UNIVERSITY OF CALIFORNIA
Agriculture and Natural Resources
UC Master Gardener Program

Fostering awareness of successful, research-based gardening practices within our communities.

We are the UC Master Gardeners of Amador and El Dorado counties. Our eNews is issued quarterly, providing information and articles relating to the gardening experience in our areas. Articles in this issue include: "Three Sisters" Gardening, Victory Gardens, Sherwood Demonstration Garden, Solarize your Garden, Firewise Landscaping, and the new EDC Master Gardener Pinterest site.

40 years of volunteer service!

In 1980, the first UC Master Gardener Programs were established in Riverside and Sacramento counties. The **UC Master Gardener Program** received official recognition as a statewide program in 2002 and currently operates in 52 of California's 58 counties. Since the program's inception, volunteers have logged more than 5 million hours in service to California gardeners.

In the words of our UC Master Gardener Program Director, Missy Gable: “Our volunteers continue to set us apart. With the continued support and commitment from volunteers, UC, and local communities, the program will continue to grow and support gardeners across the state.”

"Three Sisters" Gardening

by Betty Olson-Jones
UCCE Master Gardener of Amador County

For the second year, Master Gardeners of Amador County will have a "Three Sisters" plot in our Teaching Garden. Many have asked what a "Three Sisters" garden is, and I was just as curious last year when my son Kevin Jones planted our first one. After he passed away last July, I volunteered to keep this new "tradition" going and find out more about its history and significance.

The Three Sisters -- traditionally corn, beans, and squash -- were traditionally planted by the Iroquois Nation and other indigenous people in Northeast America and Canada. These three crops could be dried and provide food throughout the year, an important consideration. There are other traditional crops like sunflowers and amaranth that are also considered "Sisters." They provide shade to the other Sisters, attract pollinators, give additional space for beans to climb, and contribute nutritionally to a balanced diet.

In our teaching garden, we are planting the traditional corns, beans, and squash. These three crops complement and supplement each other: as the corn grows tall it acts as a support for the beans, which fix nitrogen in the soil and help support the corn in the wind. And the large leaves of squash shade the soil, protecting it from drying out, holding moisture so all three plants thrive. This tradition reflects the indigenous belief that all living things rely on each other for survival, and it allowed native people to produce enough food to support large villages of up to 1,000 people for 10-20 years. Nutritionally, corn, beans and squash also complement each other and help provide a complete diet. Corn provides carbohydrates, dried beans are rich in protein and amino acids that corn doesn't have, and squash contributes different vitamins and minerals than corn and beans.

There are many variations on layout for a Three Sisters garden. In Kevin's plot last year the corn grew taller than the shade cloth covering the garden, so we chose dwarf corn this time around. This year's plot is in a traditional style with three mounds, with a few kernels of Blue Jade corn in each (see photos). It's important to plant in order from corn to beans to squash so the plants mature together without growing at another Sister's expense. Now that the corn shoots are a few inches tall, it's time to plant pole beans around them. I'm trying "Purple Podded Pole Beans" this year. When they're ready to send out tendrils, the corn will be tall enough to support them. A few weeks later, I'll plant Lakota squash seeds around the base of the mounds. By then the corn and beans will have grown enough not to be overshadowed by the squash leaves. This variation works well for dry corn and dry beans since all the crops will be ready for harvest at the same time.

However, if you want to grow sweet corn and snap beans, you might try an alternative method so you don't have to step across your squash to harvest your fresh produce. One idea would be to plant rows of corn with beans planted in between, and a row of squash along one side. A useful side effect is that this helps with pollinating your corn. If you have a lot of room, you could plant the three in linear plots: squash, corn, beans. Rotate them each year so the corn and squash get the benefit of the beans' nitrogen-fixing in the soil.
I hope you're inspired to try a Three Sisters garden yourself!

