

THE YOLO

GARDENER

Fall 2024

A QUARTERLY PUBLICATION BY THE UCCE. MASTER GARDENERS OF YOLO COUNTY

New Collaboration in Clarksburg

Jalena Rusaw, UCCE Master Gardener, Yolo County

Dj Andriessen. Kathy Brown, and I are thrilled to announce the launch of a wonderful new project in Clarksburg, California, at the Don Fenoccio Learning Garden (you will find him pictured with us below). We are teaming up with Delta Elementary Charter School to provide enriching learning opportunities for children right in the heart of the garden. This partnership will allow students to connect with nature, gain handson gardening experience, and learn about the environment in a dynamic and engaging way.



In addition to our work with the school, we are also excited to introduce an after-school gardening program. This program will give children a chance to continue their learning and exploration outside of regular school hours, deepening their connection to the earth and fostering a love for nature.

The school gave us a heartfelt thank you, to celebrate the beginning of this journey, which was wonderful to receive.

We also participated in the Back-to-School Night event and provided education on how to read a seed packet. The parents and children enjoyed spinning the wheel, learning, and earning a sticker. Kathy also brought some of the garden goodies that grew from the Spring Garden event we had with the children.

If you live near Clarksburg and would like to learn more about how you can participate in this garden and earn volunteer hours, we would love to hear from you! This is a fantastic opportunity to get involved in your community, learn new skills, and contribute to a project that will have a lasting impact on the children and families in our area.



New Collaboration in Clarksburg	1
Controlling Vertebrate Pests in Your Fruit Trees and Garden	
Tips for the Vegetable Garden in the Scorching Summer Heat	5
Fuzzy and Colorful: The Joy of African Violets	6
Blueberries – A Blueblood Among the Berries	8
Time and Diligence Eradicate Bermuda Grass	10
Fall 2024 Master Gardener Plant Sale	12
Notes From Mu Garden: Heat Stress	14
Exploring Our Local Watershed: The Cache Creek Preserve (CCNP)	15
Fall Garden Tips 2024	18

Controlling Vertebrate Pests in Your Fruit Trees and Garden

Lane Parker, UCCE Master Gardener, Yolo County

For gardeners, few things are more rewarding than harvesting fruits and vegetables grown from their own labor. And perhaps nothing is more frustrating or infuriating than looking forward to harvesting the fruits of that labor only to find that the local wildlife has been pillaging and plundering. These battles in the garden come down to a war of wills. Fortunately, gardeners have a number of weapons at their disposal to stop those invading vertebrate pests in their tracks.

From the urban and suburban neighborhoods of West Sacramento, Davis, and Woodland to the agricultural land and unincorporated areas growing wine grapes, almonds and olives, Yolo County contains a diverse range of horticultural landscapes. All of these environments have their own unique pest challenges, but it's fair to say that the urban and suburban "wildlife" will be the animals most familiar to the residential gardener—much more familiar, in fact, than most of those gardeners would prefer.

There are a number of potential animal pests ready to wage a chewed-Earth campaign in Yolo County gardens. These pests include rabbits, racoons, mice, squirrels, and birds. The two most common pests, birds and squirrels, offer good case examples, because the methods of control and prevention that work for them can also be effective for many of the others.

For the Birds

There's nothing so idyllic as stepping outdoors and into the garden, gazing around at the beauty, and hearing birdsong lilting over the landscape. Unfortunately, the birds offering up the songs are likely the same ones eating the fruits in the very trees from which they're singing. In Yolo County, the usual suspects are crows, scrub jays, sparrows, house finches, and European starlings. Their damage usually appears as large pits gouged out of the fruits hanging in trees.



Bird damage to fruit UCIPM photo

While several methods are suggested for preventing and controlling bird depredations in the garden, shooting and trapping aren't highly recommended; For one reason or another these methods are either practically ineffective or, in the case of shooting, dangerous or illegal, depending on where you live and what species of bird is feasting in your trees.

Consequently, the remaining options are visual and noise repellents, and netting. Although netting is the most effective way to keep birds from eating the fruits or nuts in trees, it's also the most costly and labor intensive. For those of a mind and constitution to try netting, the best method is to place a one-quarter to one-half-inch mesh plastic netting over trees with ripening fruits

or nuts. However, for maximum protection, it's ideal to attach this netting to a frame that can keep the netting away from the tree. Those gardeners who can accept the initial cost and labor outlay, can also take comfort in knowing that netting is not only the most effective prevention but also is reusable.

By far the easiest way to keep birds from fruit trees is with visual and auditory repellents, also known as "frightening devices." In both urban and suburban settings, visual deterrents are most often used. Because the birds that damage fruit trees aren't active at night, auditory frightening devices will only be effective at getting noise complaints from neighbors. During the day, auditory frightening devices will deter birds, at least for a period, but will still be effective at getting noise complaints from neighbors.

Therefore, visual frightening devices such as Mylar streamers, "scare-eye balloons" (bright round decoys decorated with huge red and yellow eyes), and those repurposed compact music or movie discs, can be effective when hung in tree branches. Just remember to move the objects around every few days or couple of weeks so that the birds don't become accustomed to the devices.

If birds are eating crops on the ground or in raised beds, simple coverings like gardening cloth, chicken wire or rabbit fencing can be effective. While inconvenient for the gardener, these barriers will at least protect the fruit and vegetables from birds.

Squirrels are cute, but...

Children and the otherwise uninitiated visit their local parks, watch the squirrels scampering to-and-fro, and see adorable urban wildlife. But gardeners know better: The squirrel, whether of the ground or tree kind, is probably Public Enemy Number One in the eyes of every private horticulturalist.

In Northern California there are a number of different ground squirrels, and almost the same number of different tree squirrels. More important than knowing all the distinct species is simply knowing which type of squirrel is plaguing your garden so that you can mount the most effect defense.

Gardeners are most likely to encounter only one variety of ground squirrel, commonly known as the California ground squirrel and identified by its brownish-grey fur, a tail not quite as bushy as its tree-dwelling counterpart, and the fact that it lives in a burrow system. When fleeing danger, the ground squirrel will escape into one of its burrow holes instead of running up into a tree.

It's almost impossible to overstate the destruction caused by ground squirrels. Besides carrying diseases, ground squirrels eat everything from vegetables in the seedling stage to tree bark. They will even gnaw through plastic hoses and drip lines in search of water. Their burrowing behavior also damages nearby root systems, which can lead to the destruction of smaller plants and even trees.

Eliminating or even just managing ground squirrel populations can



Ground Squirrel UCIPM photo

be complicated. Simply covering the entrances to burrows won't discourage the inhabitants, who will merely dig new entrances to the already-established burrow system. Fumigants ("gas bombs") placed inside the burrows are the most effective. A warning, though, for those gardeners who'd prefer to catch and release instead of kill: Under California law, it's illegal to relocate wildlife without a permit, which means that, according to the University of California Agriculture and Natural Resources Division, "Live-captured ground squirrels must be released immediately on the property where they were caught, or they must be euthanized by legal and humane measures."

Depending on where you live, you'll be able to use a variety of methods to control and eradicate a ground squirrel infestation, including legal humane euthanizing measures. For much more detailed information about your options, consult the <u>Ground Squirrel / Home and Landscape / UC Statewide IPM Program (UC IPM) (ucanr.edu)</u>.

The tree squirrel is the ground squirrel's bushy-tailed partner in crime. As the name suggests, this squirrel mostly feeds on tree crops such as peaches, apples, and avocadoes. When threatened, it usually retreats to the safety of tree canopies or climbs nearby structures. And while ground squirrels dig burrows, tree squirrels create nests in tree cavities, enlarged woodpecker holes, or high in a tree in nests they build using twigs, leaves and shredded bark.

Unlike the scooped-out sections of fruit that's evidence of bird damage, squirrels usually remove the entire piece of fruit from the tree and make long, furrow-like scrapes in the flesh of the fruit, which often ends up, half eaten, on the ground.

