DEDICATED TO THE PRESERVATION OF THE CALIFORNIA NATIVE FLORA

Volume 16 No. 5 September 1996

NEXT CHAPTER MEETING

Wednesday, September 25, at 7:30 p.m. at the Trinity Memorial Episcopal Church parish hall in Lone Pine. Turn east on Locust Street (at the Bank of America) and go to the end of the street. Speaker Richard Potashin will present a talk on the natural and cultural history of aspen groves in the Eastern Sierra with particular emphasis on the historical significance of aspen bark carvings.

NEXT CHAPTER BOARD MEETING

Tuesday, September 17, 7:00 p.m. at Doris Fredendall's residence in Big Pine. All chairpersons are welcome and encouraged to attend.

PRESIDENT'S MESSAGE

The high country has been ablaze with wildflowers this summer and I hope all of you have been getting out to all the fine field trips we have had so far this season. We have even been getting a few wild and wet thundershowers that have encouraged a prolonged bloom. Our upcoming banquet on September 11th should be a great event and we are very fortunate to have Dr. James Morefield as our guest speaker this year.

There will be a state board meeting on September 14th in San Luis Obispo to discuss plans for the upcoming fiscal year. Vice President Sally Manning will be attending, but others are welcome. Contact either myself our Sally for more information. Also we need to get some letters out to our political leaders regarding several pieces of legislation including the Public Rangelands Management Act (H.R. 1296) which would cause rangeland management back 20 years, National Forest management/salvage logging bills, and still more letters are needed in support of strengthening the Endangered Species Act Thanks to all your letters and the testimony of a least 10 CNPS representatives on July 25th the California Resources Agency's has decided to revise the California Environmental Quality Act (CEQA) guidelines that threatened to cut the number of plant species required to be considered in Environmental Impact Reports under CEQA by 80%!

Hope to see all of you at the Banquet and until then enjoy these last warm days of summer and the arrival of our upcoming splendid fall colors.

……..Scott Hetzler

New Bristlecone Chapter Nominations

The Bristlecone Chapter nominating committee consisting of Mary DeDecker, Doris Fredendall and Sally Manning nominate the following individuals to carry on the important tasks that keep our chapter running smoothly.

President	Scott Hetzler
Vice President	Steve Ingram
Secretary	Karen Ferrell
Treasurer	Mary Allen

At our next chapter meeting these nominations will be confirmed.

The following article by Mary DeDecker is the tenth in a series on native plants that will focus on ecology, taxonomy and other natural history information.

Coffeeberry

A rounded shrub, 3 to 5 ft. high. Leaves are 1 inch long, more or less, thickish, prominently veined, and broadly elliptic or oval in shape. They are dark green above and sometimes paler underneath. The greenish flowers with minute petals are seldom noticed, but the berries are conspicuous. They are black and fleshy, over ¼ inch long, and contain two large seeds. Hence the common name, "Coffeeberry". Its genus name is *Rhamnus*, an ancient Greek name for Buckthorn. The coffeeberrys in this region are so variable that it is difficult to name the species. They have the red twigs of *Rhamnus rubra*, but the leaves are more like *Rhamnus californica*, which are thicker, prominently veined, finely toothed, and pointed at the tip. The fact that the floras are not consistent in their descriptions does not help. Perhaps it is best, in this case, to be content with the common name. coffeeberry is in the Buckthorn Family, Rhamnaceae, as are the wild lilacs.

It is a common shrub in canyons on the east side of the Sierra between 5000 and 7500 ft. It may occur near streams but can also tolerate relatively dry slopes.

The best known characteristic of the *Rhamnus* genus is its purgative properties. *Rhamnus cathartica* of the Old World is strongly so. All species are said to contain dascara and are mildly laxative. The Indian people and early settlers valued it as a medicinal plant. They used its bark. The fruit is bitter but relished by many species of wildlife including seven species of birds. A yellow and saffron-colored dye was made from the bark and dried berries. The berry juice, combined with alum, makes a green dye. This is an attractive shrub, worthy of your acquaintance.

……..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.

In the hot summer climate of the Owens Valley, early fall is a good time to plant perennial shrubs and wildflowers. The warm soil encourages rapid and deep plant growth while the shortening and cooling days allow the plants to lose less moisture and vigor to transpiration. Fall plantings send down healthy root growth in time to be happy recipients of our winter moisture and will emerge in spring strong and ready to bloom profusely.

