

The Curious Gardener

Vol. 31, No. 2 Spring 2024

In This Issue

Wigglers Offer Enrichment for Gardens1
BotLat: Loooong Plant Names2
The Myth of Firewise Plants3
Hotline FAQs: Cottage Garden Under Oaks?5
Insect Bytes: Monarchs5
All-Star: Chinese Ground Orchids 6
Planting Bushes and Shrubs7
Invasive Mosquitoes in Roseville7
Nevada County Demonstration Garden News8
Unusual Edible: Purple Passionflower8
Placer County Demonstration Garden Update9
Abiotic Plant Problems: Herbicide Drift9
Kids Korner: Differences Between Honeybees and Wasps
Events Calendar 11

How to Subscribe

Online subscriptions are free. Go to http://pcmg.ucanr.edu/ Curious_Gardener_Newsletter/ to sign up for electronic delivery.

Wigglers Offer Enrichment for Gardens

By Ann Wright, UC Master Gardener of Nevada County Adapted from The Union, May 27, 2023

Let's talk about worms. Traditionally, one may think of worms crawling in and out of things, living in moist, loamy areas of the garden, or on the end of a fishing line. In discovering different types of earthworms, it's clear that each has its own characteristics, and gifts for promoting soil health in the garden. Different worms have different jobs. Garden earthworms (Lumbricus terrestris) live fairly deep in the soil, and help move the earth, aerating the soil. Epigeic (meaning living on the surface



Adult earthworm, Lumbricus terrestris. Photo by Jack Kelly Clark.

of the land) are smaller non-burrowing worm cousins of the larger Lumbricus, and are masters of composting. These little bioengineers eat tons of organic matter, including kitchen scraps in worm bins. Common red wigglers (Eisenia fetida) fall into the category of composting worms. Nightcrawlers (Lumbricus rubellus) are found in shallower loose soil and come to the surface at night to drag leaves and other organic matter into their deep burrows. Both of these busy worm species are power house recyclers, but scientists have found that red wigglers are the quickest to reproduce. In the worm composting arena, red wigglers are commonly selected for worm beds.

Vermiculture is the term used to describe the use of worms as decomposers. The stars of this process can decompose food waste faster, and in less space than a compost pile. The castings (or more indelicately, worm poop) are the by-product of the material passed through the worms' gut. Scientific analysis of worm castings has shown that worm castings contain beneficial micro-organisms, enzymes, humus, fungi and other products beneficial to plant growth. Castings contain high percentages of slow-release nutrients which are easily taken-up and absorbed by plants. Soil texture and structural properties of the soil are also improved with the use of worm castings.

There are a couple of ways to obtain worm castings for garden amendment. One, purchase ready-to-go castings from a worm farmer (prices may vary), or

Continued on next page

Continued from previous page

grow your own in a worm bin, bag or box. Home vermicomposting takes a little work at the front end to start the worms in their new habitat, but once the bin is going, the worms are the ones doing the work to help break down kitchen scraps, keeping that stuff out of the landfill.

As with larger compost piles, there are certain things worms will eat, and some they avoid. Red wigglers will eat a

pretty wide variety of organic material such as fruit and vegetable scraps, coffee and tea grounds, yard waste, leaves, paper, cardboard and animal manure (do not give them cat or dog feces). Worms don't have teeth, so the food they consume is soft, having already started decomposing.

The by-product of the worm's digestive process (the castings) can be harvested within two to six months, depending on the number of worms in the bin and how much food they receive. Once this gardener's magic is harvested, it can be utilized in many ways in the garden. The castings can be used in seed starting mixes, as top dressings in flower beds, under shrubs, roses and vegetables; and as compost tea— a solution made with 1 part worm castings mixed with 3 parts non-chlorinated water. Allow the solution to steep overnight (stirring every 5 to 7 hours will help aerated the mix). The concentrate can be used right away on plant beds, or use 4-ounces of concentrate in a gallon of water as a foliar spray.

References

- About Worm Castings. UC ANR/ UCCE Master Gardener Program/ Fresno County. n.d. <u>https://ucanr.</u> edu/sites/FCManual/files/286155. pdf
- Sousa, Marcy. Vermicomposting -Composting with Worms. What's Growing On – San Joaquin UC Master Gardeners. March 11, 2015. <u>https://ucanr.edu/blogs/ blogcore/postdetail.cfm?</u> <u>postnum=17055</u>.
- Vermicomposting: Composting with Worms. CalRecycle. n.d. <u>https://calrecycle.ca.gov/</u> organics/worms/wormfact/

BotLat Corner





By Peggy Beltramo, UC Master Gardener of Placer County

Worm castings.

