

**DEDICATED TO THE PRESERVATION OF THE CALIFORNIA
NATIVE FLORA**

The California Native Plant Society



Bristlecone Chapter

**Volume 30 No. 4
July/August 2009**

There will not be a Chapter Meeting in July. The next Chapter Board Meeting will be on August 19th – BLM/USFS building at 351 Pacu Lane. Everyone is welcome to attend.

PRESIDENT'S MESSAGE

Fire: The Good, Bad, and the Beautiful

I don't know anybody who is more paranoid about fire than I am. Two years ago, while the Inyo Complex fire was still burning, I worked all day long throughout much of July to reduce the amount of sagebrush and rabbitbrush fuels around our house. This past winter I

spent many weeks working on removal of dead willow, birch, and cottonwood fuels along the stream below the house. Fire-fighting agencies around the Eastern Sierra Nevada do an incredible job of protecting homes from wildfires, but all homeowners have an obligation to do everything possible to make our properties fire-safe.

On the other hand, as a botanist and ecologist I understand that many plant species and communities, particularly in semiarid environments, require periodic fires for their regeneration and persistence. As paranoid as I am, I would not have fire completely eliminated from our region, even if I somehow had the power to do so. It is now well-established that most conifer forests in the western United States benefit from frequent, low-intensity ground fires. Total fire suppression results in build-up of fuels, and eventually destructive crown fires are inevitable.

Fires in desert scrub, unlike in forests, have become more frequent during the past 100 years, in large part due to the increased density of invasive grasses, particularly cheatgrass and red brome. Researchers have made little progress on developing methods to reduce populations of these exotic grasses, and further effort in this area should be a high priority.

Even severe crown fires can be beneficial to some plant species. I went up to the Baxter Pass trailhead in late spring of 2008, less than one year after the Inyo Complex fire, and was very discouraged by what I saw. Only a few willows and bitterbrush were sprouting at the time; all

the California black oaks appeared to be completely dead. There were essentially no wildflowers. Early this spring, however, Jerry Zatorski advised me to check out the wildflowers on the burn in the vicinity of Eightmile Ranch between Independence and Big Pine. There was an incredible carpet of scale bud (*Anisocoma acaulis*), with brilliant patches of *Linanthus parryae* and other spring annuals. I returned to the Baxter Pass trailhead in mid-June of this year to find another remarkable wildflower display. Most prominent were a bush mallow (*Malacothamnus fremontii*), Piute morning glory (*Calystegia longipes*), rosy penstemon (*Penstemon floridus*), and *Keckiella breviflora*, a shrub closely related to penstemons. Most remarkable of all was a composite aptly named *Hulsea heterochorma* for its large heads with red ray flowers and orange-yellow disk flowers. This species typically occurs only on recent burns. Many lupines were becoming established, and we can look forward to excellent blooms of these for a year or two. The oaks are sprouting vigorously.

So manage the fuels around your home intelligently, support our fire-fighting agencies, but where wildland fires have occurred, be sure to check them out two to four years after the burn for some truly remarkable botanical displays.

.....Steve McLaughlin

UPCOMING EVENTS

Late Summer Bristlecone Chapter Field Trip

July 11, Saturday. McGee Creek. Leaders: Cathy Rose, Steve McLaughlin. We'll wander up the flowery McGee Creek trail below colorful metamorphic mountains with no particular destination in mind. Besides abundant plant life, we should see birds of sagebrush, streamside, meadow, and coniferous forest. Bring lunch and water. About 4 miles round trip. Meet at 9:00 at the McGee Creek trailhead, a left turn from 395 north of Tom's Place and south of Convict Lake. For more information contact Steve at 760 938-3140.

July 17-19. Bristlecone Chapter Sojourn

July 24, Friday. Rock Creek – Mosquito Flat to Ruby Lake. Leaders: Cathy Rose, Steve McLaughlin. This walk proceeds gradually uphill to beautiful Ruby Lake, situated below granite cliffs. The pace will be leisurely as we stop often to look down on Little Lakes Valley and enjoy the plants. Plant and bird list supplied. Bring lunch, water, camera. About 4 miles round trip. Meet promptly at 8:30 at the old kiosk on the right side of the Rock Creek Road just above Tom's Place for **MANDATORY CARPOOLING** due to crowding at the trailhead. For more information contact Steve at 760 938-3140.

