

THE NEWSLETTER
Carpenteria

CNPS SEQUOIA CHAPTER



January 2014

www.cnps-sequoia.org

**CNPS 2015 Conservation
Conference Offers
Registration Rebates to
Volunteers**

The CNPS 2015 Conservation Conference: 50 years of progress and promise will be at the DoubleTree by Hilton, San Jose, next January 13-17. We have lots of opportunities for participation in this high energy event. Help make this an event to remember



by lending your talents. Hundreds of volunteers make this a great party. If you join a planning committee and put in 32 hours over the year, you may ask for a full rebate; smaller commitments yield partial rebates. Committees open include: Outreach, Volunteer Coordinators, Arts, Silent Auction Committees. Contact Josie Crawford for more information at jcrawford@cnps.org or (916) 447-2677x205.

China Creek Update – *Warren Shaw*

2013 NOVEMBER CHINA CREEK REPORT

The day of our November work party was also the day of our annual “Thank-You Luncheon,” at which we express our gratitude to those who have contributed to the Chapter’s mission at China Creek during the year, so we didn’t work too hard. We did walk the trail and pick up trash, and check on the status of the Ailanthus trees we had sprayed in October (and resprayed any still showing signs of life).

After break, we held a meeting at which we discussed: 1. What we could do to increase our work force, since we had lost several regular members -- to illness, the Peace Corps, etc. and 2. Where we should focus our attention in 2014, having FINALLY made significant inroads in the Yellow Star Thistle infestation. Several interesting suggestions arose in answer to the first, but no very hard conclusions were reached. We did, however, conclude that we should turn our attention to wild fig and bull thistle and to improving the trail, as well as continuing to control Yellow Star Thistle and Ailanthus.

Our first work party of ’14 will be Saturday, 1-18, from 8-12, when we’ll begin to pursue these goals. It would be great if you could join us. To get to the Park, take 180/Kings Canyon east across Academy to Smith or Oliver. Turn south about 1/4 mi. past the school to Rainbow and Smith. Continue south on Smith about 1/4 mi. to the Park gate. Call (559-451-1256) or email warshaw1955@gmail.com for more information.

Potpourri

Jane Pritchard

Leaves often contain bitter compounds such as caffeine and opiates to deter eating of the plant but are also common in nectar as attractants. A study reported in Science News (4/20/13, p. 17) found that caffeine in nectar improved the long-term memory of bees for floral scents.

Most carbon in boreal forests has been thought to be in mosses and fallen pine needles and leaves. So deeper layers would have older carbon. Science News (5/4/13, p. 13) reports that 50-70% of younger carbon is found deep beneath the surface sequestered by mycorrhizal fungi associated with roots which receive newly synthesized sugars. Storage of the carbon prevents carbon dioxide from escaping into the atmosphere and warming the planet.

The colorful name Sterculaceae (cacao family) is no longer in Jepson. Some species in the family stink, and Sterculus was the Roman god of privies. The California members *Ayenia compacta* and *Fremontodendron* species are now Malvaceae, along with cultivated okra, hollyhock, cotton, and hibiscus. This was brought to my attention by a Botany Photo of the Day taken in SE Queensland, Australia that featured *Brachychiton bidwillii* – beautiful red/pink cauliflors with pointed petals on a dappled gray/white trunk. Chloroplast chromosomes were responsible for the family change. That tickles the brain because chloroplasts are thought to be free-living organisms originally and became incorporated into another cell.

Observations

From Madeleine Mitchell

I started pruning the Zauschneria or CA Fuchsias. They need to be cut back to just an inch. (per California *Native Plants for the Garden*) I have always left about 6" so will see if this makes a difference in the bloom next fall.

I also had my helper thin out some of the small growth on my *Cercis occidentalis*; there were some dead limbs that he removed.



From Thelma Valdez

I'm a bit of a hawk when it comes to watching my garden's native plants push out new growth this time of year. I cheer now that the Harvest Brodiaea leaves have emerged from their summer dormancy in the hard, dry clay. I smile when I see the innocuous beginnings of Manzanita blossoms and the greening of native grasses that survive only on our minimal rain. Quiet anticipation. It's nice.