Photo by Jack Kelly Clark.

Cold, rainy, gray days as I write this. For distraction, let's look at some loooong plant names to take our attention away from outside, just for a moment.

This issue we will focus on multisyllabic plant names. The winner I have for you has twelve syllables, and the runner-up has eleven.

Corethrogyne filaginifolia (Cor'-eth-rah'-gi-nee fil'-ah-jin'-ih-fō' lee-uh), also known as *Lessingia filaginifolia*, has a much less intimidating common name—<u>silver carpet beach aster. Plantright</u> recognizes it as a low water, pollinator-attracting, non-invasive ground cover. What's not to like?

BotLat <u>Corethrogyne</u> refers to the Greek word for "a brush for sweeping" and Greek *gune* for the style part of the plant, in recognition of its brush-like style tips. The second part of this name means "leaves like Filago," in reference to its wooly leaves, which mimic those of the genus Filago.

Our second BotLat name, an eleven syllable tongue twister, is <u>Parthenocissus</u> <u>tricuspidata</u> (parth'-en-oh-sis'-us tri'-cus-pid ă' tuh, or Boston ivy. The genus comes from the Greek words parthenos, meaning "virgin" and kissos, meaning "ivy." It seems that this plant can develop seeds without pollination. The specific epithet, tricuspidata, reflects the three points on each leaf (tri- meaning three, and cuspidatus referring to sharp points.) Boston ivy can be aggressive and can also damage surfaces it climbs on, but say its name out loud three times and maybe you won't hear the rain pounding on the roof.

Top photo is silver carpet beach aster by John Doyen. Bottom photo is Boston ivy by Jean Pawek. Both under Creative Commons license <u>CC BY-NC 3.0</u>

The Myth of Firewise Plants

By Kevin Marini, UC Master Gardener of Placer County and UC Defensible Space Educator

There was a point last year when I started to appreciate the length of time that had gone by since a big fire had occurred. Most of the time, paranoia takes over daily during the summer and it's hard to recognize "good" fire years in the midst of them. I find myself thinking about fire all year around these days. There is so much concern in our community regarding fire safety—from creating defensible space to getting insurance coverage to knowing your neighborhood escape routes—we have to be proactive on all these things, all the time.

When I was kid, one of my favorite things to do was to hide in the large juniper bushes that circled our home. We had juniper berry wars in the neighborhood as almost every house had the bushes all around their homes. Of course, we now know that it is one of the most flammable plants around and, as a popular foundation planting decades ago, is now something we have to consider removing from around our homes. When it comes to "firewise" plants, we have much more insight (data) into which plants to AVOID rather than which plants to PLANT.

Catching Fire

According to Cal Fire, the majority of homes burn down in a wildland fire from embers that fly in, land in landscapes around homes or on the home itself and ignite vegetation or other materials (like outdoor furniture!). This is why there is emphasis on the Ember Ignition Zone—the 0-5 foot area around structures. In many cases, there are shrubs, hedges and organic mulches in this zone that can catch fire from embers and proceed to cause a whole house fire very quickly.

Moving out from this 0-5 feet zone, we have two other defensible space landscape zones: the 5-30 feet lean, clean and green zone and the 30-100 feet reduced fuel zone. Again, in these zones, homeowners may have dense plantings, organic mulches, and other flammable items that need to be assessed and potentially altered to become more resilient to



This diagram shows proper density and spacing of plantings in the ember ignition zone (0); lean, clean and green zone (1); and reduced fuel zone (2).



Dry or dead material inside a plant can easily catch fire if an ember falls into it. This is common with hedges and other constantly pruned shrubs. Photo by Kevin Marini.

fire. It is crystal clear that the actions we take in our defensible space zones around our house can contribute to improved fire safety.

Landscape Considerations

As convenient as it may seem to swap out all the plants in our landscape with so-called "Firewise" plants and earn landscape fire resilience in that manner, it is not the recommended approach to creating defensible space for many reasons. First, all plants burn—there are no "fireproof" plants, even though some are more resistant to catching fire and burning hot than others. Second, unmaintained plants with dead material in and under them occur all the time in landscapes whether or not the plant itself has live tissue less prone to igniting than others. Finally, the design and organization of plants in the landscape can contribute to the spread of fire towards the home and therefore, simply creating space in the landscape devoid of combustible materials like plants is a much wiser approach to creating defensible space. Let's look at each one of these components in greater detail.