Victory Gardens – Something Old Is New Again

by Robin Stanley
UCCE Master Gardener of El Dorado County

Have you ever thought of gardening as a patriotic endeavor? If so, it’s probably because you are old enough to remember hearing about the Victory Gardens of the last century. But Victory Gardens aren’t just a thing of a past. In a recent press release sent to California Master Gardeners, Rose Hayden-Smith, a UCCE farm advisor from Ventura County, encourages all Californians to bring back the Victory Garden. She provided lots of great information, including a bit of the history of Victory Gardens and some contemporary rationales for encouraging people to give them a try.

Victory Gardens were developed as a way to expand the production of fresh produce so there would be enough for the troops and the people at home. In an era of food rationing, it allowed people to supplement their food supply and support their country.

Today, according to Hayden-Smith, “The American way of life is imperiled by more than foreign wars. The country is facing ever rising fuel and food prices, the threat of global warming, and a high rate of obesity.” She has adopted a motto from a World War II poster, “*The seeds of victory insure the fruits of peace.”*

But Hayden—Smith isn’t just borrowing from the past; she’s even updated the title and the focus. On the **Victory Grower website** she has created for UCCE, she includes a definition of “good food” provided by the Kellogg Foundation’s Good Food Movement:

- Healthy – because it is fresh and minimally processed
- Green – because it’s produced and distributed in a way that supports a healthy and sustainable environment
- Fair – because it generates an equitable wage for those producing and selling it
- Affordable – because access to good food should be a right, not a privilege.

In an era when eating locally and buying organic and sustainably-grown food is gaining in popularity, there is no better way to provide healthy and affordable food than to grow it yourself. Whether in an unused back corner of your lot, in containers on your deck, or in a local community garden plot, it’s really not hard to find a place to grow your own food.

There has been a resurgence of interest in vegetable gardening in recent years. As strange as it may seem, it’s not just about saving money or even providing safer food. Hayden-Smith shares just some of these additional benefits of growing your own:

- Improves students’ academic performance
- Increases the likelihood children will eat vegetables
- Produces fresher, better-tasting vegetables than are available in grocery stores
- Provides an opportunity for physical activity.

Chances are that most readers of this column are already growing vegetables. In fact, for many of our loyal readers, their challenge is not in finding a place to garden, it’s figuring out what to do with the excess tomatoes and squash that have finally started to fill bushel baskets. So if you find yourself in that position, another patriotic thing to do is to share your food with those less fortunate. If you have produce you would like to donate to a local food closet, check out the website for our local **Plant a Row for the Hungry** effort. It lists locations and hours for the El Dorado Food Bank, as well as many food closets and other worthwhile outreach programs that would love to have your extra produce.

You might be wondering why it makes sense to be promoting a Victory Garden so late in the summer. If so, you might also be surprised how many vegetables you can easily grow here in El Dorado County during the cooler months of fall and winter. A recent Master Gardener class on cool season gardening reminded gardeners that August and September are prime planting months for many veggies, especially the cole crops, like broccoli and cabbage, leaf crops, such as spinach and lettuce, and root crops, like radishes and carrots. Master Gardeners have a wonderful resource, the *Foothill Vegetable Guide*, which provides guidelines on the best planting and harvesting times for a variety of vegetables. This laminated guide is available for $5.00 at our office, located at 311 Fair Lane in Placerville. If you would like to purchase one, email: rkcleveland@ucanr.edu.

The Victory Grower website promotes "A garden for everyone; everyone in a garden." Master Gardeners have all the resources you need to help you become a Victory Grower. We’re here to help! Let’s start our own gardening movement here in El Dorado County.

Calaveras, Tuolumne, Amador and El Dorado UCCE Master Gardeners have joined together to create a Victory Gardens 2020 Facebook Group for our area. It is a place to connect with other local veggie and herb growers, get information, find resources and share your progress, trials and successes. We invite you to join us at: **Central Sierra Victory Gardens 2020 on Facebook**.

