



Bristlecone Chapter

Dedicated to the Preservation of California Native Flora

The California Native Plant Society

Bristlecone Chapter Newsletter

Volume 39, No. 3
July-August 2018

President's Message, July 2018

Every May the 35 California Native Plant Society chapter Presidents send in annual activities reports. It is a summary of everything we did over the year. Although I find keeping track of all the numbers and filling out the report a tedious task, in the end, it is kind of fun to see what we have accomplished.

We had one volunteer spend 240 hours digitizing the Inyo National Forest herbarium database and set up monitoring plots. Ten volunteers spent a total of 12 hours on conservation issues, mainly defending California's Desert Renewable Energy Conservation Plan and protection of Conglomerate Mesa. Ninety-two people spent 376 hours on restoration activities, primarily helping to grow native plants and working at the plant sales. Thirty-three people spent 222 hours working with other environmental groups or educating the public through talks and field trips. Six people spent 450 hours on governance.

Now this sounds like we have a lot of volunteers, but because the activities are categorized differently many of the same people are doing a variety things. The reality of all this volunteering is that 34 people donated 1,300 hours to the Bristlecone chapter activities. Wow, I am truly both proud and grateful of the work our volunteers do!

The information that I find most interesting isn't asked for in the report. It is the breakdown of our membership. We have a total of 176 members, for 20 of those members we are a secondary chapter. If you look closely at where people are from, only 66% are from the Eastside (Coleville to Ridgecrest). Considering the driving distance of the Eastside, I consider our "local" members to reside somewhere in the range of Mammoth to Independence (49%). For someone to be actively involved in the chapter, the most convenient geographical residential range falls between Big Pine and Swall Meadows (36%).

On the weekend of September 7th-9th we will be hosting the State Chapter Council meeting in Lee Vining. The Chapter Council is made up of representatives from every chapter in the state and is in charge of the governance of the entire organization. September's meeting will focus on conservation. Any member is welcome to attend the meeting. We will be providing breakfast and lunch for the representatives and leading a few field trips. We could use your help with selling T-shirts, collecting money for meals, setting up and taking down meals, or supplying homemade cookies or brownies! If you can help out, please contact Stephen Ingram at stepheningram140@gmail.com. Thank you!

--Katie Quinlan

Bristlecone Chapter to Host CNPS Chapter Council Meeting Sept. 7th-9th in Lee Vining

As noted in Katie's President's Message, we will be hosting the quarterly meeting of the Chapter Council and anyone is welcome to attend. The September meeting is based around the CNPS Conservation Program, and Conservation Program Director, Greg Suba, will be leading Saturday's meeting. The meeting will take place at the Presbyterian Church from 8:30 a.m. until 5:30 p.m., with social hour and dinner to follow. An evening program with Cathy Rose as our speaker will begin at around 8:00 p.m. in the theater at the Mono Basin Scenic Area Visitor Center. On Sunday morning, the Chapter Council will meet from 8:30 a.m. to 12:00 p.m. for the regular business meeting at the Lee Vining Community Center.

We could also use a few volunteers to help on Saturday and Sunday morning. If you think you might be interested in attending and/or volunteering, please contact me at stepheningram140@gmail.com or (760)937-9918 for additional information. Thanks!

--Stephen Ingram

Jepson Workshop at Tejon Ranch

In early April I had the opportunity to spend three days at Tejon Ranch, searching out rare plants and seeing much of the largest privately held piece of land in California. I was one of 16 who signed up for this popular Jepson Workshop, led by botanists Nick Jensen, Neal Kramer, and Maynard Moe. Dr. Nick Jensen recently completed his Ph.D. at Rancho Santa Ana Botanic Garden on the Flora of Tejon Ranch, and was hired in 2018 by CNPS as our Southern California Conservation Analyst. Neal Kramer is a Consulting Botanist who has spent the last seven years working with the Tejon Ranch Conservancy to better understand the botanical resources at Tejon Ranch. Dr. L. Maynard Moe is author of *Kern County Flora: a key to vascular plant species of Kern County, California*, and a semi-retired professor at California State University in Bakersfield. He has also spent a lot of time botanizing at Tejon Ranch.

