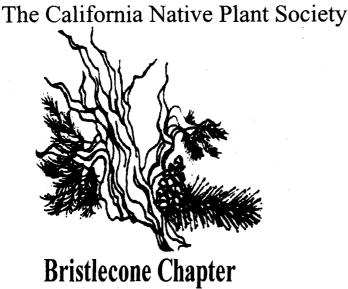
DEDICATED TO THE PRESERVATION OF THE CALIFORNIA NATIVE FLORA



Volume 27 No. 4 July/August 2006



PRESIDENT'S MESSAGE

On the weekend of June 2-4 the Bristlecone Chapter and Kern Chapter very successfully hosted the CNPS Chapter Council and Board Meetings in Ridgecrest. We thank our Creosote Ring subchapter members who enthusiastically took on the responsibility of arranging for a venue, preparing information packets, planning a field trip and preparing the food. Special thanks go to Kathy LaShure, subchapter coordinator, who very capably chaired this effort and prepared most of the food herself. Some attendees say the dinner was the best ever. Thanks go also to Janet Westbrook who led a very interesting field trip to the Kennedy Meadows burn areas. Janet and other Creosote Ring subchapter members hosted happy hour at the Maturango Museum where the local Indian Wells beer was a big hit. Thanks to each of you for your cheerful spirits and hard work.

CNPS needs to increase its membership. While membership numbers have stayed the same in recent years, costs of supporting 34 chapters and carrying out programs in education, conservation, legislation, rare plant work and horticulture at the state level have increased. CNPS continues to be the only organization that focuses its work on California's native flora. Delegates at the June Chapter Council Meeting approved a goal of increasing membership by 20% in the year ahead. The Bristlecone Chapter will try to do its part. A new membership brochure with a gorgeous Steve Ingram photo on the cover will be available at the Summer Banquet. Please share a brochure with a friend or direct anyone who might become a member to our website <u>www.bristleconecnps.org</u> where a membership application can be found. See you at the Banquet!

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UPCOMING EVENTS

Bristlecone Chapter Summer Banquet

The Bristlecone Chapter will hold its semiannual summer banquet on Tuesday, July 25 at 6:00 PM at the Crowley Lake Community Center. The public is invited to attend. The speaker is Genny Smith, who has written about the natural history of Owens Valley and the Sierra Nevada for almost fifty years. Genny Smith, editor of Deepest Valley, published in 1962, Sierra East, Edge of the Great Basin, published in 2000 and author of other books of local interest will tell us "Stories of Botanists and other Crazy Scientists" she has known and worked with along the way. Several chapters in Deepest Valley were contributed by Bristlecone Chapter founder Mary DeDecker.

The banquet will be catered by Anything Goes Fine Catering and will feature a choice of entrees - roast chicken thighs with rosemary, Dijon and parmesan or yellow sweet peppers baked with wild rice soufflé plus chopped vegetable salad, polenta torta, baguette toasts with tarragon butter, dessert and a choice of beverages. To find the Crowley Lake Community Center, take the Hilton Creek exit off #395 and go west on South Landing Road to Pearson Drive. The Center is at the corner across from the Crowley Lake Store. Reservations must be made by Tuesday, July 18. To make reservations, send a check for \$25 payable to "CNPS Bristlecone Chapter" along with vour entrée choice to Edyth Irvine, Box 100 PMB 193, Mammoth Lakes, CA 93546. For further information call Edyth at 760-924-5778.



2006 Bristlecone Chapter Summer Field Trip and Activity Schedule

July 15, Saturday. Redding Canyon riparian hike. Leaders: Jerry Zatorski and Paul McFarland. This trip is co-sponsored by the Bristlecone Chapter and Friends of the Invo. Early this season. FOTI partnered with the Inyo National Forest to mitigate some of the damage to this desert oasis. This will be a half day hike up Redding Canyon in the White Mountains just east of Bishop. The stream-side plants come into full bloom by mid summer, and this flora also hosts many native butterflies and birds. We will meet at the intersection of Redding Canyon Rd. and East Side Rd. East of Bishop at 7:00 AM. Cars okay, there will be a 2 mile, moderate hike up the canyon. Participants should bring fluids, snacks, binoculars, hand lens, field guides, sun protection, and hiking shoes that can get wet. For more information contact Jerry Zatorski, 872-3818 or "jerryzat@verizonmail.com", or Paul McFarland, 873-6400 or "pmcfarland@qnet.com".

