



The California Native Plant Society

Bristlecone Chapter Newsletter

Volume 34, No. 1
January-February 2013

Bristlecone Chapter

Return of the Sierra Spring Sojourn

Mark the date!

The Bristlecone Chapter will once again host the Sierra Spring Sojourn on May 31 through June 2, 2013 with field trips to view wildflowers from Paradise to Owens Lake along the Eastern Sierra. The gathering place for programs, field trips and accommodations for out-of-town participants will be at the Sierra Adventure Center at Bernasconi near Big Pine, 15 miles south of Bishop.

As many members remember, the Bristlecone Chapter hosted these sojourns every two years but the last one was four years ago in 2009. We are working hard to assure that this sojourn will match the success of past years. We do need volunteers to help with planning, leading field trips, working on publicity and other tasks. Call Edie Trimmer at 801-597-2104 or email at edieann@xmission.com if you are interested in making this work.

More information on registration, programs and field trips will come in the March-April newsletter.

March-April Newsletter Deadline

The Bristlecone newsletter has two new editors. We ask for readers' patience as we learn editing, formatting, printing, mailing and other skills required in putting together this bi-monthly publication.

Please continue to submit your excellent articles on the botany and natural history of the Eastern Sierra. The deadline for the March-April newsletter is February 15. Contact Edie Trimmer or Thomas Brill at 760-920-3702 or newsletter@bristleconecnps.org.

Up-Coming Events

January Board Meeting

Wednesday, January 23, 7pm, at the Friends of the Inyo office on 819 North Barlow Lane, Bishop.

We will welcome new board members Julie Anne Hopkins as Conservation Chair, Kristen Luetkemeier as Publicity Chair and Edie Trimmer/Thomas Brill as Newsletter/Membership Chairs. Members are welcome.

January Bristlecone Chapter Meeting and Program

Wednesday, January 30, 2013, 7 PM White Mountain Research Station, 3000 East Line Street, Bishop.

"The Post Fire Debris Flows of July 12, 2008 on Oak Creek near Independence." Dave Wagner, California Geological Survey.

A meeting to schedule field trips for 2013 will be held at 6 PM prior to the general meeting. Anyone interested in leading or co-leading a trip is welcome to attend and pencil in your date and destination.

For further information, contact Sue Weis (sueweis@aol.com)

February Field Trip

February 2, 2013

"The Post Fire Debris Flows of July 12, 2008 on Oak Creek near Independence." Dave Wagner, California Geological Survey.

Meet at 9:30 AM at the Mt. Whitney Hatchery north of Independence. We'll carpool from there up the Oak Creek Canyon road. This trip is a follow to Dave's presentation at the January 30 general meeting and will feature the effects and hazards associated with debris flows. The trip will end around mid-day.

Up-Coming Events

Sierra Spring Sojourn

May 31 through June 2, Sierra Adventure Center at Bernasconi near Big Pine, California.

More information to come.

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. Daily guided hikes and interpretive talks will be led by our experienced trip leaders. 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. Plant, animal and bird lists will be provided.

Our instructors are professional botanists and naturalists with many years of experience in the Golden Trout Wilderness area.

Cost \$525 (includes meals from Sunday dinner through Saturday lunch)

For information, brochure and registration contact: Susan D'Alcama: dalcama@mcn.org or 925-899-0719. Registration deadline: March 15, 2013

Program from December General Meeting

If you weren't there, you missed a great presentation and some really beautiful slides. Here is Claremont graduate student Joy England's report on plant surveys of upper Rock Creek.