Tejon Ranch stretches eastward from the Tejon Hills at the western edge of the San Joaquin Valley, south to the Antelope Valley (south of Hwy 138), and north through the Tehachapi Mountains to Hwy 58 (northwest of Tehachapi), encompassing 27,000 acres (425 square miles) of hills, ridges, and canyons. Tejon Ranch has been called “a biogeographic crossroads” because it includes four distinct bioregions, and a multitude of plant habitats from 420 to 6,800 feet in elevation. Although this huge ranch accounts for “only” ¼ of 1% of California’s acreage, it includes 14% of the native flora of California—1066 taxa—and over 20% of the vegetation types identified for our state.



Orange California poppies (*Eschscholzia californica*) and smaller, yellow Tejon poppies (*E. lemmonii* ssp. *kernensis*) growing side by side. Tejon poppy has a California Rare Plant Rank (CRPR) of 1B.1.

The geological diversity here, including some rare soil types, produces an incredibly diverse array of plants, 54 of which have a California rare plant ranking. The Tejon Hills, with 15 rare plants, have been nominated as a CNPS Important Plant Area (IPA). Thanks to the comprehensive work of Nick Jensen, Neal Kramer, and other botanists, many new populations of rare plants have been discovered recently, significant range extensions of some species have been noted, and potentially new species of *Claytonia*, *Diplacus*, and *Lomatium* have been collected. In addition, a new species of *Streptanthus* will soon be described by Nick.

The rains of March made for a surprisingly good display of annual wildflowers, and stormy weather during the workshop just added to the appeal of the areas we traveled to. Photos of some of the botanical highlights of the workshop are included here.

--Stephen Ingram

Tehachapi buckwheat (*Eriogonum callistum*), CRPR 1B.1, discovered in 2005 and endemic to Tejon Ranch where it is restricted to carbonate substrates.



Left: Calico monkeyflower (*Diplacus pictus*), (CRPR 1B.2), known from recent work on Tejon Ranch to be less rare than previously thought. Right: Alkali mariposa lily (*Calochortus striatus*), CRPR 1B.2, at a spring in Tejon Hills. Photos by Stephen Ingram.

A Follow-up on Five Bridges Disputes

In late May, there was a flurry of meetings by the Technical Group, Inyo County Water Commission, Inyo County Board of Supervisors (BOS) and the most significant, the Standing Committee. The Standing Committee is comprised of representatives from the Los Angeles City Council, Inyo County BOS, Los Angeles Department of Water and Power (LADWP),

Inyo County Water Department, and water commissions from both Inyo County and Los Angeles.

Members of the Standing Committee representing Los Angeles were decidedly unfriendly in the May 31 meeting; remarks by Inyo County representatives and members of the public were met with skepticism. The meeting did not reach agreement on any of the disputes but did not adjourn. These areas of dispute are: *whether Well W385R is a new well; whether the 1999 Revegetation Plan is applicable to the Five Bridges site; whether the goals outlined in the 1999 Revegetation Plan have been met for the Five Bridges mitigation site; what are LADWP's continuing obligations in Five Bridges, if any; and consideration by the Technical Group of revised management for Five Bridges.* The Standing Committee was unable to reach agreement on these issues and voted to continue the discussion in late June. In the interim, negotiators for Inyo County and LADWP drafted a Settlement Agreement to address areas of dispute.

The draft Settlement Agreement, after a helpful recitation of the history of Five Bridges, cites general agreements on the following issues: *(a) the 1999 Revegetation Plan for the Five Bridges Impact Area was prepared by the Technical Group as required by Section III.F of the Memorandum of Understanding (MOU); (b) the Water Agreement provides authority to the Technical Group to agree to amend or replace the 1999 Revegetation Plan; and (c) all the goals of the 1999 Revegetation Plan apply to the areas described in the Plan.*

The intent of the suit filed by Inyo County against the Negative Declaration was not to prevent testing in the revamped wells 385 and 386 but to make sure LADWP complied with the 1999 Revegetation Plan. This means that for Five Bridges, Well 385 will be considered a new well and that LADWP can do a two-month well test this winter. There is also the possibility that LADWP can do a test on W386. The Technical Group is now assured the authority to alter the Revegetation Plan rather than LADWP being able to act unilaterally on mitigation standards. Inyo County Water Department believes there will be greater environmental safeguards and more information about groundwater at Laws and possibly Fish Slough.

Facing uncertain outcomes on legal challenges by both LADWP and Inyo County, the Inyo County BOS voted unanimously at its June 19 meeting in favor of

the Settlement Agreement. The BOS believes this agreement gives Inyo County more assured control over the management and protection of the Five Bridges area than pursuing legal actions. If both Los Angeles and Inyo County sign the Settlement Agreement, lawsuits will be dropped by both parties.