Sherwood Demonstration Garden

Sherwood Demonstration Garden Update

by Sue McDavid
UCCE Master Gardener of El Dorado County

Wow, how things have changed since March! The garden was due to reopen to the public on April 1 and then the Covid-19 quarantine hit, so pretty much everything came to a screeching halt. We still are not able to hold any in-person public education events, but the garden finally was able to reopen to the public on June 12. However, due to Covid-19

precautions, only 8 people are able to visit the garden at any one time; no large groups for docent-led tours can be accommodated. So, if you plan to visit, the garden will be open on Fridays and Saturdays from 9 a.m. to noon; please note also that the college parking lot is not requiring the $2 parking fee for summer and fall.

The quarantine hit right when spring was around the corner and for gardeners, that is one of the busiest times of the year. There was a lot to be done in the garden to spiff things up for the public, but with prior approval from UCCE, a small group of essential MG workers kept the garden looking good until all MGs could get back to work. Many, many thanks go to those MGs.

If you visit, you will notice the construction of our new pergola/outdoor classroom where pavers for the flooring are being placed at present. Electrically operated shades are being installed at present with electricity going in soon thereafter, and equipment for PowerPoint presentations will be installed after that. Permanent seating will also be available. Our plan is to hold as many of our public education classes/events as we can in the pergola. This is one of our most ambitious projects in the garden and we can't thank Paul Brink, Cheryl Turner, Sheri Burke and her husband, Mike, for all their hard work on it; without Mike's equipment and know-how, this structure could not have been built.

All of the individual gardens are looking beautiful at the moment and we MGs in El Dorado County are anxious for all to visit. Come and see us!

Solarize Your Garden - A Wonderful Non-Chemical Method for Controlling Pests in Your Garden

by Susan Price
UCCE Master Gardener of Amador County

The intense heat that we all complain about during the summer months creates the perfect opportunity to solarize our gardens and landscapes. The method involves heating the soil by covering it with clear plastic for four to six weeks, allowing the sun's radiant energy to be trapped in the soil, heating the top 12 to 18 inches. When properly done, the top layers of soil will heat up to as high as 140 degrees Fahrenheit, temperatures that are lethal to a wide range of weeds, weed seeds, disease-causing organisms (pathogens) and nematodes.

Naturally, the effect of solarization will be greatest at the surface of the soil. Organisms found in the first six inches are controlled the best with decreasing effectiveness at deeper soil levels. Although some pests may be killed within a few days, it usually takes 4 to 6 weeks of exposure to full sun during the summer to ensure control of many others. July and August are ideal months for solarizing, although a month or so earlier or later can work if the weather stays warm.

The degree to which various pests can be controlled is related to the intensity, depth and duration of the elevated soil temperatures, as well as the sensitivity to treatment of your target pest. Soil solarization controls many of the annual and perennial weeds in California. Annual bluegrass, annual sowthistle, henbit and pigweed, along with many others weed species, are susceptible to solarization. But, solarization is not going to be as effective with weeds that have deeply buried root structures (corms, tubers and rhizomes) that can reprout. Rhizomes of bermudagrass and johnsongrass may be controlled if they are close to the soil surface. Control of purple and yellow nutsedge, as well as field bindweed arising from rhizomes and some clovers, can be inconsistent.

Continue reading the Solarize Your Garden...article

Firewise Landscaping

Make a Non-Combustible Zone the 'Foundation' of Your Firewise Landscaping

by Susie Kocher
UCCE Forestry and Natural Resources Advisor

Do you have foundation plantings around your house? Many of our homes do – either we planted vegetation close to the house's foundation or it was there when we bought the home. This vegetation is a legacy of the concept of 'foundation planting' promoted by landscapers and landscape architects as a way to frame a house and anchor it to the site. A quick review of landscaping websites will reveal that planting trees, shrubs, vines, grasses, and ground covers around a house is still promoted to create a transition between the built environment and the rest of the garden.

Figure 1. Vegetation has been separated from the house and its combustible siding by installation of an asphalt walkway.