Year-end progress report on research in upper Rock Creek, eastern Sierra Nevada

In summer 2012 I completed the first of two seasons of fieldwork for my master's thesis, entitled Vascular Flora of the upper Rock Creek watershed, eastern Sierra Nevada, California. My fieldwork entails collecting plant samples (vouchers) and GPS data for every vascular species throughout the ca. 30-sq-mile

study area, from alpine habitat to the lower reaches of the canyon where the Sierra Nevada and Great Basin bioregions intermix. I am identifying each voucher to species level using the keys provided in *The Jepson Manual: vascular plants of California, second edition*. These specimens will provide physical evidence (i.e. "vouch") for my compilation of a contemporary Flora of the upper Rock Creek watershed. An updated, georeferenced species checklist will serve as a valuable resource for the Inyo National Forest as they manage this popular recreational area.

In 1936 Frank W. Peirson published his Flora, *Plants of Rock Creek Lake Basin, Inyo County, California, a check list*. After Peirson, the most recent vouchered checklist was published by John Thomas Howell in 1946. Howell was awestruck by the diversity of plants he encountered in the Mosquito Flat area along Rock Creek, near the trailhead to the John Muir Wilderness. He wrote:

The collections from Mosquito Flat...are especially noteworthy. The name Mosquito Flat is applied to an elongate area of meadow and canyon side that extends along Rock Creek for about a half mile below the start of the Mono Pass Trail. In the area explored, less perhaps than one-eighth square mile, 202 species and varieties were found. When it is recalled that in Smiley's "Boreal Flora of the Sierra Nevada of California" 633 species are treated, the richness of the Mosquito Flat flora can be appreciated. I know of no place comparable to it in the Sierra Nevada.

–J.T. Howell, Base Camp Botany. Sierra Club, 1946.

Funding from the Mary DeDecker grant made it possible for me to collect 601 samples of plants in my study area over the course of 6 field trips made from May to September 2012. Exciting discoveries included a population of *Tsuga mertensiana* (mountain hemlock), and my favorite collection: the uncommon *Fritillaria pinetorum* (pinewoods fritillary). Neither of these species had been documented on previous checklists for the Rock Creek watershed.

I look forward to making additional new discoveries in summer 2013, which will be my second and final season of fieldwork. Two rare species I did not encounter, but known previously from the study area, are *Botrychium crenulatum* (scalloped moonwort) and *Calyptridium pygmaeum* (pygmy

pussypaws). I will be searching for these and other species I have not yet encountered. Judging from this season's recent depositions of rain and snow, 2013 is shaping up to be a promising year for the flora in Rock Creek. I welcome and encourage anyone interested in helping me look for plants!



Tsuga mertensiana cones
Photo by Joy England

Special thanks to Sue Weis, Kathleen Nelson, Michelle Slaton, Cathy Rose, Stephen Ingram, Jan Bowers and Steve McLaughlin, whose assistance greatly contributed to my accomplishments this year.

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Fritillaria pinetorum
Photo by Joy England

Bishop Native Plant Sale Genesis, 2013 —Katie Quinlan's News from the Greenhouse

The cottonwoods have finally dumped all their leaves and I wade through drifts of them to get to the shade tables. I ignore the leaves, hoping the winter winds will do my work for me and blow those leaves down the valley.

The shade house tables are tucked in for the winter. The overwintering plants have been repotted into bigger pots and are covered in their white blankets of row cover. I wish that I too could tuck in and take a rest. But now it is time to clean all the bags of seed that have been collected over the summer and fall, meet to determine what plants will be grown for next year and decide how much room there is for how many plants. After that meeting, I will plan what to grow for the plant sale, check to see what was popular, determine what seeds I have and calculate how much room there is for cultivation. Luckily, this year my husband built me a greenhouse/shade house in the back yard so that expands my growing space potential.

There are other chores that need to be done as well: The greenhouse plastic has to be re-attached as the wind has loosened it. There is an antelope ground squirrel that needs to be dealt with and a mole that is wreaking havoc in my demonstration beds. Donated pots from various agencies need to be cleaned and sterilized.

They say winter is a time of rest, but it is a time of anticipation as well. With gardening and growing there is always the hope that this next year will be better than last.