No "Fireproof" Plants

It's not only the case that all plants burn but also true that our care of plants influences their ability to be more or less resistant to fire. Furthermore, a plant's life cycle, seasonal variation, and growth habit can play a big role. Here is an excerpt from <u>UC ANR Publication 8695</u>, "Vegetation and Landscape Guidance":

A plant's environment and maintenance generally have more influence on the combustibility of the plant than does its characterization as fire safe or not fire safe. For example, a plant with a good water supply could have a greater growth form (that is, grow taller and wider) and hold leaves longer, Continued on next page

Continued from previous page

whereas a plant in a stressed or drought condition may have stunted growth and accumulate dead materials. Therefore, a certain species may be relatively fire resistant in one environment and less so in another.

It is crucial to differentiate between "Firewise" plant lists and "Plant flammability" lists—there are data on the flammability of some plants, shrubs and trees, but we have no research showing that a certain palette of plants in a landscape confers greater fire resilience than a different palette of plants. Of course, we can make some decisions in our landscape based on plant flammability; for example, avoiding juniper bushes all around our houses!

Maintaining Plants

One of the most popular ways of maintaining plants in our landscape is the unfortunate practice of hedging. Rather than taking the time needed to prune correctly and allow woody perennials and shrubs to attain their natural form, the easier and faster approach is simply to constantly shear them back. I call these hedges "ember catchers"; that is, if you peer into the middle of these plants beyond the outside layer of greenery, one finds a perfect spot for embers to land and catch dead material inside the plant on fire. I see these "ember catchers" in defensible space zones in landscapes all over our communities. This needs to change and it has nothing to do with the type of plant but instead with how maintenance is performed.

Many plants listed on "Firewise" plant lists have a period of time where they may be young and lush and resistant to fire but over time become woody and full of dead material (lavender plants being a great example!). Again, this is where specific techniques regarding maintenance of plants can rejuvenate that lush growth and keep them free of accumulating dried out vegetation.

Organizing Landscape Defensible Space Zones

When it comes to landscape design, it is common practice to organize a landscape to maximize varying colors, layers and textures. Defensible space considerations should focus on the "layering" part. There are two types of layering



Space trees, remove lower branches, and avoid planting a "ladder" of shrubs underneath trees to remove paths for fire to travel.

in the landscape that we want to avoid for fire safety: horizontal and vertical layering.

Many people have heard the term "fire ladders"—which refers to a situation where a small plant is under a medium sized plant that is under a large shrub under a large tree—a ladder of vegetation. This type of vertical layering is undesirable as it allows fire to creep upwards into the crowns of trees where embers get spit out.

The same layering applies for horizontal spacing; in many landscapes, there is a constant flow of vegetation from one end of the yard to the other, sometimes all the way to the house. Again, breaking up this layering with SPACING is crucial to stopping the path of fire. This can be achieved through simple plant removal, by grouping plantings in islands but also through the addition of hardscape or pathways to break up paths of vegetation.

Final Thoughts

Over time, more experimentation and research will be done on plants to ascertain their worthiness in Firewise landscapes. Currently, we do not have all the data collected to understand the best way to characterize or utilize "Firewise Plants." Again, UC ANR Publication 8695 explains:

Be cautious about "fire safe" plant lists and labels. In general, there is little evidence to support fire safe claims. In a recent review of 20 years of plant flammability studies, Bethke et al. (2016) determined that fire safe labels often relied on inconsistent types of testing or no testing at all—in part because, according to the researchers, "no consistent, standardized plant flammability testing or criteria for rating" exists to assess flammability.

For now, let's remember that the most important elements of creating defensible space don't rely on utilizing special types of plants. Work on creating a vegetation free Ember Ignition Zone (0-5 feet). Maintain plants so that dead material doesn't accumulate in or around them (5-30 feet). Remove "ladders" in the landscape and create space (5-100 feet). If these three items are crossed off your list, you are well on your way to improving the resiliency of your landscape when fire approaches.

