

NEXT CHAPTER MEETING

Wednesday, March 26th, 7:30 p.m. Big Pine Methodist Church, Big Pine. Inyo National Forest Service Botanist, Kathleen Nelson will present a talk titled; "Ramshaw Abronia: A Kern Plateau Treasure" . Kathleen's talk will cover the history, distribution and current status of this rare and beautiful plant.

Reminder: We are still very low on quart and half gallon cardboard milk cartons for our plant sale. Everyone, please bring at least two containers to the meeting. Thankyou!

NEXT CHAPTER BOARD MEETING

Tuesday, March 18th, 7:00 p.m. at Doris Fredendall's residence in Big Pine. All chairpersons are welcome and encouraged to attend.

PRESIDENT'S MESSAGE

Looks like this year is shaping up to be another busy one for the Bristlecone Chapter. Mark has been busy lining up people to lead field trips and he will be leading the one to Death Valley. I hear that some plants are already in bloom down in those environs. This May we will also be having our second annual Sierra Spring Sojourn and in July, our annual Summer Banquet.

At our last chapter Board meeting it was decided to form a budget committee to better be able to recommend to the board a spending plan for the coming year. The money we bring in only goes so far and we must be careful to keep our house in order. If you are interested in serving on this committee please give me a call. Also in relation to our budget, our chapter funding committee is still looking at various proposals for spending the gift money that we received last year. If you have any other suggestions for viable projects that support our mission please call our Treasurer and Funding Committee Chair, Mary Allen.

I want to be sure and give Vince and Ann Yoder a big thank you for the many years that they have been active in our chapter. They have put their house up for sale and could be moving out of our area at anytime. They have helped our chapter and CNPS in so many ways that I could not even begin to list them all. We are all really going to miss you two!!

.....Scott Hetzler

Upcoming Events

Sierra Spring Sojourn

The Bristlecone Chapter is sponsoring its second annual Sierra Spring Sojourn, a flower filled weekend of field trips, slide programs and camaraderie all in the splendid eastern Sierra region.

The dates for this year's event will be **May 16-18**.

We will be using the facilities of Camp Inyo at the Bernasconi Education Center, located in the foothills of the Sierra Nevada just west of Big Pine, at an elevation of 5,000 (1525m).

In addition to sleeping dorms, participants will be allowed to park their own RV's (no-hookups), or erect tents on the grounds. Motels are also available. The number of participants will be limited and available on a first-come, first-served basis, so sign up early!

We are looking forward to a great wildflower display this year thanks to early and abundant rain and are planning a variety of field trips to cover the diversity of our area. We have lots of new trips in store including a botanical sketching trip and some of your old favorites.

For further information regarding registration please send a self-addressed envelope to:

Kathleen Nelson
Rt. 1, Box 45c
Gerkin Road
Bishop, CA 93514

Bristlecone Chapter Spring Field Trips

Upcoming Bristlecone Chapter Spring Field Trips

Although it's been pretty dry in the lower elevations since our last newsletter, we're still hoping for a good display of wildflowers in the desert this spring. Please join us as we see what Mother Nature provides.

For all field trips, be sure to bring plenty of water, lunch, good walking shoes or boots, and appropriate clothing for hot sun or inclement weather. Also

useful would be a hand lens, binoculars, camera, floras, and plant lists. Trips will leave at the time announced, so please arrive at the meeting sites a few minutes early. Unless indicated, the average car should do fine. Car pooling is encouraged. Everyone is welcome, but please no pets. If you need more information contact Field Trip Chairperson Mark Bagley at 619-873-5326.

March 22, Saturday. Death Valley. Leader: Mark Bagley. Meet at 10:00 am in Death Valley, at Stove Pipe Wells in the parking lot in front of the store. It's a good place to gas up your vehicle and buy cold drinks, etc. We will try to go where the wildflowers are blooming best at that time; in the creosote bush scrub, desert saltbush scrub and alkali sink scrub communities on the lower elevations and bajadas. Easy walking, with lunch at the vehicles.