Gardeners will understand how this ongoing monitoring becomes second nature. I can spot the smallest change in the soil surface when a bulb begins to emerge or how much new growth is on certain plants by noting the color of the bark. I bought an Apricot Mallow (*Sphaeralcea ambigua*) at the plant sale in September and planted it in early October. I checked it daily through the hard freeze. It lost the tallest of growth but today it is vigorously putting out new leaves, enjoying the warm weather to which its species is more accustomed. I'm hoping that if it likes 70 degrees in January, it will love 105 degrees in July!

From Jeanne Larson

The natives in my garden have suffered varying damage. The Maidenhair fern is always the first to be hit, but it will comeback in the spring. The coast Eriogonum has a wilted look, but the leaves are green. The cold nights and warm days have had a strange effect on the Pacific Coast Iris. Usually they have formed new roots by November, which is considered the time to divide if that is the choice. The tops do not seem to have been affected by the frost, but new roots have been slow to form in the ground. Those that needed to be moved have been sitting in water and have good roots. With the warm days still here, and having cut back on watering, I shall wait a while longer before replanting them.

The Powder Blue Ceanothus and the Cleveland Sage show no damage. The Mexican Bush Sage was still blooming when the frosting nights hit, and was being visited by the lone neighborhood hummingbird. The bloom stalks are now fried, but with the warm days continuing there is new growth starting at the base of the stalks.

Field Report

--Belinda Gilbert

Showers in late October and mid-November left over two inches of rain in the foothills near Yosemite. Before the storms, few plants germinated on the dry open hills. Afterwards, the cool season native annuals Popcorn flower, Red maids, Farewell to spring, California poppy, Miniature lupine and the vernal *Draba verna* germinated where rainwater flowed in rivulets down the hillsides and under the protective cover of last year's annuals. Non-native *Erodium*, *Bedstraw* and *Dead nettle* (*Lamium amplexicaule*) sprouted as well. December brought three storm systems with rain, then snow and freezing temperatures in the teens and twenties to the foothill areas. Cool-season annuals adapted to this climate by growing slowly and near ground level, waiting for spring rains to begin blooming.

In cool, damp, shaded areas, non-native grasses revealed their cheery, bright green leaves. Although they are tender and beautiful at this stage, oak seedlings and native annuals germinate with difficulty amid the dense stands of grasses and fibrous grass roots.

Beneath the oaks, where non-native grasses have been removed, the native seedlings, Chinese houses (*Collinsia heterophylla*) and Miner's lettuce (*Claytonia perfoliata*) showed above the fallen oak leaves. The cotyledon leaves of Miner's lettuce look like fine blades of grass, and later the first true leaves appear as small green spades. In October I sowed six annual species on cleared areas around my house and two in the pasture. I am waiting for their germination with anticipation, but experience has taught me to wait patiently.

While walking the Ahwahnee foothills in early November, I found three late blooming wild flowers: Common sand aster (*Corethrogyne filaginifolia*, formerly *Lessengia*), *Sierra Lessengia*, and Common *Madia*. I collected and sowed seeds of the Common

sand aster on my property. I hope some will germinate successfully.

I have two stories to share about my past foibles recognizing native and non-native plants. A funny story was assuming plants growing on my property were native and not invasive. I clearly recognized European Brome grasses, *Erodium*, *Mullein* and *Subterranean clover*, but there were others! Two grass species come to mind. One is *Silver hairgrass* (*Aira caryophyllea*). This is a delicate, branched grass about six inches tall. I mistakenly assumed native annuals, such as *Goldfields* (*Lasthenia californica*) would be able to compete, or at least survive in areas containing such a small non-native grass. One year, *Silver hairgrass* germinated among *Goldfields*. The following year, the area was overtaken by *Silver hairgrass*, and I spent years pulling it out and sowing *Goldfield* seed. I still remove this grass among *Goldfields* in the spring.

