

#### May-June 2013

### **A New Helianthus Species**

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The following was excerpted from a manuscript by John Stebbins, in collaboration with Chris Winchell and John V. H. Constable. It will be published in *Aliso*, a peer reviewed botanical journal specializing in unique and significant native plants published by the Rancho Santa Ana Botanic Garden. Illustration by Shannon Bickford -ed.

HELIANTHUS WINTERII
(ASTERACEAE), A
PERENNIAL NEW SPECIES
FROM THE CENTRAL
SIERRA NEVADA
FOOTHILLS, CALIFORNIA

Helianthus winterii (Winter's sunflower) is described as a new species from the southern Sierra Nevada foothills (s SNF) in south central California (Fresno and Tulare Counties). This unique species is easily distinguished from the common Helianthus annuus L. by its woody trunk and year round blooming period, as well as several distinct morphological characteristics. Helianthus winterii occurs in open un-grazed foothill woodlands and annual grasslands on well-drained granitic soils, generally on south-facing slopes on lower elevation foothills east of the San Joaquin Valley.

Observations of the nine currently known *Helianthus winterii* occurrences strongly suggest that this plant is primarily found in relatively steep open areas (south facing grassy slopes, rock outcrops, roadcuts) in un-grazed well-drained granitic soils in the northern portion of southern Sierra Nevada foothills at an elevation of 180 - 460 m.  $(500-1500 \text{ ft.} \pm)$ 

Helianthus winterii is named in honor of Robert F. (Bob) Winter, emeritus Fresno City College instructor who has influenced the development of many California botanists, biologists, and natural historians within the range of this newly described species. His comments to "look at that big sunflower (blooming in January) up there" eventually prompted this closer analysis. In addition, the fact that the species routinely flowers year round, including the winter months, particularly justifies the specific epithet.

Helianthus winterii is known from a limited geographic range and narrow elevational range in southern Fresno and northern Tulare County foothills in the described habitat. Many plants grown in cultivation readily succumb to frost during the first winter period, suggesting frost as a strong selective force in the species' evolution. Its observed presence only on un-grazed slopes strongly suggests an intolerance of herbivory similar to many other California native species (e.g.. Clarkia, Aristida, Stipa. Based upon the described ecological and geographic restrictions the species should be evaluated as a potential rare plant by the California Native Plant Society and the State and Federal agencies with jurisdiction over rare species.

#### **Observations**

---Warren Shaw

(As Farewell-to-Spring began to flourish amongst the drying grasses, we sadly bid farewell to the foothills and moved to temporary quarters at Shaver Lake, so this month's observations will cover developments at 5500 feet.)

Along the four-lane, bright yellow Fremontia and creamy white Carpenteria get showier every day, and the coppery new leaves of the Black Oaks quickly become fresh green. From the top of the four-lane, into Shaver, the Dogwoods are putting on their spring show. Around the village intensely red Snow Plants are popping up here, there and everywhere. Tiny vellow Violets are also blooming, and so, at the lake, just below the dam, is yellow and pink Harlequin Lupine. Greenleaf Manzanita is just finished blooming and is beginning to form berries, as is Gooseberry. Current bushes are blooming prettily; wild Iris is up and should bloom soon.

Despite a very dry winter, it still looks and feels like spring at this altitude, and we have many blooming species to look forward to.

#### **Wind Poppies on Black Mountain**

Jane Pritchard

Black Mountain was drier than I have ever seen it on May 4. Blooms usually plentiful even into mid-May were already gone or not as numerous. Areas along the road that were cleared a year ago were now open to sunlight and filled with flowers. Chokecherry and carpenteria sprouts were nearly 3 feet tall but too young to flower yet. Carpenteria at the edge of clearings was in



full bloom. Poison oak plants less than a foot tall had plenty of blooms. Hansen's larkspur (*Delphinium hansenii*) with pinkish white flowers on erect stalks was not confined to its usual rock outcrop. Elderberries must grow really fast. They were over my head and full of spicy-smelling white blossoms. We saw a long horned

elderberry beetle – my first sighting.

At the acute angle in the road several wind poppies (*Papaver heterophyllum* nee *Stylomecon heterophylla*) showed orange-red petals hiding in surrounding foliage. They were far off the road so only one picture was taken. More had bloomed on May 10 and were near the road. Chinese houses (*Collinsia heterophylla*, now in plantain family) and little baby blue eyes (*Nemophila pulchella* var. *pulchella* – all waterleafs were changed to borage family) were less numerous than usual. Pink fairy lanterns (*Calochortus amoenus*) were their usual beautiful selves. Twining brodiaea, also called snake lily (*Dichelostemma volubile*), was everywhere. There were very few dried-up blue dicks (*Dichelostemma capitatum*). Both dichelostemmas were changed to the brodiaea family (Themidaceae).