After a busy spring and summer of native plant propagation, we are planning extensive fall plantings. Lots of beauties are ready to leave their confining containers and send down deep roots. We'll soon plant red columbine, purple sage, various buckwheats, penstemons, brittlebush, mojave asters, blazing star and other native gems. We will shade the plantings with little A-frames made with old cedar shakes for a week or so to protect them from

the burning sun and we'll give them a deep watering several times a week until the days cool off. A thick mulch (3-4 inches) of straw, compost or old wood chips is essential as long as its kept back off the stem of the new plant. A circular well mounded around the plant, helps capture moisture. Make sure the crown of the plant is lightly above the soil line to avoid rot.

Several activities are planned for September to help us get ready for next year's growing and for our proposed fall '97 plant sale (look for more details in upcoming newsletters). There will be a social and productive meeting of seed cleaning and sharing of growing techniques on October 18. We will meet at the White Mountain Research Station east of Bishop at 6:30. Seed collecting trips are also planned for September. Look for details in the field trip schedule!

……..Karen Ferrell

Upcoming Bristlecone Field Trips and Activities

For all field trips, bring any of the following: hand lens, binoculars, camera, floras and plant lists. Be sure to **bring plenty of water**, lunch, good walking shoes or boots, and appropriate clothing for inclement weather and hot sun. Please arrive at the meeting site early enough to leave from there at the given time. Carpooling is encouraged. Everyone is welcome, but please, no pets. If you need more information call Field Trip Chairperson **Steve Ingram at (619) 387-2913.**

September 14. Convict Creek. Leader: Cathy Rose. This will be a fairly strenuous walk up Convict Creek, possibly as far as Lake Genevieve, for a look at "botany, birds and water". Meet at 9:00 a.m. at the parking lot at the end of Convict Lake road on the northwest shore of the lake.

September 17. Restoration Planting at Travertine Hot Springs. Leader: Anne Halford. Join in a planting of native grasses to help restore portions of an alkali meadow community in this unique BLM **Area of Critical Environmental Concern** (ACEC) Meet at the Bridgeport District U.S. Forest Service Office (on U.S. Hwy. 395 just south of Bridgeport) at 9:00 a.m. Bring gloves, shovels, a hearty lunch and plenty of water.

September 25. Inyo Mountains native plant seed collection. Leader: Karen Ferrell. We will collect seed of various flowering forbs such as *Penstemon palmeri* on the way to Cerro Gordo. Meet at the Lone Pine Visitor's Center at 2:00 p.m. Call Karen at (619) 387-2913 for more information.

October 18. Seed Cleaning and Growing Techniques. We will clean our collected seed and discuss our findings so far regarding growing and outplanting techniques. Please bring finger food to share. Meet at the White Mountain Research Station on East Line at 6:30 p.m. Call Karen at (619) 387-2913 for more information.

October 12. Aspens: Ecology, Art and Fall Color. Leader: Richard Potashin.
We will work our way from Conway Meadows south to Bohler Canyon, and possibly McLaughlin Spring, looking at the colors and historical carvings in aspen groves. Meet at the Smart and Final parking lot in Bishop at 8:00 a.m., or at the Mono Lake Visitor's Center in Lee Vining at 9:15 a.m.

1996 Bristlecone Chapter Summer Field Trip Reports

Monitoring the Mono Milkvetch
July 13

The troop (do two people make a troop?) of anxious field trip attendees gathered in the fresh morning air at Smokey Bear Flat, which had been blessed with rain the night before. The beautiful Sierra evening primrose (*Oenothera xylocarpa*) was out in all its glory, along with Bigelow's monkey flower (*Mimulus bigelovii*), Parry rabbitbrush (*Chrysothamnus parryi),* the rare Mono Lake lupine (*Lupinus duranii*), Mono milkvetch, our target plant (*Astragalus monoensis*), and thousands of dainty spurry eriogonum (*Eriogonum spergulinum* var.*reddingianum)*.

Doris and I managed to get one 30 x30 ft. plot set up and read before our stomachs began to demand some attention. We found a pleasant spot among the Jeffrey pines to dine, just as a light sprinkle began -

not enough to stop either of us form eating of course, especially with the delicious cookies Doris had brought along!