A second story is about *Rattail grass* (*Festuca myuros*), which is identified by Cal-IPC as "Moderate Impact". This grass has 20 allelopathic chemicals which inhibit the growth of other plants, and it competes for water with native annuals. I mistakenly assumed it was native, since it didn't have the same appearance as Brome grasses. I identified and sowed native annual grass seeds, *Festuca microstachys* in the same area as *Rattail grass*, and found I couldn't tell the difference until both species had germinated, flowered and too quickly seeded. The following year, both grasses out-competed other native annual flowering plants, so over several years I removed these grasses and sowed other native annuals in their place.

As the seasons go by, wisdom says, "Expect the unexpected" when it comes to both native and non-native annuals. It's always a surprise in the spring when an unexpected population of non-natives germinates, the seeds dormant in the soil for several years. It's a rewarding surprise when rainfall, temperature and location are right, and a new population of wildflowers bloom.



Upcoming Events

A sure sign of approaching spring is community calendars filling with plant-related items and activities. The California Native Plant Society and our Sequoia chapter are no exception. Our chapter will be represented at the following:

Smart Gardening—Master Gardeners' Conference – **Digging Deeper: Continuing Lessons in Sustainability** February 22, Ramada Hotel Fresno. \$40 advance registration for welcome bag, breakfast bites, box lunch, vendors and prize drawings. Register by mail or online <http://ucanr.org/sgc>

Home and Garden Show – March 7,8,9. Our table is usually in the garden pavilion near those of other plant-related organizations. It is a great opportunity for community education and outreach. Of particular interest to many who stop by is information related to landscaping with natives, given the advent of water meters. March also brings questions about wildflower viewing, planting, and identification. Help is needed for minding the table and its information brochures Friday through Sunday. An hour or two will be much appreciated by Marian and all who visit our table. Volunteers will receive free admission. Contact Marian Orvis mforvet@comcast.net or 559/226-0145

Water-wise Plant Exchange – Saturday, May 3, 8 a.m.- noon at the Fresno State Horticulture Park (3150 E. Barstow Ave). During the event, the public can pick-up free drought-resistant plants and learn how to save water with good landscaping practices. Gardeners are encouraged to bring excess plants from their own gardens to share with others.

Plant Sale—Saturday, October 18. Clovis Botanical Garden 945 Clovis Ave. Our annual sale of native plants in partnership with the Garden will be in October this year, in recognition of the fact that our summers seem to be staying hotter longer and that October is a more appropriate month for planting the purchases.



Other Items of Interest

Post Fire Projects

--Jeanne Larson

The Public Notices in THE FRESNO BEE already have published plans for salvage sales of burned timber for public comment by the Forest Service. One is for the Carstens fire.

An encouraging Public Notice published by the Sierra Nevada Conservancy is noting a grant to be used for the Aspen Fire Rehabilitation. It is located 7 mi N. of Big Creek and the proposal it called Soaproot Stewardship Project. There are some sensitive natives in the area.

Meeting Notes –

Items covered in the November potluck business meeting:

- lunch—hummus, chips, roasted Brussels sprouts, mustard pickles, peanut soup, carrot balls, persimmon bars
- conservation report—ongoing concerns: High-speed Rail, CEMEX plans, state parks and ORV, fires>timber sales
- membership holding steady at about 100
- China Creek thank-you lunch, successes and next steps
- Plant sale report—profit up from 2012; next sale: October
- Outreach activities: multiple throughout the year

☛ Next meeting is Sunday, January 19, at the home of Thelma Valdez. Potluck lunch at 12:30 is followed by business meeting. All members are welcome. Contact Thelma for RSVP and directions, nmtv@unwiredbb.com

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.



*New and Renewing Members (as of December)

City of Fresno Water Conservation Program, Michael Kunz, Leslie Lipton, *Pat Long, Jim Seay, Georgia Porcella, Ray Gorman, Diane Hughes, Rueben Hunter, *Cheryl Lossotovitch, Anne Merrill, Marc Meyer, Marge Patrick, Beth Teviotdale

The IRS considers dues in excess of \$12 per year and all gifts to CNPS as tax deductible. Renew your CNPS membership online using a credit card. As an option, renew automatically year after year. It is quick, easy, and convenient, and reduce renewal mailing costs. Visit www.cnps.org and click on the JOIN button.



Next Newsletter: February 2014

Send newsletter suggestions to Helen Shaw helshaw@gmail.com. The deadline for the February newsletter is Friday, February 7.

