



March 2023

To our Hearty Tahoe Gardeners!

At this point in the winter season, we are all looking forward to a thaw and the chance to get our hands dirty again. Unfortunately, we cannot really do any outdoor planting yet. However, we can plan, and take care of indoor gardening tasks this month.



Our Lake Tahoe Master Gardeners are here to help you with the specific gardening environment around the lake. We also like to leverage our communication with other aligned groups to bring you the best information we can find. Check out the list of events happening in the next couple of months below. **We are very pleased to announce our new event, the "Garden Day Festival" coming to three locations around the lake in June.** Check the EVENTS area for more details.

Scroll down further to learn about the Western White Pine, get an update on LTMG collaboration with local elementary schools, the history of the peony, a 2023 potato update from Melissa G. and tips on hydroponic garden kits.

Very best,

Sandy Gainza  
Newsletter Editor

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## Upcoming Events





## **Garden Day Festivals Coming In June!**

Everything you want to know about growing food and plants in Lake Tahoe will be at your fingertips. Come join the fun and learn about growing in Tahoe area.

**June 2, 2023 in Tahoe City from 3 p.m to 7 p.m.**

Hosted by UC Davis Tahoe Environmental Research Center

**June 3, 2023 in Truckee from 11 a.m to 2 p.m.**

Hosted by Slow Foods Lake Tahoe

**June 10, 2023 in South Lake Tahoe, Tallac Estate  
from 11 a.m. to 2 p.m.**

Hosted by Great Basin Institute

Four knowledgeable and skillful organizations are collaborating to present 3 Garden Festivals in 3 different locations this year. The UCCE Master Gardeners of Lake Tahoe, UC Davis Tahoe Environmental Research Center, Slow Foods Lake Tahoe and Great Basin Institute are hosting three one day garden related festivals. There will be hands-on

vegetable workshops, tours of local facilities and gardens, local community vendors and PLANTS FOR SALE. All Festivals will be FREE.

The Garden Day Festival is a one day community event that highlights growing your own food at home or at community gardens around the Lake Tahoe area. Organizations and vendors are invited, and must register beforehand with the site host organization. The Master Gardeners of Lake Tahoe are providing in-person workshops on growing a variety of Tahoe proven vegetables. Interested individuals can pre-order materials for pick-up at the event. Preorders can be purchased at Slow Foods Lake Tahoe's [website](#) closer to the event.

The **Lake Tahoe Master Gardeners** will be on hand to discuss growing these vegetables in the Tahoe Basin:

Tomatoes and Peppers

Leafy Greens

Potatoes

Peas

Squash and Pumpkins

Onions/Leeks

Edible flowers

Vegetable starts (plants) will be available for sale. Tours of the host sites will be available during the event. A number of community organizations and agencies are expected to participate and provide information related to their organizations. Save the dates, we will have more information as the time gets closer. See you there!

### **OTHER AREA EVENTS OF NOTE:**

While the weather at the lake means not a lot of Tahoe based

events right now, we are listing classes adjacent to Lake Tahoe you may be interested in joining:

**UCCE Central Sierra** (El Dorado, Calaveras, Tuolumne, and Amador counties in Northern California)

Check out their ongoing events [HERE](#). They feature kids' programs, classes on roses, berries, tomatoes from seed and more!

### **Placer County Master Gardeners**

**March 11** - Attracting pollinators to your garden, ZOOM and live presentations. (Loomis) Click [HERE](#)

**March 18** - Straw Bale Gardening, Live (Roseville) Click [HERE](#)

**April 8** - Firescaping - get ahead and slow the spread, Live (Loomis) Click [HERE](#)

**UC Integrated Pest Management Webinars** continue through March and April. Webinar format; no cost but you must register.

