Members Night

Favorite Shots & Stories of the Natural World

Our annual Show and Tell of favorite natural places and things is coming up! As in years previous, you are encouraged to collect just enough photos to share for 5+ minutes with our eager group at our first General Meeting after the summer hiatus. Please contact Woody Elliott for questions and to reserve a slot for your presentation on our electronic projector: woodyelliott@gmail.com, (530) 588-2555.

To supplement the members sharing......Jim Bishop will give a presentation on Biological Soil Crusts. Biological soil crusts (which have gone by a variety of names over time) are diminutive, inconspicuous, but very important components common in arid-land ecosystems. They play important roles in nutrient acquisition/cycling, erosion protection, water absorption, and in the germination of native vs. non-native plants. They have been badly damaged by extensive grazing, and by other human uses of the land. A further interesting aspect of biological soil crusts is their resemblance to what may have been the earliest terrestrial ecosystems.

Jim and his wife Catie love the arid lands (essentially the desert, but other similar lands too), and go there whenever they can. They have long sought to see and understand the important components and processes that make arid-land ecosystems work.
Sitting down in the shade of oak trees staring at an old lawn mower by the dilapidated chicken coop I’m channeling Radar O’Reilley from the TV series MASH. Radar was the one who heard the helicopters carrying wounded soldiers, well before they crested the hills surrounding their camp. “Incoming” he would announce, setting the triage team in motion. When I hear a buzz above or behind me, unlike the characters in MASH I am not worried about consequences – only anticipating an incoming bumble bee descending upon the faded red lawn mower, which this colony of bumble bees, *Bombus vandykei*, called home this summer.

Last summer on my homestead (in a canyon below Paradise) bumble bees dominated the front garden. They were everywhere, the males sleeping in various salvias at night and the female workers methodically collecting nectar and pollen to bring back to their colonies during the day. There were four species of bumble bees, *Bombus californicus*, *B. melanopygus*, *B. vandykei* and *B. vosnesenskii* present in the garden and I was aware of two nesting colonies, both *B. californicus*. I was immersed in the lives of bumble bees, watching males and females visiting flowers, watching the males wake slowly in the morning, stretching their legs in the warmth of the early morning sun, watching the sporadic movement of the *B. californicus* in and out of their nests, and feeling some excitement when a young male ventured out of the nest into the world for the first time, working its way on foot through the tall grass to an opening from where it took flight.

After the Camp Fire scorched 95% of our canyon last fall, I was concerned for the survival of the bumble bees. A brief overview of bumble bee life cycles: By sometime in late summer, the colony has completed its purpose – that of producing the next year’s queens. By season’s end all of the current colony die, males, worker females and the founding queen. Only the newly produced queens remain. To survive the many months without floral resources, these young queens, already fertilized by males, find a place to wait out the fall, winter, and early spring – burrowing in some duff in the grasslands or maybe a small hole made by another creature - whatever cozy, dry place they can find. Looking around at the blackened landscape post fire, I wandered how they could have survived.

Much of the work living in a fire prone landscape focuses on fire prevention. This includes many many hours cutting the tall grass in late May through June. While it is a tedious job it is rewarding knowing that last season’s work probably helped save my house, out buildings and many oak trees. It is a job that brings me into close contact with the land, walking steadily, slowly, cutting swaths of tall dry grass, watching for bumble bee nests, wasp nests and rattlesnakes. I do my best not to let my mind wander, but I’m always surprised when I come upon a snake or active nesting site. This year while cutting the grass in late June around an outbuilding, I pushed an old lawn mower forward with my foot. Next thing I knew a dozen or so bumble bees are flying all about. They were clearly agitated, but not aggressive. I felt terrible for disturbing them and shut off the weed trimmer, carefully pushing the lawn mower back into place, hoping they’d resume their work of building a colony. Checking on them a few hours later all seemed fine – workers were coming and going. I breathed a sigh of relief, thrilled to have the bumble bees back in the garden again this summer.

However I was not to be their only disturbance. Two days later, when I checked on them in the morning the lawn mower had been turned on its side with dozens of bumble bees frantically scurrying about on the ground. The nest had not been totally destroyed just scattered. It appeared the bulk of the nest was securely tucked up around the lawnmower blade. After pushing some of the scattered remnants of the nest together I reset the lawnmower. Skunks and raccoons will dig up bumble bee and wasp nests, but I doubt if either could turn over a heavy lawn mower. It must have been the bear my dog Bella alerted me to a couple evenings earlier. Yes, it must have been a bear. Fortunately the resilient bees were able to pick up the pieces and resume their nest building and continue raising their young.
Bumble bees, like so many bees and pollinators, are struggling due to habitat loss, exposure to chemicals and climate change. I wanted to protect the bees and encourage their success, so I cobbled together a wire tent secured to rebar pounded into the ground. Crude and funky maybe, but it kept them secure for the remainder of the season.

