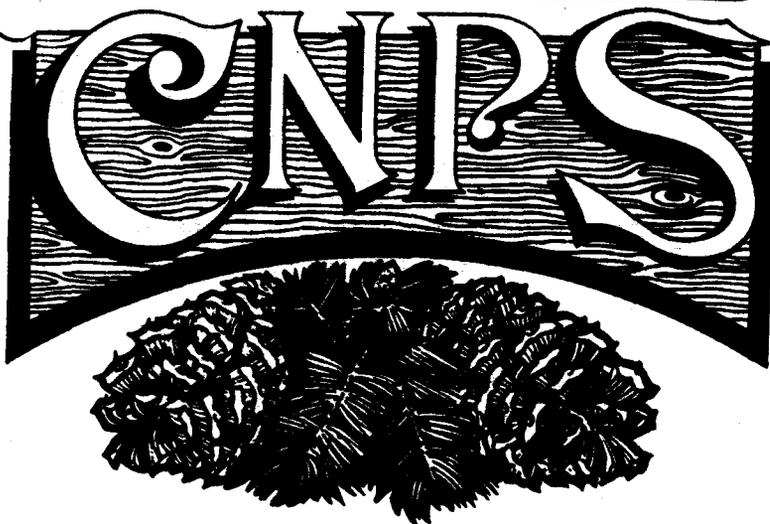


DEDICATED TO THE PRESERVATION OF THE CALIFORNIA NATIVE FLORA

BRISTLECONE • CHAPTER



Volume 15 No. 2 March 1996

NEXT CHAPTER MEETING

Wednesday, March 27, 7:30 p.m. Big Pine Methodist Church. Speaker Andrea Lawrence is a Mono County Supervisor and president of the Sierra Nevada Alliance.

The Alliance is the only group committed solely to the Sierra Nevada. Andrea will tell us more about the mission and vision of this group, its efforts to build community-based solutions to restore and protect this magnificent place we call home, and the difference individuals can make when they become involved with local issues.

NEXT CHAPTER BOARD MEETING:

Tuesday, March 19, 7:00 p.m. at Doris Fredendall's residence in Big Pine. All chairpersons are welcome and encouraged to attend.

PRESIDENT'S MESSAGE

This month I'm asking our members for help with a few things that our chapter is doing. First off, we will be holding our first Annual Sierra Spring Sojourn in May. We will need help with field trips, registration, clean up, preparing lunches and lots of other activities. We expect to have people coming here from all over the state. Our chapter can really use help from our members to insure that this event is a success. If you can give two hours or two days worth of your time we would really appreciate it. Please call Evelyn-Mae Nikolaus right away and tell her you are ready to help!

Now the sad news. Vince and Ann Yoder will be moving out of our area sometime in late spring or early summer. Not only will we miss them because they are good friends of ours, but they are also very active in our chapter. Vince will be leaving from the Conservation and Poster Sales Chairs and Ann will be resigning from the Education Chair. I do not want to wait until the last minute to start looking for people to fill these important positions. If we can find people to fill these Chairs before Ann and Vince move then they can help you become familiar with your new, essential and exciting job! So if you've been wondering "how can I help with our chapter", well here's your opportunity - now that I've given you a few hints. People make this chapter what it is so let's get going!

.....Scott Hetzler

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

Ephedra (Indian Tea)

The shrub described in this issue is broomlike and leafless in appearance and lacks showy flowers. Nevertheless it attracts attention and has played a prominent role in the history of the west. It is the genus *Ephedra*, closely related to the pine family.

The name, *Ephedra* comes from the Greek name for horsetail plant. It is the only genus in the Ephedra Family (Ephedraceae) and is considered a relict from the dinosaur age. Two of its species are common and widespread in the region. They are *Ephedra nevadensis*, Nevada Ephedra, and *Ephedra viridis*, Green Ephedra. Nevada Ephedra is most tolerant of arid conditions and occupies the valley floors and lower alluvial slopes up to about 6,000 ft. in elevation. There it meets and is often interspersed with Green Ephedra until it leaves the scene. Green Ephedra continues up the dry mountain slopes to about 9,000 ft. There are exceptions to all elevational limits, such as a site for the latter species at 10,300 ft. in the Inyo Mountains.

Nevada Ephedra is a dull gray-green shrub up to about 3 ft. high, with divergent branches. In lieu of leaves as we know them it has 2 scale-like bracts at the stem nodes. These are deciduous in this species. Green Ephedra is bright yellowish-green and may grow slightly taller than does the Nevada Ephedra. Its branches are erect and broomlike in contrast to the divergent pattern of the former. It too, has two scale-like bracts at the nodes but they are persistent. Both species are usually dioecious, meaning that the male and female parts are on separate plants. The pollen is produced by the male plant while the female bears tiny scale-like cones. The cones of both species produce one, or more commonly two, hard seeds.

