

DEDICATED TO THE PRESERVATION OF THE CALIFORNIA NATIVE FLORA**The California Native Plant Society**

Volume 23 No. 1
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NEXT CHAPTER MEETING

The January meeting will be held at White Mountain Research Station at 7:00 p.m. on Wednesday, January 29. The presentation by Eve Laeger will be about Bryophytes. What are Bryophytes? Bryophytes are the nonvascular plants known as liverworts, hornworts and mosses. Eve Laeger has been scouring the Californian Deserts and Mountains for these tiny little plants. In the presentation for the CNPS, she will review the many locations she has collected in 2002. They are as widespread as Lassen National Forest, the Clark Mountains in the Mojave Desert and the Scodie Mts. of the southern Sierra.

Eve will also give a brief overview of mosses, liverworts and hornworts. She will present a bryophyte collection to the Inyo County Botanists and the audience will have a chance for hands on examination of many specimens.

NEXT CHAPTER BOARD MEETING

The next Chapter Board meeting will be at 7:00 p.m. on Tuesday, Jan. 21 at Sally Manning's residence. All are welcome to attend.

PRESIDENT'S MESSAGE:

As I write this new message for 2003 it is snowing yet again. Looks like a good year so far for our chlorophyllous friends, and if the wet weather keeps up, it may be a great year for desert wildflowers. The recent wet weather and anticipated snowmelt should also help recharge the Owens Valley groundwater. While the wet winter is expected to help the recovery of our drought-stressed native plants, unfortunately it also brings the expansion of non-native noxious weeds. So as you pause this spring to consider the wildflowers, please also yank up a few weeds.

And speaking of Owens Valley groundwater and noxious weeds, the Lower Owens River Project (LORP) needs help from all those who care about the healthy restoration of the Lower Owens River. The LORP is a major riparian re-watering project that LADWP is supposed to do as mitigation for the environmentally-destructive groundwater pumping it did from 1970 to 1990. Comments from concerned citizens on the LORP Draft EIR/EIS are due by January 14. For more information, please see the newsletter article inside entitled: LORP: An Innovative Restoration Project or Just Another Deceptive PR Scheme? Also, keep an eye out for the Draft EIR/EIS on the CARMA radio telescopes project, which is due out in the next few weeks.

Most of our Bristlecone Chapter Board remains the same as last year, but we are all volunteering again with a new sense of purpose. I would like to thank our Field Trip Chairperson for 2002, Alisa Ellsworth, for helping coordinate field trips and our Highway 395 clean-up. (Alisa had a tough time coordinating the clean-up because of previously uncommon weather events called storms, but seven of us managed to get

our 2-mile southbound section cleaned the day before it received a heavy covering of snow.) I also want to thank Sarah Sheehan very much for acting as Secretary for the past several years and welcome Sally Manning as our new Secretary. Finally, I want to welcome our newest board member, Lora Rischer, who has volunteered to fill the previously vacant position of Education Chairperson. Please refer to our 2003 Board of Directors insert in this newsletter for a contact listing. Thanks again to all of our board members and other volunteers!

.....Stephen Ingram

UPCOMING EVENTS

FIELD TRIPS 2003 - Time to Plan

The recent moisture falling upon the eastern Sierra could provide the means for a wonderful flower year. By default, Stephen and I are taking on the job of field trip coordinator and hope to schedule an array of interesting trips to floriferous places. We will do our best to recruit, beg, cajole, threaten and bribe people into leading trips but the success of our field trips really depends on you! We need trip leaders to lead trips and we need members to attend outings. With a good flower year upcoming, we hope that attendance on trips will increase.

We plan to schedule field trips at our next regular meeting on January 29 in Bishop. Please come with ideas for trips and plan to lead one! Trip leaders do not have to be botanists or plant experts - just have a willingness to share a favorite place and be diligent with logistical details such as trip descriptions, car-pooling and communications. Inviting a knowledgeable plant friend along is also a good idea. Please call us with ideas or to volunteer to lead a trip.

Karen Ferrell-Ingram
387-2913
ingram@telis.org

CONSERVATION

LORP: An Innovative Restoration Project or Just Another Deceptive PR Scheme?

The Lower Owens River Project holds great promise as one of the most significant river habitat restorations in the country. The Project, which the Los Angeles Department of Water and Power (LADWP) is legally responsible to do as mitigation, includes a re-watering of 62 river miles of the Lower Owens, the enhancement of wetland habitats at the Delta (Owens Lake), the flooding of upland habitat to create additional wetlands in the Blackrock area, and maintenance of several off-river lakes and ponds. The public has until January 14 to send comments on the recently released Draft EIR/EIS to LADWP.

By reading the "Lower Owens River Project Journal," a slick 6-page brochure put out by DWP's public relations firm, one might think their "long-standing vision of restoring the Lower Owens River" included the funding to do it right. Wrong. The Draft EIR/EIS for the LORP does not include funds necessary for, among other things, removal of saltcedar, an invasive weed that has had disastrous effects in the Owens Valley and elsewhere. In fact, it states that "the potential for a significant increase in saltcedar is considered a significant, unmitigable impact because of the possibility that the County and/or LADWP will not have sufficient funds to mitigate an increase [in] saltcedar resulting from the LORP" (LORP DEIR/EIS 10-7). In general, one of the main problems with the project is that the Monitoring and Adaptive Management Plan which is critical to the success of the project lacks adequate funding.