Public comments before the vote by the BOS included these concerns:

- 1) What will happen once the testing of wells is completed?
- 2) This area is near the Bishop Cone, Fish Slough and areas with water rights not controlled by LADWP. What will the consequences for these areas be?
- 3) If testing will not start until this winter, why not take more time with the Settlement Agreement, to include parties of the original MOU or to refine the agreement?

For more information on these issues, the background information on the BOS webpage (http://www.inyocounty.us/Board_of_Supervisors/) for the June 19 meeting and the draft Settlement Agreement are excellent places to start.

--Edie Trimmer

Spring Field Trip Reports

June 2. Bodie Hills, Masonic Mtn. area with Ann Howald

Fifteen of us had a fantastic day in the Masonic Mountain area of the Bodie Hills admiring the views and fields of sagebrush wildflowers. Tim Messick, author of a 1983 *Bodie Hills Flora*, and an updated 2018 Bodie Hills checklist, joined us, as he did last year, from his home in Davis. Our trip this year was co-sponsored by the Range of Light Sierra Club chapter. Thanks to Dick and Joanne Hihn for making that happen.

We traveled up Masonic Road to our first stop in dense "old growth" pinyon woodland to visit a roadside population of the diminutive rare plant, Mono County phacelia (*Phacelia monoensis*). This yellow-flowered annual is known from just a few locations in the Bodie Hills, one in the Sweetwater Mtns., and a couple more in Nevada. CNPS ranks it as 1B.1, meaning rare and endangered throughout its range. It's usually found along roads, so it's difficult to say whether roadside disturbance is a threat or essential for its survival! The good news is that there continues to be several healthy populations in the Bodie Hills.

The plants of the higher elevations in the Bodie Hills benefited greatly from the late rain and snow this year, as we saw at our next two stops in the vicinity of Chemung Mine. The shoreline of Chemung Pond was festooned with tiny plants. Interestingly, these were different species from the mudworts and mousetails we saw in the same area in July 2017. Perhaps there is a rapid-fire succession of these belly plants as the shoreline conditions change through the season. Anyway, this year we were treated to a lilliputian “forest” of blue-eyed Mary (*Collinsia parviflora*), slender phlox (*Microsteris gracilis*), and most surprisingly, small-flowered gymnosteris (*Gymnosteris parvula*), which tops out at one inch in height, has five-pointed star-shaped white flowers, and is typically seen in alpine environments. It’s popping up in numerous locations in the Bodie Hills this year. Emilie Straus pointed out two pintails, four mallards, and a killdeer at Chemung Pond. Thank you, Emilie!

paintbrush extravaganza. This spot also has expansive views of the Sierra, the Sweetwater Mtns., and the Pine Grove Hills (NV).

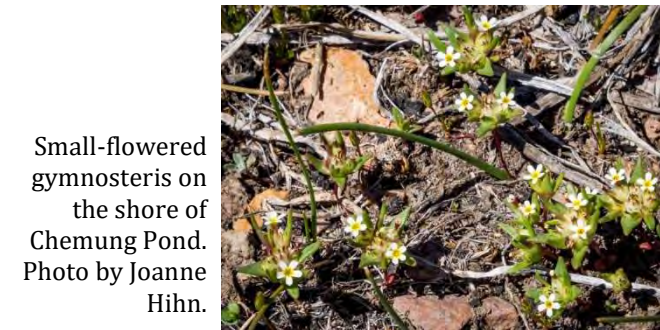


Desert paintbrush “tapestry” at sunrise.
Photo by Joanne Hihn.



Mono County phacelia. Photo © 2012 Lynn Robertson.

We had lunch under the shade of aspens at Lakeview Spring, where Emilie pointed out warbling vireos, house wrens, and several woodpeckers. After lunch we crossed the road to visit the only known population of Brown’s peony (*Paeonia brownii*) in the Bodie Hills. A few of the thirteen or so plants in this small population seemed to have grown significantly larger since 2017. These are perennial herbs that die back completely each winter. It’s impossible to know the age of an individual plant. Some in this population may be the same plants Tim Messick found back in 1983.



Small-flowered gymnosteris on the shore of Chemung Pond. Photo by Joanne Hihn.

