

The California Native Plant Society

Bristlecone Chapter Newsletter

Volume 34, No. 2 March-April 2013

Bristlecone Chapter

Sierra Spring Sojourn

The Bristlecone Chapter, CNPS, invites you to attend our eighth Sierra Spring Sojourn on the weekend of May 31 to June 2, 2013 at the Sierra Adventure Center at Bernasconi near Big Pine, California. The Sojourn will be a flower-filled weekend of field trips, slide programs and conversation in our extraordinary Eastern Sierra region. We hope you'll join us!

You will have four to five field trips to choose from on both Saturday and Sunday. These trips will cover much of the diversity of our area in and around the Owens Valley, including the east slope of the Sierra Nevada and the Bristlecone pine forest in the White Mountains.

On Saturday evening, Steve Matson will speak about Baker Creek Meadows. Steve is an amateur botanist with 25 years experience and a part-time resident of Big Pine. One of his important on-going projects is photo documentation of the flora of Eastern California and western Nevada, recorded on the CalPhoto website. His talk is titled, naturally, "Botanizing Big Pine."

Cost of the weekend including lodging and meals is \$122 per person. Please contact Edie Trimmer (edieann@xmission.com) or Kathy Duvall (kduvall@cebridge.net) for more information and registration package.

March General Meeting Program

Wednesday, March 20, 7pm, WMRC, Bishop

News from Nature's Pharmacopeia: Medicinal Plants Today

A dash of history, a sprinkling of pharmacology, and a serving of science: get a taste of the most

recent evidence-based research about the effectiveness, risks and promise of select medicinal plants. In this program, we will examine some of the herbal remedies you can find on drugstore shelves, focusing on those species that have native counterparts in our area. We will examine what research has shown about the safety and effectiveness of these botanicals, how they are tested, and what we know about how they work. You should come away from the program with not only a sense of where we've come from, but a more solid understanding of modern herbal medicines and how to make informed decisions about their use.

Program presenter Maggie Riley is a naturalist-turned-nursing student who will offer a slightly different perspective on botanical medicines than folklore and traditional remedies. With a background in botany and a current focus on medicine, Maggie is excited to share what she has learned about the current state of herbal medicine with the Bristlecone Chapter.

Program Notes from January General Meeting

At the January General Meeting Dave Wagner, a geologist with the California Geological Survey (CGS) gave a talk about the debris flows of Oak Creek on July 12, 2008. He has investigated the 1983 debris flows in western Marin County, the American River Canyon landslide that closed Highway 50 in 1997, and the 2008 Oak Creek debris flows in Owens Valley. The following is his synopsis of his findings. The complete report can be found at California Geologic Survey website, Special Report 225 or on the Bristlecone Chapter website.

The Oak Creek Debris Flow of July 12, 2008 Inyo County, California

On July 12, 2008 the remains of hurricane Bertha moved from the Gulf of Mexico across the southwestern United States bringing tropical moisture to the eastern Sierra Nevada. Over 32 mm/hr (1.25 in/hr) of precipitation fell on the Oak Creek drainage north of Independence, in Inyo County, California, which had been burned during the Inyo Complex fire of July 6, 2007, generating debris and mudflows that ran out 6 to 7 km from the mountain front, destroying 25 homes, damaging another 25, severely damaging the historic Mt. Whitney Fish Hatchery, and disrupting traffic on State Highway 395 for nearly a week. Although slopes were extensively rilled, most of the estimated 1.53 million cubic meters of sediment was scoured from channels and deposited over an area of more than 3 square km, mostly on younger alluvial fans. Mudflow surges moved down the north fork of Oak Creek at estimated speeds of 2 m/sec (~6 mi/hr) to 5.4 m/sec (~16 mi/hr) and were one to three meters high. Sand-rich, hyperconcentrated mudflows followed the active channel of the north fork of Oak Creek and abandoned channels on the fan filling them, and spread laterally across the interfluves. On the south fork of Oak Creek, boulder-rich debris flows clogged the active channel, leaving a boulder field of at least 1500 m long and 75 m wide, blocking the channel and forcing the south fork to a new course to the west. The largest boulders moved during the storm ranged from 3,300 kg to 17,000 kg. Nearly all the damage to private property and infrastructure was long the active stream channels where the hazard is the highest. Older uplifted alluvial fans were unaffected and are the least hazardous areas, while younger fans were greatly affected and should be considered, for the most part, highly hazardous. Mitigation strategy should emphasize avoidance and education to promote public awareness.

