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## Pokeweed: A giant of a weed

By Scott Oneto, Farm Advisor,  
University of California Cooperative Extension

This time of year, I often get asked, “what is that huge weed growing in my yard with dark black berries and big green leaves?” **Pokeweed!**

I personally find this plant quite interesting. As a native to portions of the United States, it turns out this plant has a diverse history, and in recent years it is being studied in cutting edge medical research and energy technology. *Have I perked your interest? If so read on.*

American pokeweed (*Phytolacca americana*) is a robust, non-woody shrub that is weedy throughout much of California. Native to the eastern United States from Maine to Wisconsin, south to Texas, Mexico, and Florida, pokeweed now occurs throughout much of North America. It is sometimes cultivated as an ornamental or garden vegetable, however more often it's considered an undesirable weed. Pokeweed is found in riparian areas, oak woodlands, forest edges, fence rows, forest openings, pastures, under power lines, disturbed areas, vineyards, orchards, cultivated fields, parks, and ornamental landscapes.

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### SUMMER 2018

#### Contact Your Local Master Gardener

##### Amador County

209-223-6838  
Office hours: 10 am–Noon  
Tuesday–Thursday  
[mgamador@ucanr.edu](mailto:mgamador@ucanr.edu)

##### El Dorado County

530-621-5512  
Office hours: 9 am–Noon  
Tuesday–Friday  
[mgeldorado@ucanr.edu](mailto:mgeldorado@ucanr.edu)

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#### 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. To explore the Pest Notes on the UC Integrated Pest Management (IPM) website, go to [www.ipm.ucdavis.edu](http://www.ipm.ucdavis.edu)



► *Pokeweed... (continued from page 1)*

Also called poke salad, poke sallet, pokeberry, inkberry, American nightshade, American spinach, soko, and pigeonberry, the plant's uses are as diverse as its names. Pokeweed has an extensive history for being used as a food, medicine, herb, dye for clothing, ink for writing, colorant for wines, and much more. Although used for food, extreme caution should be used, as the entire plant is poisonous causing a variety of symptoms, including death in rare cases.



## IDENTIFICATION

Pokeweed is an erect herbaceous perennial shrub, 4 to 10 feet tall and 3 to 5 feet wide, with large leaves and showy purple-black berries. It has a smooth, stout, purplish stem that branches extensively and can reach up to 2 inches in diameter. The bright green, elliptic leaves are smooth, tapered, and alternate on the stem. Leaves can be large, reaching up to a foot in length and 4 to 7 inches wide and have a strong unpleasant scent when crushed. The purple berries hanging from the bright green leaves and red stems in late summer are the most distinguishing characteristic of pokeweed.

## BIOLOGY

Reproduction is by seed and a single plant can produce 1,500 to 7,000 seeds annually. The seeds are large, lens-shaped, glossy, and black. Seeds can remain viable in the soil for up to 50 years. Pokeweed berries serve as an important food source for many species of birds, including robins, cedar-waxwings, warblers, pigeons, and many others. New populations of pokeweed are spread primarily by birds. Seeds germinate in mid spring through early summer when soils are warm and moist. Germination is followed by rapid growth.

Pokeweed flowers in mid-summer. Flowers are borne in white-pinkish clusters that hang from the branches. Flowers consist of 5 white sepals, no petals, and are erect when in bloom and begin to droop as fruits develop. Flowers are self-fertile resulting in high fruit set. Immature berries are dull green, turning glossy purple-black at maturity in late summer.

Pokeweed's above-ground growth dies back after the first fall frost, leaving large skeletons that breakdown over the winter. In the spring, plants resprout from a large fleshy taproot.

## IMPACT

Pokeweed is an occasional weed throughout much of the United States and is increasing in abundance in some areas. Once seen as a wildland weed, pokeweed is now becoming more common as an urban and landscape weed. All plant parts, especially the roots, contain numerous saponins and oxalates and can be fatally toxic to humans and livestock when ingested raw or with improper preparations. Severe digestive tract irritations are the primary symptom.