References:

- Valachovic, Yana and Stephen L. Quarles, Steven V. Swain. Reducing the Vulnerability of Buildings to Wildfire: Vegetation & Landscaping Guidance. University of California Agriculture and Natural Resources. July 2021. https://anrcatalog.ucanr.edu/pdf/8695.pdf
- *Wildfire Is Coming... Are You Ready?* Cal Fire. n.d. <u>https://www.readyforwildfire.org/</u>
- Fernandes, P.M. and M. G. Cruz. 2012. Plant Flammability Experiments Offer Limited Insight Into Vegetation—Fire Dynamic Interactions. New Phytologist 194: 606-609. <u>https://www.researchgate.net/publication/</u> 221790438 Plant flammability experiments offer limited insight into vegetation-fire dynamics interactions

Hotline FAQs

Can I Plant a Summer Cottage Garden Under a Large Oak Tree?

By Linda Wold and Lynn Merrick, UC Master Gardeners of Placer County

Normally, a cottage garden would include plants such as foxgloves, hollyhocks, delphiniums, and snapdragons to name a few. Unfortunately, these types of plants should not be planted under oaks for the following reasons:

You need to use species that have the same water requirements as an oak, i.e. little to no summer irrigation. If plants require water during the summer, they do not belong there. Frequent and different irrigation methods can impact the tree's natural leaf-litter mulch, interfering with oxygen availability to oak roots. This can create favorable conditions for pathogens such as root rot (*Phytophthora spp.*) and oak root fungus (*Armillaria malea*).

Alternatives for planting under oaks include the use of native plants that are adapted to our Mediterranean climate. If winter rains are unusually

Have gardening questions? Contact a Master Gardener!

Placer County 530.889.7388 or <u>submit a question</u> electronically

Nevada County 530.273.0919 or <u>submit a question</u> electronically



High water use plants like traditional cottage garden flowers and the hydrangea and others shown here should NOT be planted under oaks. Photo by Elaine Kelly Applebaum.

low, supplemental watering can be provided in the early spring by watering deeply in the outer two-thirds of the oak tree's root zone. For seasonal color, you can use pots that are watered by drip or by hand. These pots can hold all the thirsty colorful plants that are a problem for the tree when planted directly in the soil.

Overall, when considering landscaping near or under oaks, you should observe the following guidelines as outlined in University of California, Publication No. 31-146: *Landscaping Under Native Oaks of the Central Valley*:

- Ensure that drainage from landscaped areas does not collect under oaks.
- Prevent tree injury and soil compaction during landscape installations.
- Irrigate landscape plants as infrequently as possible.
- Plant appropriate shallow-rooted species that have an affinity for partial or complete shade and no need for summer moisture after becoming established.
- Utilize an appropriate soil source cover. Avoid paving over the oak root system.

Click <u>here</u> to download the full Publication No. 31-146 that will provide you with specific information on the guidelines listed above.

Insect Bytes: Monarchs

By Bonnie Bradt, UC Master Gardener of Nevada County

Just to keep you all up on a topic that seems to interest a lot of folks, the annual Western Monarch count (2023) was just released. Volunteers have counted a total of 233,394 monarch butterflies at 256 overwintering sites up and down the West coast. That is compared with last year's count (2022) of approximately 330,000 individuals at the same time.

Last year's population of 330,000 was hard hit by the many storms that overwhelmed them on their way from their overwintering sites to the inland stands of milkweed where they begin their breeding year. Even though the number of approximately 233,000 represents maybe 5% or so, of what their number used to be in the late 1980's, I am encouraged by that count, as the count of 2020 was down to perhaps 3,000 overwintering in the whole state. I literally thought we might have lost them entirely. But there they are. Still struggling for existence.

Interestingly, one last bit of trivia. The highest single location count for the butterflies was over 33,000 at an overwintering site in Santa Barbara County, owned by the Nature Conservancy. Note: it is closed to the public. Maybe we should take note!

For more details, see the <u>Xerces</u> <u>Society website</u>.





Chinese Ground Orchids Bletilla striata

By Donna Olson, UC Master Gardener of Placer County

Do you have a semi-shaded corner in your garden that needs a spot of color? If so you may want to try Chinese ground orchids (*Bletilla striata*). When I moved here from Saint Louis a few years ago, I had a lot to learn about plants that grew in this area. Among the plants in my yard that I didn't recognize were Chinese ground orchids. The clump of strappy green foliage sent out spikes of beautiful purple flowers in early spring, and the bloom period lasted for several weeks. There are other varieties with white or pink blossoms.