With both the tree squirrel and ground squirrel, two methods of prevention can keep squirrels from gaining access to the bounty in the trees. One way is to make sure that tree branches aren't close to fences or other structures such as houses or sheds. Tree squirrels will use nearby branches or man-made structures to access, often by jumping to, another promising-looking tree. Another method is to place a slippery, protective barrier such as a metal sleeve around tree trunks. These sleeves, also called squirrel baffles, are available at hardware and home improvement stores as well as online. Apparently, coffee grounds sprinkled at the base of the tree also works. But this organic method needs to be constantly refreshed: Once the coffee smell goes away, the squirrels might return.

As with birds, covering ground or raised-bed crops with chicken wire or rabbit fencing can be an immediate fix while a longer-term solution is devised. Because squirrels can dig, remember that in this case the wire should extend below the surface, and include an extended apron for the covering to be effective.

For more information about managing tree squirrels, see <u>Tree Squirrels / Home and Landscape / UC Statewide IPM Program (UC IPM) (ucanr.edu)</u>.

Going Batty

A word about bats. Northern California is home to seventeen species of bats, including the Mexican free-tailed bat famous for having taken up residence under the Yolo Causeway. Some of these bat species also make themselves at home in attics and under the eaves of houses and outbuildings such as garden sheds. These bats are the gardener's frenemies, because they not only eat large numbers of pest insects but also leave guano (bat droppings) in and underneath their roosting sites. This guano is a potential health hazard. Because most bats are protected by state and federal law, removing them completely (and alive) can be a long process involving a number of steps. But because bats are so helpful in controlling insect populations, it's usually preferable to relocate them to a nearby location rather than remove them from a property entirely.

Enter the bat box (or bat house). These wooden boxes look a bit like strange bird houses. They're specifically designed and built for bats, and are available online, if not in local hardware and home improvement stores. When properly placed (usually on a pole and at about fifteen to twenty feet off the ground, and where the box will get an adequate amount of sunlight each day), bat boxes can be effective at relocating resident bats or attracting wandering bats to a property.

When placing a bat box there are many other specific considerations. More information can be found online or by contacting local organizations such as the Yolo Basin Foundation.

VV Dav

Controlling and even ultimately eliminating invasive animal pests in the garden can be time consuming, labor intensive, and expensive. But with the right knowledge and tools, gardeners can one day celebrate VV (Victory over Varmints) Day. Yes, as impossible — dare it be said, fruitless? — as the task might seem, controlling vertebrate pests in the garden is achievable. But prevention is an important part of that control. As the Internet Center for Wildlife Damage Management explains, "Prevention is the best way to avoid wildlife damage, but it takes constant effort and vigilance. Animals adapt to our methods, and materials break and decay over time. Monitoring and maintenance are necessary in any prevention program. Act quickly before a problem gets out of hand to save yourself a lot of trouble down the road."

Tips for the Vegetable Garden in The Scorching Summer Heat

Tanya Kucak, UCCE Master Gardener, Yolo County

Editor's Note: This article is a modified version of one that appeared in the Winters Express

It was an especially hot summer! With temperatures exceeding one hundred degrees for half of July, plus several days in June and August, conditions were not optimal for many vegetables. But you can have bumper crops even in scorching-hot summers if you choose your varieties well, reduce plant stress with mulch and compost, water just the right amount, and pick your crops at the right time.

Cucumbers Too Bitter or Not Productive?

Cucumbers from plants stressed by hot, dry conditions are apt to have more cucurbitacin, the bitter-tasting compound that, in wild precursors, kept critters from eating the plants. The bitterness is usually strongest at the stem end and under the skin, where the fruit is dark green, and in deformed fruit.

Next year, choose "burp-free" or "sweet" cultivars that have been bred to reduce or eliminate cucurbitacin. Even these varieties can sometimes be bitter, so also make sure to avoid stressing the plants by using mulch and watering deeply once or twice a week. Lemon cucumbers, Persian cucumbers, white-skinned varieties, and Armenian cucumbers are also good choices.

Armenian cucumbers, which are botanically a melon, have been so productive in my garden that I've been giving away half my harvest this summer. My Armenian cucumber plant took over the trellis where I planted four other cucumbers, traveled across the bed of elephant garlic, and started to grow through my tomato plants. Not a trace of bitterness!

Summer Squash Migrating into Paths?



Tatume Squash that has been trellised.

Growing up and not out is classic garden advice for small gardens. Most summer squash varieties are bushy. They form low-growing mounds that eventually migrate into paths. If you want to keep your plants contained, try growing a vining summer squash on a trellis. Keep the tendrils tucked in regularly and check every day or two for ripe squash. Growing the plants up rather than out enables the foliage to both protect and hide the squash!

I planted Tatume, a vining summer squash, in a two-foot-diameter cage. These are oval squash, best picked at around three to four inches but still good when picked at six inches long. If you let them go long enough to develop a hard shell, they can be used like winter squash. They're tasty (at least as good as Costata Romanesco!), and the shape makes them more versatile to use in recipes.

Beans Not Producing?

Snap beans were one of the easiest crops to grow in the milder summers of Palo Alto, but here, I haven't found a foolproof variety. It wasn't hot enough for good harvests of oriental long beans there, but in Davis they are unstoppable! Dark red beans such as Red Noodle are easier to pick than green ones, because they stand out from the foliage. Once they start, they are very productive and will continue producing if picked daily, so that they don't start going to seed.

In previous years, each day before picking beans I spent some time wiping aphids (and the ants that farm them) off the long beans with my gloved hand. This summer, I noticed several lady beetle larvae patrolling the beans before the beans were mature, and no aphids (yet)! Stink bugs and leaf-footed bugs are also attracted to long beans, so I drop them into a jar of water with a little dish soap in it, hoping to keep the populations down.

Peppers Getting Sunburn?

I started shading my pepper plants after reading that Full Belly Farm has been shading its two acres of



Sunburn on Peppers-UC IPM Photo

peppers for several years to prevent the peppers from being sunburned. In one bed, where I planted close together -- nine to twelve inches instead of the recommended eighteen to twenty-four inches -- and used overhead row cover, the peppers are lush and tall, up to five feet high. A few peppers still get a little sunburn from morning and afternoon sun. In another bed, I added afternoon shade as well as overhead shade, which eliminates sunburn but impedes airflow. Next year, I will build a shade structure that is tall enough to walk under, and plant all the peppers in one area so that I can shade them more efficiently.

For vegetables, the recommended shade cloth provides thirty to forty percent shade. In my gardens, I've used a row cover and old crocheted tablecloths, which probably provide less than the recommended amount of shade. As the days get shorter in the fall, I will be removing the shade so the peppers can get more light. In past years, my pepper plants produced well into November.

Tomatoes Getting Munched?

You wait and wait for a big tomato to ripen, then you go to the garden and find out a critter has beat you to it, taking one or two big bites and leaving the rest. Or a tomato can get sunburned, or split from inconsistent watering, or get overripe before you can pick it. During hot weather, it's best to pick tomatoes at first blush or breaker stage. At this point, the seeds are mature and the tomato can develop its full vine-ripened flavor on your table indoors.

The exception is some cherry tomatoes, which need to be picked fully ripe on the vine. For example, for optimal sweetness, I pick the brightest orange Sun Sugar F1 cherry tomatoes that I can find and eat them in the garden. The ones that are picked before they reach that stage never develop full color or flavor.

Don't Forget Okra!

Okra is another crop that loves hot weather. It's easy to grow from seed, can be eaten raw in the garden or used in recipes, and has gorgeous flowers. It's in the hibiscus family, so okra is a good choice if you like to diversify what you eat and choose foods from different plant families.

Fuzzy and Colorful: The Joy of African Violets

Michelle Haunold Lorenz, UCCE Master Gardener, Yolo County

When I was growing up, my mother's dining room was filled with jewel-toned African violets. As a child, I used to go into the dining room, touch the soft, fuzzy leaves, and marvel at the brilliant colors. Even though she was not the world's best gardener, she managed to keep a huge collection of African violets thriving over many years.



