



Bristlecone Chapter

Dedicated to the Preservation of California Native Flora

The California Native Plant Society

Bristlecone Chapter Newsletter

Volume 35, No. 5
September-October 2014

President's Message—September 2014

I recently read an issue of Popular Science which dealt with technology and the future. One section was science fiction stories in which authors shared ideas of how we will deal with problems in the future. I like science fiction. I enjoy reading how writers think we will solve our problems in the future. What struck me was that the stories dealt with the technology of war, transportation, and food but never water shortage. But as National Geographic says, "All the water that will ever be is right now." We can dam it, channel it, desalinate it and pipe it all over the place, but we can't create more of it.

From tree-ring data, scientists know that the twentieth century was one of the two wettest 100-year periods in the last 1200 years. Yet western water policy and prediction is based on weather data from this 100-year period. The droughts we are experiencing now may not be an aberration but a return to the norm.

If that is the case, we need to start planning ahead. Water we waste on lawns today may be an act we regret tomorrow. I am removing lawn from my yard, and it is back-breaking work. But I will feel better when the water I put on plants go toward ones that feed me. This doesn't mean I can't have ornamentals in my yard, but I am replacing thirsty ones with native and xeriscape species. I also find that the native plants attract native pollinators. Jamie Pawelek (see her article in this issue) found nine species of native bees in my yard in a one-hour survey. My conversion from 1960 landscaping to natives is slow, but every year a few more feet of lawn will go, replaced by natives and food crops instead.

If you are adding to your native gardens or want plants that will attract native bees, come to the Native Plant Sale on September 13 at the White Mountain Research Center from 9 to 11 AM.

September 5-7 CNPS Chapter Council Meeting hosted by Bristlecone Chapter

The Bristlecone Chapter is hosting the September 2014 California Native Plant Society Chapter Council meeting. The keynote dinner is September 6 at Bernasconi Ranch on Sugarloaf Road west of Big Pine. Speaker at the dinner is Dr. Jim André, director of the Granite Mountains Desert Research Center. Jim's talk is titled "*Pondering Marcus, Malthus, Michael and Mary, and other Musings of a Desert Botanist.*" This should be an excellent program. Call Julie Anne Hopkins at 831-566-6012 if you are interested in attending the talk without the dinner.

September 13 Bristlecone Chapter Native Plant Sale, White Mountain Research Center, 3000 E Line Street, 9-11 AM

A wonderful array of native plants is offered every year. We've been busy coaxing from seed dozens of brittlebush, various buckwheats, penstemons, Mojave aster, lupine and many more favorites!!

Proceeds from the annual native plant sale provide funding for our Mary DeDecker grant program. The grant program is a fitting way to remember Mary DeDecker's many contributions to the people and plants of the Eastern Sierra. See our plant sale list at www.bristleconecnps.org for more information.

September 17, Bristlecone Chapter Board Meeting, Conference Room, Interagency Building, 351 Pacu Lane, Bishop 7 PM

All members welcome.

September 24, Bristlecone CNPS General Meeting, Larry Freilich on the Lower Owens River Project: The River Runs Through It (and How's That Working Out). Water Department Conference room. 135 S Jackson, Independence, 7 PM

Larry Freilich is the Mitigation Manager for the Inyo County Water Department. He oversees the implementation of the many Long-term Water Agreement mitigation projects, and others environmental projects throughout the Owens Valley; including revegetation projects, and the Lower Owens River Project (LORP). Larry will be presenting background on the LORP and talk about project successes and the challenges of recreating a river ecosystem on the edge of the Great Basin desert. He will also entertain a discussion on other mitigation projects that would be of interest to CNPS members and others in attendance.

Special Note: Note change of venue!



Larry Freilich on the Lower Owens River

**Inyo, Sierra and Sequoia National Forest Plans—NOI POSTED
Don't miss the opportunity to provide
Comments and Concerns**

The Notice of Intent (NOI) for the Draft Environmental Impact Statement (EIS) on the three forest plan revisions—Sierra, Sequoia, and Inyo—will be posted in the Federal Register on Friday August 29. The comment period will be 30 days beginning August 28. The NOI will inform the public of the Forest Service's intent to prepare and develop an EIS

that will revise the forest plans. Our comments will be included and addressed in the NEPA process. The final documents will be three individual Records of Decision for each forest's management plan. Since management plans are typically in place for 15-20 years it is a very important step in the NEPA process. We need to voice our concerns.