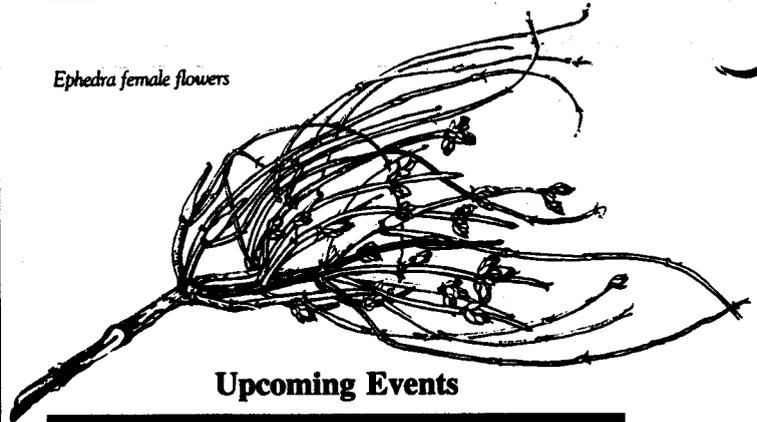
The genus has been used as a beverage throughout the west. Green Ephedra being the most popular. It has been known as Settler's Tea, Mormon Tea, Squaw Tea, Cowboy Tea, Indian Tea, etc. The Paiute names are Too-loop-na for Nevada Ephedra

and Too-loop for the more commonly used Green Ephedra. Both species were used by the native people in a desperate effort to combat venereal diseases. They were also used as a general tonic, a blood purifier, to aid blood circulation in the elderly, kidney regulator and for common colds. In fact, Green Ephedra was considered valuable for almost any ailment. Modern health food stores sell *Ephedra* as "Squaw Tea", claiming beneficial effects. Many local residents use it as a pleasant beverage. Several species of *Ephedra* have been used in China for over five thousand years to treat asthma and hay fever. The genus has little forage value.

Other species of *Ephedra* occur in limited areas within the region. *Ephedra californica* and *Ephedra funerea*, both with 3 bracts per node, are mostly in the southern deserts or the Death Valley area. *Ephedra aspera*, which comes as far north as Olancho, usually bears only one seed per cone.

.....Mary DeDecker

Ephedra female flowers



Upcoming Events

Sierra Spring Sojourn

The Bristlecone Chapter is sponsoring the first annual Sierra Spring Sojourn, a wonderful weekend of field trips and desert plant enjoyment on **May 17th thru the 19th.**

Registration will be on Friday evening, followed by a slide-show by Mary DeDecker. Join us for an all day field trip on Saturday and a catered banquet Saturday night. Sunday field trips will end about 2:00 or 3:00 in the afternoon. Breakfast and sack lunches will be provided both days.

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.

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 planning a variety of field trips to cover the diversity of our area. Trips are tentatively scheduled for the Eureka Dunes, Fish Slough, meadows of the Owens Valley, the Alabama Hills, White Mountains, and the east slopes of the Sierra Nevada. All trips will be lead by our knowledgeable Bristlecone Chapter members. Each trip will be limited to a maximum of 15 participants. We'll wait to see how the wildflowers and the roads are doing in May, and how many people have signed up, before final field trip destinations are made.

For further information regarding fees and registration send a **self-addressed envelope** to:

Vince and Ann Yoder
POB 897
Lone Pine, CA 93545
(619) 876-4275

If you haven't already volunteered, we could still use some more help with meals and clean-up. Please call Evelyn-Mae Nikolaus at **(619) 878-2149**.

Sierra Coffeeberry



**White Mountain Research Station
 1996 Lecture Series**

WMRS Bishop Classroom, 3000 E. 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 14 - "Evolution of Physiological Capacity;
 Studying High-Altitude Deer Mice at Barcroft,
 White Mountains, California"

Candace O'Connor
 Department of Biology
 University of Nevada, Reno

March 21 - "Late Pleistocene Environmental
 Change in Deep Springs Valley, White Mountains,
 California"

Howard Rogers
 Department of Geography
 California State University, Northridge

March 28 - "Recreation, Tourism and the Social
 and Economic Importance of the Environment"

Timothy Duane
 Department of Landscape Architecture
 University of California, Berkeley

April 4 - "A geographer's Look at the White
 Mountains, California"