April 12, Saturday. Alabama Hills. Leader: Vince Yoder. Meet at 9:30 am about 2.5 miles west of Lone Pine on Whitney Portal Road, at its junction with Movie Road. Join Vince, who's been studying the plants of the Alabama Hills for over 15 years, on this trip to see the spring wildflowers. There will probably be two one-mile walks; one before lunch, the other after, with lunch at the vehicles. Both walks will be fairly easy; one will have some up and down crossing washes and low hills, the other will be pretty flat.

April 26-27, Saturday-Sunday. Ash Meadows National Wildlife Refuge. Leaders: Mary DeDecker and Betty Gilchrist. Meet at 11:30 am in Death Valley Junction at the junction of Highway 190 and 127. Ash Meadows, just across the state line in Nevada, is a very special desert oasis with extensive spring-fed wetlands and alkaline desert uplands. Ash Meadows has the highest concentration of endemic species in the United States, at least 24 plant and animal species are found here and nowhere else in the world. Rare plants we will see include *Calochortus striatus*, *Astragalus phoenix*, *Nitrophila mohavensis*, *Enceliopsis nudicaulis var. corrugata*, and *Grindelia fraxino-pratensis*. No camping is permitted in Ash Meadows; campgrounds are located in Death Valley National Park, about 35 miles west, and in Pahrump, about 22 miles southeast. Primitive camping is possible in portions of the Park and on BLM lands in the vicinity. Hotels are available in Death Valley Junction and at the new Longstreet Inn and Casino, seven miles north of Death Valley Junction on Highway 127, at the Nevada stateline. The Longstreet Inn is the closest accommodations;

single or double rooms are about \$63/night, \$13/night in the RV park with full hookups (prices include taxes). If we reserve enough rooms ahead, we can get a group rate of about \$43/night at the Longstreet Inn; contact Mark Bagley, at 873-5326, by March 15th if you are interested in this rate. Contact Mary Dedecker, 619-878-2389, with other questions about the trip.

May 3, Saturday. Bryophytes (Mosses and Liverworts) in the Owens Valley Area. Leader: Jim Shevock. Meet at 9:00 am at the junction of Hwy. 6 and Wye Road, at the north end of Bishop. Join Jim, our Forest Service Regional Botanist and expert on the flora of the southern Sierra, as we search out these often neglected nonvascular plants. If you've never been in the field with Jim, this is an opportunity you should not miss. His enthusiasm and knowledge are incredible. Be sure to bring your handlens.

May 7, Wednesday. Bajada Slopes Just North of Sawmill Creek. Leader: Scott Hetzler. Meet at 8:00 am at the Hwy. 395 roadside rest stop by Black Rock, between Big Pine and Independence. For those who can take off in the middle of the week, join El Presidente on a moderate hike to look at the beautiful display of flowering shrubs on the upper bajada slopes.

May 12-15. Bodie Hills Rare Plant Survey. Anne Halford and five members of the "Partner's for Plants" group (an organization that is part of the Garden Club of America that focuses on our nation's rare plants) will be searching out several rare plants, especially documenting additional populations of the diminutive combleaf (*Polycytenium fremontii* var. *confertum*) a plant in the Mustard Family (Brassicaceae) that inhabits ancient lake margins. We will be camping out three nights with two full days of surveying. If you are interested in participating for the week or in only one day, Wednesday for-instance, I will arrange a time and place for all of us to meet. Please contact [Anne Halford](#) at 873-6714 (Hm.) or 872-4881 (Wk.) for trip details. Although this trip does back up rather closely to the [Sierra Spring Sojourn](#), the Partners for Plants folks really wanted to be able to tie in their visit to the eastern Sierra with this 2nd annual wildflower event.

May 16-18, Friday Night-Sunday. Sierra Spring Sojourn. Bernasconi Education Center, Big Pine.

See the adjacent article about this wonderful wildflower weekend.

May 31, Saturday. Owens Valley Alkali Meadows. Leader: Sally Manning. Meet at 9:00 am at the Glacier View Campground (the old Triangle Campground), at the junction of Hwy. 395 and Hwy. 168 just north of Big Pine. Although it may all look like desert to you, there is a fair amount of native alkali meadow still remaining in the Owens Valley. These meadows contain a high degree of plant and animal diversity and harbor some endemic species. California's Natural Diversity Data Base has classified alkali meadow in the state as "very threatened." On this trip we will visit several different meadows in the northern Owens Valley near Big Pine and Bishop. All sites are located next to dirt roads, so the walking will be easy.