Chinese ground orchids grow from corm-like pseudo-bulbs and will spread to form a small colony given favorable conditions. Plant the bulbs in the fall or spring, about 4 inches deep in organically rich, well drained soil. They prefer a shady spot, especially on our hot summer afternoons. They will appreciate some irrigation during the dry summer months. The <u>Arboretum All-Stars site</u> classifies their water requirements as low to medium. According to <u>Missouri Botanical Garden Plant Finder</u>, they are not susceptible to insects or diseases, although snails and slugs may visit occasionally. They don't require pruning, but you can cut the flower stems off after the bloom period for a tidier look.

Bletilla also do well in pots. If you live in one of the colder areas of our counties, you may need to protect them with a layer of mulch during the winter. Give them a try. You'll be glad you did!

UCCE Master Gardeners of Nevada County



Spring Plant Sale

Saturday, May 11, 2024 9 am to noon

Demonstration Garden, NID grounds, 1036 W. Main St., Grass Valley

UCCE Master Gardeners of Placer County



37th Annual Mother's Day Garden Tour

Sunday, May 12, 10 am to 4 pm

Our 2024 tour includes gardens of various sizes with creative features and plantings in the Rocklin area.

Tickets are \$20 each; free for children under 12.

Tickets available April 26th through the day of the tour at Green Acres in Auburn, Rocklin, and Roseville.

Cash or checks only.

Planting Bushes and Shrubs: It's All about "Location, Location!"

By Jan Birdsall, UC Master Gardener of Placer County

Have you noticed something in your landscape that has surpassed your wildest nightmares? Or the bush you had to plant that is not living up to your expectations? It is all about "location, location"! Whether you are starting from scratch, redesigning, or adding to an existing landscape, keep this in mind when choosing the proper site for plant placement. There are a variety of criteria to consider in selecting the right bush for the right place.

As in most garden planning, you should start by measuring and creating a garden map with specific dimensions. Note any obstacles such as current overhead wiring, drainage

problems, or possible future root intrusions to sprinkler pipes, foundations, or underground wiring. Observe and jot down any shade, soil, and water restrictions. Determine the available sunlight (in hours).

What is your purpose in planting your new bush(es)? Do you want to screen a neighbor's chicken coop or fence? Or create a contrasting backdrop and texture for a profusion of flowers you plan to plant in the front of them?

Is your goal to provide seasonal color interest or attract pollinators? How about ongoing habitat for beneficial critters you want to entice into your yard? You may want to narrow the plant selection list down by using native, deer resistant, drought resistant or a combination of these plants. There are many decisions to make based on your preferences and goals, as well as research-based local concerns.

Now to the best part, selecting the actual candidates for planting. You should know your <u>USDA hardiness zone</u> to choose the plants which will thrive best at your location. Determine possible plant contenders using various sources, including regionally appropriate gardening books located at the library. Lists of California plant options and some of their characteristics are available on numerous websites including UC Davis's Arboretum and Public Garden Plant Database



website, <u>California Native Plants for Placer and Nevada</u> <u>Counties</u> or <u>Plants in the Right Place for Sierra Foothills</u>, <u>Zone 7</u>.

Local water districts are often good sources for lists of plants, such as this one of <u>WaterSmart plants for the Sacramento Region</u>. Are you interested in supporting wildlife with your plantings? Check out this list of <u>keystone plants for the</u> <u>Mediterranean California Ecoregion</u>. Look around your neighborhood for bushes that seem to have flourished under the same conditions. Talk to neighbors and friends for suggestions. Keep in mind your overall goals.

Choose a plant that is within your zone and works within your abovementioned garden map. Then determine if you have the soil, sunlight, and water conditions that this plant needs to thrive. In addition, look at the plant's size at maturity. Consider if the plant will interfere with existing obstacles above, below and around it. As it matures, will it cast shade that will stunt the growth of other plants around it in the future? Plant it in a lo-

cation that provides it room to grow along with the other plants around it. Avoid future mistakes now to avoid plant nightmares in the future.

References

- Hodel, Donald R., and Dennis R. Pittenger. Selection of Landscape Plants. UC Center for Landscape and Urban Horticulture. n.d. <u>https://ucanr.edu/sites/urbanhort/files/</u> 80114.pdf
- Shrubs & Perennial Vines. UC The California Garden Web. 2024. <u>https://cagardenweb.ucanr.edu/Landscape</u> <u>Trees/Shrubs - Perennial Vines/</u>



Photo credit: Mike Quinn, TexasEnto.net

Invasive Mosquitoes Found in Roseville

In October, <u>Placer County Mosquito and Vector Control</u> found *Aedes aegypti* mosquitoes in a second location in Roseville.