**March 16:** Preventing Pest Problems at Seeding

Time: 12:00-1:00pm PDT

Presenter: Lauren Fordyce, Urban and Community IPM Educator

**Register for this webinar**

**April 20:** Aphids, Scales, and Mealybugs, Oh my!

Time: 12:00-1:00pm PDT

Presenter: Karey Windbiel-Rojas, Associate Director for Urban & Community IPM/Area IPM Advisor

**Register for this webinar**

### **Douglas County (NV) Master Gardeners**

**Plant a Pollinator Garden in a Weekend Workshops FINAL CLASS!**

3/4/23 - General Pollinator Gardens

Free but Registration is required

Contact Jessica Gardner 775-782-9960 for more information

**Beginning Vegetable Gardening:** New to vegetable gardening in Northern Nevada? It can be tricky. Come join us and learn more about how, when and where to plant, grow and harvest your next vegetable garden. Topics include: Site Selection, Tools, Maintenance, Planting Dates, Planning, Pest & Disease and much more

Cost \$45/per person

Registration is required and registration opens March 1

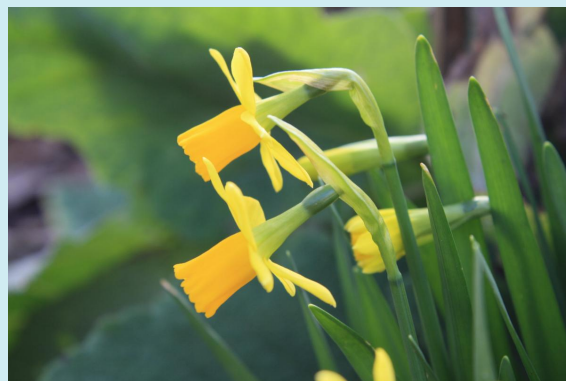
Please contact Jessica Gardner (775-782-9960) for more information and the registration link.

**Rose Care:** Please join the **UNR Extension Master Gardeners of Douglas County(NV)** for a series of rose care classes presented by rosarian Suzy Miladin. For more information contact Jessica Gardner @ 775-782-9960 or jessicagardner@unr.edu

**March 1** -Intro to Rose care

**March 8** - Spring fertilizing & deadheading

**March 22** - Disease & Insects of Roses



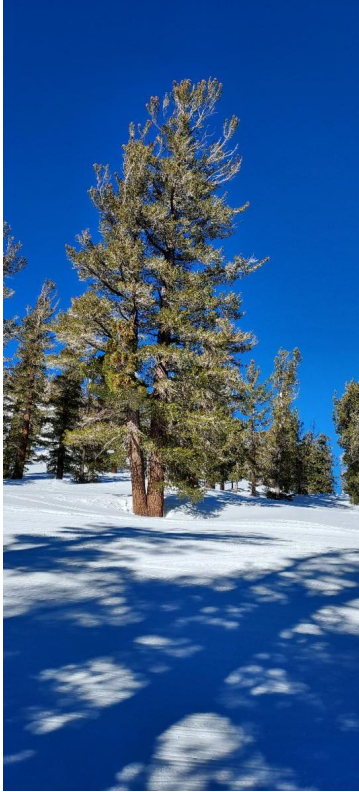
## **Tahoe Plants and Trees**

**Western White Pine**

**(Pinus monticola)**

**By David Long, Lake Tahoe Master Gardener**

The Western White Pine is found at higher elevations



in the Tahoe Basin. Western White Pine is occasionally confused with both Red Fir (*Abies magnifica*) and White Bark Pine (*P. albicaulis*), which are found in the same locations. Western White Pine, is a member of the five needle pines (suborder *Strobus*) that includes other Tahoe native trees – the White Bark Pine (*P. albicaulis*) and Sugar Pine (*P. lambertiana*). The mature tree is easily identified by its stout trunk, reddish rectangular or hexagonal plate configured bark, and 5 needle bundles. Young trees have a smoother greyish bark, not unlike the White Bark Pine. Needles are 1.5 inches to as much as 3 inches in length, green to dark green in color. Cones are cylindrical when closed and up to 4 inches in length. Cones take 2 years to develop, open and release seeds. Mature trees can be over 100 ft. tall, with a conical crown that flattens with age. Many mature trees have multiple crowns, due to weather or insect damage. Branches are whorled and spreading. The wood is very light in color, medium density and straight grained.

The tree was first identified and partially described by botanist David Douglas in 1831, from a specimen on Mount Saint Helens. Douglas died prior to completing his publication of the description. David Don finished the descriptive work in 1838. The species name, *monticola*, translates from Latin to “living in the mountains”.

The Western White Pine is found from the southern Sierras north into British Columbia, and east to Idaho and western Montana. It is only occasionally found in western Nevada outside the Tahoe Basin. Outside of California, the tree was an extremely important lumber species during the last few decades of the 19<sup>th</sup> century as well as the early 20<sup>th</sup> century,. Its wood was used extensively for railroad ties and support timbers in mines. Other uses for the wood are: construction framing, general woodworking, and furniture manufacture. It is the state tree of Idaho. The tree has become only a minor component to commercial lumbering operations since the 1920's as disease, over harvesting and fires have significantly reduced its numbers.