Pale swallowtail butterflies sipped nectar from wallflowers (*Erysimum capitatum*) and chased off any other swallowtail infringing on their territory. The swallowtails almost hovered in flight and when landing. A California sister butterfly lit almost facing us so you could see opposite sides of each wing. As it folded its wings above its back, the white bar looked like a little moving owl with big eyes. I wouldn't attack it.

We left the road near the top and walked southeast through oak woodl and. White, pink, dark rose, and dark red mariposa lilies (probably all *Calochortus venustus*) surprised and elated me. I had never seen mariposa lilies at that location. A large clump of California milkweed (*Asclepius californica*, now dogbane family) was water-stressed in early afternoon and covered with different instars of monarch caterpillars. Turkey vultures circled overhead when we ate lunch. I didn't think we smelled that bad.

Clearing along the road has made a more sunny habitat with many more flowers overall and fewer shade requiring flowers. Too bad there are not about 10,000 poison oak resistant volunteers to thin the brush on the entire hillside instead of clearing everything just along the roadsides. Native Americans went crazy over the straight redbud sprouts that grew back. When Yosemite banned the Indians from gathering in the park, many plants became less common. That ruling was reversed.

My official photographer took notes instead of pictures this day. Justin (young man with a crew cut) and Mimi (young woman in black with pink design on shirt) posted photos on the web. Friend Mimi Nguyen on Facebook to see photos in the order they were taken. Pictures not in the order taken are also at a free site: <a href="http://bit.ly/17QbtVM">http://bit.ly/17QbtVM</a>

- 1) Click the link above
- 2) Click the first photo in the list
- 3) Click 4-gray-square grid at bottom right corner of screen to go to the gallery of pictures.

#### Observations

--Jeanne Larson

This weather has clearly confused my Mexican Bush Sage (Salvia leucantha). It is about 1/2 it's normal height, but is in full bloom now instead of fall. It will interesting to see if it has blooms again in the fall and if it grows more in height. The ring of Blue Eyed Grass(Sisyrinchium bellum) that surrounds a large Chittalpa (Chilenses x Catalpa) looked very sad last fall because of the hotter summer heat, but it recovered nicely with the early, heavy rains.

Surprises are always nice. I had noticed a lily type volunteer plant and didn't think it was anything the busy Jay in my yard had planted. He was too busy trying to turn my yard into a pecan grove. It has bloomed, and is Yellow Eyed Grass (Sisyrinchium californicum). Besides the yellow flowers, it is much shorter than Blue Eyed Grass and grows in a more open rosette, making a bright spot in the garden. My shoe soles must have transported a seed from the backyard where they are growing in partial shade. The import is doing better in more sun.

I keep telling myself that I want to replace the Mexican primrose that is blooming so profusely, because it spreads so rapidly. It looks like a pink blanket in the yard. It has somehow taken hold in my neighbor's yard, 80 feet away, where, for some reason, blooms are a darker pink.

California Poppies were late blooming this year (they are just now setting seed), and the population was sparse and spindley, where before they have been an eye catcher in my front yard.



#### California Giants Revisited

Yosemite National Park issued the Draft Environmental Impact Report for the **Mariposa Grove of Giant Sequoias** in February 2013. The purpose of the restoration of the grove results from heavy tourist impact. The Mariposa Grove (upper and lower groves) contains 500

mature Giant Sequoia (*Sequoiadendron gigantea*). This is 86% of the mature Giant Sequoias within YNP and they receive 25% of the park's visitors.

These giants are unique to California's Sierra Nevada Mountains. The northernmost grove is in Tahoe NF, two are in El Dorado NF, three in YNP, one in Nelder Grove in Sierra NF near Oakhurst, and many groves in Sequoia-Kings Canyon National Park. The Groves in Mountain Home Demonstration State Forest in Tulare County will be discussed later.

"The ecosystem within the Mariposa Grove provides important habitat for special status species of plants and wildlife. The plants listed in the DEIR are noted below.

The presence of a relatively large number of special status plant species in the Grove can be tied in part to the presence of metamorphic bedrock and the consequent presence of metasedimentary soils and mineralized water. The soil and water have added nutrients and the soils retain water better than typical Sierra Nevada granitic bedrock.

Bolander's woodreed. The park's largest population is in the wet meadow of the upper grove. It's preferred habitat is mostly shady, moist sites along small streams in stringer meadows.

