General Meeting

Dec. 4th 2019
Wednesday 7 PM
Butte County Library, Chico

Using Calflora and XID (a Multi-Access key) Software to Better Your Plant Adventures

by David Popp

The talk will first focus on my experiences using Calflora to prepare for what you might see on your field adventures. Calflora is the “Swiss Army Knife” for plant enthusiasts with many textual, visual and cartographic resources for identifying plants in a given area.

Then we will explore the SOFTWARE program XID, a multi-access key to identify plants you find in the field. A multi-access key for botany is an identification tool, which can be more useful than traditional single-access, dichotomous keys that are a fixed sequence of identification steps. Such a multi-access key enables the user to choose plant characteristics that are convenient to evaluate for plant identification.

David Popp is a plant enthusiast that enjoys studying and learning about plants. His many interests include California native plants, gardening, ethnobotany, horticulture, and just about anything to do with plants. As a retired high school Biology teacher, he loves to document plants of California with his dogs using Calflora and helping others enjoy the plant kingdom.
Mount Lassen Chapter Officers for Year 2020

By unanimous vote of the membership attending the November 2019 General Meeting the following stalwarts were elected to the Chapter’s Board of Directors for one-year terms commencing January 2020:

President - Nancy Praizler,
Vice President - Deb Halfpenny,
Secretary - Karen Smith,
Treasurer - Ann Ferry,
Members At Large - Hesh Kaplan, Marjorie McNairn, and David Popp.

Thank you! to these new officers for agreeing to serve and guide the Chapter at monthly meetings in the coming year to which all CNPS members are welcome to attend. Time and place noted on the Chapter’s website.

Status of Mount Lassen Chapter
Committee Chairs for Year 2020

The following committees are lacking chairpersons: Alice Hecker Memorial Native Plant Garden at Chico Creek Nature Center, Conservation Advocacy, Invasive Plant Control, General Meeting Programs, Rare Plants, Table Sales, Website Administrator, Yahi Trail Maintenance. A Chapter Delegate to the Quarterly Meetings of the CNPS Chapter Council will need appointment by the Board of Directors. Please consider serving in one or more of these positions. Critical ones are underlined. Contact incoming President Nancy Praizler to express your interest in such appointment and former Chairpersons to learn what is typically done by these various committees.
Designing the Native Plant Garden

Part 3 - Site evaluation

Doing a site evaluation for a native plant garden is the same as for any type of garden. The point is to collect as much useful information about your land as you can before you start your garden plans.

If you have been observing your land for a year, as we discussed in Part 2 (see Pipevine, October 2019), then you will have already done your site evaluation, whether you knew it or not. You will know where north is, because you have observed how sun and shade areas move throughout the year. You will know the contours of your land, how the soil drains or water collects during periods of rain, and the direction of winds during both winter and summer. You will have formed opinions about existing trees, shrubs, walkways, fencing, views, noise, lighting, wind, parking, overhead wires, utilities, wildlife activities, and know what is lacking. You will have noticed how you move around your property and if some changes might be in order. You will have located the source of your water and determined its quality. If you have not had a full year to observe your land thoroughly, a quick inventory of these things is in order.

I strongly recommend drawing a to-scale base map of your property to record all of the features you have observed and where they are located in relation to the property lines and structures. It does not have to be a work of art, or even labeled (except for noting your scale and a north arrow) as long as you know what your marks signify and you intend it for your own use. Draw in the locations of the doors and windows of your house, garage, and outbuildings. For the urban/suburban lot, note the locations of your adjacent neighbors’ buildings (and doors and windows), trees, and other features that are easily observable from your property. Make several copies of your base map to use through the many coming phases of your design process.

It is useful to do a little off-site research as well. Knowing your general climate patterns, like annual rainfall averages and winter cold temperatures, is important. Knowing your USDA, or better yet, Sunset climate zone will be useful in choosing appropriate plant material later. To research your property’s soil types, check out: https://casoilresource.lawr.ucdavis.edu/gmap/. If you are concerned about your property’s susceptibility to wildfire, there is an interactive map to explore: https://gis.ucla.edu/blog/fire-hazard-every-building-in-california-interactive-map.