June 7, Saturday. Long Valley. Leaders: Doris Fredendall and Anne Halford. Meet at 9:00 am at the "Green Church" on the Benton Crossing Road just off of U.S. Hwy. 395 north of Crowley Lake. We will be visiting the rolling uplands of the Long Valley Caldera that are home to indigo blue delphinium (*Delphinium andersonii*), yellow butterweed (*Senecio spp.*) and alkali lakes and meadows. After lunch we'll also spend some time identifying some of the diverse needlegrasses that add to the plant diversity of this area.

The Jepson Herbarium Weekend Workshops

The Jepson Herbarium is continuing to offer intensive weekend workshops on the systematics and ecology of botanical groups. The workshops are limited to 20 participants and fill up quickly! All enrollment is on a first-come, first-served basis.

Cost per workshop: Jepson Herbarium Members: \$135; Non-members; \$150 plus room and board for field station workshops. For further information, contact **Susan D'Alcama at the Jepson Herbarium, (510) 643-7008.**

The following is a partial list of upcoming workshops.

**Class VII - Flora of Santa Cruz Island
April 10 - 13, 1997
Dieter Wilken**

Class VIII - Northern Vernal Pools
April 18-20, 1997
Bob Holland and Virginia Dains

Class IX - Cactaceae
April 25-27

Mark Porter and on Rebman

Class X - Poaceae
May 3 & 4
Travis Columbus

White Mountain Research Station
Spring 1997 Lecture Series

WMRS Bishop Classroom, 3000 East Line Street, Bishop. Thursday Evenings, 7:30 p.m. Admission is free and all are invited. For more information, please telephone (619) 873-4344.

March 13: "Geology Underfoot in the Eastern Sierra" - Allen Glazner, Dept. of Geology, University of North Carolina, Chapel Hill

March 20: "Trace Gases in the Atmosphere" - Steve Cliff, Dept. of Chemistry, University of California, San Diego

March 27: "Population Ecology of Bighorn Sheep: What I Have Learned in Two Decades" - John Weyhausen, White Mtn. Research Station

April 3: "The Universe Above Us: What We See from the White Mountains" - David Rodrigues, Chabot Observatory, Oakland, CA

April 10: "Prehistoric Obsidian Quarry Use in the Inyo-Mono Region" - ~~Brian Ramos, Dept. of Anthropology, University of California, Davis~~

April 17: "The White Mountain Boulder Train Project" - Eric Edlund, Dept. of Geography, University of California, Berkeley

The following article by Mary DeDecker is one of a series on native plants that focuses on the ecology, taxonomy and other natural history information of native plants in our region.

Creosote Bush

Creosote bush, *Larrea tridentata*, is a dominant shrub on the Mojave desert. The name honors Hohn Anthony de Larrea, a Spanish promoter of Science. It is a member of the Caltrop Family, Zygophyllaceae, far superior to the only other member of that family occurring in the region which is puncture vine, *Tribulus terrestris*, an obnoxious introduced weed.

The creosote bush is green, relatively tall, with wand-like branches, an attractive contrast to the low, gray, intricately branched shrubs with which it is associated. Its leaflets, about 3/8" long, are in pairs. The five petals of the flowers, about 1/4" long are partly twisted like the vanes of a windmill, the fruit is a round capsule, densely white-hairy. When back lighted by the sun these are most attractive.

Creosote bush has a remarkable ability to thrive on a minimum of precipitation. The largest plants occur along highways where they respond to extra moisture from runoff, growing up to 10' tall. On the open desert they are more likely to be 2-6 or 8 feet high. They may live to great old age. The plant became famous when Frank Vasek learned that its clones formed rings up to an ancient age. The stems grow outward from the original plant, making an ellipse, while the inside plants die and rot away. The new stems are genetically identical clones up to 11,700 years older than the original plant.