Aedes mosquitoes are very difficult to control. Eggs are resistant to drying and can remain viable for months. A bottle cap full of water is enough to support the development of larva.

Residents can help limit the spread of this invasive pest by eliminating all standing water on their property. Saucers under potted plants are common breeding sites and should be removed during the rainy season anyway to avoid over saturating soil. See the UC IPM <u>Mosquito Pest Note</u> for more information and control strategies for this and other mosquitoes.

7



Nevada County Demo Garden awakens in spring. Photo by Ann Wright.

Master Gardeners of Nevada County Demonstration Garden News

by Ann Wright, UC Master Gardener of Nevada County

As spring rolls around, the Nevada County Master Gardeners' Demonstration Garden is starting to wake up to new growth, and new planned projects in 2024. A fencing project around the raised beds is planned for this spring— with removal of old fencing by Master Gardener work teams, followed by installation of new fencing by a contracted company. Later, the orchard fencing will also be replaced.

The weather has been a little gentler on our garden this year, but there is always work to be done. This year, as part of a workshop "double-header", we hosted a fruit tree pruning workshop—in February, which allowed the public to observe MGs doing some dormant pruning in the orchard.

Our spring plant sale is slated for the Saturday of Mother's Day weekend—this year, May 11. We are looking forward to selling a huge variety of veggies and more flowers this year!

We are so pleased that our garden will be one of the featured gardens on the Soroptimists of the Sierra Foothills Garden Tour. The garden is not only a wonderful venue for offering workshops, but it has become a true teaching garden, with interpretive signage as well as updated plant information signs. We are hopeful to have food trucks at the garden as a special stop for Soroptimist tour participants.

We are looking forward to another very special year in our beautiful Demonstration Garden!

Unusual Edible: Purple Passionflower

By Julie Lowrie, UC Master Gardener of Placer County

Passiflora incarnata, also known as 'maypop' for the distinctive sound made from stepped on fallen fruit pods, is a perennial vine with climbing tendrils that produces enormous bluish-purple passionflower blossoms and yellowish fruit. Native to the Southeast United States, *Passiflora incarnata* is hardier in colder climates (Zones 5-9) than its tropical cousins, *P. edulis* and *P. caerulea*. According to the Missouri Botanical Garden, "Fleshy, egg-shaped, edible fruits called maypops appear in July and mature to a yellowish color in fall. Ripened maypops can be eaten fresh off the vine or made into jelly."

Besides its blossoms and fruit, *Passiflora incarnata* is the host plant for the Gulf fritillary, variegated fritillary, and the zebra longwing butterflies, whose larvae feed on it to complete their reproductive cycles.

Since the corona of *Passiflora incarnata* bloom resembled the crown of thorns Christ wore at the Crucifixion, 16th century Roman Catholic priests called it the "passionflower". In India, *Passiflora incarnata* is referred to as the "Mahabharata flower" because its bloom contains the entire narrative of the Mahabharata epic with its stamens representing the sacred trinity of three major Hindu gods.

Passiflora incarnata was historically used for medicinal purposes by the Aztecs in Mexico, Incas in South America, and Native Americans in the United States. Leaves were boiled to make a tea to calm nerves or as a tonic, while the root was used in poultices for boils, cuts, earaches, and inflammation.



Photo by Judy Gallagher. <u>CC BY 2.0</u>.

8

Abiotic Plant Problems: Herbicide Drift

By Elaine Kelly Applebaum, UC Master Gardener of Placer County

Herbicides are chemicals that are designed to kill plants—generally those we consider weeds. Sad to say, our cherished landscape or crop plants sometimes become damaged in our war against weeds.

If you apply weed killer on a day with too much wind, the chemicals can drift onto non-target plants (the ones we want to keep) and cause damage or, in worst cases, death. Additionally, herbicide can be washed off leaves by rain or irrigation and travel into the soil where it can be absorbed by non-target plants.

Signs of herbicide toxicity can mimic many other plant problems, such as diseases, nutrient deficiencies, environmental stress, and soil compaction. It is often difficult to diagnose, but if you or your neighbors have recently used a weed killer nearby, and you notice sudden wilt, dieback or disfiguration in your other plants, herbicide drift is a likely culprit.

Small and annual plants are usually at highest risk; most woody perennials and trees are more likely to survive and recover from herbicide damage.



This citrus branch was damaged by 2, 4-D, a common active ingredient in weed killers.