With your wealth of observations, you will have undoubtedly formed many ideas about how you might want to use your land. It is at this point that you should contemplate the compatibility of your desires with those of your land and the constraints of your location. We will explore this next time.
Multiple Attractions at Hat Creek

On a clear, calm, fall day this field trip explored geology and vegetation in the Hat Creek Area. Starting at the Spattercone Trail nine of us climbed up the spatter rampart ridge formed by the Hat Creek Basalt flow 24,000 years ago. We were on our way to explore the 17 spatter cones, and the origin of the lava that flowed down the Hat Creek Valley, forming the Subway Cave. The liquid lava emerged from a fissure in the ground and was directed northward for about 20 miles through lava tubes. Spatter cones are formed by blobs of molten lava that build up around a vent forming steep-sided mounds or in some cases higher spire-like formations. As the eruption subsides, the spatter cones are plugged by cooling lava. Lava tubes may still exist underground and there is evidence of such in spots where they have collapsed. From the Spatter cones we looked southward to Lassen Peak over a sea of green-leaved manzanita (*Arctostaphylos patula*) an occasional late-blooming rabbitbrush (*Ericameria* sp.), and scattered ponderosa pine (*Pinus ponderosa*.) Antelope-bush (*Purshia tridentata* var. *tridentata*) and mountain mahogany (*Cercocarpus ledifolius*) were in abundance along the trail, and there was evidence of a number of spent blooming herbs such a violet, empty seed pods of a lily, and Monardella.

After lunch, the next stop was at the Hat Creek Rim Overlook to view the many volcanic peaks and the Hat Rim escarpment. Formed by hundreds of earthquakes over the last one million years, and which raised the height 1000 feet above the valley floor, the escarpment has been eroded backward and is now covered with talus. From the overlook, the east edge of the Cascade Range Province is apparent by the mixed conifer forest, while east of the escarpment contains the floral mix of the Basin and Range Province, including the Modoc Plateau, with chaparral including manzanita, mountain mahogany, antelope brush, sage brush, rabbit brush, squaw carpet, and juniper trees. Each Province has its own distinct features and is defined by the age and types of rocks found, which we can see by the differences in the plants that grow there.

The fall colors were outstanding. Willows along Hat Creek were brilliant, and the black oaks (*Quercus kelloggii*) also beautiful, especially during the drive west on Hwy 44 with backlighting by late afternoon sun. At a slightly higher altitude, and in open forest the Garry oak (*Quercus garryana* var. *garryana*), showed its own glory at the Hat Rim Overlook and scattered through the hillsides of the Hat Creek Valley.
The final stop for the group was Subway Cave. The entrance and exit were created by the collapse of the roof. It was impressive in its size and the depth of darkness within. The signs of life observed within the cave were one small bat on the ceiling and a small fragile fern (Cystopteris fragilis) growing in a crevice of the rock wall.

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'I'm liking your plant selection' a man walking by said to me recently as I worked in a garden I'm installing. His statement surprised me – and pleased me. There are no bold foliage plants with large showy flowers or instant gratification specimen plants from 15 gallon containers. Did he see the potential in the complex arrangement of small plants, recently planted with the old lawn still in view, a couple with a few flowers? Could he visualize walking by next year and seeing a garden teeming with bees, butterflies?

This fall I will finish two garden installations, and I completed another in late summer. The intent of all three clients was to encourage more bees and butterflies in their gardens. They were motivated to do their part in helping support healthy populations of flower visitors, and all wanted to use as many native plants as possible. They’d done some research or read articles about the serious decline of pollinators and felt it was time to act by getting rid of their lawns and planting climate appropriate native and non-native plants. The precipitous decline in monarch butterfly populations along with the extensive press reporting on the mysterious colony collapse disorder in honeybees has brought attention to the need for providing healthier habitats for all pollinators.

It is plain and simple. It is not complicated. If you want to encourage pollinators in your garden, the key to success is to plant more flowers. Don't plant more lawn, or foundation shrubs, or even more shade trees, plant as diverse a selection of flowering plants as there is space in your garden.

In the UK several recent studies have shown that urban landscapes have a higher diversity of pollinator species than rural agricultural areas. Monoculture crops, farming to the roadside, and of course the heavy use of pesticides have led to this loss of diversity in rural areas – for wildflowers and for insects. Here in Chico, Rob Schlising’s outstanding garden is a shining example of the diversity of native bees that can be attracted to a suburban garden. Rob has observed approximately 50 species! So it can be done.
Want Pollinators? Plant More Flowers -(Continued)

Native plants I frequently use when designing a garden for pollinators are Heuchera, Eriogonums, Eriophyllum, Penstemon, Epilobium (Zauschneria), Salvias, Verbena, Asclepias and Monardella. The planting of non-natives such as Agastaches, Salvias, Nepeta and asters helps in providing a continuing source of pollen and nectar for a wide range of pollinators.