After she died in 2021, I inherited her collection of African violets. Some of those plants were at least forty or fifty years old. I falsely assumed that keeping African violets alive was simple because my mother seemed to do it effortlessly. When I moved her collection from Oregon to my home in California, I thought it would be a piece of cake to keep her beautiful plants alive and thriving. After all, I was a Master Gardener with a large collection of thriving houseplants. Boy was I wrong! African violets, while hearty, can also be very picky. If you provide the correct growing conditions these plants will thrive for many years. I learned by killing several of her prized plants exactly what those basic growing requirements were.

While these gorgeous houseplants resemble true violets, they are not violets. Their genus is *Saintpaulia* spp. in the family *Gesneriaceae*. They are native to the higher elevations in Eastern Africa. Botanists estimate anywhere between six and twenty species exist in the wild, but I would not recommend trying to plant them outdoors in our area. This old-fashioned houseplant has been a favorite since the 1800s. Today they are still one of the most popular houseplants available to home gardeners. They bloom almost year-round when their basic needs are met, and their bright colors and soft fuzzy leaves can bring decades of joy to your home.

To keep your African violets thriving you need to maintain their basic needs for light, water, soil, and temperature. They do best in an environment with bright indirect light. Put them in a north-facing window or where they get bright morning light, and these plants will be very happy. Give them too much sunlight and their leaves will burn or discolor. If you don't have a north or east-facing window, you can place your violets under a grow light. To achieve bloom, allow the plant ten to fourteen hours of light a day.

Keeping these plants moist but not soggy is extremely important. They prefer a slightly humid condition, so setting them on rocks in a water-filled tray will help keep the atmosphere humid around these plants. Or water the plants from below by placing the plant in a container with several inches of water, allowing the soil to absorb the moisture from below. If you are unable to use either of these two options, you can water



the plants as you would any other houseplant. However, make sure that you do not get the leaves wet. They are subject to mold from too much moisture. Excess moisture will also cause the crown of the plant to rot.

You want to keep your African violets in a comfortable range ideally between 68 and 75°F. Temperatures beyond that range may cause the plant to die. The proper soil is also important for these plants. They need loose draining soil that doesn't hold onto water. A mix of peat and perlite is ideal. If you don't mix your own, purchase a soil mixture designed for African violets.

I was truly surprised to learn how easy it is to propagate African violets. Simply snip a leaf off with sterilized scissors and pop it into a jar of water. Although they have no visible nodes, rootlets will appear in a couple of weeks. Plant the leaf with the rootlets into a small pot and watch it grow! Happy mother plants will also produce "pups"; small plantlets that grow around the base of the plant. Carefully separate these babies from the soil around the mother. Plant the pup in its own pot to grow to adult size. It may take a year or two for the babies to produce flowers.

African violets bloom best when they are a little root-bound, so don't be quick about repotting your plant. After several years, you can replace the soil around the established roots and put it back into the same pot or move it up to a slightly larger-sized pot.



Use a liquid fertilizer each time you water, which in our area will be anywhere from once a week to every couple of weeks, depending on how dry the air is around the plants. Some websites recommend a half-strength solution with each watering; I use a regular balanced water-soluble liquid fertilizer such as Schultz 20-20-20 or a fertilizer made specifically for African violets at full strength each time I water.

Once I met these plants' basic needs, I began to have success with bright blooms in shades of purple, pink, and white. I even started to propagate cuttings and while it's not back to the huge collection my mother once had, I've increased my collection by several new plants. I've even started trading leaf cuttings with a friend who has a collection of African violets in colors that I don't have. The joy of touching the soft

fuzzy leaves and marveling at the beautiful colors once again fills my life, reminding me of the joy I had as a child, watching the effortless grace my mother displayed as she cared for her beloved plants.

There are a number of good online resources you can use to learn more about African violets and their care. I started with the African Violet Society of America, and from there, discovered many other helpful resources using Google searches. Give yourself the gift of trying one of these beautiful houseplants next time you visit a nursery or garden center. You will not be sorry once you touch those soft fuzzy leaves and marvel at the beautiful flowers.

*All photos are by Sarah Kim



Blueberries - A Blueblood Among the Berries

Mike Kluk, UCCE Master Gardener, Yolo County

Blueberries bushes are attractive perennials that have a profusion of small blossoms in the spring and red foliage in the fall. Generally, they are not bothered by pests, making them a very appealing addition to any home garden. Growing them successfully in our area does require attention to soil pH, drainage, irrigation, and sun exposure but none of that is particularly complicated. They are easy to grow and give you great-tasting berries as a bonus.

Select Varieties Adapted to our Climate

Blueberries belong to the genus *Vaccinium* and are part of the *Ericaceae* family, which includes a variety of acid-loving plants such as azaleas and rhododendrons. Not all are created equal. Southern Highbush blueberries are most successful here because they have less need for chilling in the winter, have a better tolerance of high temperatures and are generally more drought hardy. They are a hybrid, created from Northern Highbush varieties (*Vacinnium corymbosum*) native to the northeast and Rabbiteye blueberries (*Vacinnium ashai*) found in the southeastern US.

Two bushes for every member of your family are recommended but more or less can't be wrong. If possible, select both early and late ripening varieties which can give you fresh berries from early May to mid-July. Good options, in order of ripening are: O'Neal, Misty, Sharp Blue, Blue Crop, South Moon, and Jubilee. The latter is actually a low-chill Northern Highbush variety with smaller but more intensely flavored berries than the others. Blueberries are self-fertile but multiple varieties can increase yield. Blueberry plants are available from some local nurseries and online. Plan to transplant in winter and early spring.

In Soil or Pot?

Blueberries can be successfully grown in our area in the soil or in a pot. Significantly more preparation is required to grow them in our native soils. Blueberries require a pH between 4.5 and 5.5 which is much more acidic than our native soils that tend to be slightly alkaline, above a neutral 7. So, if you want to grow berries in the soil, you will need to start by testing the pH of your growing area. A professional test is the most accurate but will require sending a sample of your soil to a soil lab. Labs can be easily located online. Home tests, either the chemical strip or electronic meter variety, are not as accurate but may be adequate for this purpose.



Half poly barrels make good containers for blueberries.

The easiest way to acidify soil is to add elemental sulfur, available from local nurseries, which will combine with oxygen in the soil to become sulfur dioxide. Once you know the pH of your soil, you can calculate how much sulfur to add using the Clemson Soil Acidification Calculator from Clemson University. The tool will probably tell you that the amount of sulfur you need to add is more than can be added at any one time and to plan on splitting the total amount into several applications, each separated by two to three months. Plan on ten square feet per plant, planted on a slight mound to increase drainage. You should also add organic matter to your soil to a depth of eighteen inches. Compost is always a good choice. If you add materials such as pine needles or wood chips that are not decomposed, you will need to add extra nitrogen fertilizer since these materials tie up nitrogen as they decompose.

If you want to sidestep the time needed to slowly lower the pH of our soil to blueberry friendly levels, consider planting your blueberries in pots. A pot with a two-foot diameter that is approximately eighteen inches deep is ideal. Half of a fifty-gallon poly-barrel works well. A half wine barrel can also work but plastic is preferrable over wood or terracotta because it holds moisture better. Avoid metal pots as they tend to get too hot.

You can fill the pot with an acid-based soil mix recommended for azaleas. Even that may not be acidic enough so check the pH and add sufficient elemental sulfur if necessary to lower the pH to between 4.5 and 5.5 using the Clemson Calculator. You might also want to add one-quarter inch bark nuggets up to a third of the volume to aid drainage. Another option is fifty percent potting soil and fifty percent peat moss with the bark nuggets added. If you want to limit the use of peat moss since it is a "mined" product, make a mix of one-third bark nuggets, one-sixth peat moss, one-sixth coir (coconut husks), and one-third potting soil. Add one-half ounce of elemental sulfur for each cubic foot of soil. You should check the pH of your soil, whether in the ground or in a pot, every couple of years and add elemental sulfur if necessary to maintain the pH in the 4.5-5.5 range. If growing in pots, you may also need to lift the plants every four or five years to add more potting mix since the organic matter will decompose as time goes on.