Avoiding the use of herbicides is the best way to keep your desirable plants safe, but if you must use them, apply when there is no wind and ALWAYS read and closely follow all instructions on the product label.

University of California Integrated Pest Management offers these two documents for more information: <u>Pesti-</u> <u>cides: Safe and Effective Use in the Home and Landscape</u> and <u>Garden Chemicals: Safe Use & Disposal</u>.

Placer County Demonstration Garden Update

By Karen Lopez, UC Master Gardener of Placer County

The Master Gardeners of Placer County (MGPC) have been hard at work over the last several months building a new Demonstration Garden in Loomis. The MGPC entered into an agreement with the Town of Loomis and the Loomis Library to remove the existing turf that surrounded the library and replace it with garden beds that showcase California natives, pollinator plants, HOA friendly plants, water wise turf alternatives, fruit trees and vegetable beds. All plant selections have been carefully curated to ensure they are appropriate and tailored to our varying climates here in Placer County.

Construction began immediately following our groundbreaking ceremony on September 19. Once all the infrastructure was complete, the master garden-



ers began the hard work of preparing all the new beds for planting. PCWA has been involved as well in assisting with new, water-wise irrigation supplies and advice to ensure our garden is water efficient and will be a living classroom to educate the community on efficient irrigation practices. Thanks to the efforts of all of our volunteers, planting began in December.

We have set a date of March 27, 2024 to celebrate the opening of the garden. We are excited to welcome the residents of Placer County into the garden! Look for presentations, open garden days, demonstrations and other special events that will be held there. There are interpretive signs (generously donated by our partners in Nevada County) placed around the garden and plant labels on individual plants that will help facilitate self-guided tours as well. It's a beautiful space that we hope will be utilized and enjoyed by residents from around Placer County.

Kids Korner Differences Between Honeybees and Wasps

by Linda Menge, UC Master Gardener of Nevada County

Why do bees sting? What is the difference between bees and wasps? These are the most often asked questions by children on my farm.

There are many different kinds of bees and wasps. Wasps usually have very thin waists, while bees are generally thicker. Bees and wasps are both pollinators; they move pollen from flower to flower. The difference is that wasps don't help make honey for us, but bees do.

Honeybees are the ones you see most often on flowers. That's because they use the nectar and the powdery pollen as food. They, in turn, make us other food. We eat the honey they make, and they eat it too. It takes a honeybee its whole lifetime to make a drop of honey. Honeybees take the nectar from the flower, bring it back to their hive and turn it into honey. They take the pollen from one flower and brush it on another flower and the flower makes our fruit and vegetables.

Wasps don't eat nectar and pollen from flowers. They are necessary scavengers. They eat insects, sugar, and meat. You see them at barbecues, and garbage cans.



Note the long, narrow wings, thin waist, and smooth body of the paper wasp on the left. In contrast, the honeybee on the right has shorter wings, and a chubbier, hairy body. Both photos copyright © 2012 The Regents of the University of California. All Rights Reserved.

Honeybees and wasps both sting if they feel threatened. When you see honeybees feeding on a flower, leave them alone, they are busy doing their job and they won't sting unless you try to hurt them. If they sting you once they will die.

Wasps will also sting you if they feel threatened. Most of the time you see wasps when you are eating outside. Wasps can sting you many times before they die.

Because we need pollinators to help make our food and honey, we don't want to threaten or kill them. Be kind to them!

You can download coloring pages of pollinators here.

UC Master Gardeners of Placer County

invite you to our indoor/outdoor

Garden Faire free home gardening event



Saturday, April 13, 2024 9am to 3pm Maidu Community Center 1550 Maidu Dr, Roseville

FREE ADMISSION







(530) 889-7388 <u>mgplacer@ucanr.edu</u> http://pcmg.ucanr.edu

Sponsored by Roseville Environmental Utilities



UC Master Gardeners of Placer and Nevada Counties Workshop and Events Calendar

Always check our websites for the most up to date event information.

