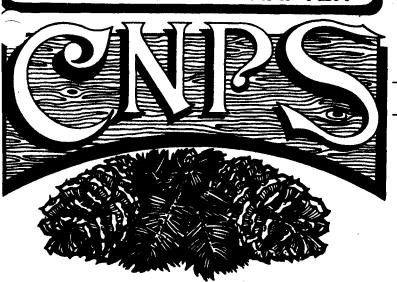
# BRISTLECONE . CHAPTER



# **NEWSLETTER**

Vol. 7, No. 1

January 1988

#### NEXT MEETING

January 27 at the Safeco Title Company, 230 West Line, Bishop. Enter from parking lot in the rear. Time 7:30 p.m. Program: A slide presentation by John Wehausen on plant communities as the nutrient base of mountain sheep populations.

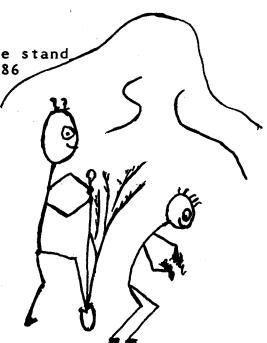
#### PRESIDENT'S MESSAGE:

Our first chapter meeting of 1988 will get off to a good start with John Wehausen's program. February will find us at the Eureka Dunes digging tamarisk. Mark Bagley is busy lining up leaders for field trips that will start in March. If there is a place that you think we should see in 1988, please contact Mark at 873-5362. March evening meeting will be in Independence. Mark your calendar for a potluck supper in Big Pine on May 25. CNPS botanist Ken Berg from across the mountains will give the program.

. . . Doris Fredendall

### TAMARISK DIG:

Tamarisk sprouts keep trying to make a mature stand on theplaya west of the Eureka Dunes. In 1986 Bruce Pavlik and his brother "dug out 340 seedlings-saplings before the heat became too much". There must be a couple of hundred there now. Join us in an effort to remove seedlings before they flower and start a new cycle. Come to the dunes as early as you can on Februsry 20 (or camp overnight). We are not allowed to use herbicides, so bring shovels, mattocks, picks, or whatever good digging tools you have. Bring food, liquids; wear hat or sunshade. Be prepared for any kind of weather. If a big storm comes in, we will postpone the dig one week and meet on March 5 at the dunes. Phone 935-2787 if in doubt.



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# D I R E C T O R Y 1988

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Bette & Ray Sisson

Name

# BOTANICAL EXPLORATIONS ALONG THE CREST OF THE SOUTHERN SIERRA NEVADA

## James R. Shevock

Why does a botanist who lives and works in San Francisco maintain membership in the Bristlecone Chapter, CNPS? Simple. The area has the most remarkable and diverse flora in the State, contains the highest and lowest elevational points in the continental United States, has wonderful scenery, and lastly, remains relatively unexplored by the majority of Californians. For those of you who live in the immediate area covered by the Bristecone Chapter are indeed fortunate.

With snow capping the higher peaks and winter rains returning to these arid lands east of the Sierran Crest, I look forward to another exciting field season of plant exploration in the southern Sierra Nevada. For the past 3-4 years I've been concentrating my field work along the crest between Walker Pass and Olancha Peak. One of the most rewarding areas for me botanically is Spanish Needle and Owens Peak located on the Sierran Crest in Kern County. Although still relatively unexplored, preliminary field work I've conducted since 1984 has already discovered four new species to science and located several new occurrences of rare plants recorded by the CNPS Rare and Endangered Plant Inventory and the California Natural Diversity Data Base. New taxa include: Allium shevockii, Astragalus ertterae, Lomatium sp. nov., and Monardella sp. nov. Both the Lomatium and Monardella have "species names", but it is not proper to use them until the names have been validly published in a scientific journal. Rare plants documented for this area include: Erigeron aequifolius, Eriogonum breedlovei var. shevockii, Haplopappus gilmanii, Phacelia nashiana, Phacelia novenmillensis, Raillardella muirii, and Trifolium dedeckerae. I'm convinced that new undescribed taxa remain yet to be discovered along the crest and eastern slope of the southern Sierra Nevada.