July 31, Friday. Rock Creek – Mosquito Flat to Long Lake. Leaders: Cathy Rose, Steve McLaughlin. Rock Creek is famous for flowers and scenic beauty. We'll take a walk past five of the many lakes on this easy botanical ramble. Plant list supplied. Bring lunch, water, and camera. About 4 miles round trip. Meet promptly at 8:30 at the old kiosk on the right side of the Rock Creek Road just above Tom's Place for **MANDATORY CARPOOLING** due to crowding at the trailhead. For more information contact Steve at 760 938-3140.

Plant Sale Events

Hello fellow native plant enthusiasts!

The Bristlecone Chapter Plant Sales (Bishop and Mammoth Regions) are gearing-up for some great sales this coming September. Here is some preliminary information on where, when and what's growing!

The **Mammoth Region plant sale** has been scheduled for **Saturday, September 12 from 9-11 AM**. Check our Bristlecone Chapter website for more up-to date alerts about this sale. For more information contact Sherry Taylor at 934-2338.

**Save the Date – Bishop Annual Native Plant
Sale - September 19th, 9-11 am—
White Mtn. Research Station, 3000 E. Line
Street.**

A wonderful array of native plants are growing and awaiting their garden homes. We've been busy coaxing from seed dozens of brittle bush, various buckwheats, penstemons, Mojave aster, lupine and many more favorites. – even scarlet locoweed!!

And please don't forget to collect seed – July will be an optimal month. Please contact Anne Halford at 872-5022 if you'd like a list of some target species we'd like to have – remember to have a great sale we need native seed!

CONSERVATION

Technical Group considers more well exemptions

Every few years the Technical Group (TG) considers adding still more wells to its list of wells exempt from the ON/OFF protocol of the Inyo-LA Long Term Water Agreement (LTWA). Every few years I write letters and articles pointing out that far too many wells are already exempt and that the TG should restore areas already degraded by pumping from existing exempt wells rather than granting new exemptions. Every few years the TG ignores my arguments and, with blessings of the Inyo County Supervisors, grants the exemptions. Another such cycle started at the Technical Group meeting of June 19, 2009.

Under the ON/OFF protocol wells can only be pumped when there is sufficient soil moisture to maintain vegetation at associated monitoring sites. ON/OFF is the principal means to insure groundwater pumping is managed so as to "avoid" creating new environmental impacts as required by the LTWA. While the implementation of ON/OFF protocol has serious problems, the protocol is better than nothing.

Wells exempt from ON/OFF are pumped even when data would place them in OFF status.

That means exempt wells are pumped without regard to the environmental impacts they create. Before Inyo County sued LA in 1971, LA pumped whichever wells it wished for however long it wished – in effect, all wells were in ON status all the time. Forcing LA to agree to a management protocol which included provisions for "OFF" was one of the principal victories Inyo achieved in the 19 years of litigation which led to the LTWA.

When the LTWA was signed in 1991, the TG granted many well exemptions. As a result, the volume of pumping from wells already exempt is only slightly less than the long term sustainable annual average pumping estimated by the USGS, and (according to the Inyo County Water Department) is so great it will probably make water table-based management impossible. Water table-based management, in turn, is the protocol Inyo and LA have been attempting for several years to develop to replace the existing, flawed, ON/OFF protocol. In seriously considering new exemptions, the TG is considering an action which would further diminish any chance of developing a groundwater management protocol which sustains native plants and animals as the LTWA requires.

I've frequently commented on the dysfunctionality of the TG, but it has usually been regarding necessary actions not taken. In this case dysfunctionality is manifested an un-necessary (and positively counter-productive) action which will be taken.