— Dave Wagner



Oak Creek Debris Flow, photo by Ken Babione
CNPS Bristlecone Chapter Newsletter, Volume 34, Number 2, March-April 2013

Field trip Report: February 2, Oak Creek

About 30 people attended the Saturday, February 2, Oak Creek post-fire debris flow field trip led by Dave Wagner. The field trip inspected several areas of Oak Creek that experienced the July 12, 2008 debris flow. After a brief review of his presentation to the Bristlecone Chapter a few nights before, Mr. Wagner led the group for an inspection of the still-visible destruction and current regrowth. The field trip concluded with a brief tour of the historic Mt. Whitney Fish Hatchery and nearby buildings that were damaged by the debris flow.



Deeply incised channel of the middle fork of Oak Creek. Photo by Dave Wagner



Granitic boulder (~1 cubic m) that came to rest against a tree trunk on the middle Fork of Oak Creek. Photo by Dave Wagner

Owens Lake: Update

The Owens Lake Planning Committee (OLPC) met on January 28, 2013. At the meeting, Martin Adams of LADWP shared a letter from LADWP to the Board of Water and Power, which included a list of seven "must have" [quotes by LADWP] components in an Owens Lake Master Plan. These have been characterized as ultimatums to which environmental groups participating on the OLPC have acquiesced. I participated in that entire meeting, and I don't recall anyone using the term "ultimatum" and I can report that no group, including CNPS, acquiesced to any demands that compromise their missions or policies.

One of the seven "must haves" is LADWP's desire to reduce water used for dust control by 50%. The Habitat Work Group of the OLPC has been working with LADWP's consultants on how to achieve that degree of water conservation, while continuing to control dust and maintain habitat values. There is a plan, also discussed at the January 28 meeting, that, when implemented over a 20-year period, might achieve that goal. It does so by replacing large expanses of shallow flooding with smaller ponds, more wetland vegetation, and waterless dust control. The plan is reasonable; its goals may or may not be achievable.

A more problematic "must have" is LADWP's desire to pump groundwater from below the lakebed to replace aqueduct water currently used for dust control. Excess pumping could have many significant environmental impacts, particularly degradation or loss of existing wetlands along the perimeter of the lakebed, and creation of new emissive areas currently stabilized by this vegetation. This would be particularly problematic since LADWP, in its lawsuit against the Great Basin Air Pollution Control District, the EPA, the California Air Resources Board, the State Lands Commission, and the BLM, is claiming that they have no additional responsibility for dust control on areas of the lakebed above 3567 feet and below the historic shoreline at 3600 feet. That is, LADWP would like to engage in activities (groundwater extraction) that might create a dust problem while refusing to take any responsibility for that problem.

Far from acquiescing, I offered a simple solution to this problem in recommending that the OLPC consider eliminating groundwater development entirely from the Master Plan until LADWP's lawsuit is resolved and responsibility for dust control from sites between 3567 feet and 3600 feet is determined.

Under the Master Plan, any groundwater development would be a project that would undergo CEQA review. LADWP has not proposed any specific groundwater project at this time, although some of the scenarios they are exploring would clearly have long-term impacts that neither CNPS nor the Bristlecone Chapter could support. I have pointed out the potential for these impacts to other OLPC members, including all of the regulatory agencies, and I will continue to do so.

The OLPC process is a negotiation. If LADWP proves to be intransigent in this negotiation then the process will likely fail. That would be a lost opportunity, both for habitat at Owens Lake and for LADWP.

— Steve McLaughlin

Birch Creek Journal

February 11, 2013—After three days of wind and maximum temperatures in the low forties, it's hard to believe that last week we opened the sliding glass door during the day to invite some exterior warmth indoors. That brief spell of warm weather was enough to bring out rain beetles (*Paracotalpa granicollis*), those rust-colored insects about the size of a thumbnail that fly tirelessly about a foot or two above the ground. The warmth was also just enough to give a little push to spring in the riparian zone. Along Birch Creek leaf buds are swelling now on black cottonwoods (*Populus trichocarpa*) and streamside willows (*Salix lasiolepis*), and the first catkins are emerging on water birch (*Betula occidentalis*).