Location, Irrigation, and Mulching

Blueberries need at least six hours of sun to produce well. They will, however, benefit from some afternoon shade during the heat of the summer. Depending on the amount of direct sun they receive, adjust irrigation so that the soil remains moist but not soggy. Mini sprinklers and drip irrigation are both good choices. Mini sprinklers give better coverage of the entire root system but be sure to keep water off the crown. Watering twice a week is generally adequate. With drip systems, run a line down both sides of the plants eight inches or so from the crown or, if in a pot, circle each plant about six to eight inches from the trunk with drip hose. Four inches of straw, pine needles or similar organic matter laying on the soil surface will help retain soil moisture and moderate its temperature. Plants in pots may need more regular watering than plants in the soil.

Fertilizing

Blueberries are light feeders and can be sensitive to too much nitrogen. A balanced fertilizer intended for acid-loving plants is a good option. Fertilize once in the early spring and again in early summer at the rate recommended on the product label.

Pruning

Upon planting, remove any broken branches and very small shoots. For the first year, at least, remove blossoms to encourage stronger growth. After that, plan to prune in the late winter when the plants are dormant. Allow up to six strong canes to develop on each plant. Remove weak and spindly canes. After three or four years

you should be able to remove two of the oldest canes each year and let two of the strongest new ones grow. Do not cut back the ends of canes, unless they are broken, because blueberries tend to fruit at the end of branches.

Pests and Diseases

Birds are the most common blueberry pests. Robins, bluejays, and starlings will all regularly enjoy them as a snack. If this becomes too troublesome, bird netting is the best solution. Netting works better if held off the plants with stakes but can be laid directly on them if necessary.

Blueberries have few insect pests. Aphids and thrips can sometimes be a problem. Both can be controlled by washing them off with a strong spray of water or spraying insecticidal soap if the



A nice show of blossoms in the spring is a bonus.

infestation is bad. Phytophthora Root Rot and Botrytis, a fungus, are both fostered by overwatering. Be sure your beds or pots are draining well and check to be sure that your irrigation is not leaving the soil soggy.

Conclusion

Blueberries can be attractive landscape plants and are definitely a tasty treat. The keys to success are maintaining soil that has the necessary acidity, keeping plants adequately watered and protecting them from intense afternoon sun. With these steps, you can enjoy fresh, delicious blueberries in Yolo County.

Time and Diligence Eradicate Bermuda Grass

Tanya Kucak, UCCE Master Gardener, Yolo County

B ermuda grass (Cynodon dactylon) is my favorite weed to eradicate. In my experience, it's one of the easiest pernicious weeds to get rid of!

I've eliminated this perennial warm-season grass at about ten organic community garden plots and paths in the past couple decades. It took less than one season in every case, plus ongoing diligence. I kept Bermuda grass out of one garden plot and its surrounding paths for over fifteen years even though it was rampant in neighboring plots.

In each case, I got rid of Bermuda grass by scraping the surface to get rid of above-ground stems, or stolons, and digging up any obvious below-ground stems, or rhizomes. In paths, I added overlapping layers of

newspaper or cardboard, then added six to twelve inches of mulch. If any of it struggled through, it was weakened and easy to pull, and for bad infestations I checked at least weekly.

The worst infestations I found were under weed cloth. Bermuda grows happily through and under the weed "barrier." In California's dry summers, weed cloth maintains a layer of moisture under the mulch and helps it flourish. In other garden plots, I've seen Bermuda grass flourishing under plastic that was meant to "solarize" the soil but ended up providing a greenhouse environment.



In garden soil, I learned to recognize bright-white propagules -- any segments of stolon or rhizome -- and got rid of them as I moved soil or forked in compost in the spring.

As a lawn grass, Bermuda can be planted by chopping up rhizomes and incorporating them into the soil. So if you rototill in an area that has Bermuda grass, you are actually replanting it! Each segment becomes a new plant.

It's especially easy to pull up Bermuda grass when the soil is moistened by winter rainfall. It goes dormant in the winter, which means the green shoots above ground fade, but the rhizomes are still benefiting from winter rains, and any segments that started to dry out in the summer may be revived. If I find a dense patch, I dig under it with a hori hori from a couple directions, then grab the whole clump of weed and soil and shake it. The remaining white rhizomes stand out against the dark soil. Grab one end, tug slightly, and see if you can prise ever-longer rhizome pieces out of the ground. (This is my idea of fun.) If it's growing in mulch, it's even easier to pull out stolons and rhizomes.

Time and diligence are also the recipe for eliminating a Bermuda grass lawn. I was a docent at Cynthia Figrim's garden

during the Water-Wise Landscape Tour. She started digging up the half-acre lawn the first day escrow closed on her Woodland house, and continued nearly every day for two years until the Bermuda grass was gone. Her first choice for dealing with weeds is "always to dig them up, because digging them up gives instant results" and lets her "immediately plant new plants where the weeds used to be."

She and her husband wanted a "low-maintenance, low-water yard." With seventeen years' experience gardening with California native plants, Cynthia "wanted to put in the effort to turn [the yard] into a thriving ecosystem." To that end, Cynthia said, "Slow and steady gets the job done." As she dug up the lawn, she shoveled the removed grass and dirt into their trailer. When the trailer was full, her husband hauled it to the landfill. She "designed and planted the garden gradually as the lawn was cleared."

You can put weeds alone in your garbage or organics bin, but any significant amount of soil needs to be hauled to the landfill.

"Digging up four thousand square feet of lawn all by yourself may seem impossible, but digging up four square feet is perfectly doable for nearly anyone," Cynthia said. "If you can dig up just four square feet of lawn every single day, in three years you'll have cleared four thousand square feet of lawn. Or if four square feet per day is too much for you, then dig up an average of just two square feet every day, and in six years you'll still have cleared four thousand square feet of lawn, all by yourself."

Fall 2024 Master Gardener Plant Sale

Wilda Knoesen, UCCE Master Gardener, Yolo County

The Fall 2024 Master Gardener-Yolo Plant Sale will take place on Saturday, October 5 and Saturday, October 12 from 9:00 a.m. to 1:00 p.m. on both days. Drought tolerant ornamental garden plants (bulbs, California native plants, perennials, and succulents) will be available. Quart sized pots are \$5 each and gallon sized pots are \$6 each. Cash, checks and credit cards are accepted. The sale is being held at Woodland Community College, 2300 E Gibson Rd, Woodland, CA 95776.