—Katie Quinlan

Persistence Pays Off: The Third Season of the Rare Plant Treasure Hunt

The motto of the Rare Plant Treasure Hunt (RPTH) is “Explore, Botanize, Feast, Camp, Repeat.” I’m here to tell you that “repeat” is key. 2012 is the third year for this citizen-science program started by CNPS in 2010 with the goal of getting up-to-date information on many of our state’s rare plants. It’s also the third year that my husband Rich and I have participated.

In the spring of 2010 I organized a field trip to the proposed site for the Ridgecrest Solar Power Plant. Amber Swanson, the newly-hired coordinator for RPTH, joined us and prepared a list of possible rare plants that we might encounter. While we didn’t find any rare plants that day, our plant survey (72 species from 25 families) showed a complex well-functioning ecosystem that supports a high number of Desert Tortoises of all ages and a functioning genetic corridor for Mojave Ground Squirrels. Our work helped the California Energy Commission staff biologists determine that the biological resources of the proposed site could not be mitigated, and they recommended that no facility be built.

Last year Rich & I formed the Red Jeepster team and spent many happy Fridays exploring the southern Kern Plateau from our home in Inyokern. Being relatively new to the area, having moved here in 2005, we discovered that this portion of the Sequoia National Forest was unlike the hiking trails we had tramped in the San Gabriel Mountains or the Eastern Sierra farther north. Instead of using the few designated hiking routes that don’t allow dirt bikes, we set out to see what we could find in the many meadows of varying sizes, some not even named on maps. It was a tremendous summer for plants, after a winter of over 200% of normal precipitation, followed by well-spaced summer thunderstorms. We were able to find and document 32 rare plant populations. Some of these plants I had seen and photographed in previous years but hadn’t realized they were rare (*Phacelia orogenes*, *Fritillaria pinetorum*, *Sidalcea multifida*). Others were completely new to us (*Astragalus ertterae*, *Ivesia campestris*, *Cordylanthus eremicus ssp. kernensis*). Our adventures earned us a Second Place award as Intrepid Treasure Hunters. Amber proved to be an excellent mentor, cheerfully answering many emails, teaching me how to correctly record information on the CNDDDB forms, and tracking down herbarium specimens to identifying tricky species. Thanks Amber! Thanks also to Rich for mastering GPS and being willing to stop our red Jeep quickly as I called out “Let’s look here!”

The thrill of the hunt was taking hold! My former CNPS Chapter, San Gabriel Mtns., also won a 2011 RPTH award for their Lily Springs study. Taking a cue from their work, I realized that repeated visits to a particular location over a season will reveal changes in the flora. I also learned on my own that once you understand what habitat a particular species likes you can look for the habitat first, the plants second. Both these lessons paid off in 2012.

2012 was a very dry year in the Indian Wells Valley. We had virtually no spring annuals. So I was eager to get up into the mountains earlier than usual. It had been a dry winter at the higher elevations also and locations that had been carpeted with annuals in 2011 had hardly any this year. But, as is usually the case, the shrubs and perennials bloomed. Over the winter I had learned how to use RareFind and had downloaded occurrence records for a number of possible target rare plants.

I set my sights on the dainty daisy *Erigeron multiceps* (Kern River Daisy) and we updated information for 7 populations. Amazingly some were blooming right around the outhouses on the west side of the Kern River bridge in Kennedy Meadows, with a more robust mid-September population along the fishing path to the south.

Another targeted species turned out to be *Ivesia campestris* (Field Mousetail). Through RareFind searches over the winter, I found that many of the southern Kern Plateau meadows had probably not been carefully surveyed. Based on the number of plants we had observed at Osa Meadow in 2011, I felt that if we searched similar meadows (i.e. similar habitat), it might be found elsewhere. That hunch was right—we documented 7 populations on outings from June through early September. Based on these finds and the work that Danny Slakey (RPTH coordinator based in Sacramento) did further north, it is likely that this species will have its rank changed from Rank 1B.2 to Rank 4. It just not as scarce as once thought. And I hope to look for additional populations in 2013.