Lunch and rain shower coming to an end, we made our way to the next plot. Diligently mapping and measuring plants and this year's reproductive output, we were through about 1/3 of the plot when the real squall moved in. We decided to call it a day, and the plots were finished later with the help of the Interagency Resource Team (IRT). I'll be looking at the data later this year, when the plants go to sleep and the days are short and cold, to try to learn more about the status of this special plant.

……..Kathleen Nelson

South Fork of Big Pine Canyon
July 20

It is my experience that every field trip has its drop outs. I say this as a longtime field trip participant (though a thorough novice in the plant area). What happens to these individuals? Why do they disappear so soon after things get started? What do they do when they leave the group? Why did they come in the first place?

Shortly after our group of nine set off from the end-of-the road parking lot at the foot of Big Pine Canyon for a walk to the South Fork of Big Pine Creek, my husband faded out of the picture. Was he intimidated by the presence of so many athletic (his term) females, a few of whom were considerably superior to him in age and all of whom, along with the other man in the group, were miles beyond him in knowledge of plant life? Of course not. He complained of the sun.

Here are the questions, I was told later, that he was asking himself but was too embarrassed to bother the experts with, during that short span of time that he was with us. "What kind of plant can I get to fend off these mosquitoes?" "What kind of plant will protect me from sunstroke?" "What kind of plant will cure me when I come down with altitude sickness?" "Does this terrain support a plant that removes rattlesnake venom?"

Our leader, Doris Fredendall, had set "the first wall" as our goal. Three hours and 15 minutes into the trip, a grand time of stopping and looking and feeling and smelling, of asking questions, of examining leaves, bark, blooms and seed pods, or repeating plant names, I timidly asked Doris where was this "wall". She pointed to a huge, vertical flat of rock - to the side of a mountain, in fact - still some distance away. Twenty minutes away? Three-fourths of an hour? Two hours? As a novice, I couldn't say. Thinking of Ed, back there pacing the parking lot, I became the second person to leave the group. (This is not dropping out; this is terminating early).

Ed had gone to the Lodge, eaten breakfast and read the newspaper. After an hour or so, figuring we were on our way back (the notice in the newsletter had said a moderate walk "of about three miles round trip"), he braved the elements and set out to meet our group. Much later, having failed to find us and having left his bottle of water behind, he made his way back to the parking lot. I found him sitting in the air conditioned car, looking tanner, reading "Short Walks around the Big Pine Creek", by John M. Vickers. "This is a wonderful place! We've got to come back up here!" said my drop-out husband.

Back home after the field trip, I unfolded the five-page list of plants of the South Fork of Big Pine Creek that Doris had prepared for us. It had three columns: scientific names; popular names; and habitat, frequency of occurrence, or unusual characteristics.

I have explored the issue of field trip drop outs. I will now tackle one other, possibly related question. What actually does the complete novice, the one who shows up at the beginning of the trail once every two or five or fifteen years, get out of a Native Plant Society Field Trip?

I sat over Doris' list of 168 trees, shrubs, bushes, grasses, cacti, and tiny little ground coverings and circled all the items that I remembered her stopping at and telling us about. Each time I circled a name of a plant (the popular name in the middle column, of course), I made an effort to picture that plant and to recall some special thing Doris, or occasionally another member of the group, had pointed out about it. Each time, I felt a ripple of satisfaction - yes, the thrill of learning something new. Of the large number and variety of plants Doris took us through, here are the ones I latched on to: tall angelica, prickly parsley, pink plume, hawksbeard, sticky aster, wool cache plant, water birch, wallflower, Mojave prickly pear, elderberry, snowberry, common horsetail, blazing star, summer snowflakes, Indian ricegrass,

nude buckwheat, sulphur flower, mountain mahogany, bitterbrush, wild rose, gooseberry, Bridges penstemon, bee plant. Being a complete novice, I circled only 23 items, not even 15 percent of the list! But I'm keeping that list. We're going back up there!

……..Dianne Tucker-LaPlount

Sauntering on Sagehen Flat

July 27

We started our trip with high hopes, making our way up the old road between Crooked Creek and Sagehen Flat. Relocating a historical population of the White Mountain horkelia (*Horkelia hispidula*) was our goal. Dark clouds were already gathering over White Mountain Peak, and by 10:30 we were hearing the not-too-distant rumblings of thunder.