FALL 2024 PLANT LIST

BULBS & RHIZOMES

Narcissus tazetta Tazetta Daffodil Zephyranthes candida White Rain Lily

CALIFORNIA NATIVES

Calliandra californica Baja Fairyduster

Epilobium canum 'Calistoga' California Fuchsia 'Calistoga'

Eriogonum fasciculatum
 Iris 'Pacific Coast Hybrid'
 Salvia apiana
 Salvia spathacea
 Sisyrinchium bellum
 California Buckwheat
 Pacific Coast Hybrid Iris
 California White Sage
 Hummingbird Sage
 Blue Eyed Grass

HOUSE PLANTS

Begonia x corallina Angel Wing Begonia

Epipremnum aureum Golden Pothos Schefflera species Umbrella Tree

PERENNIALS

Antigonon leptopus San Miguel Coral Vine Arctotis hybrid 'Orange' Orange African Daisy

Buddleja species Dwarf Purple Butterfly Bush

Chlorophytum comosum Variegated Spider Plant

Coreopsis grandiflora Largeflower Tickseed (Hardy Form)

Correa 'Dusky Bells' Red Australian Fuchsia

Dymondia margaretae Dymondia groundcover

Fragaria x ananassa 'Albion' Albion Strawberry
Fuchsia species Red & White Fuchsia

Fuchsia triphylla 'Gartenmeister

Bonstedt' Lady's Eardrops Fuchsia

Gaura lindheimeri Lindheimer's Beeblossom (White)

Glandularia lilacina Lilac verbena
Goniolimon tatricum German Statice
Hebe 'Amy' Amy's Hebe

Kniphofia 'Christmas Cheer' Christmas Cheer Poker Plant

Lavandula dentata French Lavender

Lavandula multifida Fernleaf Lavender

Leonotis leonurusLion's TailLimonium pereziiSea LavenderLobelia laxifloraMexican LobeliaPallenis maritimaGold Coin Daisy

Pelargonium 'Snowflake' Scented Snowflake Pink Geranium

Pelargonium 'Vancouver Centennial' Coral Geranium

Pelargonium citrosumCitronella GeraniumPelargonium sidoidesKalwerbossie Geranium

Plectranthus argentatus 'Silver Shield'Silver Spur FlowerRoldana petasitisVelvet GroundselSalvia canariensisCanary Island SageSalvia farinacea HybridMealy Cup SageSalvia guaraniticaAnise Sage

Salvia jamesonii Everblooming Autumn Sage

Salvia microphylla 'Hot Lips' Hot Lips Sage Salvia officinalis Common Sage

Santolina chamaecyparissus Grey Lavender Cotton Sphaeralcea ambigua Desert Globemallow

Stachys byzantina Lamb's ear

Teucrium chamedrysWall GermanderTeucrium fruticansBush Germander

SUCCULENTS

Aeonium arboreum Green/purple Tree Aeonium

Bulbine frutescens 'Hallmark' Orange Stalked Bulbine

Cotyledon orbiculata oblonga Pig's Ear (pointed leaf)

Hesperaloe parviflora False Yucca

Crassula tetragona Miniature Pine Tree Succulent

Kalanchoe fedtschenkoi Lavender Scallops Plant

Senecio mandraliscae Blue Chalk Sticks

Notes From My Garden: Heat Stress

Joy Sakai, UCCE Master Gardener, Yolo County

I don't know about you, but I am over the summer heat and am looking forward to a cool autumn. I grew up on the Central Coast of California, where the typical temperature range for a summer day was somewhere between 55° and 75°F. That and my Northern European heritage add up to zero personal heat tolerance. I question my own sanity: why did I plant myself in the Sacramento Valley? Well, it is closer to our kids. Besides, I have legs, air conditioning, and a tiny little pool. I do not have to stay in the sun while it is 110° F outside. Unfortunately, my plants do, and they are stressed out.

Plants are sensitive to temperature. Heat outside of a species-specific comfort zone causes a number of metabolic and physiologic changes in a plant. The changes are triggered when sensors in the plasma membranes of plant cells register excessive heat. At that point, a number of biochemical changes happen that are intended to protect the plant tissues from serious damage. Pores close to reduce loss of water, leaves may fold to reduce sun exposure, uptake of carbon dioxide is reduced, and photosynthesis slows. As a result, growth, fruit and flower production, and therefore seed production slows down. These metabolic changes due to excessive heat are referred to as heat stress and are a serious concern for agriculture and our own gardens. If you're wondering why your vegetable garden was a disappointment this year, look at the high temperatures in Yolo County during July. Ugh!

Any discussion of heat and stress in plants should include an understanding of the word climate. As my sister (who spent time studying atmospheric changes over eons for her Ph.D.) frequently reminds me, climate and weather are different. Climate is the mean of weather variables over decades. Those variables include temperature, precipitation, wind, and others. Although the occasional heat wave is not surprising in California, where weather shifts from year to year are common, the march of climate change is very alarming. The increasing summer heat levels are not going away. So, how do we help climate-proof our own outdoor environment?



Ceanothus 'Julia Phelps' under heat stress

There are measures you can take next summer to protect your plants from the heat. The most important plants to protect are your "foundation" plants, trees and large shrubs, since they take years to grow and provide shade to your property. Mulch is something you can add now, this winter, or next spring. A thick layer of mulch reduces water evaporation and cools the soil. When high heat is predicted, you can reduce soil temperature around your trees by watering deeply. Remember to water in the early morning. Water at the edge of the leaf canopy, called the drip line, slowly enough to wet the soil down at least a foot deep all around the perimeter.

Be sure to do any fertilizing or pruning of fruit trees either months before or sometime after the highest heat of summer, depending on the species. Both of these actions encourage growth, not what you want in extreme heat. Lastly, if you notice dead leaves on shrubs or trees from heat, leave them on. They can still protect limbs and branches from the sun.

If you have smaller plants or a vegetable garden to protect next summer, consider using temporary shading during periods of high heat. Get out an unused market umbrella, hang shade cloth over vegetable beds, or make DIY shade structures for young, vulnerable plants.

If you need to replace plants that have died, autumn is the best time to do it because they have more time to develop their root systems. I admit to my own particular bias toward the use of native California plant species. After all, these plants have evolved in California. But don't be fooled into thinking that a native that grows on the coast or in the mountains will work in our climate. Most natives are drought tolerant, which is great, but heat tolerance is different. If you are replacing plants, remember to ask nursery personnel about a plant's heat tolerance, their sun or shade needs, and water needs.

My hope is that if we all do what we can to reduce our contribution to climate change, and if we save our trees and prepare for heat, we will leave healthier environments to future generations.

Exploring Our Local Watershed: The Cache Creek Nature Preserve (CNNP)

Lorie Hammond, UCCE Master Gardener, Yolo County

This article was informed by a conversation with Jim Barrett, a retired medical doctor and dedicated environmentalist, who is Board Chairman of the Cache Creek Conservancy (CCC) 501c3, as well as a Yolo County Master Gardener, and by the CCC website.

As citizens of Yolo County, we inhabit two watersheds. In the spring issue of *Yolo Gardener*, I wrote an article about the newly expanded Lake Berryessa Snow Mountain Monument, which preserves land along Putah Creek. This piqued my interest in Cache Creek, the other river in our Yolo County watershed.

Cache Creek extends from Clear Lake, from which it overflows as flood control, down through the Capay Valley until it empties into the Yolo Bypass.

The CCC website lists Cache Creek as blending three major cultures: the Yocha DeHe Wintun culture, mining, and agriculture. The creek is also valued for its exceptional scenic beauty and whitewater recreation. Cache Creek was always a rich habitat. It derived its name from the early California beaver trade. Trappers got so many beaver pelts along this creek that they would *cache* them in various hideaways. But the history of this basin goes back thousands of years, during which Native peoples from the Wintun tribes have tended, gathered and lived in this plentiful land. Cache Creek currently juggles mining, agricultural, recreational, and Native cultural interests in potential cooperation or conflict. "A partnership between Yolo County, the aggregate producers, and CCC was and still is innovative", states the CCC website

In the midst of Cache Creek, the Cache Creek Nature Preserve (CCNP) is a 135 acre jewel where the public can access the many types of natural environments in Cache Creek. The CCNP is a small piece of Cache Creek and is managed by the CCC, which also manages the lower fourteen miles of Cache Creek (from Capay Dam to Highway 5) as dictated by the Cache Creek Resource Management Plan (CCRMP). Working together with the county and environmental groups, the CCC hopes to restore the rest of the creek, previously damaged by gravel mines, to a more natural state, closer to what can be observed at the CCNP.



Tending and Gathering Garden, with a canoe to gather tules and other reeds.

The CCNP has many features. Three of the main ones are the Tending and Gathering Garden (TGG), the Jan T. Lowry Memorial Garden, and the wetlands basin with its ascending natural environments. Families, school classes, and nature lovers of any age can visit these environments and interact with educational programs and displays there (see details below).