We also followed up on additional populations of 2011 species: *Sidalcea multifida* and *Viola pinetorum ssp. grisea*, each with 4 populations. We’ll keep looking for these in 2013 too.

Not all our trips were to the Kern Plateau. The earliest 2012 find was the tiny onion *Muilla coronata* at Lamont Saddle on our annual April foray along the Chimney Peak By-Way. In early June we took a drive to the Greenhorn Mountains on the west side of Lake Isabella. There we searched for *Calochortus westonii* (Shirley Meadows Star Tulip). I had wanted to see this fringed

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other-worldly-looking species ever since reading my friend Rebecca Rothenberg's third botanical mystery novel *The Shy Tulip Murders*. Behind a large slash pile along Rancheria Rd. on the mountain crest we found a tiny seasonal drainage with 20 plants in full bloom. Further south where the Sawmill Road careens east down to the lake, we found swaths of the rare *Phacelia exilis* (Transverse Range Phacelia), both along the road and downslope among giant boulders.



Calochortus westonii
Photo by Kathy LaShure

After completing one Creosote Ring field trip and 10 Red Jeepster outings, I had enough information to complete 27 survey forms, documenting 12 species. Like Amber, Danny proved to be a wonderful mentor, helping with prompt email answers and comments. And we were able to share one Treasure Hunt to Horseshoe Meadows in July. Thanks Danny! Based on our collective work the Creosote Ring subchapter was declared the overall winner in the RPTH awards for 2012. Our prize is a most welcome and useful copy of *Jepson II*.

Now that cooler weather is here for some months, it's time to look at RareFind and set some possible goals for next spring and summer. There are several populations of an unidentified *Boechera* that just might be the rare *B. tularensis*. We have yet to see any Kern Plateau Milkvetch (*Astragalus lentiginosus* v. *kernensis*) or Pgy my Pussypaws (*Calyptridium pygmaeum*). There are several small meadows which we haven't surveyed and they might have treasures. I'm praying for rain and snow which have yet to arrive. Persistence does pay off for both plants and plant hunters. Happy hunting!

--Kathy LaShure

These are golden days here along Birch Creek at the end of November. Yellow leaves and yellow goldfinches spin away from our big cottonwood, and sometimes I can't tell the difference until they come to rest. Willows are yellow too, and so are windrows of birch leaves on the ground. I could fill buckets and boxes and barrels with yellow. Our wild roses flowered poorly this spring—not enough water or too many mites—but they redeem themselves now with shades of red that I look for in vain on a color wheel.

Steve and I missed the transformation by spending ten days in Arizona this month. For thirty years we lived and worked in the Sonoran Desert in and near Tucson, and every year we joked about fall color when ocotillo leaves turned vermilion as the soil dried out in late summer. Nothing wrong with the color itself, you understand—it's just that a single ocotillo plant can have one hundred whiplike stems, each ten feet long and producing barely enough leaves to fill a teacup, much less a bucket.

When we visited Arizona this year, ocotillos were already bare, which mattered not a bit because the real glory of the Sonoran Desert, as far as I'm concerned, is not its autumn color but its perpetual greenness. Even in the midst of drought, this is the greenest desert I know. Foothill paloverde, a small, bunchy tree with minuscule leaves, is yellow-green from top to bottom thanks to chlorophyllous

pigments incorporated into the bark. The green skins of various cacti—sprawling prickly pears, magnificent saguaros, stiffly branched chollas—vary subtly from species to species, and a careful observer might be able to identify them from a square inch of epidermis.

For several days, Steve and I camped and hiked in the desert mountains just west of Tucson and were happy that between the two of us we remembered the scientific names of virtually every plant we passed. It was quite literally like meeting old friends. We noticed with satisfaction that buffelgrass, a pernicious introduction from southern Africa, had been greatly reduced along roadsides, thanks to years of effort by volunteer groups such as Sonoran Desert Weed Whackers. Furry white pods decorated the creosote bushes, letting us know that there had been enough summer rain for a second bloom. I stood close to a saguaro, hoping to hear wind singing through the

spines, but the day was too still.