The Inyo National Forest will hold a public scoping workshop **6:00-8:00pm — Thursday, September 18, Inyo National Forest, Tri-County Fairgrounds, Sierra Street & Fair Drive, Bishop.** For more information and to review the planning documents go to:

www.fs.usda.gov/main/r5/landmanagement/planning.

This process may seem long and slow but it is important for the Eastern Sierra and for those who love its plants.

--Julie Anne Hopkins

Native Bees Need Native Plants

On your next wildflower hike, take notice of the unusual winged insects pollinating the colorful blooms. Are they all honey bees, or are they one of 1,600 native bee species that call California home? While honey bees tend to dominate the bee landscape, they are not native to North America, but were brought here by early European settlers. California's native bees have evolved over thousands of years with the diverse flora over our heterogeneous landscape. The various shapes, sizes, and colors of blooms have adapted to fit with their most preferred pollinator, native bees. Bees are built for pollination and have specialized hairs on their bodies in which to carry pollen back to their nests and feed to their developing young. They also time their emergence to sync with the bloom of their preferred plants. This means that as the first spring blooms open, with them comes a group of native bees built specifically to pollinate them, including bumble bees, spring long-horned bees, digger bees, and mining bees. As the season progresses a new group of bees emerge to collect nectar and pollen.

Many native plants rely on their bee pollinators so they can set fruit and go to seed, which then provides food to a myriad of animals and birds. Bees can be placed in two different groups, either generalists or specialists. Specialist bees have evolved to collect pollen from either one family of plants, i.e. Asteraceae or Malvaceae, or even one genus or species of plants. Their offspring will only survive if they consume the

pollen from these specific plants. One famous specialist is the squash bee (*Peponapis pruinosa*), which requires plants in the Cucurbitaceae in order to survive. Squash bees are common garden visitors as many gardeners and farmers have planted squash, zucchini, and pumpkins all across the U.S. Some flowers may not be able to set seed if their specialist bee is missing and often the reproductive success of both the bees and flowers are tied to each other. Most bees, however, are generalists and can take pollen and nectar from most flowers.



Peponapis pruinosa
Photo by Rollin Colville

Through our research in the Urban Bee Lab traveling all over California, we have found that native bees have a strong preference for native plants. Most home gardeners, however, plant non-native exotic ornamentals, especially as that is what is found at most plant nurseries. To encourage native bees into your garden, plant a diverse palette of flowering plants, which bloom from early spring into late fall. Plant natives including *Ceanothus*, *Arctostaphylos*, and *Salvia* species, and plant large patches of smaller plants like *Penstemon*, *Achillea*, and *Lupinus* species. For more information on gardening to attract bees, visit www.helpabee.org

--Jaime Pawelek
UC Berkeley Urban Bee Lab

Note: We hope to have Jaime Pawelek as a guest speaker at our general meeting this spring depending on road conditions.

August 2014 Greenhouse News

This summer's weather has been a real challenge to the growing season. It has been a real dance with the timing of water because of hot thunderstorms. The plants started to look over-watered so I backed the timer down to three minutes a day, that was too little. Five minutes seemed too much – but then we would have a dry week and five minutes was good. This year will be known as the dance of the water.

I have found with natives plants that when they don't get enough water they look terrible, like they are dead, but within a week of getting water again they spring back with new growth and recover rather rapidly.

Despite the challenging weather the plants for the sale look really good. I have 2,706 plants of 65 different species. Growing the natives is like running a science experiment. What it takes to get one species to grow is different from what another needs for growth. It is nice to grow the plants I know, but it is also fun to try new plants. This year my new plants are *Quercus kelliogi* Black Oak, *Amelanchier utahensis* Utah Serviceberry, *Ceanothus velutinus* Tobacco Bush, and *Ericameria albida* White Rabbitbrush.

The sale will be on Saturday, September 13 from 9 to 11 AM at the White Mountain Research Center.

--Katie Quinlan

Bristlecone Trip Report—O'Harrell Canyon – Glass Mountain Trip Report

Sherryl Taylor and Julie Anne Hopkins were joined by 12 other curious plant lovers on a hike up O'Harrell Creek to see what there was to see. In fact, some folks drove long distances - the East Bay Area, L.A. and Ridgecrest- to attend! The Glass Mountains are located on the eastern edge of the Long Valley Caldera, so we had amazing views of the Sierra Nevada to the west.