Nevada County: ncmg.ucanr.edu Placer County: pcmg.ucanr.edu

Follow Us on Facebook:

Placer County https://www.facebook.com/PlacerCountyMasterGardeners Nevada County https://www.facebook.com/PlacerCountyMasterGardeners

March

March 2 10:00 am to Noon *Totally Tomatoes* Veterans Memorial Hall, 255 S. Auburn St., Grass Valley

March 9

10:00 am to Noon *Gardening for Birds and Butterflies* Veterans Memorial Hall, 255 S. Auburn St., Grass Valley

March 9 10:30 am to 11:30 am

Straw Bale Gardening Loomis Library, 6050 Library Drive, Loomis

March 16 10:00 am to 11:30 am *Tomato Mastery* Roseville Utility Exploration Center, 1501 Pleasant Grove Blvd., Roseville

Pre-registration required. Click <u>here</u> . **March 23** 10:00 am to Noon

Irrigation – New Topic! Veterans Memorial Hall, 255 S. Auburn St., Grass Valley

> Check out recordings of past workshops on our YouTube channels: <u>Nevada County</u> <u>Placer County</u>

April

April 6 10:00 am to Noon *Weeds* Demonstration Garden, NID Grounds, 1036 W. Main, Grass Valley

April 13 10:30 am to 11:30 am *Planning Your Summer Vegetable Garden*

Loomis Library, 6050 Library Drive, Loomis

April 13 9:00 am to 3:00 pm *Master Gardeners of Placer County Garden Faire* Maidu Community Center, 1550 Maidu Dr., Roseville

April 20 10:00 am to 11:30 am *Gardening Best Practices* Roseville Utility Exploration Center, 1501 Pleasant Grove Blvd., Roseville Pre-registration required. Click <u>here.</u>

April 20 10:00 am to 5:00 pm April 21 11:00 am to 4:00 pm *Visit the Master Gardeners of Nevada County Booth at the Home, Garden & Lifestyle Show* Nevada County Fairgrounds

11228 McCourtney Rd, Grass Valley

Nevada County Events in Green boxes Placer County Events in Yellow Boxes

May

May 4 10:00 am to Noon *Gophers, Moles and More* Demonstration Garden, NID grounds, 1036 W. Main St., Grass Valley

May 11 9:00 am to Noon

Spring Plant Sale! Vegetables, annuals, perennials. Grown here, for here! Demonstration Garden, NID grounds, 1036 W. Main St., Grass Valley

May 11 10:30 am to 11:30 am

Cut Flower Gardening Loomis Library, 6050 Library Drive, Loomis

May 12 10:00 am to 4:00 pm *Mother's Day Garden Tour*

May 18 10:00 am to 11:30 am *California Native Plants for Habitat Gardening* Roseville Utility Exploration Center, 1501 Pleasant Grove Blvd., Roseville Pre-registration required. Click <u>here</u>.

May 18 10:00 am to Noon *Softwood Propagation* Demonstration Garden, NID grounds, 1036 W. Main St., Grass Valley

May 18-19 10:00 am to 4:00 pm *Soroptimist Spring Garden Tour* Demonstration Garden, NID grounds, 1036 W. Main St., Grass Valley



About UC 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 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 UC Master Gardener of Nevada and Placer Counties Programs began soon thereafter in 1983.

Serving Placer and Nevada Counties for Over 40 Years

Have a Gardening Question?

Contact Us! Placer County Residents 530.889.7388

or contact us through our <u>website</u> or <u>Facebook</u>

Nevada County Residents 530.273.0919 or contact us through

our website or Facebook

UC Cooperative Extension Placer County

11477 E Avenue Auburn, CA 95603 530.889.7385 office 530.889.7397 fax email: <u>ceplacer@ucdavis.edu</u>

UC Cooperative Extension Nevada County

255 So. Auburn Street Grass Valley, CA 95945 530.273.4563 office 530.273.4769 fax email: <u>cenevada@ucdavis.edu</u>

Production Information

The Curious Gardener is published quarterly by the University of California Cooperative Extension Master Gardeners of Placer and Nevada Counties. All information presented pertains to the climate and growing conditions of Nevada and Placer Counties in California.

Bruno Pitton, Editor Environmental Horticulture Advisor

Kathy Gee, Coordinator Master Gardener Community Education Specialist

Donna Olson, Content Coordination Elaine Kelly Applebaum, Production Kevin Marini, Proofreading UC Master Gardeners of Placer County



Agriculture and Natural Resources

UC Master Gardener Program

The University of California Division of Agriculture & Natural Resources (UC ANR) is an equal opportunity provider. (Complete nondiscrimination policy statement can be found at <u>https://ucanr.edu/sites/anrstaff/files/390107.pdf</u>) Inquiries regarding ANR's nondiscrimination policies may be directed to UC ANR, Affirmative Action Compliance Officer, University of California, Agriculture and Natural Resources, 2801 Second Street, Davis, CA 95618, (530) 750-1343.