio, fossom 3 to dig, a folium, i *n* leaf; folia herba, ae *f* grass. hortus, *i m* gap radix *f* root. viridis, e wita, ae xylen zer BOCLLAC

Find Out What Those Weird Plant Names Mean

by Peggy Beltramo, Placer County Master Gardener



## Where Have All the Asters Gone?

Do you struggle with binomial nomenclature of plants? You know you need to know the genus and species name of a plant to get the exact size and variety you want, but learning those names is tricky. Then, just when you memorize *Zauchneria californica*, (California fuchsia), you find out that the name has been changed—to *Epilobium canum*! In this issue, let's look at a couple of these changes and understand why they happened.

Plants are named by a complex set of protocols defining by whom and how they are named. Recent scientific advances have given an internal peek into plants' DNA and disproved older family connections. Also, some plant family histories have become more accurate. For example, Asters native to North America are no longer considered Asters. This is because the 'type specimen', or first recognized and named *Aster* is a European species; therefore our North American asters are now classified as *Symphiotrichum*, *Ionactis*, *Eurybia*, or *Doellingeria*. Yikes!

Looking at the Pacific aster, *Symphiotrichum chilense*, the genus is a combination of 'symph', from the Greek for coming together, and 'trich', meaning hair, possibly referring to the anthers of the flowers. *Chilense*, the specific epithet, is a reference to Chile, although it is a native of California.

Going back to the California fuchsia (pictured at left), the genus *Epilobium* comes from the Greek word '*epi*' meaning "upon" and '*lobium*' meaning "a pod" in reference to the flowers sitting above the developing seed capsules, and the Latin *canum*, which designates old or gray, referring to the grayish-green leaves.

These explanations won't help you remember the name changes, but they may help you understand why the changes are made. Science does keep us moving forward, even though the road may be bumpy.



2020 Gardening Guide and Calendar



## **Autumn Gold Found in Gold Country**

by Trish Grenfell, Placer County Master Gardener

When I look out my window and see leaves gathering on my neighborhood lawns, I smile at the bounty of autumn riches. I see gems to create garden magic. All healthy trees release compostable leaves and you should keep yours. If your neighbors don't want theirs, transport them in bags to your home for use now or in the future. Although one can buy compost, your home pile is better in terms of content. Not only do you know the ingredients of your homemade compost – it is usually more diverse than commercial blends.) Take advantage of your resources and cook as much of your own compost as you can.

Many of you may see tedious work when you view this season's "gifts" on your lawn and gardens. And you have NO interest in learning how to make compost. But wait! Over 20 years of research by turfgrass experts at Michigan State University has surprised homeowners with ways to use those leaves to save money. A free investment in leaf shredding will surprise you with less dependence on commercial lawn fertilizer and far fewer weeds in your turf. Stop the raking and bagging of autumn leaves. Make a lawn mulch! Research has proven that these cut leaves will not mat up and suffocate/dehydrate the grass beneath it. The shredding not only prevents matting but also speeds up leaf decomposition into nutritional compost. The leaf mulch will also fall into any bare spots in the turf and prevent weed germination. A Michigan State Extension research group reports that "nearly a 100 percent decrease in dandelions and crabgrass can be attained after adopting this practice of mulching leaves for just three years" (Finneran 2).



The easiest way to shred is to mow over the leaves on the lawn several times and the easiest way to do that is to use a mulching mower. However, you can use any mower whose deck is raised to the highest setting. Even push mowers are effective but shred in smaller amounts. Alternatively, you could use a leaf shredder but that entails gathering the leaves. The easiest time to shred is when the leaves are dry! Make that a rule: no shredding when wet. If you have a huge pile of shredded leaves in one place, get the lonely rake and even out the distribution of cut leaves. If you do use a mower to shred, you might also cut some of the grass. Good! These



grass clippings should be left where they fall; they will add heat to the decomposition process and hasten the leaf conversion to fertilizer.

Alternative uses for those shredded leaves:

1) Add them to a compost pile.

2) Place them as a mulch onto your garden beds for weed control and protection from winter cold. This mulch eventually will decompose and enrich the soil.