July 22, Saturday. Valentine Camp, **Below Mammoth Lakes Basin. Leader:** Mark Bagley. Valentine Camp, part of the Valentine Eastern Sierra Reserve, is part of the University of California's Natural Reserve System. It contains an unusually diverse sample of eastern Sierran habitats at the ecotone between the sagebrush desert of the Great Basin and coniferous forests of the higher Sierra Nevada. Mark has led many walks at Valentine Camp since the University acquired the property in the mid-1970's. This will be an easy walking trip at an elevation of about 8000 feet. Meet at 9:30 am. Because this is a reserve used for teaching and research, this will be a guided tour where all must stay with the group and our numbers will be limited. So please sign up by contacting Sherryl Taylor at (760) 924-8742 or email at "staylor@npgcable.com". Trip will end about 3:30 pm. Bring lunch, water and

some cash if you want to buy <u>The excellent</u> <u>Flora of Valentine Camp</u> by Bristlecone Chapter member Ann Howald.

August 12, Saturday. Bald Mountain Botanical Area, southern Sierras. Leader: Judy Breitenstein. There may be some stops to recognize burn progression on the way up. We will be high, you will see Mt. Whitney from the top but the road is good and the trail is easy. This elevated piece of seabed hosts some things pretty much of its own. There are several meadows to visit along on the way. We will choose those the week before. Bloom time may be different this year. Meet at the Kennedy Meadows turn-off from Hwy 395 at 8:30 am. Prepare for changeable weather. Have a full tank of gas, good tires, water, food, bug repellent, hats and sun screen. Car pooling is an option from the turn-off or from the "Store" at Kennedy Meadows. For more information contact Judy Breitenstein at 760-375-2158 "ebreit@ridgenet.net".

2006 Native Plant Sale

The plant sale Preview will be held immediately before the regular meeting on Wednesday, September 27. From 6:00-7:30 PM an informal preview to the sale and native plant gardening discussion will take place at the native plant propagation center at White Mountain Research Station in Bishop. At that time, interested gardeners can place orders for limited quantities of plants which will be available for pick-up the following Saturday and following week. The order form and plant list will also be available on our website: www.bristleconecnps.org. Please contact

ingram@bishopwireless.net for more information.

CONSERVATION

A Fish Story, Part Two

In my February newsletter article ("A fish story") I described DWP's use of pumping for the Department of Fish and Game (DFG) Blackrock fish rearing facility to increase flows down the aqueduct and called it a "piscine shield." Because DWP dried up Blackrock springs, which supplied the facility with water from 1941 - 1970, it "mitigated" the impact by drilling wells and supplying the hatchery with pumped groundwater. Because the pumping is mitigation, it was exempted from the "On/Off" management protocol in the Inyo-LA Long Term Water Agreement, which means the pumps never go off. The average flow from the spring was about 8000^1 af/yr. To mitigate, however, DWP pumps over 12,000 af/yr. This excessive pumping permanently lowers the water table under a large area to the south and west, thereby destroying what was formerly the finest meadow in DWP's wellfields. In the February article I concluded that DFG wasn't ultimately responsible - DWP was using it as a pawn.