This is the time of year when a gout of golden resin hangs from the tip of every cottonwood bud. If you cut the bud open, you will find that the interior is awash in resin. Many plants in the Willow Family-not just cottonwoods-produce resin inside leaf buds. One hypothesis is that the resin repels leaf-eating insects; another is that the resinous coating on young leaves slows water loss through evapotranspiration. Both could be true, of course, and doubtless are. Curious to see what the resin tasted like. I bit into one of the golden droplets. I got the faintest taste of pine, then spent a couple of minutes removing resin from my teeth. I can report that if I were an insect, I would find something else to eat. Having no desire to coat my body in the stuff, I'm willing to take the water-loss hypothesis on faith.

Away from local creeks, the approach of spring is hard to find. In some years I have noticed tansy mustard (*Descurainia pinnata*) and filaree (*Erodium*

cicutarium) blooming in the Poverty Hills as early as mid-February, but a quick walk along the usual trail tells me that this is not going to be one of those years. Our neighborhood got a good rain in October, a little more at the end of November, and not quite nine inches of snow during two storms in December. Call it 1.4 inches of rain for the winter to date, and that's a generous estimate. I know we live in a land of little rain, but this is ridiculous.

The Poverty Hills, a mounded mass about eight miles south of Big Pine, will live up to their name this year, I'm afraid. On walks through the Poverty Hills in 2008, my husband Steve and I kept a running list of plant species. It's a short list-just 123 kinds of native and exotic plants. About fifty percent of species on the list are native annuals, from breathtakingly lovely wildflowers like evening snow (*Linanthus dichotomus*) to inconspicuous green things that only a botanist could love, like brittle spineflower (*Chorizanthe* brevicornu). Most of them will be far and few between this spring. No doubt cheatgrass (Bromus tectorus), red brome (Bromus madritensis), and other exotic annuals will make some kind of showing as spring advances; otherwise, this year's flora will be impoverished indeed.

We compiled our list mostly during a good spring after a reasonably wet winter. I'm sure that it is not complete-we could add more species with more exploration-but I would be astounded if we could double it. During that good spring, Steve made 31 collections, thereby tripling the number of Poverty Hills specimens in the online database for the Consortium of California Herbaria. This small range, easily walked from end to end in half a day, is woefully under collected compared to Bishop Creek (1,588 specimens), Rock Creek (646 specimens), Big Pine Creek (626 specimens), or even the Alabama Hills (489 specimens). And it's no wonder. Few localities in the Eastern Sierra appear as unpromising for a botanical excursion. The Poverty Hills are brown, dry, and lumpy, rather like a basket of dehydrated buns.

Certainly no one would argue that the flora is rich or diverse. When we lived in Arizona, Steve and I examined species richness in twenty local floras as a function of topography and found that number of species increased with elevational range and habitat diversity. The Poverty Hills cannot offer much of either. The elevational range (the difference between the lowest and highest points in the study area) is slight, not even 800 feet, and habitat diversity is also

minimal. Using a generous definition of habitat, you might come up with five or six: north-facing ravines, rocky slopes, more or less level benches, playas (there's only one), and dirt roads. The physical features that added diversity to Arizona floras—mainly springs and creeks—are absent in the Poverty Hills unless you include Tinemaha Creek, which we did not do.

And yet the flora of the Poverty Hills surprised us again and again. On one walk, Steve found a few scarlet milkvetch (Astragalus coccineus); on another, we stumbled across a small population of naked buckwheat (Eriogonum nudum). Once, whizzing along the east side of the Poverty Hills on Highway 395, we saw a flash of magenta that could only have been Colorado four o'clock (Mirabilis multiflora). A year or two later, when our neighbor Ros Gorham showed us her route to the top of the range, we discovered that Heermann's buckwheat (*Eriogonum heermannii*) was part of the flora. These four species and a few others seem to be present in the Poverty Hills as odd lots in odd places-never abundant, never widely distributed. One has the feeling that they landed here at random and persisted by sheer good fortune.

What little richness there is in the flora probably relates as much to variety of rock types as anything else. A small-scale geologic map shows that most of the Poverty Hills is granodiorite and metasedimentary rocks with smaller areas of basalt and sedimentary rocks. But when you walk around, you notice finer distinctions, and you notice considerable variability in soils, too. Plants respond to these differences on a small scale. Nevada indigobush (*Psorothamnus polydenius*) is common on level ground where sandy soil has accumulated; Mojave indigo bush (Psorothamnus arborescens) likes the rocky slopes. Four-wing saltbush (*Atriplex* canescens) is here, there, and everywhere; allscale (Atriplex polycarpa) likes the silty soils of the playa. A close analysis could doubtless tease out more examples.