Two of the exemption requests – those from the California Department of Fish and Game (DFG) for the Blackrock Hatchery -- were particularly egregious. DFG already has two exempt wells for this hatchery and they are already destroying a large meadow southeast of the 8 Mile ranch. CNPS called attention to this problem several years ago to both DFG and the TG. Neither group has taken any action. Rather than addressing existing problems, DFG seeks authority to create new problems by acquiring new exemptions.

DFG is currently under a court order to bring its entire statewide hatchery operations into compliance with the California Environmental Quality Act (CEQA). This is the very law which

gave rise to the LTWA, whose requirements DFG now seeks to ignore by requesting the exemptions. The court specifically mentioned impacts of supplying water to hatcheries as one of the subjects DFG must address in the Environmental Impact Report it is ordered to complete. DFG didn't disclose the existence of this court order to the TG, nor did TG members give any indication they were aware it. DFG's request for well exemptions under these circumstances shows contempt for the intent of the court order.

It may not be too late to stop this irresponsible proposal. Please contact the DFG Fisheries Superintendent in Bishop and ask that DFG reduce its already excessive use of groundwater rather than seek new well exemptions under the LTWA. Please contact Inyo County Supervisors and ask that a moratorium on new well exemptions be declared until a water table-based management protocol is implemented and problems from existing exempt wells are addressed.

.....Daniel Pritchett

FIELD TRIP REPORTS

Black Rock
June 6, 2009

The good, the bad and the ugly were seen in alkali meadows near Black Rock Fish Hatchery, when Conservation Chair Daniel Pritchett showed us vegetation change in relation to fire and groundwater.

We visited permanent vegetation monitoring sites Test Sites 1, 2 and 3 in the Blackrock area. The 2007 Inyo Complex Fire burned sites TS1 and TS3, but not TS2. All sites included narrow fenced exclosures.

At TS1 (the ugly), subject to continuous deep drawdown, the burned area was a sea of tumbleweeds, but it was still dominated by grass in the mid-1980s. While the Water Agreement was being negotiated, pumping drew the water table down from about 5' below the ground to over 24' below ground. A few small alkali sacaton

(*Sporobolus airoides*) showed between the tumbleweeds at the monitoring site. Charred tufts of older sacaton are being undercut by wind erosion. The highway (US 395) was closed briefly due to blowing dust from the fire site. In the adjacent unburned area, after 20 years of continuous groundwater drawdown, sacaton is still extant as dirt-covered lumps, only the underground parts remaining alive.

At TS 2 (the bad), subject to continuous drawdown, Great Basin Sagebrush (*Artemisia tridentata*), Rabbitbrush (*Chrysothamnus nauseosus*) and Torrey Saltbush (*Atriplex torreyi*) have grown over the meadow grass. DWP imposed a three year suspension of grazing after the fire to allow grass recovery. However, grass is not recovering to baseline conditions. Rare mariposa (*Calochortus excavatus*) occurs at TS2, but it rarely blooms, a further indication of low water table.

At TS 3 (the good), subject to cycles of shallow drawdown and recovery, alkali sacaton and saltgrass (*Distichlis spicata*) started coming back a few days after the 2007 fire. In the fenced exclosure, purple plumes of sacaton waved above lush grass and it was hard to believe a fire had recently occurred.

In the 1991 Water Agreement, in return for re-watering the Lower Owens River, DWP was not required to restore vegetation to conditions prevailing before its massive groundwater pumping began in 1970, but, instead, was required to manage vegetation so as to avoid decline from conditions in the 1980s. Neither TS1 nor TS2 (the two monitoring sites subject to continuous drawdowns below the grass rooting zone) have recovered to their initial conditions measured in the 1980s. TS3, on the other hand, which has had shallower drawdowns and periods of recovery to the grass rooting zone, has as much, if not more grass now than when the site was first established in 1988.

The extra 4,000 acre-feet of drawdown which is goes through Blackrock Hatchery, purported mitigation for taking 8,000 acre feet from Blackrock Springs, accounts for the lower water tables in these vegetation test sites. The 4,000 acre-feet does not go back into the water table, but into

the Aqueduct. Whether the extra water benefits the hatchery, which was operating well on 8,000 acre feet of water, is questionable.