The latest chapter in this story appeared last month. In the Inyo Register of May 13-14, 2006, it was reported that DFG plans to spend 1.4 million dollars in improvements to the Blackrock facility over the next five years. In so doing it will increase production

¹ In the February newsletter article I gave a figure of 7000 af/yr as the average flow of Blackrock Springs from 1941 (when the fish rearing facility was established) through 1970 (when DWP dried up the spring). There was a pulse of pumping in the 1960's, however, which reduced the average flow. The figure of 8000 af/yr used in this article is based on the period from 1941-1960, during which time no DWP pumping is documented. This is a better estimate of the spring flow.

from the current 158,000 pounds/year to 180,000 pounds/year. No mention was made in the article of any plans to reduce the excessive groundwater pumping which supplies the facility (and the LA Aqueduct). If DFG can increase production of fish while reducing groundwater pumping to 8000 af/yr (the original spring flow), more power to it. I'd like to believe that's what is planned, but the track records of DFG and DWP don't inspire confidence.

Evidence of the meadow destruction by fish hatchery pumping appears every year in the form of monitoring data gathered by the Inyo County Water Department, in analysis of data from the LANDSAT satellite, and in simply looking at photographs of past conditions in the area. It doesn't require specialized training to see the shrub invasion and decline in grass, as anyone who has attended one of my field trips to the area can attest.

We're entitled to fish AND meadows. To settle for one at the expense of the other is to sell ourselves short. If DFG has 1.4 million dollars to spend for Blackrock and doesn't use it to reduce water consumption it will have become a willing accomplice to DWP's environmental devastation of Owens Valley rather than a mere pawn.

If you are concerned about the fate of the Blackrock meadows, please consider contacting your Inyo County Supervisor and/or the DFG office in Bishop, and/or the manager of the Blackrock fish rearing facility.

.....Daniel Pritchett



Field Trip Reports

McMurry Meadows, May 20, 2006

On May 20, 2006, Kathleen Nelson, Botanist for Inyo National Forest, led a field trip of 10 participants to McMurry Meadows southwest of Big Pine. We traveled along the McMurry Meadows road from the Glacier Lodge road and made several stops in sagebrush scrub along the way.

At the first stop, a sandy plain with scattered granitic rocks, Kathleen pointed out several shrubs in full bloom, including desert bitterbrush (*Purshia tridentata* var. glandulosa), Clokey blue-sage (Salvia dorrii), and indigo bush (*Psorothamnus* arborescens). Herbs in flower included capped cryptantha (*Cryptantha* circumscissa), bud eriophyllum (Eriophyllum pringlei), Easter bonnets (Eriophyllum wallacet), desert larkspur (Delphinium parishii), and tidy tips (Layia glandulosa).

At the second stop, a nearby lava flow, we saw several more herbs in bloom, among them sego lily (*Calochortus bruneaunis*), blue dicks (*Dichelostemma capitatum*), three-hearts (*Tricardia watsoni*), apricot mallow (*Sphaeralcea ambigua*), blue phacelia (*Phacelia distans*), Inyo onion (*Allium atrorubens*), and, along the road, mountain prickly poppy (*Argemone munita*). Additional shrubs flowering here included cottonthorn (*Tetradymia axillaris*) and California buckwheat (*Eriogonum fasciculatum* var. polifolium).

We took a short spur road to a gravelly flat where shrubs were very sparse and a cushion plant, Kennedy buckwheat (*Eriogonum kennedyi*), was abundant and blooming profusely. Scattered among the buckwheat cushions were Inyo onion, sand blossoms (*Linanthus parryae*), and bitterroot (*Lewisia rediviva*), all in bloom. Bitterroot is acaulescent, and its large, white flowers, one or two per plant, seemed to grow right out of the ground. Most plants had more buds than open flowers, which suggested that the show had just begun.

Continuing farther along the McMurry Meadows Road, we stopped to look at Biglelow coreopsis (*Coreopsis bigelovii*) blooming on a hillslope and also found a perennial *Lotus* in flower. Other bloomers at this location included clustered broom-rape (*Orobanche fasciculata*), red triangles (*Centrostegia thurberi*), and flower baskets (*Mentzelia congesta*).