The Poverty Hills were not named by a disappointed botanist, as appropriate as that would have been. The first use I have seen was in a mining claim made in 1890. A few other miners picked up on the name, then local newspapers began to use it when describing the location of certain mining operations. As late as 1902, newspaper editors sometimes put Poverty Hills in quotation marks, I suppose because the name was unfamiliar to many readers. The story about the hills being named by a local storekeeper

who went broke is, I'm afraid, apocryphal, or at least highly speculative. Either way, it's a place name that reeks of disappointment, quite a burden for such a diminutive mountain.

My initial disenchantment with the small size of the flora eventually faded. Now the brevity of the list is a point of interest and a springboard for speculation. What effect have decades of grazing had on the flora? Has invasion by red brome and cheatgrass altered species composition? How does the Poverty Hills flora compare in richness and species composition to the floras of other hills and knolls in the vicinity–Fish Springs Hill, for example, or the rhyolite dome–and does distance from the mountain front have anything to do with the differences among them? There's plenty to think about and more collecting to do. Being a botanist, you see, means never having to say you're disappointed.

— Jan Bowers

Mary DeDecker Grant Recipients

In 2001, the Bristlecone Chapter established a grants program as a fitting tribute to Mary DeDecker, a renowned local botanist and founding member of our chapter. Our goal is to facilitate research and projects that increase the understanding and appreciation of native plants and ecosystems in the Eastern Sierra.

Grant recipients receive up to \$1,000 each for expenses and are asked to present their results to the Bristlecone Chapter either at a regular meeting or in the chapter newsletter.

Recepients of this year's grants as recommended by the Mary DeDecker Grant Commitee, all graduate students, are:

Erika Gardner, Claremont Graduate University, "A vascular flora of the Kiavah Wilderness in the Scodie Mountains, southern Sierra Nevada, Kern County, California."

Elaine Chow, University of California, Davis, "Does invasive barbwire Russian thistle threaten the endangered Eureka Valley evening-primrose?" **Lara Kobelt**, Northern Arizona University,

"Populations of *Abies concolor* in three mountain ranges of the Mojave Desert."

Joy England, Claremont Graduate University, "Vascular flora of the Upper Rock Creek watershed, eastern Sierra Nevada, California." This is the second year Joy has received a grant from the Mary DeDecker Grants program.

Up-Coming Events

March Board Meeting

Wednesday, March 13, 7pm, at the Friends of the Inyo office on 819 North Barlow Lane, Bishop. All members are welcome.

March Bristlecone Chapter Program

Wednesday, March 20, 7 PM White Mountain Research Station, 3000 East Line Street, Bishop.

Maggie Riley offers a dash of history, a sprinkling of pharmacology, a serving of science: take a look at the most recent evidence-based research about the effectiveness, risks and promise of select medicinal plants. In this program, we will examine some of the herbal remedies you can find on drugstore shelves, focusing on those medicinal plants which are native to our area.

Spring Bristlecone Chapter Field Trips

CANCELLED: March 16, Saturday - Dedecker Garden Spring Cleaning. Katie Quinlan, Sue Weis.

Bring your gloves and gardening tools and help get the garden ready for winter. For more information, contact Sue Weis at sueweis@aol.com, 760-873-3485.

March 24, Sunday - Highway Clean-up. Leader Scott Hetzler.

Meet at the intersection of Highway 395 and Pine Creek Rd., west of 395, at 9:00 AM. We will try to be done by 1:00 PM. For more information contact Scott at 760-873-8392.

April 12-16, Friday- Monday, Wildflower Show at the Maturango Museum,

100 E. Las Flores, Ridgecrest, 760-375-6900. Come and see an extensive display of wildflowers collected locally by trained volunteers and identified by botanists. Extended hours for the Ridgecrest Desert Wildflower Festival on Friday and Saturday. Lecture on Sunday at 2:30 pm: Wildflowers of the High Desert.