Child's blue-eyed Mary. This species prefers steep, shady banks of creek drainages.

Coleman's piperia is found in the dry shade of conifer forests. It is widely scattered within the Grove.

Lemmon's wild ginger is found in wet meadows in the upper grove and is frequent in all small streams and moist drainages in the lower grove.

Mock leopardbane. The single known occurrence is in the upper Grove and consists of several patches in the light shade of open forest growing in mineral soil or shallow duff. It is easily shaded out by encroaching shrubs and

--Jeanne Larson, Conservation Chair

herbaceous vegetation. Ground fires are important in keeping the encroaching plants under control.

Repand rockcress habitat is open, lightly shaded slopes with a thin duff layer such as occurs after low-intensity fires

remove downed fuel and thick duff.

Short-leaved alpine gold has a single occurrence in the upper Grove where it prefers light gaps in the forest canopy where the duff layer is thin and the mineral soil exposed.

Yosemite sedge is common in moist seepages in the Mariposa Grove. It prefers the thick organic soils of streamsides and seepages in partial shade. Its population sizes appear to be boosted by fire.

Giant Sequoias need fire to open the cones and clear duff for germination to occur. Roughly 82% of the Mariposa Grove are located within 200 ft of delineated wetlands."

The 4807 acre **Mountain Home State Demonstration Forest** is located in Tulare County, east of Porterville at elevations of 4800-7600 feet. In 1875, John Muir called these Sequoia groves the finest in the Sierra. The Native Americans used this area in the summer. An archaeological site is dated back 8,000 years.

The groves have been logged at various times for redwood and mixed conifers (sugar pine, incense cedar, white fir, and ponderosa pine). In 1860 when logging started, sheep, cattle and hogs were grazed in the meadows. Summer cabins were built by grain farmers to escape the summer heat. Between the late 1890's and 1920's the logging companies went broke. There was no logging again until about 1930. Recreationists used the old logging roads, streams and millponds for camping, hunting, and fishing.

During 1930-1941 forest deadfall was being cut for fence posts. In 1946, the 4800 acres was offered for sale to the US Forest Service, but was turned down. Then the owner started cutting down the redwoods in hopes of finding a buyer. The State of California acted to save

the 5,000 old growth redwoods and the Demonstration Forest was born.

Today, the forest is being actively logged of mixed conifer, which shade out sapling redwoods, and is open for a full range of recreation activities between May and October depending upon snowfall. (Excerpted from CDF and Tulare Co. websites.)



#### APRIL AT CHINA CREEK

Our April work party happened to end up on the same day as local observations of Earth Day, so we had determined we would take some time away from our usual work -- grubbing weeds, mulching the trail, picking up trash, painting over graffiti, and other such mundane tasks -- to taking an appreciative look at the Park and thinking a little about what we had accomplished so far and what directions we should be taking in the future.

We did start off with a little work, hauling and spreading mulch on the trail, before our usual morning break. In this process we observed that, though we have been spreading mulch on the trail for years, using a plentiful supply of shredded tree material provided by PG&E's contractors; there seems to be little permanent effect, and if it weren't for Hank Urbach's regular mowing and spraying, the trail would disappear pretty quickly. Since we were in a reflective mood and thinking about the future, we couldn't help but observe also that mulching is a slow and laborious process when done, as we do it, by hand.

After break we decided to check out the north section of the Park, where we had devoted considerable effort to eradicating a spreading grove of Ailanthus (Tree-of Heaven) last fall. We were happy to discover that most of the big trees were dead or dying. We were disappointed, however, to discover that a large percentage of the saplings showed signs of life. Our last activity of the day was to survey the north section for Valley oak seedlings to be sure we had caged them all to protect them from the cattle which are brought in for weed abatement in the spring. We found a number of uncaged trees and put them on the list for May.

Some Conclusions:

- 1. We need to seek a better way to maintain the trail (corn gluten as a pre-emergent has been suggested).
- 2. We're making progress on Yellow Star Thistle and Ailanthus, but we have a new infestation of Mare's Tail or Horseweed to figure out, and we're going to have to retreat the Ailanthus this fall. Efforts to eradicate "wild" fig seem to have been ineffective, and we need to try something different.
- 3. It's very sad that so many of the big old oaks have fallen, but we're happy to see so many seedlings thriving.
- 4. The Park is an incredibly beautiful and worthwhile place, and we should keep doing what we can for it as long a possible, despite the fact that our little band of volunteers isn't getting any bigger or any younger.