At our final stop, McMurry Meadows, we walked first across the lowermost slopes of a dry hill next to the meadow, where we saw Panamint Mountain lupine (Lupinus magnificus) just starting to bloom. Also in flower on the hillslope were Stansbury phlox (Phlox stansburyi), desert paintbrush (Castilleja angustifolia), arrowleaf balsamroot (Balsamorhiza sagittata), pink milkvetch (Astragalus sepultipes), and Douglas sedge (Carex douglasii). We saw Douglas sedge blooming again in the meadow proper along with wild iris (Iris missouriensis), Nevada blue-eyed grass (Sisyrinchium halophilum), aspen onion (Allium bisceptrum), poison zigadene (Zigadenus venenosus), and alkali shooting star (Dodecatheon pulchellum). Coyote and arroyo willows (Salix exigua and S. lasiolepis) were in bloom in the meadow as well, but it was still too early for wild rose (Rosa woodsii).

.....Janice E. Bowers and Steven P. McLaughlin

Black Rock Springs, June 3

Irony in the Meadow Zone

June 3 began windily but warmly at the Blackrock Fish Hatchery, where seven of us gathered for Daniel Pritchett's alkali meadow zone field trip. As fish roiled the surfaces of hatchery raceways, we discussed 1970s groundwater pumping that dried Blackrock Springs and Los Angeles' resulting "environmental mitigation" for the damage: 12,000 acre feet per year of groundwater pumping from an exempted well in the impacted area to supply the fish hatchery as mitigation for the groundwaterpumping-related loss of the approximately 8,000-acre-foot-per-year springs.

Fleeing pangs of irony, we caravanned west and up--admiring cheesebush (Hymenoclea salsola) and California eriogonum (Eriogonum fasciculatum var. polifolium) in bloom en route--to look down on the valley and view the shift in color from silver to deeper green that characterizes a shift to meadow zone vegetation at the edge of the alkali sink zone.

Returning to the valley floor, we toured three vegetation monitoring sites. At the first site, an area classified as groundwaterdependent meadow in the 1980s, our spirits dropped to the local level of the water table, which was well below saltgrass (*Distichlis spicata*) rooting zones. Nevada saltbush (*Atriplex torreyi*) with its conveniently deeper roots, dominated most of the monitoring site. The second site lifted our spirits--alkali sacaton (*Sporobolus airoides*) flowered nearby, although *A. torreyi* still dominated the site. Groundwater levels hovered about two meters closer to the surface than at the first site.

At our third monitoring site stop, we found what we'd hoped for: recognizable alkali meadow. In a shouldn't-be-surprising correlation between groundwater-dependent vegetation and higher water tables (within rooting zones), we found that the water table was approximately one meter below the surface, well above that of the other two sites. We concluded our trip at a fourth site in the midst of the meadow zone with a stroll through healthy alkali meadow, stopping to admire red and black willow (*Salix laevigata* and *S. goodingii*), occasional shallow

pools of water, and rich black mud thick with Baltic rush (Juncus balticus) and other wetland vegetation, which, contrary to recent Montgomery Watson Harza speculation, was not drowning from too much water.

.....Ceal Klingler

Witcher Meadow, June 24

Six industrious meadow wanderers explored Witcher Meadow on Saturday, June 24, to rid the meadow of the lovely but invasive Tragopogon (Tragopogon dubius Scop). A member of the Asteraceae family, tragopogon is also known as common salsify, or goat's beard, or even wild oysterplant. The plant branches out from the base with long leafy stems, each producing a large flower that becomes a globe-shaped seed head (think large, delicate dandelion). We collected 20 pounds of this invader. And, of course, now that we've learned it doesn't belong here, Tom and I have been clearing it from the lower Rock Creek trail and our yard.

Happily, there were more plants to enjoy, beginning with huge Jeffrey pines that provided much-needed shade on a very hot day. Meadow highlights, in bloom, included rein orchids (*Platanthera dilatata* v. *leucostachys*) and sparsely-flowered bog orchid (*P. sparsiflora*), shooting star (*Dodocatheon alpinum* v. *majus*), starwort (*Stellaria longipes*), a clover (*Trifolium andersonii* var. *Beatleyae*), timothy grass (*Phleum alpinum*), *Penstemon papillatus*, and many interesting grasses we didn't identify.