Unfortunately, in a fire prone region like ours, this strategy can increase the risk of your home igniting in a wildfire. Up to 90% of homes that burn in wildfires are ignited by embers, according to the Insurance Institute for Building and Home Safety (IBHS). During a wildfire, embers rain down on a house and start small fires in vegetation. If that vegetation is in contact with the combustible siding of your house, then the small fire started in foundation shrubs can ignite the siding and eventually engulf the house. For a video of this effect in action, see the **IBHS website** .

In order to remove this risk, IBHS and other educational organizations are advocating instead for the installation of a 5-foot non-combustible zone around the home and all attached structures including wooden decks.

Current law

Current **defensible space law** requires maintaining 100 feet of defensible space around a home or the property line, whichever comes first. El Dorado county has passed a **new vegetation management ordinance** that helps it to enforce existing defensible space law.

Current interpretation of the defensible space law encourages homeowners to maintain a 'lean, clean and green' landscape between 0 and 30 feet from the home and a 'reduced fuel landscape' between 30 and 100 feet from the home. However, this interpretation doesn't incorporate new understandings about the critical role that the zone closest to the house plays in ignition during fires.

How to install a 0 to 5 foot non-combustible zone

To reduce the chance that ignition will occur near your home and flames will reach the building, install a non-combustible zone starting at the main structure and extending out five feet. This zone should not have any combustible material, such as plants, debris, firewood or other stored items.

Instead, consider installing hardscaping in this zone. This can be achieved by installing hard surfaces such as stone or concrete walkways, or use of noncombustible mulch products (e.g., rock mulch). ***See Figures 1 through 3.***

If vegetation must be kept in this zone, it should consist primarily of irrigated lawn and low-growing herbaceous (non-woody) plants. Shrubs and trees, particularly conifers, are not recommended for use in this zone.

Risky locations

Plants adjacent to combustible siding and foundation vents, as well as plants under or next to windows and soffit vents or interior corners, present the greatest hazard. Plants ignited in these locations can ignite the home by allowing flame to contact it, throwing embers into vents or through radiant heat. Do not plant in these locations. ***See Figure 4.***

Risky plants

Any plant can be a risk, but some plants are riskier than others. Woody shrubs should be removed, especially conifers such as ornamental junipers. Fire fighters call these shrubs 'little green gas cans'! Large trees on the other hand, are more difficult to ignite, especially if their limbs have been trimmed back to at least 10 feet from the home. ***See Figure 5.***

Hopefully with a few strategic changes in your near home zone, you can make fire safety the 'foundation' of your landscaping.

References:

- **Embers Cause Up to 90% of Home & Business Ignitions During Wildfire Events**
- **100 Feet of Defensible Space is the Law**

Figure 2. A stone pathway and rock mulch has been installed to create a non-combustible zone. (Photo by El Dorado County MGs)

Figure 3. Rock mulch has been extended around the base of the house. Stone facing at the base of the house reduces the risk of having combustible wood siding.

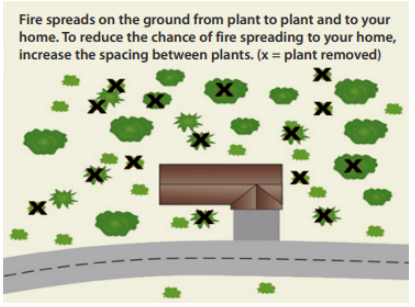

Figure 4. The riskiest locations for planting. The inside corner of the house is where embers 'eddy out' and collect during high wind events. (Photo courtesy of UCANR **Home Landscaping for Fire** publication)

- [El Dorado County Vegetation Management]

Figure 5. A cigarette thrown out the window into a 'foundation planting' of ornamental junipers burned this apartment in Reno (Photo courtesy of the University of Nevada CE [Living with Fire] program)

The El Dorado County Master Gardener Pinterest Site

by Kit Smith
UCCE Master Gardener of El Dorado County

Pinterest is a social networking website, a gathering place for people online. At Pinterest, people search keywords and photos to find inspiration and ideas for their interests and hobbies. Users 'pin' photos that represent and link to websites to add to their own subject matter Boards. Our Pinterest website address is **https://www.pinterest.com/MGofEDC**.