Up-Coming Events

April 15-22, California Native Plant Week
CNPS celebrates the Second Annual California
Native Plant Week. For more information:
cnps.org/cnps/conservation/nativeplantweek/

April 27, Saturday. 9:00 AM. Baker Creek. Leader Steve Matson.

Meet in Big Pine at the parking area next to campground at Junction of 395 and 168. We will drive 3 miles to Baker Creek, 1/2 mile of that on well graded dirt road. We will hike off trail over open ground to top of the marble hill behind the Bernasconi Center. About 3 miles RT.I hope to find *Astragalus inyoensis* in its yellow flowered version along with *Coreopsis bigelovii* in its northernmost population and much else. Contact: Steve Matson 760-938-2862 or ssmat@sbcglobal.net.

California Botanical Society Centennial Celebration

April 12-14, Friday-Sunday, Berkeley CA

California Botanical Society celebrates 100 years beginning Friday, April 12 with field trips to either Mount Diablo or Mount Tamalpais. Centennial symposium "Botanical Frontiers: Past and Future" takes place on Saturday at Valley Life Services Building, University of California, Berkley. For more information, visit www.calbotsoc.org.

Sierra Spring Sojourn

May 31-June 2, Friday-Sunday, Sierra Adventure Center at Bernasconi near Big Pine, California.

Field trip extravaganza. See website for registration and more details. Field trips are planned to take advantage of spring blooms and full descriptions will be available closer to the event date. Evening banquet and talk by Steve Matson "Botanizing Big Pine" on Saturday, June 1. Cost is \$122, which includes lodging and meals. Contact: Edie Trimmer at 801-597-2104 (edieann@xmission.com) or Kathy Duvall at 760-387-2122 (kduvall@cebridge.net).

Summer Bristlecone Chapter Field Trips

Up-Coming Events

June 9, Sunday - Highway Clean-up. Leader Scott Hetzler.

Meet at the intersection of Highway 395 and Pine Creek Rd., west of 395, at 9:00 AM. We will try to be done by 1:00 PM. For more information contact Scott at (760) 873-8392.

July 6, Saturday. South Fork, Big Pine Creek. Leader Steve Matson.

Meet in Big Pine at the parking area next to campground at Junction of 395 and 168. We will drive 10 miles up Big Pine Canyon to the trailhead by Glacier Lodge. I propose to hike 6 to 7 miles RT. I hope to find *Lupinus padre-crowleyi, Nama rothrockii, and Penstemon papillatus.*Contact: Steve Matson 760-938-2862 or ssmat@sbcglobal.net.

July 13, Saturday - Mammoth Lakes Basin, Heart Lake and Arrowhead Lake. Leader Ann Howald.

Meet at the far end of the parking lot that is beyond the Coldwater Campground, at 9:00 AM. We will hike up the Heart Lake trail, through the montane form of sagebrush scrub that is "enriched" with many wildflowers, then cross a talus slope with an array of multi-colored hybrid columbines, then return from Arrowhead Lake through subalpine forest. This is a moderately strenuous, although short (about 2.5 mi) hike. We should return to the parking lot by mid-afternoon. Bring lunch, water, sunscreen and a hat; and hiking poles if steep downhill bothers your knees. For more information contact Ann at 707-721-6120 or annhowald@yom.com.

July 20, Saturday - Little Lakes Valley. Leader Joy England.

Assist Joy with her fieldwork for her thesis research. Translation: look for cool plants. Meet at the Mosquito Flat trailhead at 9:00 AM.

Up-Coming Events

July 27, Saturday. White Mountains. Leader: Jerry Zatorski. It always a treat to see what can be found in this high desert mountain range in midsummer. This trip will focus on the sub-alpine and alpine habitats in the White Mts. Expect to see many herbaceous and shrubby alpine species along with the famous Bristlecone Pines. We will meet at the Triangle campground entrance just north of Big Pine, at the intersection of US 395 and SR 168 at 8:00 AM and go from there. This will be an all day trip, so have plenty of food, fluids, along with field guides hand lens, sun protection, dress for weather and so forth, plant to return to Big Pine by ~ 5:00 PM. For more information contact Jerry Zatorski at 760-387-2920 or jerryzat@gmail.com.

Golden Trout Wilderness Camp—Flora and Natural History of the Southern Sierra

July 7-14, 2013, Golden Trout Wilderness Camp. Instructors Tim Thomas, Pam McKay and Paul Collins.