#### SPECIAL CHINA CREEK REPORT

We were contacted last fall by chapter member Alex Sheriffs, who is also a member of a Yale alumni group who periodically perform public service projects. He had read of our efforts at China Creek, and was wondering if it would be possible for the group to do a day of service there. Eventually we settled on May 11, 2013, as the day.

We had planned to start the day with a guided tour of our interpretive trail, as an introduction to the Park, making sure each was armed with a shovel or a hoe so we could deal with incidental members of our "Ten-Most -Wanted Weed list as we walked along. They were so eager to kill weeds I found it hard to keep them moving around the trail and had to cut the tour a little short in order to get them back to the gate in time for our customary coffee break. They did get to see the pretty pink flowers of the California Rose and expanses of creamy white Anemopsis blossoms.

By break time, several stalwart volunteers had arrived, so after coffee and muffins, I asked Laura Castro and her Mom, Socorro, to guide the Yalies to the north grazing area to work on the exotic thistle populations there, while Gene Richards and I set to building new cages for oak seedlings. Shortly Laura came running back to fetch the water jug because she was worried about her crew in the mid-nineties heat. At quitting time (12:00) she came back to say she couldn't get them to quit; they wanted to work out the patch they had started, and so they did.

Despite the heat and occasional ticks, they seemed to have a good time, and we sure enjoyed showing off the Park to some new folks and getting some extra help with our plentiful supply of exotic thistles. Many thanks to Alex and his eager group; thanks also to Laura, Socorro, and Gene.



Anemopsis californica – Lizard tail

#### Membership

Thelma Valdez

If you require corrections or additions to your membership information, contact Thelma Valdez at nmtv@unwiredbb.com

The Sequoia chapter serves Fresno, Madera, and Kings counties.

#### March/April Welcome to \*new and renewing members:

Eileen Bennett, Belinda Gilbert, David hartesveldt, Rueben Hunter, MaryBeth Janzen, Marianne kast, Richard Kauffman, Jeannine Koshear, Jeanne Larson, Howard Latimer, Leslie Lipton, MaryMcClanahan, John Mengshol, \*Kathleen Miles, Craig Poole, Jane Pritchard, June Richie, Margaret Rivers, Lynne Rodriguez, Warren Shaw, Peg Smith, and Colin Wilkinson.

**NOTE:** Sometimes renewal information does not trickle down to the chapter for one or two months after your renewal has been received in Sacramento. We maintain a three-month grace period, which should ensure no lapse in your receipt of the newsletter.

tSequoia Chapter, CNPS thanks Derrel's for their support



Next newsletter July/August Please send contributions and corrections to Helen Shaw by July 19 helshaw@netptc.net

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THE CALIFORNIA NATIVE PLANT SOCIETY OIN



Membership includes the quarterly CNPS journal, Fremontia; the quarterly	y Bulletin which gives statewide news and announcements of	ĺ
ctivities and conservation issues; and our chapter newsletter, Carpenteria.		

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The California Native Plant Society is a statewide nonprofit organization of amateurs and professionals with a common interest in California's native plants. The mission of the Society is to increase understanding and appreciation of California's native plants and to preserve them in their natural habitat through scientific activities, education, science, and conservation.

# CARPENTERIA May/June 2013 CALIFORNIA NATIVE PLANT SOCIETY SEQUOIA CHAPTER

c/o Jeanne Larson • 3457 Redlands • Fresno, CA 93726

## MADELEINE'S MUSINGS

Madeleine Mitchell

#### Marah Wild Cucumber

This is an interesting plant native to California that I've seen only in the



spring when it's newly leafed out. We were with Audubon looking for birds, but I was looking at plants rather than birds. The common name is Man-root and this indicates that underground there is a large tuber (man sized) from which the vine grows and fruits. I hadn't seen it with fruit, but the second common name is Wild Cucumber, and what a prickly one. The fruit was about 6 inches long and the vines can sprawl through shrubbery for yards. The genus is Marah and there are four species listed in the Jepson Manual; a flower is needed to ID it. The vine wilts in the fall and disappears.





#### May/June 2013

# Thanks to Sequoia Chapter members for sharing

#### **Clockwise from below**

From Thelma Valdez' yard
Rosa californica - California wild rose
Nassella pulchra - Purple needlegrass
Malacothamnus densiflorus
Many-flowered bush mallow

From Jeanne Lalrson's yard Blue-eyed grass

From Jane's hike
—with thanks to Mimi Nguyen

Calochortus venustus - Mariposa lilies
(These and many more on the site named
in Jane's report: <a href="http://bit.ly/17WbtVM">http://bit.ly/17WbtVM</a>
(click on first photo "Justin")