Access along the southern Sierran Crest is extremely limited, even with the newly constructed Pacific Crest Trail (PCT). At present, the portion between the Mt. Jenkins-Owens Peak saddle north to Spanish Needle still remains to be built. The hike to Owens Peak can be accomplished by following the PCT north of Walker Pass for nearly 9 miles, then cross-country from the Mt. Jenkins-Owens Peak saddle to the summit. It is a very long trip from Walker Pass to Owens Peak via the PCT. A more direct route, but considerably steeper, is to follow the unimproved trail at the end of the dirt road up Indian Wells Canyon. The trailhead is reached via a 4WD road, but I once got my Honda Civic to the trailhead, but it is not recommended!! The trail is very steep, rocky, and lacks water along the route. The summit can be reached within 3 hours or less depending on your stamina. On the way up, the first section of trail stays close to the canyon bottom lined with canyon live oak with wild grapes cascading over its branches. The center section is dominated by a pinyon pine woodland with an occasional Nolina. The Nolina is a very unusual plant, a relative of the Lords Candle, Joshua Tree, and Mohave Yucca, all which are members of the genus Yucca. Nolina parryi ssp. wolfii is very different from its cousin the Yucca. In Nolina, the male and female flowers are borne on separate plants, a term we botanists call "dioecious". Also in  $\underline{\text{Nolina}}$ , each female flower produces a single seed, and in this species it is about the size of a 'BB'. In  $\underline{\text{Yucca}}$ , on the other hand, the male and female parts are enclosed within each flower and the fruit develops into a capsule containing numerous flat black seeds. Individual nolina plants do not flower every year, nor do all of the plants in a population flower There are always a few nolinas on the slope in flower during late June to August. Another easy way to tell a Nolina from a Yucca in the

Page 4.

southern Sierra is to look at the leaves. The tip of the leaves in all of our species of <u>Yucca</u> have extremely sharp points, and the edges of the leaves are smooth. In <u>Nolina</u>, the tip is not spiny, but somewhat tattered. The edges of the leaves are extremely sharp resembling a very fine serrated knife blade.

The last section of the trail to the summit of Owens Peak is steep and rocky. The actual summit of Owens Peak is a metamorphic roof-pendant comprised of dark colored 'slate-like' rocks surrounded by large granitic spires and rock outcrops. The northwest slope of the peak contains a small area of marbles where several dwarf maple trees occur. Limber pine, Jeffrey pine, pinyon pine, sugar pine, western juniper, and white fir form a very open mixed conifer forest near the summit. It is in this area where the extremely rare new Lomatium species occurs. Cercocarpus ledifolius, Holodiscus dumosus and the beautiful mint Salvia pachyphylla with its lovely pink to purple bracts and large dark blue to violet flowers cover the slope. The Salvia is in full bloom during July.

Botanizing along the granitic spires and rock outcrops can also be very rewarding. On these rocky faces and crevices occur Penstemon newberryi, Haplopappus cuneatus, Cercocarpus intricatus, and Heuchera rubescens as the dominant species. The little yellow-flowered rose Potentilla saxosa ssp. sierrae is relatively common here on Owens Peak in protected overhangs, ledges, and crevices of granitic rocks. This species flowers most of the summer. The rare plants Raillardella muirii, Erigeron aequifolius, Eriogonum breedlovei var. shevockii, Haplopappus gilmanii and the new species of Monardella are generally located on 'terraces' of these spires and rock outcrops along the northeast face of the peak. The new Monardella forms large mat-like colonies and has extremely "sweet-smelling" foliage resembling many of our aromatic desert sunflower shrubs instead of the strong mint smell typical for the genus.

In September 1987, Jim Jokerst and I ventured up Owens Peak to obtain some live Monardella plants to grow in cultivation with the eventual objective of obtaining a chromosome count for this new species. While gathering the material, we took this opportunity to explore the area for late flowering plants since all of my previous trips up Owens Peak were in the spring or early summer. We discovered a very unusual white-flowered sunflower shrub on granitics which I tentatively placed in the genus Haplopappus. I had never seen the plant before in the southern Sierra Nevada, and at the time, surmised that it too may be new to science. These plants were later determined to be Haplopappus gilmanii, a species endemic to the Inyo and Panamint Ranges of Inyo County, and being nearly restricted to limestones. This species was first collected on Telescope Peak overlooking Death Valley near 10,000 feet by the famous collector M. French Gilman in the early 1930's. Prior to this discovery, the only other confirmed collection is from the "Narrows", Inyo Mountains. Since so few taxa occur as endemics to the Inyo-Pamamint Mountains and the southern Sierra Nevada, the discovery of this species on Owens Peak is very interesting from a phytogeographical point of view. Even though these ranges are relatively close together, their evolution, geologic age, soil development, climate, and floras are quite different.