We wandered up through the bristlecone and limber pines onto the wide vistas of Sagehen Flat, aptly named judging by the sage grouse droppings. Up on the flat, we were struck by the profusion of beautiful dense mats formed by the stemless lupine (*Lupinus lepidus* var. *utahensis)* in the small sandy washes. Further investigations led us to the little *Potentilla pensylvanica*, which momentarily fooled many of us from a distance, with its rosaceous fruiting stems poking up above the foliage, trying its best to look like a horkelia.

After a refueling stop with grapes, cookies, and other goodies, we decided to make our way back down towards the cars, as the weather was not looking promising. We did make a couple more stops to key out the bow-nut cryptantha (*Cryptantha cinerea* var. *abortica*), and the somewhat tricky narrow-leaved butterweed (*Senecio spartioides*) - you're not going to try to tell me that's a shrub, are you??

We accepted Dory's hospitality at the Crooked Creek station, with a warm place to sit and eat the rest of our lunches. No horkelia this day, but many a corner remains to be strolled through and poked into on Sagehen Flat.

Conservation

More wilderness? - you bet, if for no other reason than to further restrict ORV action that too often destroys habitats and is unsightly. If you agree, let the BLM in Bishop know how you feel. Contact Joe Pollini at (619) 872-4881. In addition, these small areas in the Inyo, White and Sierra will act as buffers to the larger wilderness areas in the National Forests nearby. These tracts are individually small but significant in aggregate.

On a different topic - in a few lines contained in the Conference Report for Interior and related agencies 1993 Appropriation Act (HR 5503), Congress authorized funds for a scientific review of the remaining old growth in the national forests of the Sierra Nevada in California, and for a study of the entire Sierra Nevada ecosystem. This act created the Sierra Nevada Ecosystem Project (SNEP). The primary emphasis of the project was to assemble and assess the comprehensive data necessary to assist Congress and others in making important policy decisions for the future management of the Sierra Nevada. The other emphasis was to examine alternative management strategies so as to maintain the health and sustainability of the entire ecosystem while providing resources to meet human needs.

The complete report of SNEP is contained in four volumes plus an executive summary. Volume I contains critical findings, the context for the study, summarizes the major points from the assessments and case studies in the other volumes, and a presents alternative strategies and their implications for the future health and sustainability of the ecosystem.

Volume II contains the technical assessments of historical, physical, biological, ecological, social, and institutional conditions in the Sierra Nevada, selected case studies, details on the scientific basis and methods used in strategies, and references to the literature and data sources.

Volume III included late submissions of peer-reviewed papers from Volume II, additional commissioned reports, and summary listings of workshops and participants.

Volume IV is a computer-based catalogue of all public databases, maps, and other digitally stored information used in the project.

For anyone interested in Sierra history, present conditions, and alternative ways to manage it, these publications are a must. Start with the Executive Summary ($1.50) and Volume I ($7.50); then if you want more detailed information get Volumes II and

III.

To order "The Status of the Sierra Nevada" contact the:

Centers for Water and Wildland Resources
1072 Academic Surge
University of California
Davis, CA 95616-8750

Make checks payable to: Regents of the University of California.

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.

Correction: It the July Newsletter (Vol. 16 No. 4) paragraph 5 of Andrew's article on Fremont cottonwood should read: "…In the "elk field", north of the Poverty Hills and east of Highway 395, is a beautiful grove of old cottonwoods. They all have stout, horizontally forking limbs and broad crowns. Between Big Pine and Bishop, look for cottonwoods characterized by vertical forking, which creates taller, vase-shaped trees, with narrower crowns…"

Black Cottonwood *(Populus trichocarpa)*

Black cottonwood (*Populus trichocarpa)* is also known as balsam cottonwood or simple balm, after the resin which coats its leaf buds and sometimes the underside of its leaves. This resin is devoid of medicinal value, but the black cottonwood is at all seasons a balm to the senses.

In the summer the dark green uppersides of the broadly ovate leaves is cooling just to behold; the silvery undersides of the 3-6 " long leaves twinkle in the breeze. A closer study of the leathery leaves reveals their finely toothed margins and round petioles. *Populus fremontii*, Eastern California's other large common cottonwood, has large teeth and flat petioles.