SEQUOIA CHAPTER OFFICERS* AND COMMITTEE CHAIRS

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Education	Warren Shaw	(See Newsletter)
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Plant Sale	Marian Orvis	(see Secretary)
Conservation	Jeanne Larson	(see Treasurer)
Directors at Large	Jim Seay Michele LuValle	jnjseay@gmail.com luvalle@mcn.org



JOIN



THE CALIFORNIA NATIVE PLANT SOCIETY



RENEW

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

I wish to affiliate with the Sequoia Chapter.

Name: _____

Address: _____

City: _____

State: _____ Zip: _____

- Student, Limited Income.....\$25
- Individual\$45
- Family, Group, or Library.....\$75
- Plant Lover \$100
- Patron\$300
- Benefactor \$600
- Mariposa Lily\$1500

Make your check payable to "CNPS" and mail with this form to:

New Member

Renewing Member

California Native Plant Society
2707 K Street, Suite 1
Sacramento, CA 95816-5113

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

January 2014



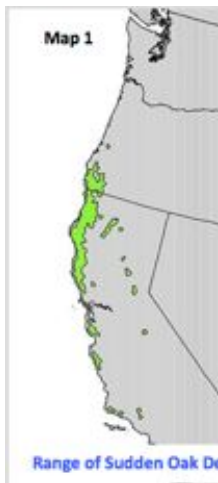
CALIFORNIA NATIVE
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SEQUOIA CHAPTER

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

MADELEINE'S MUSINGS

Sudden Oak Death Ecology

Madeleine Mitchell



The following article and map was taken from the WPDN summer 2013 newsletter. As a Master Gardener, some of us went to training to help us with diagnosing problems that could affect not only the native plants but agriculture, too. WPDN stands for Western Plant Diagnostic Network www.wpdn.org. I originally went to Sudden Oak Death syndrome when I was first certified in 1995, so my interest goes back a ways. This is the latest research on the possibility of what causes the decline and death of our native oaks. Fresno and Madera county are not affected but I thought the link between our native laurel and SOD interesting. The map is small but you can see where the areas are, mostly along the coast where the Oaks are in trouble.

Professor David Rizzo, a plant pathologist and mycologist in the Department of Plant Pathology at UC Davis, gave a presentation at a first detector training session at the UC Davis Arboretum on August 2, 2013. Dr. Rizzo is one of the lead scientists with the California Oak Mortality Task Force. It has been found that where *Umbellularia californica* (bay laurel, California bay laurel, Oregon myrtle) grows, *P. ramorum* thrives. *U. californica* acts as a Typhoid Mary for *P. ramorum*, having foliar infections but not dying from the pathogen. This is one of the main sources of the pathogen in the natural landscape. Where there is no bay laurel, there is no natural spread of the disease. Map 1 is the range of SOD, and Map 2 is the range of bay laurel.

The subgenus of oaks is another factor in susceptibility to or tolerance of the pathogen. The white oak group is very susceptible to the pathogen, while the red oak group is very tolerant of the pathogen. Is it a matter of genetics? This is another piece of the Sudden Oak Death puzzle.

The origin of the pathogen is still under investigation. At first it was thought to have come from the Netherlands or Germany in rhododendron, azalea, or camellia nursery material. Through genetic analysis this was disproven. The next hypothesis was that it came from Japan or somewhere in Asia, but this has also been discounted. *P. ramorum* was first discovered in California in 1995 when large numbers of tanoaks died mysteriously in Marin and Santa Cruz counties. It is possible that *P. ramorum* is native to the United States. Infection rates could have previously been at a low level, but changes in the environment caused a change to the population structure. Alternatively, the symptoms of *P. ramorum* may have been mistaken for that of other pathogens.





JANUARY 2014
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**SEQUOIA
CHAPTER
CNPS**



Clockwise from top, right

- **Toyon:** *Heteromeles arbutifolia*
- **Coyote Bush:** *Baccharis pilularis*
- **Mexican Manzanita:** *Arctostaphylos pungens*
- **Desert Willows:** *Chilopsis Linearis*

--With thanks to Thelma Valdez