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## HISTORICAL SIGNIFICANCE

American pokeweed has a long history in the United States. A wide variety of chemicals have been isolated from pokeweed that have medicinal properties and Native Americans have used the plant in herbal remedies for centuries. During the Civil War, soldiers wrote letters using the ink from American pokeweed berries, and the pigment is still used occasionally to dye fabrics. Pokeweed has also been a favorite staple of country cuisine since



colonial times, when tender young shoots were boiled and eaten as “poke salad.” Resembling canned spinach, “Poke salad” or “Poke sallet” was once available commercially and still inspires “Poke” festivals across portions of the East Coast and the Deep South. American singer-songwriter and guitarist, Tony Joe White is best known for his 1969 hit song, “Polk Salad Annie,” that was performed by Elvis Presley and Tom Jones. The shoots proved so popular to the first European explorers to the New World, it is documented that early Europeans took the sprouts back to Europe where they were equally enjoyed.

While Pokeweed has been used in folk medicine to treat numerous health problems and is still used in many herbal remedies today, medical research has not shown whether pokeweed is indeed effective in treating many of these ailments. Recently a protein in the plant—“pokeweed antiviral protein”—shows promise in being used in treating cancer, herpes, human immunodeficiency virus (HIV), and for conferring broad spectrum disease resistance in agricultural crops.

Researches have also been examining pokeweed for other uses. The dark red dye made from pokeweed is currently being tested to coat fiber based photovoltaic solar cells. The dye acts as an absorber, helping the cells tiny fibers trap more sunlight to convert into power. This fiber cell technology can produce as much as twice the power that current flat-cell technology can produce, and the dye made from pokeweed is much less expensive than a polymer dye.

**What’s in a name?** The scientific name *Phytolacca americana* comes from the Greek word *phyton* meaning plant and *lacca* meaning crimson lake in reference to the deep reddish-purple fruits. The second term, *americana* is in obvious reference to this plant being native to America. The common name poke is derived from *puccon*, *pocan* or *poughkone* (from an Algonquin Indian name for this plant). Berries were once used to make ink, hence the sometimes-used common name of inkberry. An additional common name is poke sallet, local term meaning salad.

For more on management:

<http://cecentralsierra.ucanr.edu/Articles/Common Pokeweed/>

All photos from J.M. DiTomaso and E.A. Healy, *Weeds of California and Other Western States*, 2007.

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Scott Oneto, is the Farm Advisor and County Director for the University of California Cooperative Extension Central Sierra. He can be reached at [sroneto@ucanr.edu](mailto:sroneto@ucanr.edu) or 209-223-6834. ♡

## Get Answers to Your Gardening Questions Online

[http://cecentralsierra.ucanr.edu/Master\\_Gardeners](http://cecentralsierra.ucanr.edu/Master_Gardeners)

- Information about UCCE Master Gardeners and how to become one
- Calendar of Master Gardener events including a list of public classes
- Useful links to gardening websites
- Home gardening publications

### Got a specific question?

Ask a question through our online form:

[Ask a UCCE Master Gardener of Amador County](#)

[Ask a UCCE Master Gardener of El Dorado County](#)

Or just email us!

Amador: [mgamador@ucanr.edu](mailto:mgamador@ucanr.edu)

El Dorado: [mgeldorado@ucanr.edu](mailto:mgeldorado@ucanr.edu)



## Shade Gardening in a Mediterranean Climate

*By Susan Corey-McAlpine*  
*UCCE Master Gardener of El Dorado County*

There is possibly no more perfect gardening activity for these hot summer afternoons than planning a shade garden, a haven of private coolness. The gardening climate of El Dorado County mimics that in Chile, Australia, and parts of the Middle East, where we have the “Mediterranean climate” of wet winters and hot, dry summers. Our gardens are usually “dry” spots, growing in a specific cycle of hot and cold. To succeed, the shade garden must be preplanned and well thought-out, with preparations for a fall planting. Planting in the fall allows new plants to expand their roots in warm soil and be more ready for spring growth than if you wait for spring.