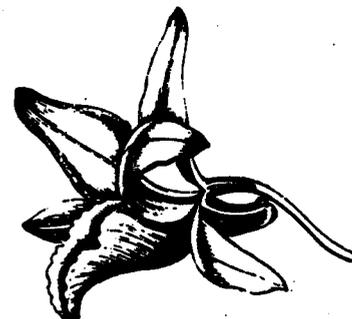
Doug Powell
 Department of Geography
 Sonoma State University, California

April 11 - "Interesting Invertebrates in the Springs
 of the White and Glass Mountains, California"

Marilyn Myers
 Department of ESPM/Entomology
 University of California, Berkeley

April 18 - "Micro-earthquakes and Geothermal
 Circulation in Long Valley Caldera, California"

Gina Von Damm
 Department of Geology
 University of California, Davis



**Upcoming Bristlecone Chapter
Spring and Summer Field Trips**

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 sites early enough to leave from there at the given time. Carpooling is encouraged. Everyone is welcome, but please, no pets. Additional trips are in the works for June and late summer. If you want to lead a trip or need more information call Field Trip Chairperson Steve Ingram at (619) 387-2913.

March 16. Daylight Pass in Death Valley.
Leaders: Mary DeDecker and Renee Beymer (new Death Valley Nat'l Park botanist). We will meet at the Visitor's Center south of Lone Pine at 8:30 a.m., and then drive into Death Valley for a trip to Daylight Pass at an elevation of 4000'. Call Mary (873-2389) or Renee (786-3233) for more details.

March 30. Cross-Country Ski Trip, Upper Rock Creek Canyon. **Leader: Scott Hetzler.** This trip will take us up picturesque Rock Creek Canyon for a look at Sierra Junipers and other coniferous trees in winter. Meet at the Sno-Park at 9:00 a.m. for a moderate ski trek up to Mosquito Flat and beyond. For more information call Scott at 873-8392.

April 13. Volcanic Tablelands and Chidago Canyon. **Leader: Denise Waterbury.** This moderate 4 mile hike will take us through pink Bishop Tuff canyons and escarpments abloom with spring annuals. Meet at 9:00 a.m. at the Y behind the Texaco Station off of U.S. Hwy. 395 and Hwy. 6.

April 20. Union Wash in the Inyo Mountains.
Leader: Anne Halford. This moderate to strenuous 4-6 mile hike will take us through the dolomite labyrinth of this interesting wash in search of hidden springs and botanical treasures. Meet at 9:00 am at the intersection of U.S. Hwy. 395 and the Manzanar Reward Road south of Independence. High clearance vehicles recommended.

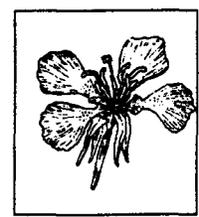
April 27-28. Kern Valley Festival. Although this is not a CNPS trip, this weekend is open for anyone who wants to go to Kernville for this festival sponsored by the Kern River Research Center. Five of California's six bio-regions occur around Kern Valley, and the festival coincides with the peak of bird migrations and flowering periods for many plants. Events include field trips, nature walks, bird banding demonstrations, workshops, kid's activities, rafting trip, and art show. For more information call Karen Phillips (619) 378-2407, Richard Potashin (619) 873-6692 or Steve Ingram.

May 4. San Lucas Canyon. **Leader: Vince Yoder.** For those unable to make last year's trip, or for those who loved last year's trip, there is another chance to find *Penstemon monoensis* and *Astragalus cimae* var. *sufflatus*, among many others. 4WD vehicles recommended. Meet at the Visitor's Center south of Lone Pine at 8:30 a.m.

May 11. Box Canyon in the Inyo Mountains.
Leader: Mary DeDecker. We will drive up the Mazourka Canyon Rd. to Box Canyon. Meet at 9:00 a.m. at Independence Park at the south end of town west of U.S. Hwy. 395 at Citrus Rd.

May 17-19. Sierra Spring Sojourn. The first annual Eastern Sierra wildflower event. Many field trips and other activities are in store. For more information on registration, please see the previous announcement on pages 2 and 3 of this newsletter.

Upcoming field trips in June, July and August will feature rare plant monitoring with Inyo National Forest botanist, Kathleen Nelson, seed collection of southern Owens Valley species with Richard Potashin, a Big Pine Canyon trip to see meadow and cliff-dwelling plants with Doris Fredendall, and a trip to Bull Lake in the Bishop Creek drainage with Jack Crowther. Look for details of these trips in the upcoming May newsletter.