Peter Vorster, hydrologist for the Owens Valley Committee, attended the field trip. After the planned visits to the Blackrock permanent monitoring sites, Peter led an impromptu trip to the Lower Owens River, via the Blackrock waterfowl management area.

.....Connie Spenger (reviewed by Daniel)

Parker Lake
June 13

Despite some windy, cold, and wet weather, 22 participants joined Cathy Rose for her hike to Parker Lake on June 13. Many species were in bloom, including wild onion (*Allium bisceptrum*), two species of *Phlox*, groundsel (*Senecio integerrimus*), western sweet-cicely (*Osmorhiza occidentalis*), and several others. The plant that attracted the most attention was a delicate fritillary lily, *Fritillaria pinetorum*. We ended the hike along the south shore of the lake below excellent specimens of western white pine (*Pinus monticola*) and whitebark pine (*Pinus albicaulis*). If you missed this hike, you might want to make it to Cathy's trips to McGee Creek (July 11), Ruby Lake (July 24), or Long Lake (July 31).

.....Steve McLaughlin

Bristlecone Chapter Hopes to Make Newsletter Available On-Line

Our Chapter has recently started discussions regarding modernization updates to our newsletter and chapter website. With ever shrinking non-profit revenues and the push to walk-the-talk about green behavior, we've decided to begin producing an on-line version of our newsletter via an email link to our members. My initial suggestion regarding implementing these changes has had mixed reviews, but most are warming-up to the idea. What we need though to make this happen is your input and email addresses!

If you want access to an email version of our newsletter or are adamant about not receiving an on-

line version PLEASE let us know by emailing our new newsletter editor Daniel Pritchett at; skypilots@ucsd.edu or call if you don't have email at; (760) 873-8943.

We plan on still producing a hard-copy version of our newsletter for those members who don't want, or can't access on-line media, but we do need to start getting an idea of how many members fit this category to better gauge our production costs, etc. Thank you so much for taking the time to give us your feedback and thank you to all the faithful readers for the past 18 years – Anne Halford



DESERT-ASTER

Next Newsletter Deadline: July 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
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Membership Category

___ Student, Limited Income	\$25.00
___ Individual	\$45.00
___ International	\$45.00
___ Family, Group, or Library	\$75.00
___ Supporting	\$75.00
___ Plant Lover	\$100.00
___ Patron	\$300.00
___ Benefactor	\$600.00
___ Mariposa Lily	\$1,500.00

Please make membership checks payable to and send to:

CNPS – Membership Coordinator
 2707 K. Street, Suite 1
 Sacramento, CA 95816

Bristlecone Chapter Directory

President – Steve McLaughlin (760) 938-3140
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Secretary – Connie Spenger (760)-938-2159
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Programs – Sally Manning (760) 873-3790
Field Trips – Sue Weis (760) 873-3485
Decker Native Plant Garden – Jerry Zatorski (760) 872-3818
Publicity – Denise Waterbury (760) 873-7639
Historian – Ann Fulton (760) 873-9261
Librarian - EvelynMae Nikolaus - (760) 878-2149
Rare Plant Committee - 2008 Chair. – Anne Halford (760) 872-5022
Plant Sale Committee – Anne Halford, Diana Pietrasanta, Sherryl Taylor (924-8742), Denise Waterbury (873-4344)
Book Sales - Sue Weis (760) 873-3485
Posters – Stephen Ingram (760) 387-2913
Kathy LaShure, Creosote Ring Sub-Chapter Coordinator, (760) 377-4541

Gift Contribution: Where most needed _____ Conservation _____

THE CALIFORNIA NATIVE PLANT SOCIETY (www.bristleconecnps.org) Bristlecone Chapter Newsletter comes out bimonthly. It is mailed free to members of the Bristlecone Chapter, CNPS. The subscription is \$5.00 per year for non-members and can be obtained by sending newsletter subscriptions to CNPS. P.O. Box 364, Bishop, CA 93515-0364. Send newsletter articles not memberships to Daniel Pritchett, Newsletter Editor; 401 E. Yaney St., Bishop, CA 93514 - or email to skypilots@ucsd.edu