The other area proving to be rich in botanical rarities is Spanish Needle Peak which is only a couple of air miles north of Owens Peak. Geologically, it is quite different from Owens Peak and is nearly 700 feet lower in elevation. Spanish Needle Peak can be reached via the Pacific Crest Trail near the BLM Campground just north of Lamont Meadows, a hike of about 6

miles. A 'short-cut' route is to walk along a small dirt road about the north edge of Lamont Meadow. At the road's end, it is just a short cross-country hike uphill to the northern saddle of Spanish Needle along the PCT. Again, no water is available. The PCT crosses the northwest face of Spanish Needle, then gradually switchbacks down the west side of the peak where it ends at this time until the final link is built to the Mt. Jenkins-Owens Peak saddle.

Along the PCT on the west face are several populations of the relatively rare Phacelia novemnillensis, and further down the slope where you can actually see the spires of Spanish Needle Peak is the largest known population of the endemic Spanish Needle Onion, Allium shevockii. Both species are in full flower from late May to mid June depending on the weather. Allium shevockii is quite unlike any other native California onion. The obovate petals (tepals) are lime green below and bright maroon above with recurved tips. This new species was first collected in June 1985. Other rare plants currently known near the summit of Spanish Needle include: Eriogonum breedlovei var. shevockii and Trifolium dedeckerae. A well developed mixed conifer forest occurs along the north slope of Spanish Needle Peak, and the eastern slope is extremely rugged and has only recieved a cursory investigation.

For this botanist, the most limiting factor in exploring and documenting the flora of the southern Sierra Nevada along the crest is the inability to carry enough water to last more than one day at a time, especially in the hot summer months. The limited access, and rugged nature of the area makes cross-country travel not only difficult, but time consuming. Yet, I believe this article demonstrates some of the botanical rewards.

I am a firm believer in the NEED for very localized checklists and floras along with properly prepared voucher specimens from areas previously unsurveyed botanically within the Bristlecone Chapter area. Examples of excellent observations, collections, and/or photographs of plants have been done by many members of our Chapter over the years. The botanical work carried out by Mary DeDecker alone would take volumes to record. Another member of our Chapter making a very important contribution to our local flora is Mary Ann Henry. She has found a "favorite place" where she has been recording all of the plants for several years now at this locality. The recent field work in the White Mountains by Jim Morefield is another classic example. What wonderful contributions these endeavors are to California botany!

In closing, I want to take this opportunity to state that it does not take a degree in botany to become a good botanist. Some of the best field botanists in the state have been self-taught. Field work leads to a better understanding and appreciation of our flora, and such knowledge can them be transfered into recommendations for appropriate land management, stewardship, and species conservation. This is extremely important in the area covered by the Bristlecone Chapter since the majority of these lands are "public lands" administered by the Bureau of Land Management and the U.S. Forest Service.

James Shevock is an energetic botanist whose record speaks for itself. We are indeed fortunate that his career with the Forest Service has allowed so much field work, and that he has had the enthusiasm to do it. M.D.

#### **NEW MEMBERS**

We are happy to welcome back a former member, Carroll, whom we have missed, along with a valued associate from Sacramento, and a really new member whom we anticipate meeting.

Carroll Albert 6010 Doraldson Grants Pass, OR 97526 Ken Berg CNPS Botanist, CNPDB 1416 9th Street, Room 1225 Sacramento, CA 95814

Jim Meadowcroft Box 511 Bishop, CA 93514 Δ Δ Δ Δ Δ Δ Δ Δ Δ Δ

We offer you the following quote from PLANT ECOLOGY, edited by Michael J. Crowley.

The stature, color and texture of plants give landscape its unique character. As Darwin wrote, a traveler should be a botanist, for in all views plants form the chief embellishment. The cast of the vegetation's features is determined by the size of the dominant plants (whether they are trees or bushes, herbs or mosses), by their spacing (whether they form continuous cover or are widely spaced-out), and by their seasonal prospect (whether the plants are deciduous or evergreen, and whether they undergo striking seasonal color changes).

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Notes from the Editor:

Appreciation is expressed to those who help to get the Newsletter out to you. K.C. Wiley prepares the labels and keeps them up to date. Evelyn Mae Nikolaus faithfully comes to help fold and prepare the printed copy for mailing, often assisted by K.C. Last but not least is our cooperative local printer, Jack Pound, who goes far beyond the call of duty. A month or so without him, when his press broke down, made us even more appreciative. Who else would cater to our convenience and then deliver the finished product to the door?

To subscribers: Your expiration date is shown on the mailing label. Please check it from time to time and keep your renewals up to date. We are reluctant to drop a subscriber, but cannot continue to carry dropouts. In case we have made an error in our figures, please call it to our attention.