Conservation Corner

The recent decision by the Owens Lake Soda Ash Company principals to discontinue the project and sell to an interested successor is unfortunate for several reasons: first, the tax base; second, the jobs; third, the image to the County of the difficulty in getting a project underway; etc. Environmental extremism is being bandied about as a major factor. Actually, some of it is probably bureaucratic bungling.

So, it is being proposed to "streamline", "simplify" the permit procedures. This may be a worthy goal as some projects are relatively benign and could go ahead expediently. But, there are dangers in too much speed.

In our opinion, the health of our environment is still a leading factor. Endangered species must be a primary focus. So long as the safeguards are preserved, not bypassed, denigrated, or suppressed, ok.

The scoping period when a new project is proposed ~~should produce all of the reasonable, important~~ ideas, objections, factors, etc. related to the proposal. To bring up objections at the last minute may be a cute delay tactic but it is damaging to the good, objective image environmentalists should want to project.

To streamline the process as has been suggested is alright, but let's make sure that the environment is not short changed in the process. Vigilance!

.....Vince Yoder

Build Membership and Help Spread the CNPS Message

We all share the goal to increase understanding and appreciation of California's native plants and to preserve them in their natural habitat through scientific activities, education, and conservation. And yet, in spite of expanding programs and efforts, CNPS seems to be losing ground in this very worthy goal. The current political climate has particularly threatened land acquisition and the budgets of stewardship agencies.

However there are 8,591 of us. At an individual level we can increase this number and thereby reach more people and at the same time have a stronger influence at the decision-making levels. With your help we can succeed in this effort. Invite your friends and colleagues to join. They probably share your interests and values, so important to achieving CNPS's goals. And they might be more inclined to continue their membership through subsequent years because they know another member - you.

There are many people who would be interested in CNPS who are not current members. Perhaps you know some of them:

- ~ People who enjoy learning more about native plants and their habitat...on field trips, at flower shows, and in books
- ~ People who like to grow native plants: home gardeners, landscapers, herbalists, Native Americans
- ~ People who care for our wildlands (or want to restore our damaged wildlands): agency people, planners, reserve managers, ranchers, restorationists, elected officials
- ~ People who see native habitats and plants being lost to development and escaped exotics and want to preserve them: outdoor recreationists, park users, and hikers
- ~ People interested in preserving native habitats for their diverse wildlife values: birders, fisherman, butterfly watchers
- ~ People who enjoy the beauty of native plants: photographers, artists, dreamers

We hope you will make a special effort to encourage new members. Give your friends a gift membership and ask them to join you on a field trip this spring.

.....CNPS membership drive committee



ENVIRONMENTAL NEWS HIGHLIGHTS -

GREENLines, Thurs. Feb. 29, 1996, from GREEN, the Grassroots Environmental Effectiveness Network, A project of Defenders of Wildlife. Call (202)789-2844x288 or email rfeather@clark.net

MORELLA LETTER AT 43: A letter circulated among House members by Reps. Connie Morella (R-MD) and Sam Farr (D-CA) against extending the current moratorium on listing of endangered species has received the support of 43 Representatives but more signers are expected by week's end. Morella plans to submit the letter to House Speaker Newt Gingrich at that time, urging him to "do whatever is necessary to restore funding without any 'riders' or other policy limitations" on listing of species under the ESA. "Extinction of many species is a loss for which we may never be forgiven," the letter says. A representative of the Interior Department told a workshop at a conference of the Garden Clubs of America this week that two species of Hawaiian plants have gone extinct since the moratorium was enacted.

EVANGELICAL LEADERS COME TO WASHINGTON TO SAVE THE "ARK:

On Wednesday, January 31 in Washington, evangelical leaders from across the country kicked off a million-dollar public education campaign calling for stronger endangered species protection.

According to the religious leaders, they brought their message to Washington to remind politicians that the Bible tells us to protect ALL of God's creation. "People in their arrogance are destroying God's creation, yet Congress and special interests are trying to sink the Noah's Ark of our day - the Endangered Species Act," said Calvin DeWitt, a zoologist who co-founded the Evangelical Environmental Network. The group urged the Christian Coalition and other conservative Christians to re-examine the Bible's teachings on the environment. The leaders are also creating a new network of "Noah" Congregations to carry the message to evangelicals all over America.



The Final Word

Inspiring or alarming items from the news

"God told Noah to take every animal into the ark, not just those which were economically feasible, or cuddly, or useful for medicinal purposes." Stan LeQuire, Director, Evangelical Environmental Network, quoted in "Spreading the Word on Preservation," Washington Post, February 27, 1996.