Come join us in the beautiful high Sierra of the Golden Trout Wilderness. Spend the week exploring alpine habitats of Cottonwood Lakes Basin and the John Muir Wilderness. Lectures, slide shows and an opportunity to key plants with dissecting scopes will fill the evenings. We will see an abundance of wildflowers in alpine meadows and encounter endemic plant species while taking in the incredible Sierra vistas. Cost \$525 (includes meals from Sunday dinner through Saturday lunch). For information, brochure and registration contact: Susan D'Alcamo: dalcamo@mcn.org or 925-899-0719. Registration deadline: March 15, 2013.

Fall Bristlecone Chapter Field Trips

October 20, Sunday. Highway clean-up. Leader: Scott Hetzler.

Meet at the intersection of Highway 395 and Pine Creek Rd., west of 395, at 9.00 AM. We will try to be done by 1:00 PM. For more information contact Scott at 760-873-8392.

Up-Coming Events

October (date & time TBA): Bitterbrush Planting/Indian Fire Rehab.

Martin Oliver (BLM), Julie-Anne Hopkins. Last summer the Indian Fire burned over 10,000 acres of sagebrush/bitterbrush habitat east of Mono Lake. This area is important for sage-grouse and other wildlife. Adjacent areas that have burned in the past 20 years have remained largely free of non-native annual grasses and other weeds but shrub species have been slow to return. Come out and help plant bitterbrush and other native plants that were grown at the Deepest Valley Native Plant Propagation Center. For more information contact Martin Oliver at mpoliver@blm.gov, 760-872-5035.

October/November (date & time TBA) – Dedecker Garden fall clean-up. Katie Quinlan, Sue Weis.

Bring your gloves and gardening tools and help get the garden ready for winter. For more information, contact Sue Weis at sueweis@aol.com, 760-873-3485.

Bristlecone Chapter Newsletter Editors and Membership Chairs

We (Edie Trimmer and Thomas Brill) are the Bristlecone Chapter newsletter editors and membership chairs. We both worked for the State of Utah in land management and natural resource economics. We bought a house in Big Pine in 2008 and commuted between Salt Lake City and Big Pine before moving here full time in July 2012. While botanist is a title neither of us can aspire to, we are interested in Eastern Sierra flora.

We are also interested in hearing your ideas about the direction the newsletter should go. As amateurs, we want to bring along other inexperienced but enthusiastic plant-lovers into membership in the Bristlecone Chapter.

Next Newsletter Deadline

Please have your articles or information to us by April 15, 2013. Send article to: newsletter@bristleconecnps.org.

Bristlecone Chapter Directory

President: Yvonne Wood 760-873-8273 Vice President: Holly Alpert 760-709-2212 Secretary: Rosemary Jarrett 760-387-2782 Treasurer: Rosanne Higley 760-387-2803

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

Grants: Kathleen Nelson 760-873-1095

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

Programs: Holly Alpert 760-709-2212 Field Trips: Sue Weis 760-873-3485

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 Website: Maggie Riley webmaster@bristleconecnps.org

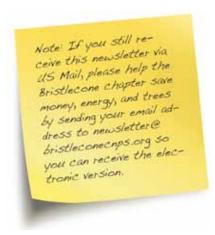
Posters: Stephen Ingram 760-937-9918 Book Sales: Sue Weis 760-873-3485 T-shirt Sales: Scott Hetzler 760-873-8392

Conservation: Julie Anne Hopkins 831-566-6012 Partnerships: Steve McLaughlin 760-938-3140 Highway Clean-up: Scott Hetzler 760-873-8392

DeDecker Garden: OPEN

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 <u>cnps.org</u> and click on the JOIN/renew button at the top of the page, or mail in the form below:

		Patron	\$300
Name:		_ Benefactor	\$600
Address:		_ Mariposa Lily	\$1500
City:	State:	_ Additional Contribution	
Zip Code: Phone:			
Email:		Mail To / Make Payable To:	
I wish to be affiliated with the Bristlecone Chapter:		CNPS Membership Coordinator	
Other:		2707 K Street, Suite 1	
		Sacramento, CA 95816	
Membership Category			_
Student / Limited Income	\$25	Gift Contribution:	Wherever needed L
_ Individual	\$45	Specific Area:	
_ Family	\$75	_	
Plant Lover	\$100		