Appropriate articles are welcome and much appreciated. The deadline is prior to the first of each publishing month, that is on alternate months. We also appreciate comments as to what you like to see in your newsletter.

# BRISTLECONE CHAPTER FIELD TRIPS, 1988 SPRING SCHEDULE

MARCH 19-20. DEATH VALLEY. Leader: Peter Rowlands, Environmental Specialist and Botanist, Death Valley National Monument. We'll visit areas in the valley and foothills with the best wildflower displays. Be prepared for a primitive, dry camp on Saturday night if the campgrounds are full in the park. Meet at 10:00 am Saturday, at the Death Valley National Monument Visitor Center, near Furnace Creek. Easy to moderate walking.

APRIL 16-17. SHORT CANYON AND WALKER PASS, WEST OF RIDGECREST IN THE SOUTHERN SIERRA. Leaders: Mary Ann & Ronald Henry. Saturday we will hike in Short Canyon, often a diverse and colorful wildflower garden. For those wishing to stay, we'll camp near Walker Pass on Saturday night and hike on the Pacific Crest Trail Sunday. Camping Saturday night will be in a primitive, dry camp. Meet at 9:30 Saturday morning, at Brady's Cafe and Mobil Station, just north of the junction of highways 395 and 14. Moderate hiking, some cross-country.

MAY 21-22. TETRACOCCUS PEAK AND WILDROSE CANYON, PANAMINT MOUNTAINS. Leaders: Mike & Nancy Prather. This is an area with many endemic and rare plants. See our March newsletter for trip details.

JUNE 4. MAZOURKA CANYON, INYO MOUNTAINS. Leaders: Evelyn Mae & Al Nikolaus. Meet at 9:00 am, at the rock service station just south of Independence, on the corner of Mazourka Road and U.S. 395.

JUNE 18-19. 4-WD VEHICLE TRIP IN THE INYO MOUNTAINS. Leaders: Mary and Paul DeDecker. Difficult driving and easy walking trip, entering the Inyo Mountains from Big Pine and returning via Independence. Dry camp Saturday night at Papoose Flat. Meet at 9:00 am in Big Pine at the Triangle Campground, junction of U.S. 395 and Hwy 168. High clearance 4-wd vehicles are absolutely necessary. If planning to participate please contact the leaders at 878-2389.

### FIELD TRIP POLICIES

Generally, day trips last most of the day while the overnight trips conclude early Sunday afternoon. Bring a lunch and drinks on a day trip. Often we are near the vehicles at lunch, but always be prepared to carry your lunch on a hike. Bring plenty of water or other thirst quenching beverages (one gallon per person per day if it's hot, plus water for the car and for cooking and cleaning if we're camping), a hat, dark glasses, sunscreen, and sturdy walking shoes. Don't forget to bring along field guides and a hand lens!

Family, friends, visitors, and members from other chapters are welcome to come along, but <u>please no pets</u>. Unless indicated, the average car should do fine on our trips. Please use a reliable vehicle, with good tires, and start out with a full tank of gas. Trips will <u>LEAVE</u> at the time announced, so please arrive a few minutes early. Car pooling is encouraged.

Contact Mark Bagley, field trip chairman at 873-5326, for more information or if you have any ideas for trips or would like to lead one.

NOTICE: Mark Bagley will be teaching a Cerro Coso Community College Course, NATURAL HISTORY OF THE MOJAVE DESERT, on two spring week ends, April 23-24 and May 7-8, each with an evening class session, April 12 and May 10, in Bishop. Call Mark 873-5326 or Cerro Coso at 872-1565.

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BE A GOOD NEIGHBOR! Do not poison the air by burning material which will put toxics into the air. Christmas wrappings or any paper with colored ink, and most plastics are bad, especially the styrofoam which we use so freely. Dispose of them with solid waste. DO NOT BURN!

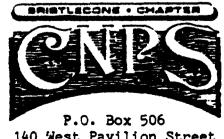
# CALIFORNIA NATIVE PLANT SOCIETY - Membership Application The California Native Plant Society is an organization of lay persons and

The California Native Plant Society is an organization of lay persons ar 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 understanding of California's native flora and to preserve this rich resource for future generations. Varied interests are represented.

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The BRISTLECONE NEWSLETTER comes out bimonthly. It is mailed free to members of the Bristlecone Chapter, CNPS. The subscription is \$5.00 per year for others. Editor: Mary DeDecker.

California Native Plant Society



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