What should be your considerations for planning the shade garden? First is each plant’s exposure to sun, defined in one of four categories.

- ▶ Full sun is more than 6 hours daily.
- ▶ Part sun is 4 to 5 hours daily
- ▶ Part shade is 1 to 2 hours of sun exposure daily.
- ▶ Full shade is less than 1 hour daily.

A plant’s shade requirements can be found on the nursery hangtag or in a general gardening book. Note that shade is also related to the angle of the sun—determined by the time of year—and that canopy shade from a deciduous tree is provided only in certain months. And note that some shade is static—as at the base of your house—while some dappled sun from a light canopy casts moving shade on the garden.

Secondly, select plants depending on their need for acid or alkaline soils and group them accordingly. You might want to pair the shallow-rooted maple with like-rooted rhododendrons. And speaking of roots: don’t forget to tread lightly (or not at all) at the base of oak trees. Oaks don’t like their roots crowded or damaged with surface plantings, and oaks won’t survive any additional water required by shade plants. We would recommend not adding a layer of soil deeper than 2 inches over oak roots. Adding soil might nurture shade plants under an oak canopy but it is not helpful to the oak. And ultimately, we probably would choose to protect our heritage oaks rather than to indulge the shade garden’s plants. A thought: use planters instead for shade plants under oaks.

Thirdly, don’t assume that your shade garden must have uniform green foliage and don’t feel resigned to an expanse of “no color.” There are a wealth of sizes, shapes, textures, and shades of greens and colors in shade-loving plants: examples are Bear’s breech (*Acanthus mollis*) with large interesting leaves and spikes of white bloom, the laciness of a columbine (*Aquilegia*) with its geometric, dual-colored flowers, and the dark gloss of azalea leaves and elegant spring bloom. Search a local nursery for drought-tolerant rhododendrons (who knew?) and other shade plants specially propagated for our Mediterranean climate.

I hope that I have sparked your interest and enthusiasm for the shade garden. Hungry for more information? Check out the archived articles at our website (<http://ucanr.edu/edmg>). UCCE Master Gardener Merry Campbell, who chairs the Shade Garden at the Sherwood Demonstration Garden in Placerville, has written several articles which expand on this topic. The Sherwood Demonstration Garden is open to the public with sixteen distinct gardens full of ideas for the home gardener. Further, join us for a special treat when UCCE Master Gardeners Merry Campbell, E.J. Kipping, and I will be presenting a free public class, “Shade Gardening in our Mediterranean Climate,” on Saturday, August 25, 9 a.m. to noon, at the Government Center, Building C Hearing Room, 2850 Fairlane Court in Placerville. We will have slides and lists of shade plants for every need and answers for all your questions. ♡



# Come Grow With Us!

## UC Master Gardener Training Begins January 2019!

### Learn It!

- Attend the initial 15-week training series
- Attend regular continuing education classes
- Attend monthly general meetings

### Grow It!

- Get your hands dirty by volunteering in the teaching garden or Heritage Rose Garden Project
- Work with area youth in a school garden or participate in farm field trips
- Propagate plants for the annual plant sale

### Teach It!

- Educate residents at farmers markets, workshops and events
- Volunteer at the Master Gardener help desk
- Lead or assist with public education classes



*Do you enjoy getting your hands dirty? Do you enjoy sharing your knowledge?  
Do you want to meet new people who share your gardening passion?*

Then you may be the ideal candidate to become a **UCCE Master Gardener of Amador County**. You will be trained by the University of California Cooperative Extension in science-based horticulture and then volunteer to teach others on sustainable gardening practices.