I suppose you can tell, but I might as well admit it outright: the Sonoran Desert is not only the greenest desert I know, it is also the most beautiful—to my eyes, anyway. Among deserts, it was my first and will always be my best beloved. Being there again, I had to struggle to remember why we moved away.

Eventually, we drove into Tucson for some necessary shopping, and then I remembered why: tangled traffic, endless strip malls, constant red lights, and, most of all, suburban sprawl. Places that were desert when we left six years ago are now housing developments where every stick of native vegetation was cleared off for easy construction, then brought back in greatly diminished numbers to be placed at wide intervals in swaths of colored gravel. It's not an improvement, and only a dollar-besotted developer could pretend it was. I remembered with pain the day I took my regular route to the office and burst into tears when I saw bulldozers scraping down the desert at Greasewood Boulevard and Anklam Road. It's all apartment buildings now, and those two country roads have become major thoroughfares.

Perhaps every refugee to the Owens Valley can tell a similar story. No one moves here for the bright lights, after all. Steve and I came here to have some peace in our lives, to enjoy expansive landscapes unblotted by houses and shopping malls, to see the Milky Way, to leave our doors unlocked and our windows unbarred, and to hear running water without ceasing. We wanted the luxury of a world that time had apparently forgotten. We found all that and more, and we have never regretted the change. But luxuries come at a price. By historical circumstance, we and every other resident of the Owens Valley have exchanged open space for water, and in doing so we have lost some control of our environment.

Here is the conversation that new arrivals have with old hands. I've been on both ends over the years, as have all of us, I'm sure.

Old Hand: Los Angeles is pumping too much groundwater. Alkali meadows have dried up and been invaded by shrubs. Wet meadows are overrun with cows and are showing signs of deterioration. Dust is still blowing off Owens Lake, causing air pollution and illness. Los Angeles is violating its own Long-Term Water Agreement.

New Arrival: If it weren't for the city, this place

would be wall-to-wall condominiums and car dealerships.

Old Hand: Yes, but the city is undeniably a poor steward of the biological and hydrological resources of the Owens Valley.

New Arrival: Believe me, if Los Angeles didn't own nearly everything, there would be even less water on the valley floor than there is now because of local demand.

Old Hand: Yes, but . . .

This conversation will never end because the conflict will never end. Nearly 3,800,000 people live in Los Angeles and another 27 million visit annually. That's a lot of thirsty people. As climatic warming reduces the Sierra Nevada snowpack, streamflow will decline and the city will inevitably intensify its efforts to extract every possible drop from the Owens Valley. Our relations with the Department of Water and Power, already fraught with tension and distrust, are not likely to get better.

When I moved here, I knew almost nothing of these problems. If I thought about them at all, I assumed they were in the past. Then I learned a little more, and I started expecting solutions and improvements, even reform and progress. Now I know that we'll be lucky to maintain the status quo, much less return to an earlier time such as the late 1960s when groundwater was still high enough for springs to flow across the valley floor. I'm grateful for the citizens and scientists who stay in the fray year after year—groups like the Owens Valley and Mono Lake committees and agencies like Great Basin Unified Air Pollution Control District. They deserve and need our support.

More personally, I'm grateful there was a little spot for Steve and me along Birch Creek. We have not, it turns out, found a place that time forgot, but it is a place where we often forget that days are rushing by and that winter wind will eventually tear the yellow leaves away.

—Jan Bowers

**That time of year thou mayst in me behold
When yellow leaves, or none, or few, do hang
Upon those boughs which shake against the cold,
Bare, ruined choirs where late the sweet birds sang.**

Sonnet 73

William Shakespeare



Erigeron multiceps
Photo by Kathy LaShure

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: _____
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Bristlecone Chapter

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