The shrub occurs in the low desert valleys of eastern California, covering the valley floors except for extremely alkaline or saline basins. In Owens Valley it avoids Owens Lake and then yields to Great Basin species along the base of the central Sierra. It thrives along the base of the Inyo Mountains and ascends Mazourka Canyon up to about 5100 feet in elevation northeast of Independence. A single creosote bush has been noted on the sunny side of a large boulder along the old highway south of Keough's Hot Springs and north on a slope of the White Mountains just northeast of Chalfant.

Although few animals eat the foliage, a small desert grasshopper, and a walking stick live on the foliage. One hundred species of bees, 22 of which are totally dependent on creosote bush, visit the blossoms.

The various Indian tribes valued it for many uses from firewood to its remarkable medicinal properties. The Papago Indians called it their drugstore,

providing medications for sores, snake bites, menstrual cramps, and many other ills. Its leaves were used to treat rheumatism as well as for treating wounds and burns. It was also used internally for tuberculosis and gastric complaints. It is said to have outstanding antiseptic properties. Flower buds, pickled in vinegar, were eaten like capers. The lac scales which form encrustations on the stems were used for mending pottery and waterproofing baskets, and also for dyeing leather red. Besides being highly valued by the native tribes, it was respected by the early explorers. Fremont referred to it as "a rather graceful plant, its leaves exuding a singular but very agreeable odor.

.....Mary DeDecker

Native Plant Notes

Native Plant Notes is a column for sharing techniques about how to grow our native plants. All contributions are welcome so let your ideas germinate.

Mountain Mahogany

Mountain mahogany (*Cercocarpus ledifolius*) has many good qualities to recommend it for a place in the garden. It occurs naturally on dry, exposed, and rocky slopes and, consequently, is not genetically inclined to expect many amenities. It is evergreen, providing an olive-green backdrop for the more showy summer and spring flowers. In winter, it is a welcome dash of deep green in an otherwise dormant colored landscape.

Although the flowers are rather insignificant in summer, fall is a beautiful season for mountain mahogany. It produces spiraling white plumed fruits that glow in the long light of autumn. The spiral shape of the fruit helps it to "drill" into the ground with fluctuating humidity levels, thus planting itself.

Mountain mahogany is a willing and non-demanding candidate for landscape use. It is very hardy in both heat and cold and needs very little supplemental water once established. Mountain mahogany will grow to six to ten feet tall, sometimes reaching small tree size. A large, beautiful specimen can be seen growing at chapter members Mary and Paul DeDecker's house in Independence.

This member of the rose family has a reputation as a slow grower, but once out of the seedling stage, it

grows at a reasonable rate. With quick drainage, sun, and sparing water, mountain mahogany will be a beautiful resident of any eastern Sierra landscape. It can be purchased through mail order sources for native plants or seeds may be obtained from me.

.....Karen Ferrell-Ingram

Tree Lore

Tree Lore is a series by Andrew Kirk that will be devoted to the identification, distribution and natural history of our native trees.

Transplanted Easterners, rejoice!. There are maples in the Eastern Sierra. No, not the ponderous sugar or red maples (*Acer saccharum*, *A. rubrum*) of Pennsylvania or Vermont, providers of birdseyes and fiddleback lumber and the world's finest sweetener. Instead our local mountains are graced with dwarf maple (*Acer glabrum*) the dainty expression of all "mapleness" with minimum size and maximum beauty.

Dwarf maple, the New World's northernmost maple, ranges from southeastern Alaska to the Mexico border, and east through Colorado. It is sometimes called Rocky Mountain maple, for the heart of its range. Another common name, mountain maple, leads to the confusion with *Acer spicatum*, the mountain maple of the Appalachians, the Alleghenies, and the Adirondacks.

In Oregon and Washington it attains its greatest size, exceeding 20 meters tall, hardly a dwarf. More often it settles for 10 meters with a shrubby form of several trunks, with handsome gray bark, becoming brown on elderly stems.