It was a beautiful hike up the Jeffrey Pine/Mountain Mahogany (*Cercocarpus ledifolius*) fragrancd canyon, along side O'Harrell Creek. Many riparian plant species were in flower, such as, Sierra Tiger Lily (*Lilium parvum*), Primula-like Monkeyflower (*Mimulus primuloides* var. *primuloides*), Columbine (*Aquilegia formosa*), Goldenrod (*Solidago*

multiradiata), and deep purple Monkshood (*Aconitum columbianum* var. *columbianum*), to name a few. We were very fortunate to have several botanical experts along to help identify some of the less familiar species (or provide the current names...), and we added a few species to Michael Horner's existing plant list.

Watch for this hike to be advertised again in 2015— even though the trail is a little underdeveloped, it is worth the trip.

--Julie Anne Hopkins



Glass Mountain Field Trip
--Photo by Julie Anne Hopkins

Aspendell to North Lake Field Trip

Michael Honer led a delightful botany hike on July 19 beginning at Aspendell and ending at North Lake. The group botanized along the old stock trail which began at the edge of a seep meadow and climbed up dry slopes of sagebrush shrublands to the lake.

Some plants seen on the dry slope were *Caulanthus pilosus* (chocolate drops), *Heuchera rubescens* (alumroot), *Ericameria viscidiflorus* (curly leaf rabbit brush) and blooming *Opuntia basilaris* var. *basilaris* (beavertail cactus). Three *Eriogonum* stood out: *microthecum* var. *ambiguum* (yellow flowered wild buckwheat), *nudum* var. *deductum* (naked buckwheat) and *umbellatum* var. *nevadense* (sulfur flower).

We had lunch at North Lake in the cool aspens by the outlet creek. Dark clouds were forming as we explored the seep meadow. But what lush and beautiful blooms greeted us! A few plants we saw were *Carex aurea* (golden sedge), *Epipactis gigantea*

(stream orchid), *Lilium Kelleyanum* (Kelley's lily), *Parnassia parviflora* (small-flowered grass o parnassus) and *Spiranthes romanzoffiana* (lady's tresses). Also we found both *Platanthera tescamnis* (hyperborea) (white flowered bog orchid) and *Platanthera dilatata* var. *leucostachys* (pale yellow flowered bog orchid). Great Day in the mountains!

--Kathy Duvall



Parnassia parviflora
Photo by Jane from Durham NC

Have I got a Workshop for You!

Occasionally, there are notices for botanical workshops and conferences held all over the state or elsewhere in the west, such as the annual *Eriogonum* convention, the biennial California Botanists Conference and others. Included among these are workshops hosted by the UC Berkeley Jepson Herbarium. These were the brainchild of the editors of the first complete Jepson Manual published in 1993 as a companion to the new treatments and keys. What better way to introduce the users to the new manual than by spending time with the authors of these treatments? These informal workshops were designed to educate botanists and plant enthusiasts on families and genera that might be challenging or interesting or just plain beautiful. Taxonomy was the primary focus but regional flora or field workshops were also introduced, like those taught by Jim Morefield in our White Mountains or Dana York at the Eureka Dunes.

I began my workshop attendance back in 1995, because our local Tahoe Chapter of CNPS had very

little to offer the plant enthusiast beyond the occasional field trip. I wanted tools and knowledge and I wanted them now! So I traipsed off to Berkeley and sat in a lab looking through a microscope for an entire weekend. I was in heaven! Actually, I was in way over my head, rather intimidated by the level of advanced botanical expertise exhibited during a weekend immersed in Asteraceae, the Sunflower Family. But I was hooked! There's nothing like getting to know a key and all its subtleties than by learning from the person who wrote it. I found the field workshops to be even more fun, such as those held at the Sage Hen Field Station near Truckee or the Yuba Pass Field Station further north. Bishop even hosted some of these early workshops in Rosaceae and Astragalus. Socializing with other participants in a beautiful location was an important aspect of these events. I have met many other botanists, amateur and professional, and now count many of them close friends. There's great food as well, as field workshops are almost always well catered!

I have attended over 30 workshops in the intervening 19 years. They were not inexpensive but always well worth it. I started out with a focus on taxonomy. Travis Columbus from Rancho Santa Ana taught an outstanding Poaceae (Grass) workshop. Following this workshop I immediately went out and bought a microscope of my own. I started keying grasses like mad, even driving an hour away down out of the snow to collect non-native grasses in the Sierra foothills.