A unique feature of the CCNP is the **Tending and Gathering Garden** (**TGG**), which is on the banks of a large tule wetland. This garden was planned by members of the <u>California Indian Basket Weavers Association</u> to grow fiber plants for basket making. Visitors can enjoy the roundhouse vista points and walkable island bridge. Potential visitors can also check the CCC website for educational demonstrations on how to use tules for boats, houses, floating gardens, and more.

A second striking feature of the CCNP is the **Jan T. Lowry Memorial Garden**, which is located just north of the amphitheater and displays many native plants. A third feature is the **wetlands**, which provide important habitat

for aquatic fauna at all levels, from water birds to amphibians to insects. The wetlands and its environs create a scenic, many layered bowl. The first layer of vegetation above the wetlands is a riparian forest of willows, cottonwoods, and chaparral. The second layer is an oak savannah, which consists of grasslands and oaks. Climbing further, one can also view agricultural lands and finally the foothills which surround the Cache Creek basin. All of these environments provide rich habitats for wildlife viewing.

The CCC was formed in response to California legislation. Due to decades of "gravel wars" in which farmers and environmentalists fought against the damage to creeks caused by aggregate mining, California issued two mandates in the 1990's. The first outlawed further mining in creek channels themselves. Mining in the creek channel ceased and ongoing mining now occurs in off channel mining pits. The second required miners who had previously damaged the creek to fund its restoration. In 2017, the county developed the Cache Creek Parkway

Plant to address this mandate. It is hoped that implementation of this plan will start next year downstream from the CCNP. The CCC will oversee its implementation.



The layered landscape which surrounds the wetlands.

What is involved in restoring Cache Creek to a more natural habitat? Every year a group of scientists including a biologist, a geomorphologist, and a hydrologist walk the fourteen-mile creek bed to see how it is faring. They assess the introduction of native plants and the eradication of invasive species. They also oversee the effects of cultural or prescribed burns, which practitioners are learning to perform from Native Americans, who have historically managed this land.

Burning not only helps prevent wildfires, but it also clears out old brush, makes way for new growth, and in some cases, activates native seeds which only grow after a burn. The CCC integrates land management ideas both from scientists and from traditional Native cultures. A misconception which many people hold is that the land traditionally occupied by Native peoples was "wild", rather than managed. Native peoples managed their land in many ways, working so closely with nature that their efforts were often not recognized by White settlers.

Jim Barrett, Chair of the Board of Directors of the CCC, holds several dreams for Cache Creek. His first dream is that the stakeholders of this watershed work together to create a healthy environment. Cache Creek is a working creek which supplies irrigation to farmers and gravel for construction. It is also the focus of local conservation organizations, Native American tribal groups, and more. The CCC's vision is that all of these groups work together.

Jim's second dream is that habitat restoration be extended to increase the habitat acreage in the off-channel mining sites. Currently the gravel mines dig deeply into the gravel bed, creating lakes. Historic mercury mining

17

in the mountains above Cache Creek left behind a trail of mercury pollution in all the waterways. This pollution becomes dangerous when it is activated anaerobically in deep water. A long-term solution would be to reconfigure the off-channel sites and fill in deep lakes so that wetlands can form. This solution would enable the creek to restore itself to an environment closer to its original form, while simultaneously avoiding the mercury pollution problem, decreasing flood risk, and adding water to the aquifer.

Deciding how to manage Cache Creek is a process involving many players, public and private, from the County Board of Supervisors to the Native American tribes nearby. Many environmental organizations such as <u>Tuleyome</u> and the <u>Center for Land Based Learning</u> also play a part. We invite anyone interested in learning more about their watershed to get involved. Begin by visiting the Cache Creek Nature Preserve. Its natural beauty will entrance you.

The <u>Cache Creek Nature Preserve</u> is at 34199 County Road 20, Woodland. It is open from 8-4 Monday through Sunday (closed Saturday and holidays), and is free to the public. No pets allowed

Fall Garden Tips 2024

Peg Smith, UCCE Master Gardener, Yolo County

Ever wondered why or how deciduous trees lose their leaves? In climates that have colder winters and warmer summers, in the spring, as leaves develop and grow, several different chemicals and hormones stimulate the development of what is called the abscission layer at the junction of leaf and branch. This layer allows the passage of energy from the leaves to pass into the branches and trunk of the tree to sustain the growth and health of the tree. As the days of fall shorten and become cooler production of one hormone, auxin, is reduced. With less auxin the abscission layer bond weakens and in time or aided by the wind the leaves separate from the branches.

What's the advantage to a tree of losing leaves in the winter?

- Without leaves during the winter a deciduous tree will require less energy.
- Moisture is conserved within the trunk and branches.
- In winter storms wind can pass through the branches putting less strain on the tree.

What is the difference with evergreen trees?

Evergreen trees, for example conifers, in colder climates are adapted to survive the winters. Their needles or slim narrow forms of foliage contain a resin that resists cold and wet weather. Their shape, tall and slim, means that they can handle strong winds. Their often-downward sloping branches and foliage allows heavy rain or snow to slide off the branches. Conifers and other evergreen trees also have a waxy coating on their needles or leaves that limits water loss in the cold of winter. The outer bark of many evergreen trees is different from deciduous trees. It contains air pockets that act like insulation that helps protect the tree from freezing. Deciduous trees have living, fluid filled cells in their bark that may freeze and can lead to splitting of the bark.

As we slide into fall with fewer hot days and cooler mornings and evenings, we find ourselves in the 'Goldilocks' time of the year for gardening. Fall is truly the prime time to head into the garden to review and reinvigorate. A walk around the garden and a checklist of 'to dos' will prepare for not only the winter but also the coming spring.

Any perennial planted in the fall will go quietly about the business of producing healthy root growth throughout the fall and winter. By the spring and summer these plants will have well established root systems and are better able to support a burst of spring growth and then cope with the following summer heat. Some of the more tender perennials planted in the fall may need a little frost protection on the coldest of our winter nights but most will come through with flying colors. You haven't missed the boat if you don't plant in the fall, the opportunity for spring planting will come, but do consider a detailed fall check of your planting needs.

A great local resource for planning your garden with consideration for sustainability, beauty and water conservation is the Climate Ready Tool Kit on the UCDavis Arboretum and Public Garden website.

Here are a few things to consider for your Fall gardening.

Bulbs:

Fall is considered bulb planting season, and we tend to plant the traditional bulbs that originate in colder climates. Perhaps this year is the time to try something a little different, well suited to Yolo County's climate yet equally beautiful. Here are some bulbs that can provide the delight of something hidden, bursting through, with color and beauty year-round.

Bulbs – Early Spring Blooming

Here's a very resilient candidate for your garden, Summer Snowflake *Leucojum aestivum* 'Gravetye Giant.'

The California native iris *Iris douglasiana* are spring blooming, come in many colors and are summer dormant. They naturalize well.

Add in some dwarf daffodil *Narcissus* 'tete-a-tete', and some Spanish squill (bluebells) *Hyacinthoides hispanicus* R. and you will have a fine spring show.

Bulbs - Late Spring Blooming

For late spring blooms you can't go wrong with the reliable Allium family, ornamental onions. *Allium giganteum*, is very showy with tall purple flowers. Drumstick Allium *Allium sphaerocephalum* attractive when in bloom and also attractive when the flower heads dry in the summer. Star of Persia *Allium christophii*, blooms like a living firework burst. Alliums are pollinator attractors.

Bulbs – Fall Blooming

The sea squill, *Drimia maritima* produces tall white spears in August/September. Its leaf season is winter and is most ideally grown in an area of ground cover or near grasses that will need winter cut back as its large leaves can smother other plants. It is summer dormant so place it where you won't disturb the bulbs during the summer. Best grown in companion with plants that are dormant in winter.

Something more diminutive but spectacular in its own way for August/September bloom is the Argentine rain lily *Zephyranthes candida* that forms clumps of shiny, grassy leaves. It is a good edging plant that attracts beneficial insects.

