

CALIFORNIA NATIVE PLANT SOCIETY MARIN CHAPTER

August 2021 Newsletter

Marin Chapter Meeting: "A Photographic Tour of the Genus Calochortus" Guest Speaker: Jeff Bisbee

August 9 @ 7:30 pm via Zoom [Register for this meeting here.](#)

Spend a gorgeous evening with renowned botanist and photographer Jeff Bisbee, enjoying and discussing this genus of bulbs native to California and elsewhere on our continent. Calochortus is divided into three sections (Calochortus, Mariposa, and Cyclobothra). Botanists further divided each section into four subsections. Jeff will share about each subsection, including distinguishing characteristics of each. Jeff has previously presented great programs on Arctostaphylos (manzanita) and Ceanothus.



Calochortus venustus - butterfly mariposa lily



Calochortus tomiei - Tolmie star tulip (pussy ears)
by Jeff Bisbee



Calochortus plummerae - Plummer's mariposa lily
by Jeff Bisbee

Jeff was raised in Grass Valley, in a rural setting where he developed a passion for native plants. His father worked for the Forest Service and got him started on trees. His interest spread from there to other types of plants. Jeff has always had the desire to document the beauty of plants with photography and has had many of his photographs published. He provided many photos for the book, "Conifers Around the World", traveling throughout Mexico to photograph conifers in their native habitat. Mike Vasey got him interested in photographing Arctostaphylos, which led to the book "Field Guide to Manzanitas". Since then, he has moved on to other genera, such as Ceanothus, Calochortus, Fritillaria, Lilium, Erythronium, and his latest interest is the genus Eriogonum with its 300+ species. He also enjoys cultivating many native plants from seed. Jeff has an extensive collection of Mexican and western conifers on his family property in Colfax. He has contributed many Mexican conifers to the U.C. Santa Cruz arboretum. He is also cultivating many Arctostaphylos and Ceanothus. Jeff is currently living in Gardnerville, Nevada, which gives him easy access to many of the Calochortus species of the eastern Sierra.

Marin Chapter Field Trips

Field Trip Guidelines:

- **Email Susan Schlosser** at scschlosser52@gmail.com to sign up for a field trip, as we are limiting participants to 15.
- **Electronically sign** the CNPS Liability waiver for the trip (Susan will provide the link.)

Friday, August 6 - 10 am to 2 pm - Johnstone & Jepson

Loop Tomales Bay State Park has botanical treasures any time of the year. We'll go from the Zen-like environment of the bishop pine forest through mixed evergreen forest to ledum swamps and decomposed granite beaches along the bay. During late summer, this trail comes alive with the fruits of fall. We will munch on huckleberries, marvel at the fruit on the California honeysuckle, search for the CNPS Listed 1B *Campanula californica* (marsh harebell), and have lunch at beautiful secluded Pebble Beach. ~2.5 miles **Leaders:** Ann & Woody Elliott



Sambucus racemosa var. *racemosa* - red elderberry
by Ann Elliott

[Upcoming field trip details can be viewed here.](#)

Gardening During Drought

by Laura Lovett and Kristin Jakob

Native plants are a great choice for our gardens. They need a fraction of the water that is required to maintain traditional gardens—approximately 30% of what is needed for most non-native ornamental shrubs. Adapted to our summer-dry climate, they make a particularly good choice when water is in short supply. While hardy enough to survive on winter and spring rains, many plants will nevertheless suffer when winter rainfall is scarce. There are a number of things you can do to be sure your established plants make it through this very dry summer.

Keep in mind that the intent is to water to keep plants alive, not to make them grow fast. Watering less often and more deeply will stimulate roots to grow deeper instead of on the surface where they will be susceptible to drying out. Because plants need to be watered at an early stage of water deficit to prevent irreversible damage, it is crucial to check plants regularly for symptoms of drought, preferably during the afternoon when symptoms are most evident.

Too much water, or watering in the heat of day, can also kill native plants; California's natives are not adapted to wet and hot soils, which foster the growth of fungal infections. Waterlogged soils will cause root rot and encourage pathogens on plants. Symptoms of overwatering resemble those of drought stress:

- Wilting leaves that do not perk up in the evening
 - Yellowing and upward curling or rolling of leaves
 - Leaf, blossom, and fruit drop
 - Browning or scorching of leaf margins and tips
 - Small leaves; limited shoot growth
 - Interior needle and leaf drop on conifers and evergreens
-

Long-term consequences of drought include branch dieback on trees (with a loss of shade and costly pruning or tree removal), increased susceptibility to disease, and root death and eventual plant or tree death.

Watering Tips

The Goal: Wet the soil with a deep soak approximately once a month. Most well-established native plantings will thrive with a deep-soak irrigation once every 3-4 weeks during the dry season, May through October. Supplement with a few refreshing, shallow overhead waterings in between—just enough to wet the leaves and rinse off the dust. Native plants from riparian (streamside), coastal, or redwood forest habitats might require weekly soakings. Gardens near the coast will require less irrigation than those in hotter inland regions.