Our final stop was at New York Hill, at the north base of Masonic Mtn., at about 8500 feet in elevation. Here, we first rambled through a clay flat with a low-growing form of sagebrush scrub dominated by low sagebrush (*Artemisia arbuscula*), where we found another rare plant, Bodie Hills draba (*Cusickiella quadricostata*) (CNPS 1B.1). This plant was formerly in the genus *Draba*, thus the common name, and as Tim pointed out, it has four “stata,” meaning four sides on the fruit. It’s one of those rare plants that can be locally abundant, as it is on New York Hill, but its overall range is quite restricted. Besides the Bodie Hills, it grows in the Sweetwater Mtns., and several locations nearby in Nevada. This was also a four-locoweed spot, with cottonball locoweed (*Astragalus purshii*), Whitney’s locoweed (*A. whitneyi*), Humboldt River milkvetch (*A. iodanthus*), and shaggy milkvetch (*A. malacus*), all growing practically on top of each other. Amazingly, hybridization is nearly unknown in

We continued a short distance on Masonic Road to an unnamed summit just beyond the mine and pond. Here we viewed a spectacular multi-colored tapestry of desert paintbrush (*Castilleja chromosa*), in shades ranging from light yellow through light to dark orange, to the typical dark red. This population extends over several acres at the northwest base of Masonic Mtn. While desert paintbrush can be pollinated by hummingbirds, these Masonic Mtn. plants were frequently visited by large bumblebees (*Bombus fervidus*). Yes, there were locoweeds, onions, lilies, and many other flowers to look at in this location, when we could tear our eyes away from the

locoweeds – thank goodness! Just for contrast, we walked 100 yards or so up to the base of Masonic Mtn. and passed into a different kind of sagebrush scrub. This taller shrubland was dominated by mountain sagebrush (*Artemisia tridentata* ssp. *vaseyana*), antelope bitterbrush (*Purshia tridentata*), and snowberry (*Symphoricarpos rotundifolius*). And here we found a different suite of understory plants: sagebrush bluebells (*Mertensia oblongifolia*), wallflower (*Erysimum perenne*), wavy-leaved paintbrush (*Castilleja applegatei*), and spreading phlox (*Phlox diffusa*). Usually, abrupt vegetation transitions like this are caused by a change in soil type, in this case from clayey to more sandy-gravelly. We wrapped up by once again appreciating the views from this beautiful and somewhat off-the-beaten-track corner of Mono County.

You can find Tim Messick's wonderfully entertaining Bodie Hills blog posts and the most recent version of his Bodie Hills checklist (click on Downloads) at: www.bodiehillsplants.com

--Ann Howald

May 19. Harkless Flat with Steve Matson

I had scouted the field trip locales two weeks before the actual trip on May 19th. After viewing the decent bloom closer to the base of the Sierra, I was discouraged with by how dry the Inyo Mountains were. The rain shadow effect was strong this past winter. I even considered cancelling.

Well, I did not cancel and the morning of the 19th opened with 18 persons showing up, some from quite far away. Where did all these optimists come from? We were not to be denied. We all might like to be blessed with acres of colorful annuals, but a handful of individual flowers is just fine, thank you very much. Our first stop was a favorite wash along the Death Valley Road in the Waucoba lake beds. I pointed out the black-banded rabbitbrush (*Ericameria paniculata*) that was not blooming yet and sported few black bands. There were plenty of shrubs like Acton's encelia (*Encelia actoni*), indigo bush (*Psorothamnus* sp.) Mojave aster (*Xylorhiza tortifolia* var. *tortifolia*) and various saltbushes (*Atriplex polycarpa*, *A. canescens*, and *A. confertifolia*).

Returning to the cars, we stumbled upon a few surprising annuals like brightwhite (*Prenanthes exigua*), and broad-leaved gilia (*Aliciella latifolia* ssp. *latifolia*) growing right next to the road.

Next up was Devil's Gate, with its spectacular geology (Precambrian quartzite and dolomite). We found fragrant snowberry (*Symphoricarpos longiflorus*), cliff phacelia (*Phacelia perityloides*), Jaeger's fissurewort (*Halimolobos jaegeri*), and Nevada rock daisy (*Perityle megaloccephala* var. *megaloccephala*). Most exciting for at least a few of us was finding some Nevada ninebark (*Physocarpus alternans*), hiding next to some gooseberry (*Ribes* sp.) with which it can be confused.



Nevada Ninebark,
Physocarpus alternans.
Photo by Steve Matson.