#### **15-Week Master Gardener Volunteer Training**

*Topics include: botany, soil, plant pathology, home orchards, entomology, water, pests, landscape trees, composting, plant I.D., propagation and so much more!*

*Classes are held in Jackson on Tuesday's beginning in January*

*Cost: \$200 (includes books & materials)*

*Interested? Sign up on our interest list at: <http://ucanr.edu/becomeamastergardener>*

*Orientation October 16 at 5 p.m. or October 30 at 11 a.m.*

*\*Attending one of the two orientations is mandatory*

Questions? Contact: [rkleveland@ucanr.edu](mailto:rkleveland@ucanr.edu) or (530) 621-5528



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UCCE Master Gardener Program  
Amador County

## Spotlight on Cardoon



*By Carolyn Shaw*  
*UCCE Master Gardener of El Dorado County*

If you have recently walked through the vegetable area in the Sherwood Demonstration Garden (Placerville) or Amador Master Gardener Teaching Garden (Jackson) you'll see a lot of ripe and delicious vegetables. You may come across an unusual large plant that sort of looks like celery but the wrong color—what is that big, spiky strange thing, is it really a vegetable and how do you eat it? You are looking at a cardoon.

*What on earth is a cardoon, anyway?*

A thistle-like plant, cardoons (also called cardone) grow abundantly in the Mediterranean and are usually in season from November to March. A close relative to the globe artichoke, the cardoon looks a bit like celery on steroids, growing as tall as six feet. It has thorny, silver-grey leaves and pompom-like purple blossoms. It's not exactly a friendly-looking vegetable and it probably won't make you salivate at first sight. Unless, of course, you know what a treasure for the palate lies underneath that protective garb.

Just like with its cousin the artichoke, a little bit of work is needed to get the succulent part of this plant on your plate. But unlike artichokes, it's not the blossoms we're after, but the stalks. Their delicate artichoke-like flavor is as refined as it is addictive.

Once you've trimmed and peeled the stalks, it's wise to blanch them in order to remove their sometimes considerable bitterness. I also find that adding a little lemon juice along with salt to the blanching water brightens up the cardoons' delicate flavor.

Cardoons lend themselves to many wonderful dishes: gratins, bagna cauda (a traditional Piedmont dish of barely blanched cardoon stalks served with a garlicky dipping sauce), fritters, stews (gently braised on their own or with other vegetables) and soups. Explore cardoon recipes and you'll discover something precious, even a bit mysterious, in this magical plant. ♡

## Sherwood Demonstration Garden Update



*By Sue McDavid*  
*UCCE Master Gardener of El Dorado County*

Lots of work has gone on in the Sherwood Demonstration Garden this summer. Ten yards of mulch were hauled and spread in the orchard, which will go a long way in keeping the weeds down. Fruit on most of the trees is abundant this year and enjoyed by many. A group of UCCE Master Gardener Volunteers began planting annuals in the area behind the kiosk and the two pots on the patio were planted (*see photo above*). It will be nice to welcome visitors with some color as they enter the garden.

Visitor count was down a bit in July, most likely due to the heat we are experiencing. Now that things are cooling a bit, please come and visit us. There are many exciting things going on in the garden. Our children's garden has a new tic-tac-toe board and a giant pumpkin that is sure to enchant young and old alike.

If you have not visited the Sherwood Demonstration Garden, please come and find us at 6699 Campus Drive in Placerville. We're behind Folsom Lake College next to the observatory. (*Note: the college does charge \$2 for parking.*) We are open 9 a.m. until noon on Friday and Saturday through October and then open monthly on 2nd Saturdays for hands-on learning in the vegetable garden. We also do private group tours upon request, contact [mgeldorado@ucanr.edu](mailto:mgeldorado@ucanr.edu). ♡

# SUSTAINABLE ORGANIC GARDENING WORKSHOP

*A workshop offered by the UCCE Master Gardeners and UCCE Master Food Preservers of El Dorado County in collaboration with the Shingle Springs Band of Miwok Indians*



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## Native Land Management • Sustainable Soil Pests and Pollinators • Composting Seed Saving • Food Preservation