The LORP has enormous potential if it is done right. Points to address in your comments might include:

- inadequacy of funding for control of saltcedar, perennial pepperweed, and other noxious weeds;
- inadequacy of funding for Monitoring and Adaptive Management Plan;
- failure to address long-term cumulative impacts associated with proliferation of noxious weeds;
- lack of any recreation plan for the anticipated increase in visitors,
- failure to address environmental impacts of any LORP-associated groundwater pumping;

- lack of a design for a 50 cfs pumpback station, resulting in a six-month delay if this smaller size gets approved (surprisingly, the larger, more complex 150 cfs pumpback station has been designed and could be utilized six months sooner than the 50 cfs one).

Please send your comments by Jan. 14 to Los Angeles Department of Water and Power, 300 Manditch Lane, Bishop, CA 93514, or fax to 760-873-0266. For more information, see the Draft EIR/EIS online at www.lorpeir.com, and see the talking points on the website of the Owens Valley Committee at www.ovcweb.org.

.....Stephen Ingram

Atmospheric Influences on Tree Ring Widths of Bristlecone Pine

Dendrochronology is the science of tree-ring analysis. Certain types of trees grow by adding one growth ring annually, which provides both an absolute age of the tree, and a record of the surrounding environment during the formation of the ring. Atmospheric carbon dioxide has doubled since 1850. Some scientists (LaMarche et al. 1984) have noticed an increase in tree-ring widths in high elevation conifers, in particular the bristlecone pine (*Pinus longeva*). They attributed the increase in tree-ring widths to the increased atmospheric carbon dioxide. My research investigates the possible relation between the observed increase in tree rings at higher elevations and the type of soil, elevation gradient, and tree age. The ramification of this study will provide solutions for the possible effect of anthropogenic activities on forest ecosystems, and how human practices might lead to the lose the oldest living trees in the world.

In my dissertation research, I have chosen to utilize the science of tree-ring analysis to further test LaMarche *et al.* 1984 theory, in which he attributes the increase in tree-ring widths at higher elevations to the increased atmospheric carbon dioxide. The bristlecone pine is a native species of the Inyo Range in California, and represents the oldest living species on earth. Atmospheric carbon dioxide emissions have been increasing since the onset of the industrial revolution due to the increased fossil fuel consumption. Understanding of the behavior of the bristlecone pine in response to one form of human activities will facilitate our understanding of the impact of anthropogenic activities on long-lasting

stands, and the future impact of increased atmospheric deposition on ecosystems.

Most of the studies that examined tree-ring growth patterns at the upper forest border line, have demonstrated the increase in tree-ring widths after 1885, however, some other studies did not show that increase in tree ring growth including tree-ring samples from the same stands that LaMarche et al. examined in 1984.

For my Ph.D. research at the University of Arizona, I test the observed increase in tree-ring widths in relation with two parameters, that is:

- 1) The increased atmospheric nitrogen and carbon deposition by analyzing the chemical needle content of the two compounds.
- 2) The possible relation between the observed increase in tree-ring widths and the type of soil, elevation gradient and tree age.

The story that preliminary testing tells us is that there is a significant relationship between the age of the tree and its growth response to the surrounding factors. However, further results are to be confirmed when the data analysis is finalized

Thanks to CNPS Bristlecone Chapter for providing partial funds to achieve this project

Linah Ababneh- 2002 recipient of the Mary DeDecker Botanical Grant.

NEXT NEWSLETTER DEADLINE: FEBRUARY 28TH

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 _____ .

Bristlecone Chapter Directory (Partial List)

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	\$1,000.00
<input type="checkbox"/> Benefactor	\$1,000.00
<input type="checkbox"/> Corporate	\$1,000.00

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 Vice President - Sherryl Taylor (760) 924-8742
 Secretary – Sally Manning (760) 873-3790
 Treasurer - Rosanne Higley (760) 387-2803
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 Native Plant Sales - Karen Ferrell-Ingram - (760) 387-2913
 DeDecker Native Plant Garden – Jerry Zatorski (760) 872-3818
 Publicity - Heidi Hopkins - (760) 647-6271
 Historian Kathy Duvall - (760) 387-2122
 Librarian - EvelynMae Nikolaus - (760) 878-2149
 Rare Plant Committee - 2003 Chair. – Kathleen Nelson
 (760) 873-1095
 Book Sales - Sue Weis (760) 387-2349

Please make membership checks payable to:

The California Native Plant Society.
 -Mail to: Bristlecone Chapter, CNPS
 P.O. Box 364, Bishop, CA 93515-0364

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 Newsletter Editor Anne Halford at 312 Shepard Lane, Bishop, CA 93514 - or email to: fkhalford@earthlink.net

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