We finally left the Death Valley Road and drove onto the dirt access road leading to Harkless Flat. We completely blocked the road with all our vehicles as we explored a rib of Deep Springs limestone (also Precambrian). Michele Slaton helped me with the scientific name for a little, white-petaled daisy-like plant sometimes called rose heath (*Chaetopappa ericoides*). Paintbrush (*Castilleja* sp.), rayless daisy (*Erigeron aphanactis*), and Mojave fishhook cactus (*Sclerocactus polyancistrus*) were a few of the other limestone denizens.

The ultimate destination of the field trip was the Owens Valley overlook on the western edge of Harkless Flat. We had a nice lunch overlooking Tinnemaha reservoir, but not without a strong wind blowing up slope. What had been a cooler and cloudier-than-the-average day developed thunderstorm activity and lightning off to the east. We took brief looks at little-leaved mountain mahogany (*Cercocarpus ledifolius* var. *intricatus*) and prickle-leaf (*Hecastocleis shockleyi*) before heading home, a good time had by all.

--Steve Matson

Greenhouse Update

What I enjoy most about growing plants for the plant sale is that each year is a new science experiment. I try new seed treatment methods, growing regimes and soil mixes to see if I can get healthier plants.

As the growing season is now in full bloom I can start to see how different experiments worked out this

year. I didn't have much luck getting my penstemons to sprout and got a lot fewer than I had hoped. However, I started the *Penstemon speciosus* at two different times and found the seeds that were stratified longer fared better. The seeds that were started later never sprouted even after they had stratified as long as the first batch. Next year I will start all the penstemon seeds earlier.

Buckwheats can be sowed directly into the soil; they don't need any pre-treatment. This year, however, I soaked the seeds overnight to make sure they had imbibed a bunch of water, and I got a much higher germination rate. Presoaking seeds also worked for many of the grass seeds as well.

I did a little more research this year and found that the Joshua Tree nursery uses a long-term slow release fertilizer with their seedlings. So this year I added to the soil mix slow release fertilizer and additional nutrients from JTM Nutrients. The plants are looking much better.

Hand watering instead of relying on the automatic sprinklers also seems to be working much better – there is less dry and overwatered spots.

I invite you to come and see how the plants look with my new treatments. The plant sale will be on August 25th at the White Mountain Research Station. Like last year, members can come to the sale at 8 a.m. and the general public can come at 9 a.m. You will be able to renew or become a member on that day. The sale ends at 11 a.m. Proceeds from the annual native plant sales provide funding for our Mary DeDecker Botanical Grants. The grant program is a fitting way to remember Mary DeDecker's many contributions to the people and plants of the Eastern Sierra.

--Katie Quinlan

In Memoriam Evelyn Mae Nikolaus 1931–2018

The Bristlecone Chapter lost one of its founding members last month. As a member since our chapter was founded in 1982, Evelyn Mae filled many roles over the years including president, secretary, librarian, historian and sales. She was also instrumental in forming the Sierra Spring Sojourns, a delightful weekend of field trips and speakers held in May.

Evelyn Mae will be missed by the town of Independence, where she lived for many years with her husband Al and her family, and by the Bristlecone Chapter.



Photo of Evelyn Mae courtesy of the Nikolaus Family.



California Native Plant Society
Bristlecone Chapter

Native Plant Sale

When: Saturday, August 25th, 9–11 a.m.

Where: White Mountain Research Center
3000 E. Line St.

Show a current membership card to get in at 8 a.m.

A complete list with quantities is available at:

http://bristleconecnps.org/native_plants/sale/nativeplant_db.php



Plant prices:

Small tree pot	\$5.00
Cactus pots	\$5.00
Gal. pots	\$8.00
Tall tree pots	\$10.00



Up-Coming Events
(For updated information, visit
bristleconecnps.org/events)

Bristlecone Chapter to Host CNPS Chapter Council Meeting, Sept. 7-9, in Lee Vining.
Please contact Stephen Ingram at stepheningram140@gmail.com or (760) 937-9918 to volunteer and/or for information.