**Keynote Speaker • Scott Oneto**

UCCE Central Sierra Director, Farm Advisor and owner of Oneto Family Farm

*Save  
the  
Date*

**Saturday, Feb. 23, 2019  
8:30 am to 4:00 pm**

Shingle Springs Rancheria  
5281 Honpie Road, Placerville

**Registration Deadline  
Saturday, Feb. 9 • \$25**

Includes class handouts, samples,  
and a light bag lunch with cold drink

**Register by Jan. 15 to receive a free gift!**

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*For More Information or to Register:  
<http://mgeldorado.ucanr.edu> or (530) 621-5502*



Should you need assistance or require special accommodations for any of our educational programs, please contact us at 530-621-5502. The University of California, working in cooperation with County Government and the United States Department of Agriculture. The UC Division of Agriculture & Natural Resources (ANR) prohibits discrimination or harassment of any person in any of its programs or activities. Our nondiscrimination policy statement can be found at <http://ucanr.edu/sites/anrstaff/files/192438.pdf>.



# Free! PUBLIC EDUCATION CLASSES

Classes are from 9 am to Noon, unless otherwise noted.

Please call ahead or check online to confirm locations.

Click on the class title for the option to schedule an email reminder for the class.

## Amador County

Click on class title for more information.

Questions? Call 209-223-6838.

### Aug 25 Annual Tomato Tasting Event

If you are like most gardeners, tomatoes are number one in your heart. Most of us eagerly anticipate the first delicious fruit of the season. We are all looking for the perfect tomato. Saturday, August 25th is your chance to put your tomatoes to the ultimate test! The UCCE Master Gardeners of Amador County are sponsoring a tomato judging and tasting contest at the Sutter Creek Farmer's Market located on the corner of Main Street and Gopher Flat Road. Bring at least one washed tomato of each variety (at least five cherry tomatoes) to the Sutter Creek Farmers Market between 8:30 am and 9:30 am on Saturday, August 25th. The judges will begin their tasting at 10:00 am and announce their favorites by 11:30 am. Prizes will be given for the biggest, as well as best tasting red, non-red, and cherry tomatoes. Our fantastic judges will include Sue Mosbacher - Program Representative UCCE Master Food Preservers, Bill Tarchala - Competition Organizer, Amador Co. Fair, National Beer Judge, Mary Pulskamp - Rosebud's Restaurant, Farm to Fork, Jackson. Questions? Send an email to Marie at [loretta@comcast.net](mailto:loretta@comcast.net).

### Sep 8 Summer Fruit Tree Pruning

Check website for more information as it becomes available. Please call 209-223-6838 for the off-site location for this hands-on pruning class taught by UCCE Master Gardeners.

### Oct 6 Living in the Forest

Check website for more information as it becomes available. Location: Amador County GSA Building, 12200-B Airport Road in Jackson.

### Oct 20 Soils – Composting & Vermiculture

Check website for more information as it becomes available. Location: Amador County GSA Building, 12200-B Airport Road in Jackson.

## El Dorado County

Click on class title for more information.

Questions? Call 530-621-5512.

### Aug 25 Shade Gardening

Don't fret about having shade garden areas. Attend the shade gardening class taught by UCCE Master Gardeners Merry Campbell, Susan Cory-McAlpine and EJ Kipping and find out that shade gardening is not a problem but instead is an enjoyable and challenging garden opportunity. Location: Government Center Hearing Room, Building C, 2850 Fairlane Court in Placerville.

### Sep 8 2nd Saturdays with Barry – Open Garden Day

A lot of things are happening in the summer vegetable garden. This month's topics include planting onions, garlic, shallots, and cover crops. **Time: 9:00 am to 11:00 am.** Parking fee: \$2.00 (see kiosks in college parking lot). Location: Sherwood Demonstration Garden, 6699 Campus Drive in Placerville (behind Folsom Lake College, El Dorado Center).