Since then, my interest in taxonomy has given way to workshops focused on unique regions of California as my passion in photo-documenting plant taxa has grown. For example, just this year I began with a workshop to Anacapa and Santa Cruz Islands off Santa Barbara in April. We boated to both locations and stayed three nights at a UC field station on Santa Cruz Island. We bounced around the back of a truck over four days, getting to locations not easily accessible by the general public, led by Steve Junak of the Santa Barbara Botanical Garden.

I scooted back to Berkeley for a Cryptanthinae workshop anchored by Michael Simpson of UCSD the following weekend. We got a great overview of the genera *Cryptantha*, *Plagiobothrys*, *Pectocarya* and *Amsinckia*—known to many as Popcorn flowers and Fiddleheads. Although this was entirely lab work it was very satisfying.

June brought me back down south with a field workshop to the Tejon Ranch. Centered just east of the I-5 corridor at Tejon Pass, this is the largest contiguous private landholding in California and has only recently been open to botanical research and limited public access. We spent three days exploring this section of the Tehachapi Mountains with Neal Kramer who has been doing surveys on the Ranch for three years. Newly described *Eriogonum callistum* (Tehachapi Buckwheat) was seen, as were many taxa that were completely new to me. A real high point was a close encounter--100 meters--with a group of California Condors! (*Ai yi yi—editor's comment*)

In July I was off to Mt. Eddy, a 9,000 ft. mountain just west of and overshadowed by Mt. Shasta. What sets Mt. Eddy apart is that it is part of the largest serpentine outcrop in North America. As with our carbonate rocks here in the eastern Sierra, serpentine rock with its unusual chemistry leads to a remarkable abundance of endemic plants, including, as you might expect, more rare Buckwheats, Mt. Eddy Sky Pilot (*Polemonium eddyense*), and much else. Dana York and Julie Kiersted-Nelson treated us to a pack train supported camping trip, great weather, excellent food, pleasant companions and great leadership.

While these workshops may not be for everyone, I highly recommend them. Many fill up quickly and you may be wait-listed. Check out <http://ucjeps.berkeley.edu/workshops/> for further information. The workshops are winding down for this year, but in the late fall keep an eye out for next year's roster of workshops.

Happy botanizing.

--Steve Matson

Fish Springs and Black Rock: Forgotten Towns of Owens Valley by Janice Emily Bowers

Janice Bowers, a member of the Bristlecone Chapter and the author of "Birch Creek Journal" for our newsletter, has written a book on the abandoned towns of Fish Springs and Black Rock. Today Fish Springs south of Bishop isn't even a ghost town. Black Rock, now Aberdeen, is a mobile home park. But in the 1870s, they had a thriving population. [Fish Springs and Black Rock: Forgotten Town of Owens Valley](#), by Janice Emily Bowers, focuses on a little-known boom town in the late 19th century halfway

between Bishop and Independence. This is a serious historical study of a small boom town between 1864-1922, and Bowers makes an important contribution to the history of the Owens Valley.

Bowers writes in her introduction: “My book is *not* yet another history of how Los Angeles took (or stole) the water of Owens Valley. It is both broader and narrower than that—narrower in that it focuses on one neighborhood of many that were destroyed so Los Angeles could thrive, and broader in that the story of this one neighborhood tells in miniature the history of Owens Valley and indeed of Inyo County.”

Extensive appendixes and notes, including detailed township maps, and a biography complete the book. If you have Sierra Nevada/Owens Valley books on ecology, natural history, water, or geology, this book needs to be included. The book (signed) is available at Spellbinder Bookstore in Bishop and the Eastern California Museum in Independence.

--Thomas Brill

Volunteer Opportunity BLM-CNPS Indian Fire Bitterbrush Planting Day—October 18

On Saturday October 18, 2014, the Bristlecone Chapter of the California Native Plant Society will team up with BLM Botanist Martin Oliver and the Bodie Hills Conservation Partnership for a Bitterbrush planting in the footprint of the Indian Fire - south of Mono Lake in beautiful Mono County, California. Martin has several hundred young bitterbrush, and a few grasses – many our Prez, Katie Quinlan grew from seed—to be placed and planted. Join in on this opportunity to help with this post-fire restoration project.

We'll be meeting at Mono Mills off Hwy 120 at 9:30 AM. Contact: Julie Anne Hopkins, Conservation Chair (831) 566-6012



BLM Botanist, Martin Oliver, instructing volunteers on 2013 Planting Day

Up-Coming Events

CNPS Chapter Council Meeting, September 5-7 Bernasconi Center

Registration closed August 27 but space might be available for some events., such as the evening talk by Dr. Jim André. Call Julie Anne Hopkins at 831-566-6012 for information.