CNPS Native Plant Sale
August 25, Saturday, 9-11 am,
White Mountain Research Station, Bishop

This is the largest native plant sale of the year, and this year, we can accept credit cards! A wonderful array of native plants is offered every year. A variety of flowers, shrubs, and trees adapted to our area will be for sale. See our sortable database for a full list of plants sold in past years and what will be available this year.

http://bristleconecnps.org/native_plants/sale/nativ_eplant_db.php

CNPS Field Trips
(Check online for the most up-to-date info
bristleconecnps.org/events)

Saturday, July 21. Wyman Canyon, White Mts.
Leaders: Courtney Collins & Michèle Slaton
We will explore the areas in bloom from the bristlecone pine forest down into pinyon-juniper woodlands and riparian areas. We can expect to see several showy wildflowers, and also rare plants, including Dedecker's clover (*Trifolium kingii* ssp. *dedeckerae*), small-flowered rice grass (*Stipa divaricata*), and Nevada ninebark (*Physocarpus alternans*). We'll spend time searching for the limestone daisy (*Erigeron uncialis*) – a treasure first seen in Wyman 30 years ago, but not documented since.

We will meet at 8:30 a.m. in Big Pine at the intersection of 395 and 168, and regroup again at 10 a.m. at the top of Wyman Canyon (the southern intersection of the Bristlecone Road with Wyman, ca. 2.5 mi. north of Schulman Grove). 4WD will be required. Bring everything you need for a full day in the field. Contact Michèle Slaton (760) 920-8693 or mslaton02@gmail.com with questions.

Up-Coming Events
(For updated information, visit
bristleconecnps.org/events)

Jepson Herbarium Workshop with Hugh Safford.
Introduction to Fire Ecology of the Sierra Nevada
August 2-5, Sierra Nevada Aquatic Research Laboratory

California has been referred to as the "pyrostate." In the Sierra Nevada, many ecosystems have close ecological and evolutionary associations with fire; the nature of these relationships varies substantially, depending on factors like the species involved, climate, history, and geography. Participants in this 4-day workshop will delve into the fire ecology of major vegetation types in the Sierra Nevada. The curriculum will include 2-3 field trips to eastern Sierra Nevada sites exemplifying the fire ecology of yellow pine and mixed conifer forest, sagebrush, and subalpine forest. Fire management and ecological consequences of current and projected future trend in wildfire will also be major focus areas of the field trips.

Course Fee: \$400/\$430

To register and to find more information on this and other Jepson Herbarium workshops, please visit
<http://ucjeps.berkeley.edu/workshops/>

Please send your articles or information to us by August 15, 2018 for the next issue.

Bristlecone Chapter Directory

President: Katie Quinlan 760-873-8023

Vice President: Michèle Slaton 760-920-8693

Secretary: **OPEN**

Treasurer: Sue Weis 760-873-3485

Chapter Council Rep: Stephen Ingram 760-937-9918

Conservation/Partnerships: **OPEN**

Programs: Michèle Slaton 760-920-8693

DeDecker Grants: Michèle Slaton 760-920-8693

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: **OPEN**

Newsletter: Elaine Chow newsletter@bristleconecnps.org

Membership: Elaine Chow membership@bristleconecnps.org

Website: webmaster@bristleconecnps.org

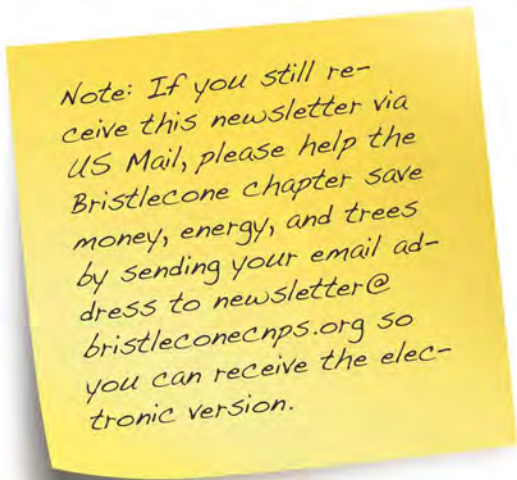
Hospitality: **OPEN**

T-shirt Sales: Stephen Ingram

DeDecker Garden: Steve Dickinson

The California Native Plant Society

Bristlecone Chapter
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Bishop, CA 93515-0364
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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: _____

Mail To / Make Payable To:
CNPS Membership Coordinator
2707 K Street, Suite 1
Sacramento, CA 95816

Gift Contribution: _____ Wherever needed
Specific Area: _____

Membership Category

- _ Student / Limited Income \$25
- _ Individual \$45
- _ Family \$75
- _ Plant Lover \$100
- _ Patron \$300
- _ Benefactor \$600
- _ Mariposa Lily \$1500
- _ Additional Contribution _____