Today, Aug 12th, marks the end of bumble bee season on the homestead. I know this because after sitting and observing for 10-20 minutes several times a day, the bees are no longer coming and going into and out of the nest. And there are none in the garden. I may see a few queens occasionally as they visit flowers to build up reserves for their long wait until next spring. The garden is much quieter now. The work and purpose of this colony is completed. I will miss them.

A male B. vandykei napping on a hot day on Lamb’s Ear

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**Treasurer** Nancy Praizler  
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Delegate / Programs Co-Chair Woody Elliott

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Hospitality Roxane Canfield

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Volunteer OPEN

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There have been six summer field trips at the time of this Pipevine deadline. Margo Lund volunteered to lead the walk along the Butte Creek BLM Trail. The outstanding feature of that trail was storm damage as a result of a thunderstorm with wind and hail a day or so before. The trail was carpeted with big leaf maple leaves, and many tender plants were shredded. There was still plenty to see, and great interest was spurred by the masses of lady bugs on the alders and redbud shrubs. We observed the rare Sanborn’s onion plants (*Allium sanbornii*), but unfortunately there were no blooms.

The Butterfly Valley trip was the most popular with 30 participants, mainly locals from the area of Quincy to Portola. We were rewarded with views of the two insectivorous plants in the meadow. The sticky round-leaved sundew (*Drosera rotundifolia*) and the California pitcherplant/cobra lily/ *Darlingtonia californica*. Each has its own unique way of trapping insects as a source of nitrogen for growth, since fens and seeps are notoriously low in nitrogen. Stops along the road provided another wet habitat where the twayblade (*Listera convallarioides*), the white bog orchid (*Plathera dilitata*) and Shasta lilies (*Lilium shastense*) grew.

Linnea Hanson led the field trip to explore the **Plumas Penstemons**. We were successful in finding in bloom five out of the six species in various habitats near the Bucks Lake area. The first located was western gray beardtongue (*Penstemon laetus*) bright blue among pink *mimulus*. Mountain Pride (*Penstemon newberryi*) and Plumas County beardtongue (*Penstemon neotericus*) grow across the road from one another on a rocky slope overlooking Bucks Lake. Thanks to Linnea I can remember them because both species start with “n.” Meadow beardtongue (*Penstemon rydbergii*) was found, yes, in a meadow! Hotrock beardtongue (*Penstemon deustus*) grew along the hot, dry road adjacent to the meadow. Of great interest was the blooming bear grass in a brush field beside the road. The history of the area was explored by walking a short distance on the Beckwourth Trail (finding Drummond’s anemone and a woodland star) and scouting out the loggers’ cabins used by the Swayne Lumber Company.
Betty Volker took us to Kennedy Meadows for a grand show of many varieties of flowers in a wet meadow. At her invitation, many from the cabins in the Butte Meadows/Jonesville area joined us for a total of 17 people. With everyone’s participation we identified 100 species, and added almost 20 species to the plant list, though some of those species came from Colby Meadows near the snowmobile parking area and also the pitcher plant fen near Cherry Hill. Highlights were the many Shasta lilies, sundew, and western Tofieldia (Triantha occidentalis ssp. occidentalis) a head of small lily-like flowers in the false asphodel family, (photo above) not to be confused with California bog-asphodel (Narthecium californicum) in the real Asphodel Family, and which has a similar growth habit. At least it is yellow. Sometimes I get confused with all these name changes. Both of these bog flowers used to be in the Lily Family, but now in California each is the single genus in its own family.

Wilson Lake is on the ridge east of Child’s Meadow. Many flowers were blooming at the time of our visit, a very different habitat than Kennedy Meadows. Along the dry edges of the lake, and even in the boggy or drying areas around the lake we observed a plant with yellow flowers that could be mistaken at a distance for monkeyface flowers. They actually belong to the common bladderwort (Utricularia macrorhiza) an insectivorous plant, which has sacs on its leaves which pull in small insects, mosquito larvae, worms etc. and digest them as a nitrogen source. If you are interested, you can see the action by Googling “bladderwort youtube.” All we could see were the little bladders on the leaves. Flowers of the area included masses of pink Bridge’s gilia, (Navaretia lepetala) pentstemon along the lakeshore.

We were fortunate to have Robert Fischer join us for the field trip to Scotts John Creek, as he compiled the plant list for that interesting place.