The tree is susceptible to the disease of white pine blister rust (WPBR). WPBR is a rust type disease-causing fungus (*Cronartium ribicola*) which is native to central Asia, where the endemic 5 needle pines have significant resistance to the disease. The disease was spread to Western Europe in the mid 1800's and to the Americas around 1900 on contaminated nursery stock. Tahoe's white pines, the Sugar Pine, Western White Pine and the White Bark Pine, are all susceptible to WPBR. The disease is slow in progressing once established, affecting the tips of the stems initially and progressing further through the tree until the vascular tissue is affected and the tree dies. For large trees like the Sugar Pine and Western White Pine, death can take 30 years or more from initial infection. However, since the branch tips are first affected, the tree's ability to produce seed cones ceases. An infected tree is weakened and is susceptible to secondary infections and attack by insects. WPBR itself is interesting as the rust has a complex life cycle producing two types of spores, based on the host. The spores produced from an infected tree cannot infect other trees, but only species of *Ribes* (currents and gooseberries). Similarly, the spores produced on infected *Ribes* plants can only infect the five needled pine trees. Research, including significant work on Tahoe Basin trees, has shown that a few Western White Pines have a gene that provides resistance to WPBR. In general, there is greater genetic variability in

Western White Pines found in the Sierras than elsewhere in the tree's range. This genetic variability is thought to be related to adaptive changes due climatic variabilities within its range.

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Close up of the five needles of the Western White Pine





Western White Pine in Snow



Bark of the Western White Pine

## Melissa Guthrie, Lake Tahoe Master Gardener aka "The Potato Lady" Upcoming Potatoes for 2023



Our seed potato selection for 2023 has been hand-picked based on those that have done well in our area. Not literally "hand-picked", but we are driving to Stockton to pick up the huge bags. We intentionally try to source from local, preferably small farms.

A few characteristics of our 2023 Seed Potatoes in our GYO series:

**Red LaSoda.** A main-crop red skinned, white flesh potato with good production; reliable variety.

Red LaSoda has done well and was the most requested for future workshops in our post year evaluations. The Red LaSoda is our "insurance potato" because they can be planted up to a month before the last frost.

**Constance.** A main-crop bright yellow skinned, yellow flesh potato having a vigorous vine; medium maturing at about 95 days; usually very high production; super yummy.

We have also done well with Constance and our local seed potato grower thought it one of the best.

**Huckleberry Gold** (limited amounts). A main-crop with lush deep-purple skinned, a golden flesh



potato; mid-season, which means they are perfect for this year's massive snow and they don't want to be planted in March (!), a lot of seed potatoes do better in warmer zones.

This year is going to be a challenge with all the snow and most likely the ground in our outdoor beds will stay frozen until late spring. If you haven't tried to grow potatoes in containers, this year may be the year to try it. Container vegetable growing is perfect when the weather is a bit unpredictable so that you can move your plants to a warmer area easily. Think mud room, garage or make yourself half nuts by putting them in the bathroom.

We have asked that our Red LaSoda and Constance be taken out of dormancy about 10-15 days prior to our pick-up. This is called 'green-sprouting'. The seed potatoes are left in the dark at about 70-75 degrees, to jump-start sprouting from the "eyes". Then, they are exposed to light which further helps with our shorter growing season. Then we bag them up and benefit from our cooler temperatures in Tahoe to slow and compact sprouting until you plant them. It is a bit of "hurry up and wait, but planning will help to ensure you have lots of delicious potatoes to dig up and enjoy for fall.

GYO events are not starting until June 2nd, so this is a reminder to plan to plant your seed potatoes as soon as you get them. Prepare your growing area ahead of time so that you are ready to plant in June!.