Our Pinterest site aligns with the purpose of Pinterest, and the goals for our site match our Mission, which is to share University of California (UC) research-based information on gardening, home horticulture and pest management with local residents.

On our site are 23 Boards that pictorially display who are Master Gardeners (MGs) and the University of California Agriculture and Natural Resources (UCANR), Sherwood Demonstration Garden (SDG) and each separate garden within SDG, and Plant a Row for the Hungry. Additionally, we present Boards to publicize and provide the advanced registration information of each Zoom public education class. We make those Boards 'secret,' unseen, after a class has completed. When visitors click to open our Boards, they see pins which link to our home website, farm advisors, UC Intergrated Pest Management, UCANR publications, our booth at the El Dorado Hills Farmers Market and our virtual office open to take questions. Many of the photographs on the Boards have been kindly provided by El Dorado County MG Audrey Brandt.

Visitors to our Pinterest site can choose to 'follow' us; we currently have 30 Followers. We follow 20 other MG, UCCE and UCANR sites. Visitors and Followers are connected through their common interests in our mission.

Our Pinterest is also linked to our Instagram and Facebook sites, both MG and SDG. Additionally, all our social media sites are mentioned in articles published in local newspapers. Social media, publications and the Central Sierra e-newsletter are MG Communications projects.

Please visit **https://www.pinterest.com/MGofEDC** and follow us. Outreach is the key for all our social media platforms. The more local residents and home gardeners who are knowledgeable about our program and the abundance of information available to them the more our environment benefits.

Master Food Preservers on Facebook

- [UCCE Master Food Preservers of Amador/Calaveras County]
- [UCCE Master Food Preservers of El Dorado County]

Master Gardeners on Instagram

- **#uccemastergardenerseldorado**
- **#sherwooddemonstrationgarden**

Master Gardeners on Facebook

- [UCCE Master Gardeners of Amador County]
- [UCCE Master Gardeners of Calaveras County]

Contact Your Local Master Gardener

Amador County

209-223-6838
Office hours: 10 am–Noon Tuesday–Thursday
Email
Have a gardening question?
Ask a Master Gardener

El Dorado County

530-621-5512
Office hours: 9 am–Noon Tuesday–Friday
Email
Have a gardening question?
Ask a Master Gardener

Sign Up Online

Not on our e-newsletter distribution list yet? **Know someone who would like to receive our**

- [UCCE Master Gardeners of El Dorado County]
- [UCCE Master Gardeners of Tuolumne County]
- [UCCE Master Gardeners of Lake Tahoe]

Master Gardeners on Pinterest

- [UCCE Master Gardeners of El Dorado County]

[newsletters and notifications on classes and events? Sign up online.]

Free Pest Notes

Free Pest Notes are available on a variety of topics. For more information, call or email your local UCCE Master Gardener office or explore the Pest Notes on the [UC Statewide Integrated Pest Management (IPM) website].

Master Gardener of Amador County Classes

August 15, 2020 Cool Weather Crops - Online
Register in advance for this meeting:
https://ucanr.zoom.us/meeting/register/tJIpdO-tqD4jH9GhxjirnmH026uO7nV5-pn2
After registering, you will receive a confirmation email containing information about joining the meeting.

September 12 Summer Fruit Tree Pruning - off site: email to sign up mgamador@ucanr.edu

October 10 Growing and Maintaining Apple & Pear Trees - check website for meeting details.

Master Gardener of El Dorado County Classes

See website for class information.

Accessibility: Should you need assistance or require special accommodations for any of our educational programs, please contact us at 530-621-5502.

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UCCE Master Gardeners of Amador County and El Dorado County

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