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Witcher Meadow was burned in the 2002 Birch Fire, opening up opportunities for a few more species of interest, such as redrayed hulsea (Hulsea heterochroma). Dry meadow species included Mariposa or sego lily (Calochortus bruneaunis), Mojave prickly-pear (Opuntia polyacantha v. erinacea/hystracina), Penstemon rostriflorus, wooly star (Ertastrum wilcóxii), wavy-leaved paintbrush (Castilleja applegatei) and an annual, little yellow owl's clover/paintbrush (Castilleja tenuis).

Thanks to Steve Ingram for leading this adventure and to Karen Ferrell-Ingram, Sherryl Taylor, Lo Lyness and Tom Higley for help collecting the tragopogon before it spread further.

.....Rosanne Higley

1 cm

5 mm

Primula suffrutescens

NEW MEMBERS

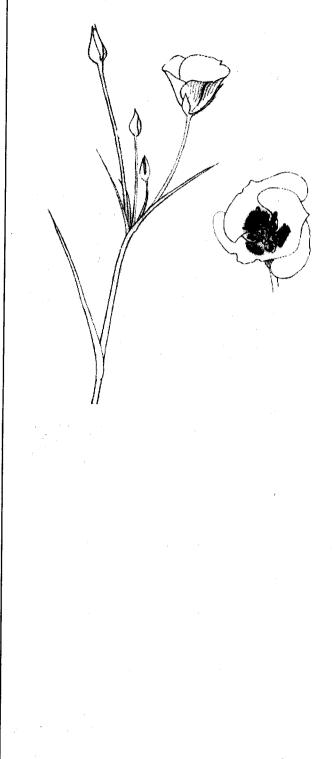
The Bristlecone Chapter warmly welcomes the following new members:

Shelley Janek Shingle Springs, CA

Debby Brooks Angels Camp, CA

Sharon & Malcolm Clark Mammoth Lakes, CA

July gold *Dedeckera eurekensis* Illustration by Joy Fatooh Inyo mariposa lily (*Calochortus excavatus*) Illustration by Joy Fatooh



Next Newsletter Deadline: August 28th

CALIFORNIA NATIVE PLANT SOCIETY - Membership Application

The California Native Plant Society is an organization of lay persons 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. Varied interests are represented.

Name	P.O. Box or Street	
		one
I wish to be affiliated with the Bristlecone Book Sales - Sue Weis (760) 387-2349	Chapter Other_	·
Membership Category		Bristlecone Chapter Directory
 Student, Limited Income Individual Family, Group, or Library Plant Lover Patron Benefactor Mariposa Lily 	\$25.00 \$45.00 \$75.00 \$100.00 \$300.00 \$600.00 \$1,500.00	President – Sherryl Taylor (760) 924-8742 Vice President – Sue Weis (760) 387-2349 Treasurer - Rosanne Higley (760) 387-2803 Secretary – Denise Waterbury – (760) 873-4344 Membership – Diana Pietrasanta - (760) 873-6262 Newsletter Editor - Anne Halford - (760) 873-6714 Conservation - Daniel Pritchett - (760) 873-8943 Plant Communities - Sally Manning - (760) 873-3790 Invasive Weeds - Brian Cashore - (760) 387-2789 Legislation – Kathy Duvall- (760) 387-2122 Education - Edyth Irvine (760) 924-5778 Programs - Sue Weis (760) 387-2349 Field Trips – Jerry Zatorski (760) 872-3818 Native Plant Sales - Karen Ferrell-Ingram - (760) 387-2913 Decker Native Plant Garden – Jerry Zatorski (760) 872-3818 Publicity – Ann Fulton – (760) 873-9261 Historian – Ann Fulton (760) 873-9261 Librarian - EvelynMae Nikolaus - (760) 878-2149 Rare Plant Committee - 2006 Chair. – Anne Halford (760) 873-6714 hm., (760) 872-5022 wk. Book Sales - Sue Weis (760) 387-2349
Please make membership checks payable to	o and send to:	
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