The phenomenon of guttation was observed on the enchanter’s nightshade, and on strawberry leaves. It occurs when a plant is fully hydrated due to wet soil, and there is no transpiration of that water from the plant because the stomata are closed at night. Because of the pressure from the root, the excess water in the plant then exudes from pores on the tips or edges of the leaves. It is not the same as dew, which condenses from the air outside of the leaves Special flowers we saw were the rare (CNPS List 1.B.2) Silene occidentalis ssp. longistipitata, or long-stiped Silene, (photo below) and close by, western peony (Paeonia brownii) with its large seed pods. The small Yosemite moonwort (Botrichium simplex var. compositum) was growing in a moist seep. We wandered through an entire field of Helianthella (Helianthella californica var. nevadensis), woolly mule’s ear (Wyethia mollis), and arrow-leaved balsamroot (Balsamhoriza saggittata). The flowers of the latter were especially enjoyed by the deer.
RIDGE LAKES
LASSEN VOLCANIC NATIONAL PARK
September 7 Saturday
Meet at Chico Park & Ride west parking lot (Hwy CA 99/32) in time to leave by 8:30 am. Call the leader for an alternate meeting. Take a lunch, water, sun/wind/insect protection and money for ride sharing. We will drive Hwy CA 32 to CA 89, 74 miles to the Lassen Park southwest entrance Visitor Center for a rest stop. Ridge Lake trailhead is at the Sulfur Works parking lot, 1 1/2 miles north of the Visitor Center. Experience an alpine high with minimum of effort. You will however, have to work because the elevation gain is 1,000 ft over a mile’s distance of trail. The trail is clean and easy to follow and we will make many stops to view flowers and view spectacular vistas. The two Ridge Lakes lie cupped in a stark high country bowl at the base of a bony ridge between two of Lassen Park’s major peaks. Leader: Marjorie McNairn 530-343-2397

KINGS CREEK TO CONARD MEADOWS
LASSEN VOLCANIC NATIONAL PARK
September 21 Saturday
Meet at Chico Park & Ride at 8:30 am. Bring lunch, water, sun protection, and money for ridesharing. Wear sturdy hiking shoes. The hike is an easy three mile round trip in a little traveled area, excellent for birds, wildflowers and deer. We will walk from King’s Creek Picnic Area past Cold Boiling Lake where gas bubbles rise to the water’s surface to flower fields near Crumbaugh Lake. See lava cliffs that ring the lake’s basin, and vistas of surrounding peaks. If time, energy and desire permit, we will continue another half mile to Conard Meadows, a round-trip total of about 4 miles. It will be fairly level, with some ups and downs, at an elevation of around 7000 feet. Leader: Marjorie McNairn 530-343-2397

Friends of the Chico State Herbarium
present a workshop on
Maintaining Native Plants in the Garden

This workshop will be held from 9:00 a.m. to 3:30 p.m. on Saturday Sept. 21st 2019, in Room 129 Holt Hall, on the Chico State University Campus. The registration fee is $60 We’ll spend the morning in the Chico State Herbarium discussing what a native plant garden entails – design, soils, planting, irrigation and overall maintenance. The afternoon will be hands-on in a garden, seeing best practice techniques for planting, pruning, deadheading, watering and more. For more information contact John Whittlesey johnccnd@gmail.com Co taught with Rob Schlising. To register contact the CSU Chico Biology office at (530) 898-5356 or sscholten@csuchico.edu.

From Our Horticulture Chair - Gardening With Natives
Do you have questions about your native garden, plant care, or plant selection? Bring your questions - and any samples or photos - to our monthly meetings. An experienced horticulturist will be available to help you find answers prior to the start of each meeting. Look for us near the display tables.

And fall is almost here - the best time of year to plant natives. So get your plant lists and numbers firmed up and purchase those plants soon while the nurseries still have them in stock. Don't forget that it's also time to sow wildflower seeds and plant spring-blooming native bulbs. If you are having trouble sourcing your favorite plants, I am happy to help you. You can contact me, Deborah Halfpenny, at debhalfcent@yahoo.com.
These businesses support the goals of CNPS
Members get a 10% discount on Plants

EXECUTIVE BOARD MEETING

September 18th
ALL CNPS MEMBERS WELCOME!

Sundew *Drosera rotundifolia*
Membership Form
CALIFORNIA NATIVE PLANT SOCIETY
I wish to affiliate with the Mount Lassen Chapter new ____
renew ____
Name ____________________________________________
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State ______ Zip _________ Phone ____________________
Email _____________________________________________
Send Membership Application to:
California Native Plant Society  Student / Fixed Income ...... $25
Attn: Membership                Individual ...................... $50
2707 K Street, Suite 1         Plant Lover ............... $120
Sacramento, CA 95816-5130      Supporter .................. $500
For memberships for organizations or to become a
Perennial monthly-sustainer contact CNPS.org

Calendar for
September 2019
5th      General Meeting
7th      Ridge Lakes
18th     Board Meeting
21st     King’s Creek
21st..... FOH Workshop