Soil: Know your soil; different soils store water differently. Loam soils are ideal, providing a perfect blend of moisture retention and pore space where roots can find water and oxygen. Clay soils hold moisture but can become waterlogged to a point where there is no oxygen for the roots. Sandy soils can easily dry out to the point where roots cannot find water.

Time of Day: Water your garden in the early morning to minimize fungal diseases and water loss to evaporation. Avoid watering during the heat of day. Don't water plants showing signs of midday stress. Many plants cannot absorb available water as quickly as necessary to compensate for water lost due to evapotranspiration. Plants will look wilted in midday but will recover on their own in the evening. Additional midday water will not alleviate the wilting.

How Much: For effective irrigation, it is important to apply enough water to thoroughly wet the root zone: the larger the plant the larger the root zone. The root zones of trees and shrubs extend out from the trunk in an area at least equal to the height of the shrub or the drip line of a tree.

Where to Water: As a general rule, a plant's root system is most active at the drip line—the area directly under its outermost branches. Do not over-water right next to the crown of the plant, which is the spot where the stem comes out of the soil. Many plants suffer from fungal rot if the soil at the crown is continually saturated during warm weather.

Beware of Lawns: If you cut off irrigation to a lawn, shrubs and trees that have been dependent on regular lawn watering must have supplemental irrigation of their own to prevent limb dieback and tree death. Birch, ash, and redwood trees are especially susceptible to dieback when water stressed and will subsequently need costly pruning.

New vs Mature: A common mistake is to underwater newly-planted ornamental and edible plants and overwater established, mature plants. New transplants need more frequent and shallow irrigations than established plantings. No plants should be put in the ground until we get soaking fall rains.



This drip emitter has been placed **too close to the stem** of the plant which can lead to rot.
Photo: Tree of Life Nursery

Tools: Soaker hoses offer an effective way to deep water mature trees and shrubs: circle the hose around the tree 4 to 5 feet away from the trunk. For a row of shrubs, lay the soaker hose along the shrub row a foot or two away from the base of the shrubs. Turn the water on very low, and let it run several hours.

Garden Care Tips

Mulch around plants to control weeds, conserve soil moisture, and moderate soil temperatures. Organic mulches, such as bark, shredded leaves, grass clippings, and straw are preferred because they improve soil structure and return nutrients to the soil upon decomposition. Apply mulches from 1 to 3 inches deep. Do not place mulch directly on top of plant crowns or too close to the trunk or stems of your plants, since a layer of mulch can cause the crown to rot. Check with your local municipalities as to what kinds of mulch they allow. The Marin Fire Code prohibits the use of shredded redwood bark, also known as “gorilla hair” mulch.

Avoid using fertilizers or pesticides. Fertilizers can damage root systems under drought conditions and pesticides may burn plant foliage. They also kill off the “good” bugs that pollinate your garden.

Resist the temptation to prune woody ornamentals and trees. Some drought-stressed plants may go dormant and appear dead. Dead wood is brittle and brown under the bark and dormant wood is white or green under the bark. Wood that is obviously dead may be removed at any time.

Control weeds. They can outcompete cultivated garden plants for water and nutrients.

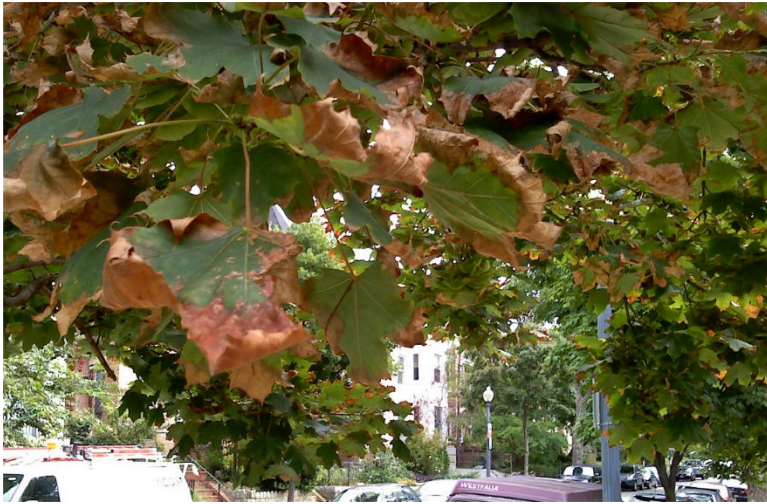
Spray foliage with water to wash off the leaves but avoid doing so when plants are in the direct hot sun. This light rinse-off is a perfect complement to occasional deep watering.

Incorporate organic matter into soil since this improves the soil's water-holding capacity and promotes good drainage during wet weather. Soil amendments with animal manure in them should not be used on native plants.

Correct sprinkler system problems. On average, 20–40% of water applied to lawns and groundcovers is wasted due to too high rates of application, system leaks, low or tilted heads, broken sprinklers, incorrect water pressure and sprinkler spacing. Keeping your irrigation system properly maintained will help you maximize the benefits from the water you do use.