Of course sustaining a healthy ecosystem of flower visitors takes more than just planting more flowers. Native bees need undisturbed areas to nest and butterflies need a variety of larval sources for their caterpillars, but providing a source of food – nectar and pollen, is a good place to start in helping to support populations of our native pollinators.

Upcoming Field Trips

**CALIFORNIA STATE UNIVERSITY CHICO**
**CAMPUS TREE AND SHRUB TOUR**
**Saturday, December 7**

Meet in front of Bidwell Mansion at 10 am for a 2-hour fall color walk to see trees in the campus landscaping. Some date back to the founding of Chico State Normal School in 1890. Some trees have been lost through the years, but some trees we might see are three different kinds of redwoods, American chestnut, eastern dogwood, hawthorn, purple Norway maple. Ends at noon. Leader: Marjorie McNairn 530 343-2397

**MAIDU ROCK SHELTER**
**Upper Bidwell Park**
**Wednesday, January 1, 2020**

HAPPY NEW YEAR!

Meet at 10 am with lunch and drink at the Horseshoe Lake (parking lot E) trailhead to upper Bidwell Park. Wear cool weather gear. Start the new year off with this traditional trip to Upper Park and a rock overhang with 25 bedrock mortars and a small waterfall over the entrance (if it has been raining.) About a 3.5 mile hike. Rain cancels. Leader: Marjorie McNairn, 530 343-2397, MLMcNairn@aol.com.

Calendar

**Snow Goose Festival** January 25 & 26 (Saturday & Sunday). Volunteers are needed to assist at our educational table. A sign-up sheet will be available at the December general meeting.

On January 13-14, 2020, **Northern California Botanists** will present a two-day symposium titled “**The Diversity of Northern California Botany: Challenges and Opportunities**” at California State University, Chico. A third day of workshops is offered. Also included: a poster session, reception, banquet, keynote speaker. Student stipends available. For details, see www.norcalbotanists.org
Wildfire is a natural part of California’s ecosystems, but the “new normal” of extreme and deadly wildfire patterns demands a better understanding of how fire affects the natural environment and what each of us can do to be better stewards of our land before and after fire. The California Native Plant Society has partnered with dozens of subject matter experts, scientists, and organizations to create a statewide, science-based guide to address these challenges. Mount Lassen Chapter, North Valley Community Foundation and Butte County Fire Safe Council were among the donors who supported the Fire Recovery Guide.

The CNPS Fire Recovery Guide is an expanded, statewide edition of the organization’s Fire Recovery Guide for Wine Country, originally published shortly after the 2017 wildfire season. The new 92-page booklet focuses primarily on land management for property owners post-fire, but also includes simple overviews on defensible space and basic fire ecology. Sections include:

- Frequently asked questions about wildfire in California
- A post-fire checklist for land-care
- A decision-flow diagram for post-fire management
- Recommendations for erosion control
- Tree care and landscaping considerations after fire
- Defensible space updates, and
- An overview of California’s most fire-prone habitats

The Fire Recovery Guide is available for download for no cost at cnps.org/fire-recovery. CNPS has also printed an initial run of 15,000 copies. The chapter has already distributed around 175 copies to individuals and groups in our chapter’s area of Butte, Glenn, Tehama and Plumas counties. Contact Cindy Weiner (wildflowermaven@comcast.net) if you know people who experienced property damage in recent fires or who live in high fire risk zones and would benefit from the information in the guide.

Soaproot (Chloragalam sp). showing growth a few weeks after the Camp fire

Photo by Jennifer Jewell

Milkmaid (Cardamine californica) Three months after the Camp Fire.
These businesses support the goals of CNPS
Members get a 10% discount on Plants

Denise Kelly
Owner
406 Entler Avenue
Chico, CA 95928
530 345-3121
FAX 345-5354
flowerfloozie@sbcglobal.net
www.theplantbarn.com

Crepe Myrtle on Chico State Campus
Membership Form
CALIFORNIA NATIVE PLANT SOCIETY
I wish to affiliate with the Mount Lassen Chapter new ____
renew ____
Name ____________________________________________
Address __________________________________________
City ______________________________________________
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 December  2019

4th  General Meeting
7th  Chico State Campus Tree Tour

No Executive Board Meeting in December

January 2020

1st  Maidu Rock Shelter
13th - 14th  Northern CA Botanists
25th-26th  The Snow Goose Festival

Painted Lady on Blue dicks Dicholostemma capitatum