For bright splashes of color in the Fall add Aztec lily *Sprekelia formossissima*, spider lily *Lycoris radiata* (both have red blossoms), and autumn crocus *Sternbergia lutea*, (yellow blossoms).

Beneficial Insects:

Consider, as you do your Fall cleanup, our beneficial insect friends. Many like a somewhat messy garden that gives them shelter over the winter. Lady Beetles overwinter under loose leaf layers so you can allow some

of the fall leaf drop to remain as winter shelter for our beneficial lady beetles. The lady beetle nymphs emerge in the spring with voracious appetites and consume proportionally more aphids than the adult lady beetles. The nymphs are perhaps 'odd' looking but they are of great benefit to the garden.

There is one caveat to allowing leaves to remain on the garden. A carpet of leaves from trees such as sycamore, or oak need to be cleared if they fall densely on the crown of a plant. This blanket of leaves on the crown of a plant combined with heavy winter rains can encourage fungal and bacterial diseases.

Pest and Disease Control:

The Master Gardener program encourages the least toxic solution to diseases and pest control. 'Least toxic' does not mean that the recommended solution may not work well, it means a recommended effective solution that is 'least toxic' to the environment. An easy-to-use site to research any disease or pest you may encounter is the UCD Integrated Pest Management (IPM) website.

Fruit Trees and Berries:

Fruit tree hygiene is important to control soil and waterborne fungal and bacterial disease. Clean up all old fallen fruit, this will reduce the possibility of fungal spores over wintering under the fruit trees to re-infect the spring fruit. Follow the IPM recommended dormant spray applications for fruits and berries.

An early fall light pruning of dead or crossing branches will help trees weather the coming fall and winter storms. You may need to consider removing aging or diseased fruit trees or wish to add to your inventory of fruit trees to espalier or provide both fruit and shade. Fruit Trees: Training and Pruning Deciduous Trees

Vegetables:

The year-round vegetable garden is one of the benefits of our Yolo climate. We don't need to shut down vegetable growing for the winter. If you love the brassica family, cabbage, broccoli, cauliflower, etc., now is the time to plant for a winter crop. If you are growing your own brassicas from seed many of the brassica seedlings are almost indistinguishable from each other so 'label, label, label'. Our <u>Vegetable Planting Guide</u> is a great reference to what and when to plant in any season.

If you are not growing winter vegetables, plant cover crops such as fava beans, clover, or vetch to replenish the soil nitrogen for better spring and summer vegetable yields. Cover crops also reduce the loss of the topsoil in heavy winter rainstorms.

Fruit and Vegetables:

- Pinch back plants to allow tomatoes, melons, and squash enough time to mature before frost sets in.
- Consider planting winter vegetables such as broccoli, lettuce, endive, parsley, garlic, peas, and onion sets.
- Remove unproductive plants.
- When the summer vegetables are finished use the squash, melon, cucumber, and tomato trellis supports for planting peas and sweet peas in October, the soil will gain some nitrogen replacement from these legumes.
- Pick green tomatoes when daytime temperatures no longer exceed 65° F. Wrap them in newspaper or place them on a windowsill to let them ripen indoors.
- Maintain your compost pile by adding clean (non-diseased) garden waste and leaves.
- Control earwigs, snails, and slugs.
- Apply liquid copper to citrus to prevent brown rot.
- Apply the first dormant spray to fruit trees in November.

Peach leaf curl

Shot hole fungus

Fertilize and Amend:

If leaving an area of soil dormant for the winter

- Add well composted manure and/or compost to improve soil structure and fertility.
- Apply a layer of leaves, straw, or newspaper covered with grass clippings or leaves to your soil surface to reduce weeds next spring, improve soil structure, and prevent erosion.
- Consider planting a crop of green manure (fast growing plants) on any open ground to loosen the soil and to replenish soil nitrogen before planting in the spring. Winter Cover Crops for the Home Garden

If Growing Winter Vegetables, Flowers, Bulbs or Seeds:

Any time a gardener takes out a plant or prepares for a new plant consider that an ideal time to improve the soil in that discrete area.

Preferably add well composted manure and/or compost to improve soil structure and fertility before planting winter vegetables, flowers, bulbs or seeds.

If using a commercial fertilizer make sure to follow application directions. Over enthusiastic application of fertilizer will increase nitrogen availability which will encourage the plant to produce foliage rather than bloom or fruit.

Lawns:

Have you considered removing or reducing your lawn to expand your ornamental plantings, add a vegetable garden, or plant walkable drought tolerant ground cover instead of lawn? You don't need to do it all at once, develop an overall planting design and break it into smaller, more easily handled projects.

There are 40 million acres of land in the US dedicated to lawns. Here are good reasons to consider this change.

- Lawns require more frequent watering and water runoff wastes water.
- Lawns are a monoculture habitat, a variety of native plants will support native insects, butterflies, bees, and birds.
- Traditional gas-powered lawn equipment contributes to air pollution and greenhouse gas emissions. A fourstroke lawnmower running for one hour equates to a vehicle traveling Five-hundred miles.

Lawn Maintenance and Climate Change

The following method works equally well for an area of weeds or lawn.

Fall is the ideal time to low mow a lawn, water the area, cover the soil with a dense weed barrier of cardboard and/or newspaper which is then covered with a sufficiently deep layer of mulch. This method of lawn removal has several benefits - discouraging weed and grass growth, preventing soil erosion, and it will still be possible to walk across the area to access other parts of the garden without slipping in a quagmire. Lawn grasses and weeds are tenacious so it is important to follow the directions in Master Gardeners How to Remove a Lawn carefully or the results will be disappointing.

Lawn care

An environmentally aware approach to watering and care can improve any lawn you decide to keep, reduce reliance on both pesticides and herbicides, and reduce the use of gas-powered equipment. Lawns do not need daily watering to remain green. Encourage deep root growth by watering for a longer cycle less frequently (once or twice a week depending on temperature). If there is water runoff before the cycle is completed, break the duration of the watering cycle into two shorter waterings with a shut off period between. Do this by adjusting the watering duration to turn off when water runoff shows, allow the water delivered to penetrate the soil for an hour,

then repeat the cycle of watering until runoff. This should deep soak the lawn and encourage the roots to penetrate more deeply. A more deeply rooted lawn will better withstand the heat of the summer and should only require watering once or, at the most, twice a week in the heat of summer. Consider using a 'smart' irrigation controller that will manage the watering cycle for you dependent on the weather.

- Renovate a poorly performing lawn by de-thatching, aerating, fertilizing, and over-seeding it with either an annual or perennial rye or fescue mix, which will keep it green through the winter.
- Fertilize lawns in early fall with a complete fertilizer (one that contains nitrogen, phosphorus, and potassium).
- Check your sprinkler system. Be sure it is properly adjusted with no leaking sprinkler heads and that all the nozzles are working. Adjust the run times so there is no water wasted in runoff.
- Seasonally adjust the watering cycle on your lawn. It will require less water in the fall and little or none in the winter. Bermuda lawns go predominantly dormant in the winter and may appear 'dead'. No need to worry, they will recover with the natural rain cycle and push spring green growth.
- Continue to mow as needed, raise the height of the mower's cut. Consider using a mower with a mulching system. With this grass clippings are cut more finely and drop to the lawn and are not collected in a bag. The grass clipping will break down and naturally feed the lawn.
- Remove dead leaves from your lawn regularly to prevent your lawn from expiring from lack of sunlight or contracting fungal infections.
- Fall is the best time to put in a new lawn with either seed or sod.

For complete lawn care see <u>UC IPM Healthy Lawns</u>.

Annuals and Perennials:

Now is the time to scatter seeds for California annuals such as California poppies and tidy tips. Rake back any mulch from the soil, scratch the soil surface with a metal rake to loosen, scatter the seed, then lightly rake the area soil to cover the seed. Water gently so the fine seed is not washed away. Enjoy the show in the spring.

Another way of adding to your garden palette of plants is to check with neighbors and friends to see if they are dividing any perennials that you may have noticed in a garden. Share your extra bulbs, corms, and tubers with friends and neighbors.