Green Sprouted Potatoes



Picking Up our Seed Potatoes

## Tahoe Master Gardeners Help in Local Schools By Cindy Wise, Lake Tahoe Master Gardener

Gardening can be a great activity to cultivate a hands-on, meaningful and engaging learning experience for

children. Lake Tahoe Unified School District (LTUSD) schools have established gardens, growing domes and greenhouses at various school sites, and have incorporated these sites into school curriculum or after school programs when possible. In past years, our Lake Tahoe Master Gardeners (LTMG) and other organizations have assisted with this on occasion, as well as with after school gardening projects at the local

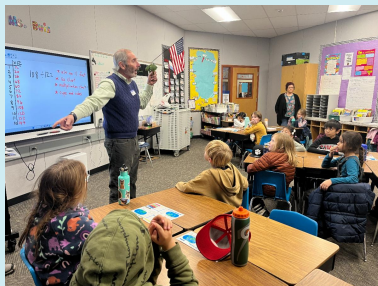


Lake Tahoe Boys and Girls Club (LTBGC). Before the Covid pandemic, these collaborative efforts were a bit random and irregular. During the pandemic, school sites were closed or volunteers were not allowed onsite. Despite schools returning to in-person learning, parent volunteers have not returned to their pre-pandemic level of involvement at gardening school sites.

LTMG, along with Grow Your Own Tahoe-Truckee (GYO), LTUSD staff, and Cal-Fresh (CA Department of Social Service's nutrition program) are working together to help re-establish an active gardening element into school and after school programs. As a first outcome from our initial meeting late in 2022, it was agreed that growing microgreens in the classroom would fit nicely into Cal Fresh's planned nutrition program for second and third graders, and could be accomplished regardless of winter weather. Students could plant the seeds, and be harvesting microgreens in about two weeks. The microgreens could then be used as part of a tasting or cooking lesson.

By January 2023, we were ready to launch delivery of the first microgreen growing activity to six classes of second and third graders. LTUSD staff wrote a lesson plan and made the classroom arrangements. LTMG and GYO provided seeds, soil and classroom instruction/planting activity. Teachers guided follow up plant care. CalFresh staff explained the nutrition benefits. Students tasted and cooked what they grew. This successful introduction will be followed in March and April by similar microgreen growing activities for 18 other classes at three elementary school sites, reaching an estimated total of 500 students.

Additional gardening activities for school and after school are being planned to further involve students in gardening, as well as bring back parent and community involvement in the maintenance of the school gardens, grow domes and greenhouses. School site work days to ready the school garden sites for spring planting will be organized, along with gardening training for parent volunteers. A team of trained parent and community volunteers are needed to maintain the school gardening sites during those times when student gardeners are not available such as during summer break. A Tahoe elementary school in neighboring Nevada has requested gardening assistance as well. In addition, preliminary discussion is underway to help establish a new children's garden at the LTBGC.



Learning about  
Microgreens



Caring for the Sprouts

Preparing the Soil



Adding fertilizer



Microgreens Sprouting

## Floriography - The Peony (*Paeonia lactiflora*) By Dave Long

Peonies are a late spring and early summer blooming flower. Most peony cultivars found in the garden are hybrids cultivated for over 3000 years (in China). Eastern Peonies were brought to Europe from China and Japan in the early 1800s. The peony is the state flower of Indiana. Dextra Baldwin McGonagle enjoyed hybrid peonies and had them planted along the artificial stream she constructed beside her house in Tahoe (Baldwin Estate). The Lake Tahoe Garden Club reintroduced peonies into the gardens at Tallac Estates a few years back as a reminder of Dextra's interest in the plant.



Peonies are showy flowers often found in bridal bouquets, and is the "official" flower of a twelfth wedding anniversary. The largest peony flowers can be up to 10 inches in diameter. Well maintained plants can live to over 50 years. Flower color varies from white to red and yellow, but is never blue.

The flower petals are edible. They are partially cooked, sweetened and served as a dessert in Asian cuisines. You can add the fresh petals to a salad or added to lemonade. Peonies are used in herbal remedies for intestinal or bladder ailments. Roots and seeds are used in remedies for headaches and pain associated with childbirth.

As for peony floriography, there are two origin stories.. The first is simple and involves a beautiful nymph named Paeonia who flirted with Apollo. Aphrodite, who was also interested in Apollo at the time turned Paeonia into the Peony flower. The second more convoluted story relates to the Roman gods' physician, Paeon, who upset his mentor Asclepius (the god of medicine and healing: his staff is part of the logo for physicians) by extracting from the peony root a liquid that cured Pluto, the god of the underworld. This upstaging of Asclepius led to threats of murder. Zeus intervenes, sort of, turning Paeon into the peony flower rather than letting Asclepius kill him.