Please forward and post. Edited by Peter L. Kelley and Greg Macias. TO SUBSCRIBE: e-mail eicinfo@acpa.com with "subscribe" as the subject and your name, organization, and interests in the message. Or, fax 202-797-6501. News and items for Spotlight on the Field are always welcome at the same addresses. TO UNSUBSCRIBE: send e-mail to esa-action@node23.acpa.com with "unsubscribe esa-action" as the subject.

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.

Willows

Willows (*Salix* spp.) can be notoriously difficult to identify, due to individual variation and their tendency to hybridize. Thus it is refreshing to find a willow that is so "unwillow-like" as to be easy to identify: Scouler Willow (*S. scouleriana*). Most willow leaves are toothed and narrower on the distal end. Scouler's Willow (*skooler* - after Scottish naturalist John Scouler) is identifiable at a glance due to its untoothed, obovate leaf that is wider on the distal end.

In winter, its smooth whitish-gray bark, decorated with black lenticels and an occasional dark vertical stripe, should readily identify it. Scouler Willow does not develop the thick bark, furrowed and ridged, of other willow trees until late in life. Even trees close to their maximum size of 15 meters tall and 1/2 meter in diameter may retain the handsome whitish-gray bark on their mast-like trunks.

Winter is also a good time to see the yellow-green young twigs.

But it IS a willow. In common with its kin, it bears male and female catkins on separate trees, distributes its seeds via fluffy "cotton", and grows in thickets (albeit lofty, airy thickets).

Look for Scouler Willow along the streams flowing from the Sierras. Catholic in its choice of companions, it grows shoulder to shoulder with Black Cottonwood and Water Birch on Georges Creek, with Red-osier Dogwood on Oak Creek, and in the shade of Red Firs on Pine Creek. Sometimes it prospers in apparently dry situations, even pioneering in the wake of fire, earning it the nickname of Fire Willow.

Native Plant Notes

Many seeds that have been under cold stratification treatment (CNPS Newsletter November 1995) in my refrigerator are germinating! Most of them have been chilling since early January. So far, I have sown sprouted seeds of *Purshia tridentata*, ~~*Cryptantha confertiflora*~~, *Cercocarpus ledifolius*, *Monardella odoratissima*, *Salvia dorrii*, and *Penstemon* spp. There are, of course, many possible pitfalls ahead for these little plants; germination is just one of the first steps on a long, difficult path towards a mature plant. That said, it is still an exciting sight to see the short, white radicles (embryonic root) emerging from swollen seeds.

Sowing sprouted seed or untreated, dry seed is a simple procedure. The sprouted seed does require some care not to damage the fragile new root and enough alertness to plant the seed with root end down. For most seeds it is recommended to use a soil-less medium so as to avoid pathogens that may be lurking in a mix containing organic matter. Equal parts of perlite, vermiculite and peat moss work very well. The peat has some anti-fungal qualities that can be beneficial to young seedlings.

There are many techniques and containers that can be used for sowing seed. One method used by many professionals is to sow seed fairly thickly in four inch pots or in three inch deep trays filled with

moist medium. Cover thinly with more of the soil-less medium and tamp down lightly. It is easier to keep the pots or flats moist if they are covered with clear plastic which is removed upon germination. When the seeds germinate and are big enough to handle, perhaps when they produce their first set of "true" leaves after the cotyledon stage (the first leaves that appear after the seeds germinate), pluck out the seedlings with a fork and transplant them to roomier containers. At this stage, the planting medium can either be the soil-less mix or one with some organic matter commercial potting mix or sifted compost added). Keep in mind that there are no nutrients in the soil-less mix so fertilizing is important when the seedlings have reached the "true leaf" stage.

Light is crucial to the health of young seedlings. Place the seedlings in a cold frame, a greenhouse, a south window sill, under grow lights or anywhere they can receive 6-7 hours (more if under grow lights) of bright light.

Finally, experimentation is the name of the game for growing our eastern Sierra and Great Basin native plants. There just isn't much known about their requirements so I recommend that everybody start lots of seeds (we still have plenty of seed to give away) of many different species and record and share the results. I would be happy to hear about your experiences! You can contact me at (619) 387-2913. If you would like some seed samples please send a self-addressed envelope to: Rt. 2 Box 352, Bishop, CA 93514.

.....Karen Ferrell

New Members

The Bristlecone Chapter warmly welcomes the following new members:

Stephen and Guin Bork
Bishop

Gerald P. Strangio
Palmdale, CA

NEXT NEWSLETTER DEADLINE: April 26.

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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