- Continue deadheading and removing dead leaves.
- Divide and transplant bulbs, tubers, and corms.
- If your oriental poppies, iris, agapanthus, and daylilies are becoming less vigorous, fall is the season to divide and replant them.
- Enjoy the fall color of perennials. Wait until spring to trim or cut them back.
- Evergreen perennials should not be cut back in the fall. These include rock cress, creeping sedum, creeping phlox, and hens and chicks.
- Roses should keep producing flowers into December, but do not fertilize after September because that will encourage shoot growth that will be nipped by the first frost. Deadhead as needed unless you prefer colorful rose hips to develop and provide winter interest.
- Plant fall flowers such as calendulas, chrysanthemums, bachelor buttons, dianthus, forget-me-nots, sweet peas, and violas. Many of these will overwinter and provide lush color in the spring.
- Spring-blooming perennials such as foxglove, columbine, salvia, and daylilies can be planted now.



Island Pink Yarrow Achillea millefolium

- Fall is the best time to introduce perennials such as yarrow, asters, coreopsis, salvias, geraniums, and lantana to your garden.
- Take cuttings of your favorite annuals and perennials. <u>General Information on Propagation by Stem Cuttings</u>

• Gradually move frost sensitive potted plants to more sheltered locations so they will adjust. Plants placed under the shelter of the eaves will not be watered by the rain so check the soil moisture and water as needed.

Trees and Shrubs:

Fall is the best time to plant trees and shrubs. Always consider what space the mature tree will occupy in the garden when choosing your trees.

Suggested Trees for Yolo County Planting Landscape Trees

Our winter rainfall can vary greatly from season to season. In a dry winter, both newly planted and established trees may need supplemental watering. <u>Drought Care of Trees</u> For autumn colors of red, gold, or yellow, choose these trees: Chinese pistache *Pistacia chinensis*, gingko *Gingko biloba*, tupelo *Nyssa sylvatica*, scarlet oak *Quercus coccinea*, red oak *Quercus rubra*, chanticleer pear *Pyrus calleryana* 'Chanticleer', or red maple Acer rubrum.

Plant drought-tolerant trees such as valley oak Quercus lobata, blue oak Quercus douglasii, Japanese



Ceanothus' Ray Hartman'

pagoda tree *Sophora japonica*, or crape myrtle *Lagerstroemia*. A new favorite is the Chinese Fringe Tree *Chionanthus retusus*. You will need to have plenty of room if you are planting the oaks. An attractive smaller tree, known as the chaste tree *Vitex agnus-castus*, is also drought tolerant producing sprays of blue flowers.

Apply a top dressing of manure and/or compost to help your trees emerge from dormancy with lush leaves and flowers.

Plant easy-care and drought-tolerant shrubs such as, California lilac *Ceanothus* which comes in colors from almost white to deep purple/blue. *Ceanothus* can fill garden niches from low growing to small tree. Also consider heavenly bamboo *Nandina domestica*, tobira *Pittosporum tobira*, and western redbud *Cercis occidentalis*.

Prune and shape trees in late fall.

Garden Housekeeping:

- Be alert for frost warnings, succulents and citrus are susceptible to damage from heavy frosts. <u>Frost Protection for Citrus and Other Subtropicals</u>
- Sharpen spades, loppers, pruners, and your lawn mower blade. You can use a file or take your tools to a professional sharpener.
- Combustion lawn mowers should have an annual tune-up to reduce pollution. Consider switching to a battery powered lawn mower and battery powered blower.
- Clean, disinfect, and oil your tools, so they will be ready for pruning roses, trees, and shrubs from late fall to early spring.
- Keep birdbaths and feeders clean and full for migrating birds. Regular cleaning of bird feeders and water sources helps reduce the transmission of viral diseases such as the recent occurrence of Avian bird flu.
- Check out your local farmer's market for a colorful selection of fall decorations, including pumpkins, gourds, dried corn, and fall flowers.
- Keep a journal. Record your watering cycle information, pruning, spraying, and planting information. Make a list of garden improvements and ideas. Fall and winter are ideal times to research, design, and plan spring improvements to either hardscape or landscape.

• Collect seeds from your garden. Some vegetables such as the cucurbit family (squash, cucumber, melon, corn) easily cross pollinate so may not produce true to the parent plant the next season. Do not collect seeds you've planted from commercial packets labeled 'hybrid' they will most likely produce a sterile seed or no seed.

• Check out your favorite garden catalogs. Many tools available for gardeners are ergonomically designed to reduce stress on muscles and joints. It is time to think about ordering next spring's seeds and bare root plants (ornamental and vegetable).

Garden Fun:

- Make a fall wreath and table decorations from dried or fresh garden cuttings. Grape vines wrapped around a circular form, or simply wrapped around themselves, make an ideal basis for a seasonal wreath.
- Use a hollowed-out pumpkin or gourd as a vase.
- Plant succulents in a carved-out pumpkin or gourd for table decorations.

Do you have a question?

- Phone the Master Gardener Hotline (530) 666 8737
- E-mail your question to: mgyolo@ucdavis.edu

Things to do:

- UCCE Yolo County Master Gardener Fall Plant Sale will be held at Woodland Community College, 2300 Gibson Rd., Woodland, CA 95776 on Saturday, October 5 and Saturday, October 12 from 9 am 1pm on both days.
- Check out the Woodland Community College demonstration gardens.
- Take a walk in the <u>UC Davis Arboretum</u> for inspiration. Check the Arboretum website for their fall sales
- Visit the <u>Davis West Pond</u>, surrounded by a showcase of waterwise plantings
- Have a look at the Teaching Garden at the Winters Library.
- Opposite the Farmers Market in Davis, along B Street, is Central Park Gardens in Davis
- Visit the Honey Bee Haven at UC Davis
- Check the UCCE Yolo County Master Gardener website for more gardening information and detailed topics.



HOW TO CONTACT US:

Like us on Facebook: UCCE Yolo County Master Gardeners.

Check our website for FREE gardening publications:

http://ucanr.edu/yolomg.

Email questions: mgyolo@ucdavis.edu

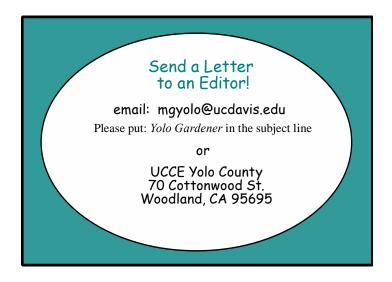
Telephone: 530-666-8143.

Questions about your garden? We'd love to help!



U.C. Cooperative Extension UCCE Master Gardeners of Yolo County 70 Cottonwood Street Woodland, CA 95695

The Yolo Gardener - Fall, 2024



STAFF

Jim Fowler, Managing Editor Deborah Cunningham Editor Jennifer Baumbach, Editor Jim Fowler, Layout



WRITERS

Lorie Hammond, Mike Kluk, Wilda Knoesen, Tanya Kucak, Michelle Haunold Lorenz, Lane Parker, Jalena Rusaw, Joy Sakai, Peg Smith

It is the policy of the University of California (UC) and the UC Division of Agriculture & Natural Resources not to engage in discrimination against or harassment of any person in any of its programs or activities (Complete nondiscrimination policy statement can be found at http://ucanr.edu/sites/anrstaff/files/215244.pdf)

Inquiries regarding ANR's nondiscrimination policies may be directed to John I. Sims, Affirmative Action Compliance Officer/Title IX Officer, University of California, Agriculture and Natural Resources, 2801 Second Street, Davis, CA 95618, (530) 750-1397.

This newsletter is a quarterly publication of the University of California Master Gardener Program of Yolo County and is freely distributed to County residents. It is available through the internet for free download:

Jennifer Baumbach, UCCE Master Gardener Program
Coordinator Yolo and Solano Counties

http://yolomg.ucanr.edu/