### Sep 22 Starthistle

Join UCCE Master Gardener Steve Savage to learn about this invasive weed that has taken over large portions of California's range land and urban landscape. Learn about its origins, how it moves, why it is so difficult to control, how to overcome these difficulties, control methods, and how to design an effective control program. Location: Government Center Hearing Room, Building C, 2850 Fairlane Court in Placerville.

### Sep 29 Native Gardens/Class Tour

Do you love wildlife, pollinators, and birds, and would like to enjoy their activities in your landscape? Are you ready to lower your water bill, and spend less on fertilizers and pesticides as well? UCCE Master Gardener Alice Cantelow, will teach you how to choose and add colorful, easy-care native plants to your garden. Parking fee: \$2.00 (see kiosks in college parking lot). Location: Sherwood Demonstration Garden, 6699 Campus Drive in Placerville (behind Folsom Lake College, El Dorado Center).



## Sherwood Demonstration Garden Open April 1 to October 31

From April 1 to October 31, the Sherwood Demonstration Garden (SDG) will be open on Fridays and Saturdays from 9 am until noon.

UCCE Master Gardeners of El Dorado County care about your safety. SDG is closed when it is raining or when temperatures reach above 95 degrees.

Our website now has a link to the weather forecast we use. Please check our website before visiting for these or any other changes in current open days.

On open days, there are trained Master Gardener docents on duty to talk with visitors about the garden and answer questions.

Guided tours can be arranged for small or large groups by contacting Sheri Burke at [mgeldorado@ucanr.edu](mailto:mgeldorado@ucanr.edu).

Visit the SDG at 6699 Campus Drive in Placerville. Built on property owned by the El Dorado County Office of Education, SDG is located between Folsom Lake College-El Dorado Center (FLC-EDC) and the Community Observatory.

Parking in the FLC-EDC parking lot is \$2.00.

For more information about the Sherwood Demonstration Garden, please call the UCCE Master Gardener office at 503-621-5512 (Tue-Fri from 9-12) or check out the SDG pages on our website.

 [Sherwood Demonstration Garden](#)



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### Upcoming Classes

- For information on El Dorado County classes, call 530-621-5506 or email to [edmp@ucanr.edu](mailto:edmp@ucanr.edu)
- For information on Amador/Calaveras County classes, call (209) 223-6857 or email to [acmp@ucdavis.edu](mailto:acmp@ucdavis.edu)

#### Sep 8 Make & Take Workshop: Low Sugar/No Sugar (FULL)

Workshop size limited. Register early. Workshop fee: \$20.00. (9:00 am–noon) Bethell-Delfino Agriculture Building, 311 Fair Lane in Placerville.

#### Sep 15 Make & Take Workshop: Herb Salts & Dried Herbs

Workshop size limited. Register early. Workshop fee: \$20.00. (9:00 am–noon) Bethell-Delfino Agriculture Building, 311 Fair Lane in Placerville.

#### Sep 15 Venison: Field Prep – Aging & Preserving

(9:00 am–noon) Calaveras Senior Center, 956 Mountain Ranch Road in San Andreas.

#### Sep 19 Freezing & Dehydrating Basics

(6:30 pm–8:30 pm) Calaveras Senior Center, 956 Mountain Ranch Road in San Andreas.

#### Sep 29 Oktoberfest Workshop

(9:00 am–noon) Amador County GSA Building, 12200-B Airport Road in Jackson.

 [Central Sierra Master Food Preserver Classes](#)



### MASTER GARDENERS ON FACEBOOK

[UCCE Master Gardeners of Amador County](#)  
[UCCE Master Gardeners of Calaveras County](#)  
[UCCE Master Gardeners of El Dorado County](#)  
[UCCE Master Gardeners of Tuolumne County](#)



### MASTER FOOD PRESERVERS ON FACEBOOK

[UCCE Master Food Preservers of Amador/Calaveras County](#)  
[UCCE Master Food Preservers of El Dorado County](#)



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