Fall turns the leaves a restful yellow-brown. Winter reveals the bark: smooth and greenish-white with a handsome patterning of horizontal lenticels in younger trees, becoming gray and deeply furrowed when older.

On the medium-sized trees typical of the Eastern Sierra, the leafless trees exhibit gracefully upturned twigs, each tipped with stout, ruddy buds, already sticky and fragrant.

Black cottonwood ranges from northern Baja California to Alaska, and west to Montana. It is the tallest broadleaf tree of the western states. The current champion, in Oregon's Willamette Mission State Park, soars to 155' tall, with a diameter of 8'. Reports survive of 200' cottonwoods felled by early settlers.

In southern Alaska, black cottonwood intergrades with balsam poplar (*Populus balsamifera*). In fact, the current Jepson Manual relegates black cottonwood to subspecies status: *Populus balsamifera* ssp. *trichocarpa.*

Look for black cottonwood along Eastern Sierra streams; at isolated locations in the Panamint Mountains; and in the Inyo Mountains at Tollhouse Springs and Wyman Canyon, where it mixes with Fremont cottonwood. At the extremes of its elevational range, roughly 5,000 to 10,000 in the Sierras, look for curious specimens with distorted leaf shapes and stunted growth.

Rapid growing, as are most members of the Willow Family (*Salicacea),* black cottonwood has been widely planted for shade and wind breaks. It is lumbered in the Northwest, primarily for prosaic products such as crates and pulp. In this age of dwindling timber reserves and the exploitation of lesser-known-species, it would not be surprising to see black cottonwood enter into wider use, as have aspen and mesquite.

……..Andrew Kirk

Strangers in Inyo County

Long ago I was told the beautiful *Ceanothus* population at the mouth of Symmes Creek could not be *C. leucodermis* because "it does not grow here". We have learned since how invalid that concept may be. The following discoveries of plant species far outside their usual range are worthy to note, even though they have not established significant populations.

Kathleen Nelson, in the July newsletter, told of the discovery of the rare *Orobanche valida* ssp. *valida* (Rock Creek strangler) at about 6000 ft. on the Independence burn. It had been known only from two sites in the San Gabriel Mountains.

Derham Giuliani, a local entomologist, has discovered unusual plants that he finds in remote places. Among them are *Woodwardia fimbriata*, giant chain fern, which he found in 1983 at 5600 ft. on Cartago Creek west of Olancha. More surprising was his recent find of a San Diego mahogany, *Cercocarpus minutiflorus*, at 6800 feet on Summit Creek, also west of Olancha.

We always considered ourselves free of poison oak, *Toxicodendron diversilobum*, but Vince Yoder, in his study of the Alabama Hills, discovered it in a protected place there. Fortunately, it has not spread.

Andrew and Leah Kirk found *Phoradendron macrophyllum*, common valley mistletoe, previously unknown east of the Sierra, at 4000 feet on Ash Creek. Its host plant was the native ash, *Fraxinus velutina*.

Tom Lipp, the alert Fish and Game warden, recently brought in a fire poppy, *Papaver californicum* for determination. He found it just above the Gray's Meadow Campground at 5900 ft. on Independence Creek and feared that it might be an opium poppy. The site had been burned the year before.

An attractive shrub noted on the July 20 field trip up the south fork of Big Pine Creek appears to be *Ceanothus foliosus*. More of the plant is needed for positive determination, however.

So keep you eyes open for any unusual plant which may have found its way into Inyo County. It appears that some adventurous species from southern California or west of the Sierra may have become established on the east side south of a critical frost line. Any clues or explanations?

……..Mary DeDecker

Plant Containers Needed

Please save those milk cartons; quart and ½ gallon preferred and donate to either Karen Ferrell or Anne

Halford. We will pick-up all donations!

NEXT NEWSLETTER DEADLINE: October 28.

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

___ Student/Retired/Limited Income	$20.00
___ Individual or Library	$35.00
___ International	$35.00
___ Family or Group	$45.00
___ Supporting	$75.00
___ Plant Lover	$100.00
___ Patron	$250.00
___ Life	$500.00
___ Benefactor	$1,000.00
___ 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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