Truly dwarf-like, compared to other maple species, are the leaves and samaras. The familiar maple leaf pattern, palmately lobed with deep sinuses and saw-toothed edges, is reduced to 5cm long and wide at most. (Compare to 25cm for *A. macrophyllum*, the bigleaf maple of the Northwest.) Often the leaves are a scant 2cm, and superficially resemble currant leaves. Dwarf maple is sparsely foliated. This adaptation allows light to penetrate throughout, creating a tree with an inner glow, identifiable at long distances.

The paired samaras are a tiny 2-3cm long, attached at 45° or less. Green when first formed, these seeds

later turn brown. As many as eight pairs will spring from a single bud. These clumps, and a few brown leaves, may remain on the tree all winter, adding a golden accent to its pallid frame.

In the Panamint, Inyo-White, and eastern Sierra Nevada ranges, look for *Acer glabrum* var. *diffusum* between 5,000 and 10,000 ft. (1525-3050m). This variety is distinguished by its grayish-white twigs. It delights in a moist northerly slope, a bouldery break in the pinyon forest, a gravelly cliff base, or sometimes a streamside station.

Acer is ancient Latin for sharp or penetrating; whence acerbic, acerose, etc. Apparently maple wood was once so prized for making spears and arrows that it came to be called Acer. Dwarf maple has no such utilitarian uses, but elk and mule deer browse the leaves and tender twigs, and squirrels and birds dine on its seeds. But utility is only part of any tree's appeal.

Even if dwarf maple were a bitter browse and worthless wood, its gentle spirit of a tree would never fail to be beautiful, nor cease to inspire

.....Andrew Kirk

Conservation

The most important conservation news for our chapter this month is the resignation of Vince Yoder from the position of Conservation Chairman. When I agreed to take his place I imagined the job to consist of trying occasionally to persuade club members to write letters regarding conservation issues. In January Vince informed me that he had some documents relating to my new position as conservation chairman. My heart sank when he mentioned that the documents form a stack 4 feet long by 4 feet wide by 4 feet high! Few of us realize how numerous are the agency proposals and actions upon which CNPS (i.e. Vince) had commented. I had no idea how much time and energy he had put into the job and I commend him (as should we all) for his efforts.

To continue to have an effective conservation program I will need the assistance of as many members as possible. I encourage anyone who would like to help to contact me (619-873-8943, Skypilots@Telis.org). I am attempting to prioritize

and maintain a file of documents and issues upon which comments and/or research are needed. I suspect that whatever your particular conservation interests there will be a document/issue relating to them which needs comments sometime during the year.

Issues which I expect to come up include (among others) grazing permit renewals and wilderness management in the Inyo National Forest.

Good news is the recent settlement agreement (MOU) announced by Inyo County, the Los Angeles Department of Water and Power (DWP), and several environmental groups regarding DWP's groundwater pumping in the Owens Valley. Several CNPS members worked very hard in the negotiations which led to the agreement and we owe them a debt of gratitude. I hope that by the time you read this newsletter the Inyo County Board of Supervisors will have approved MOU. I believe it represents a decided improvement over the status quo.

.....Daniel Pritchett

Bristlecone Chapter Highlights

Meeting of the Eastern Sierra Rare Plant Working Group

At the November Rare Plant Scientific Advisory Committee (RPSAC) meeting in Berkeley, which was attended by Mary DeDecker, Anne Halford and Kathleen Nelson, discussions focused on the traditional as well as new roles and functions of the committee. One new change in RPSAC is the establishment of Regional Rare Plant Working Groups comprised of individuals familiar with the rare plant taxa of a specific region. Each group will focus on the review of regionally specific taxa to be included in subsequent editions of the CNPS Rare and Endangered Vascular Plants of California and review and prioritization of taxa needing further taxonomic and distributional information.

At our first Eastern Sierra Rare Plant Working Group meeting held on February 21st a basic foundation of our group's structure, physiographic boundaries and focus were established. We also discussed the need to include less subjective rarity ranking criteria for our rare species that currently follow the standard CNPS R-E-D code rankings. Jim Morefield presented an excellent discussion on ways to

potentially integrate the more objective Nevada Natural Heritage plant rarity ranking system with the current R-E-D codes.

For more information about the Eastern Sierra Working Rare Plant Working or if you would like a copy of the meeting minutes, please contact Rare Plant Chair. Mary DeDecker (619) 878-2389 or Anne Halford (619) 873-6714.