Because the peony has a history in many cultures it is not surprising that it also has many connotations. In Victorian Europe, the flower represents shyness and bashfulness, perhaps alluding to the flower's petal's inward turning tips, as if

looking down in a bashful manner. In a bouquet with foxglove, peony was a gift from a secret admirer. Peonies with violets and hyacinth symbolized apology and a request for forgiveness. In eastern Europe the flower denotes modesty and shyness, along with tales of fairies and nymphs hiding their nakedness by turning into peony flowers.

In Victorian North America there is a bit stranger connotation given to peonies. It was thought by some that if you dug up the plant and brought it into your home... you'd be visited and cursed by fairies while you slept, and you would be unlucky for the rest of your life!

The peony is an "official" emblem for China, and was made the national flower in the Qing Dynasty. Peony supposedly translates in Chinese as most beautiful flower. It has connotations related to wealth and rank.

*Editors' Note:* Peonies can grow well in the Lake Tahoe region. They require a certain amount of cold weather and they do require regular watering. Buy peonies in the spring as container plants, or find bare root varieties and plant in amended well draining soil in sunny to mostly sunny locations. Peonies need time both to settle in and then to bloom. Alternatively, plant in moist, fertile, well-drained soil in the fall, as they grow better that first year if they have the benefit of being in the soil during winter. They will eventually grow to three or four feet in diameter and two to three feet in height. Don't expect blooms for two to three years after planting. You may need to stake the flowers on young plants. Deadhead promptly for more blooms. After a few years, peonies can flower for decades with the proper care. In Tahoe, most peonies bloom in May and June.

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## **Growing Your Own Hydroponically Sandy Gainza, Lake Tahoe Master Gardener**



If the long Tahoe winters get you itching to grow something, you might try a hydroponic gardening kit, such as the Aerogarden. There are many brands of these automatic all inclusive hydroponic systems out there. The Master Gardeners do not endorse specific products. We do recommend you research the online marketplace for many different kit garden types. My first look at hydroponics was a behind the scenes tour about 20 years ago at Epcot, the Disney park in Florida. At Epcot, they have four amazing greenhouses,

showcasing hydroponic agriculture, aquaculture, a tissue culture lab and more.

Hydroponic agriculture requires less water, uses nutrients more efficiently, grows plants faster, avoids soil born pests and disease, and can take less space than soil based agriculture. AND there is no weeding! The disadvantages are start up costs and operational costs, and maintenance of the system. Occasionally hydroponically grown plants have been susceptible to Fusarium and Verticillium, so selecting resistant plant varieties is a must with hydroponic systems in agriculture. It is certainly worth considering here in the Tahoe regions as our native soils are quite poor, and our weather is not conducive to year round production of food.

A few years ago, I was gifted an Aerogarden. One of many brands of small, hydroponic, all inclusive growing stations, the garden kit has a basin for water, receptacles for plant pods, LED lights, and a small circulating pump. You plant seeds in small, conical pods. or buy seed kits. The control panel on the garden asks you questions and sets a timer for the lights to go on and off. Many hours of light are required for an indoor system such as mine. In addition to water and seed pods, nutrients must be added to the water to enable the plants to grow. The pump circulates the nutrients. All of these tasks are managed by the Aerogarden. I add nutrients every 14 days, and add water when an indicator tells me to. The lighting is controlled by a timer.

The all inclusive kits, such as the Aerogarden, are a bit expensive to buy, but are extremely hands free. I usually set up the system in the winter and put it away in summer, when I can grow things outside. Lettuces, herbs and greens have been the most successful, with tomatoes not doing very well in my system. I also found that putting the system in a heated room increases the speed of growth, but the lights can get to you; they are on about 18 hours a day. You may want to place your garden in a guest room or other unused area. A flaw of my Aerogarden, which may have been corrected in later versions, is that a power outage will require you to go and reset the clock. The system will still run but the lights may go on and off at the wrong times.

The USDA has a [great link](#) link to many resources for hydroponics if you want to dive in a little deeper or explore DIY hydroponic systems, instead of investing in an all automatic kit.

Here are a few photos of my garden now, and fellow master gardener Vicki Price's garden. I am growing lettuce and she is growing herbs.



Control Panel



Lettuce crop four weeks since planting



Herbs after one month

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