3) Gardeners with soil drainage problems will want to use the shredded leaves to make leaf mold. When leaf mold is added to the problem soils, their texture becomes more crumbly and water holding capacity is increased. Making leaf mold is similar to making compost. Keep the piles uniformly moist with access to air. Turning them on occasion is helpful but not necessary. Instead of adding a bunch of organic matter to a pile, you just use leaves. Since the "greens" that act as the lighter fluid to heat up a compost pile are missing in the leaf mold, its composting process is much longer. Leaf mold is formed by this "cold" process through the action of soil-dwelling fungi.

Enjoy the trees of autumn and save money with your treasure of fallen leaves.

## References

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## **Events Calendar**

For the most up-to-date information on events, please visit our websites:

Nevada County http://ncmg.ucanr.org/

Placer County http://pcmg.ucanr.org/

## October

October 5 10:00 am - noon *Deer, Oh Dear!* Demo Garden, NID Grounds 1036 W. Main St., Grass Valley

October 5 10:30 - 11:30 am *Gardening Myths* Loomis Library 6050 Library Drive, Loomis

October 12 10:00 am - noon *Planting in the Shade* Demo Garden, NID Grounds 1036 W. Main St., Grass Valley

October 27 10:00 am - noon *Trees for Nevada Co. Landscape* Grass Valley Elk Lodge 109 S. School St., Grass Valley

## November

November 9 10:00 am - noon *The Art and Science of Pruning Fruit Trees* Grass Valley Elk's Lodge 109 S. School St., Grass Valley

November 16 - 18 Friday 11:00 am-5:00 pm Saturday 9:00 am-6:00 pm Sunday 10:00 am-4:00 pm *Visit Placer Co. Master Gardeners at the Mandarin Festival* Gold Country Fairgrounds 1273 High St., Auburn Nevada County events in green boxes Placer County events in yellow boxes



Nevada County "Bite Me" Tomato Tasting



September 7 9:30 am - 1:00 pm *"Bite Me" Tomato Tasting* and Open House 10:30 - 11:30 am Edible Gardening workshop 11:30 - 12:30 pm Garden Tool Maintenance workshop Demo Garden, NID Grounds

1036 W. Main St., Grass Valley

September 21 9:00 am - noon *Master Gardeners Fall Plant Sale* Demo Garden, NID Grounds 1036 W. Main St., Grass Valley

**September 27, 28, 29** Fri. 11:00 am - 6:00 pm Sat. 10:00 am - 6:00 pm Sun. 10:00 am - 5:00 pm *Visit Placer Co. Master Gardeners at the Auburn Fall Home Show* Gold Country Fairgrounds 1273 High St., Auburn

#### Visit Master Gardeners at Local Farmers' Markets

8:30 am to 1:00 pm every Tuesday, through October, near Whole Foods at the Fountains, Roseville

8:00 am to noon 1st & 3rd Saturdays, through October, Old Town Courthouse parking lot in Auburn

8:00 am to noon Saturdays until mid September at the Saturday Growers Market, North Star House, Grass Valley

#### Nevada County Master Gardeners and Friends Talk Radio:

Listen live on Saturdays from 10:00 am until noon

#### at KNCO 830AM

Live stream or download podcasts at http://www.knco.com

Call in with questions to (530) 477-KNCO (477-5626)

## The Curious Gardener ~ Fall 2019



## **About Master Gardeners**

Our mission as University of California Master Gardener volunteers is to extend research-based gardening and composting information to the public through various educational outreach methods. We strive to present accurate, impartial information to local gardeners so they have the knowledge to make informed gardening decisions in regard to plant choices, soil fertility, pest management, irrigation practices, and more.

The Master Gardener volunteer program was started in the early 1970s at the Washington State University. Farm Advisors became overwhelmed by all the incoming calls from home gardeners and homesteaders so they trained volunteers to answer these questions and the "Master Gardener Program" was born. The first University of California Master Gardener programs began in 1980 in Sacramento and Riverside counties. The Nevada County and Placer County Master Gardener Associations began soon thereafter in 1983.

## **Over 35 Years Serving Placer and Nevada Counties**

## **Production Information**

*The Curious Gardener* is published quarterly by the University of California Cooperative Extension Master Gardeners of Placer and Nevada Counties.

#### Kevin Marini, Editor

Community Education Specialist: Home Horticulture and Composting Education, Master Gardener Coordinator

Elaine Applebaum, Production Placer County Master Gardener

## Have a Gardening Question?

## **Call our Hotline**

Placer County Residents 530.889.7388

# Nevada County Residents 530.273.0919

Master Composter Rotline 530.889.7399

#### UC Cooperative Extension Placer County

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