Oaks of the Eastern Sierra

A special contribution by *Derham Giulianii*

During 1988-1989 I was engaged in salamander surveys of eastern Sierra watersheds for the California Department of Fish and Game. I used the opportunity to record the trees present in each canyon from Kernville to Lee Vining.

Of the oaks, there were three species:

1. Golden or canyon oak (*Quercus chrysolepis*) was seen up to about 8000' in nearly every canyon from Indian Wells Canyon, Kern County, to its northernmost site at Pinyon Creek near Independence.
2. Black oak (*Quercus kelloggii*) occurred to as high as 9,000' along a 15-mile zone of canyons in the vicinity of Independence. There are two or three trees along Big Pine Creek at the SW edge of Big Pine. I was told in the 1970's by an old-timer of the area that about 60 years ago he used to run sheep there and had cut walking sticks from a grove of very large oaks that were later all cut down. Vern Burandt once said he'd found black oak in the north fork of the South Fork of Ash Creek but I was unable to find them anywhere in the drainage.
3. Interior live oak (*Quercus wislizenii*) other than 2 sites in Kern Co., was observed only in Independence Creek drainages below 6000'. Hybrids (oracle oak, *Quercus X morehus*) between this and black oak occur at two sites, three or four hybrids on lower Oak Creek and one on Independence Creek (this last hybrid apparently resulting from Oak Creek pollen).

Despite isolation, our oaks support a diversity of oak-associated fauna such as numerous species of leaf gall wasps and woodborers. The California sister butterfly follow golden oak, its larval hostplant, all the way to the northernmost two trees of Pinyon Creek. Western gray squirrels, rare in the eastern

Sierra, have been seen as far north as Division Creek and the northern limit here of Merriam's chipmunk is Big Pine Creek

Canyons With Oak Listed From South to North

Oak Species Abbreviations

<u>Location</u>	<u>C</u>	<u>W</u>	<u>M</u>	<u>K</u>
Indian Wells	*			
Short	*			
Grapevine	*	*		
Sand	*	*		
Ninemile	*			
Deadfoot	*			
Fivemile	*			
Little Lake	*			
Sacatar	*			
Portuguese	*			
Tunawee	*			
Talus	*			
Haiwee	*			
Hogback	*			
Summit	*			
Walker	*			
Falls	*			
Olancha	*			
Cartago	*			
Braley	*			
Ash	*			
Cottonwood	*			
Carroll	*			
S. Fk. Lubkin	*			
N. Fk. Lubkin	*			
Tuttle	*			
Lone Pine	*			
Hogback	*			
Georges	*			
Bairs	*			
N. Fk. Bairs	*			
Shepherd	*			
Pinyon	*			*
Lime			*	*
Independence			*	*
Boron Springs				*
Tub Springs				*

S. Fk. Oak	*		*
Charlie	*		*
N. Fork Oak	*	*	*
McGann Springs			*
Thibaut			*
Sawmill			*
Division			*
Big Pine			*

Next Newsletter Deadline: April 24th.

THE 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 _____
 City _____ State _____ Zip Code _____ Phone _____
 I wish to be affiliated with the Bristlecone Chapter _____ Other _____.

Membership Category

<input type="checkbox"/> Student/Retired/Limited Income	\$20.00
<input type="checkbox"/> Individual or Library	\$35.00
<input type="checkbox"/> International	\$35.00
<input type="checkbox"/> Family or Group	\$45.00
<input type="checkbox"/> Supporting	\$75.00
<input type="checkbox"/> Plant Lover	\$100.00
<input type="checkbox"/> Patron	\$250.00
<input type="checkbox"/> Life	\$500.00
<input type="checkbox"/> Benefactor	\$1,000.00
<input type="checkbox"/> Corporate	\$1,000.00

Please make check payable to: The California Native Plant Society. **Mail to:** Bristlecone Chapter, CNPS. HCR 67 Box 35, Independence, CA 93526.

Gift Contribution: Where most needed _____ Conservation _____.

THE 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 others. Editor: Anne Halford.

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