Bristlecone Chapter Native Plant Sale, Saturday, September 13 9-11 AM

White Mountain Research Center, 3000 E Line St. , Bishop

Bristlecone Board Meeting, Wednesday, September 17, 7 PM

Conference Room, Interagency Building, 351 Pacu Lane, Bishop.

September Bristlecone Chapter Meeting and Program, September 24, 7 PM

Inyo Water Department Conference Room, 135 S Jackson, Independence.

Larry Freilich on the Lower Owens Project: The River Runs Through It (And How's That Working Out)

BLM-CNPS Indian Fire Bitterbrush Planting Day—October 18, 9:30 AM

Mono Mills off Hwy 120 at 9:30am. Contact: Julie Anne Hopkins, Conservation Chair (831) 566-6012

Fall Bristlecone Chapter Field Trips

October 4, Saturday, CNPS Field Trip: Mollie Gibson mine area (White Mountains), Leader: Michèle Slaton, Meet at Highways, 395 and 168, 8:30 AM

We will walk along an old dirt road to "Prospect X," an abandoned silver mine on the east side of Westgard Pass. The hike ranges between 6600 to 7200 feet elevation. The walk will be 5 miles round trip, with the last ¼ mi. in a steep, but walkable canyon. Bring good footwear, layered clothing, water, lunch, and other items for an all-day outing.

Visit our website for more information on this hike.

October 12 Sunday--Highway clean-up. Leader Scott Hetzler. CANCELLED.

For more information contact Scott at 760-873-8392.

Bristlecone Chapter Directory

President: Katie Quinlan 760-873-8023

Vice President: Michèle Slaton 760-938-3258

Secretary: Rosemary Jarrett 760-387-2782

Treasurer: Paul Satterthwaite 773-208-7858

Creosote Ring Sub-chapter: Kathy LaShure 760-377-4541

Chapter Council Rep: Steve McLaughlin 760-938-3140

Conservation/Partnerships: Julie Anne Hopkins
831-566-6012

Programs: Michèle Slaton 760-938-3258

DeDecker Grants: Holly Alpert 760-709-2212

Field Trips: Sue Weis 760-873-3485

Historian: Kathy Duvall: 760-387-2122

Bishop Plant Sales: Katie Quinlan 760-873-8023

Mammoth Plant Sales: Sherry Taylor 760-934-2338

Publicity: Kristen Luetkemeier 703-862-4395

Newsletter: Edie Trimmer/Thomas Brill 760-920-3702

Membership: Edie Trimmer/Thomas Brill 760-920-3702

Website: Maggie Riley <webmaster@bristleconecnps.org>

Posters: Stephen Ingram 760-937-9918.

Book Sales: Sue Weis 760-873-3485

T-shirt Sales: Scott Hetzler 760-873-8392

Highway Clean-up: Scott Hetzler 760-873-8392

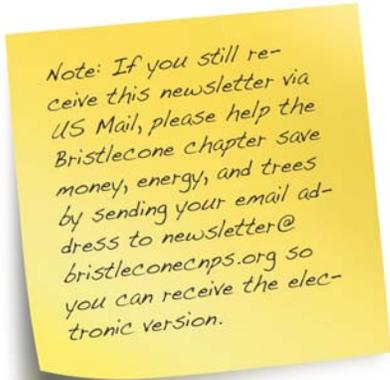
DeDecker Garden: Richard Potashin 760-263-5022

Next Newsletter Deadline

Please have your articles or information to us by
October 15, 2014.

The California Native Plant Society

Bristlecone Chapter
P.O. Box 364
Bishop, CA 93515-0364
RETURN SERVICE REQUESTED



Membership

The California Native Plant Society is an organization of laypersons and professionals united by an interest in the plants of California. It is open to all. The society, working through its local chapters, seeks to increase the understanding of California's native flora and to preserve this rich resource for future generations.

To Join or Renew Online: Go to cnps.org and click on the JOIN/renew button at the top of the page, or mail in the form below:

Name: _____
Address: _____
City: _____ **State:** _____
Zip Code: _____ **Phone:** _____
Email: _____
I wish to be affiliated with the Bristlecone Chapter: _____
Other: _____

__ Patron \$300
__ Benefactor \$600
__ Mariposa Lily \$1500
__ Additional Contribution _____

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Sacramento, CA 95816

Membership Category
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