Most deciduous trees, and even conifers, will drop leaves (or needles) when they undergo drought stress. This is part of the tree's drought adaptation, shedding the part that loses water. The trade off, of course, is that the tree is also shedding parts that photosynthesize. It's a delicate balance. Trees can sometimes lose all their leaves to drought and recover; sometimes not. Don't assume a tree that has dropped leaves is dead, even one that has lost all of its leaves. Give it a chance to recover and make the final call in the spring.

Use these guides to help you put water where it is most useful and during the time of day when the water will soak into the soil and be most available to plants. With care, you should be able to coax your established plants through this year's very dry summer. Meanwhile, it doesn't hurt to pray for early fall rains!



A streetside maple showing severe water stress. Photo: S, Davis

YouTube Channel for CNPS Marin Chapter

Check out the [Marin Chapter YouTube](#) channel for recordings of Chapter Meetings and other events. Click the link above, or while in YouTube search for CNPS Marin. Hit the **SUBSCRIBE** button to be notified of new postings.



Weed Wrenches to Loan

Even though the ground may be dry, it is still possible to pull broom with a weed wrench. Finish up this year's fire preparedness by clearing broom and other fire-prone woody plants on your property. Borrow up to seven wrenches, including one large wrench weighing about 11 lbs. with a jaw capacity of 2.5 inches. Contact Eva Buxton (Conservation & Invasive Species Chair) evabuxton@sbcglobal.net

[Read more...](#)



Kid's Corner (for the young at heart) - August is Berry Month

Marin County has a wealth of colorful, wild berries. Keep your eye out for berries in your neighborhood: black berries, thimble berries, huckleberries, Oregon grapes, bear berries, salal, twin berries, honeysuckle berries, and elder berries. Take pictures of berries you find. Birds and mammals rely on these berries for food. Ask your folks before you taste any berries yourself. I tasted the first huckleberry from my yard yesterday; it was still a bit tart.



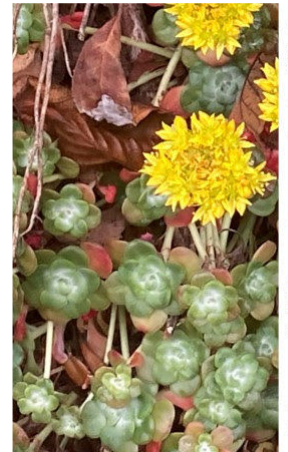
Vaccinium ovatum - evergreen huckleberry
by Ann Elliott

Upcoming Marin Chapter Events - 2021

Aug.

6 Field Trip - [Johnstone - Jepson Trail, Tomales Bay State Park](#) Friday @ 10 am

9 Chapter Meeting "[A Photographic Tour of the Genus Calochortus](#)" Guest Speaker: Jeff Bisbee @ 7:30 pm [Register here.](#)



Sedum spathulifolium - stonecrop
by Ann Elliott

Sept. Chapter Meeting Guest Speaker: Daniel Gluesenkamp, Executive Director of California Institute for Biodiversity

Oct. Chapter Meeting Guest Speaker: Nicole Ibanez, recipient of one of CNPS Marin's 2021 educational grants, will share the results of her research.

Check CNPSMarin.org for upcoming field trips and events as they are scheduled.

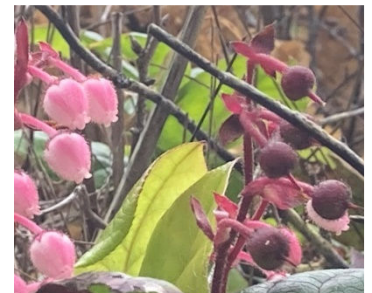
Marin Chapter Board Meetings generally occur on the first Monday of each month. To attend, contact co-President David Long sfdlong@ix.netcom.com

Join CNPS Events - Statewide & Organized by Other Chapters, etc.

Peruse the [CNPS Calendar of Events](#) that includes talks and virtual garden tours.

Aug. 5 [Naturehood: Plant Selection 101](#)

Aug. 12 [Climate Change Impacts on California Biodiversity](#), Yerba Buena Chapter



Gaultheria shallon - salal
by Ann Elliott

Aug. 18 [Paintbrushes in Peril: Rare Castilleja Species of North America](#), Santa Clara Valley Chapter

Aug. 19 [Gardening in Fire Landscapes](#), CSU Chico Herbarium

Sept. 1 [The Wild We Make](#), Mount Lassen Chapter

Sept. 2 [Naturehood: Gardening in a Drought](#)

Submissions of articles, events, and art are welcome.
Outreach help on Instagram and Twitter needed.

Contact Ann Elliott, Newsletter Editor annonfire@gmail.com.

p.s. Please add marincounty@cnp.org to your contact list
so our newsletters are not flagged as spam or promotions.



Holodiscus discolor - ocean spray
by Ann Elliott

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