



February 2002

# The Bay Leaf

California Native Plant Society • East Bay Chapter • Alameda & Contra Costa Counties

## Calendar of Events

February 1, 8, 15, 22, Fridays: **Native Here** open 9-noon  
February 2, 9, 16, 23, Saturdays: Native Here open 10-1  
February 4, Monday: Native Here will participate in the Friends of Five Creeks Event  
February 22, 23, Friday & Saturday: seed sowing at Native Here  
March 1, 8, 15, 22, 29, Fridays: Native Here open 9-noon  
March 2, 9, 16, 23, 30, Saturdays: Native Here open 10-1

February 2, Saturday: **Native Plant Restoration Team**,  
March 2, Saturday: Native Plant Restoration Team, p.4

February 5, 12, 19, 26, Tuesdays:  
**Plant Sale** propagation and potting sessions, p. 3

February 9, Saturday: **Field trip** to Redwood Regional Park, p. 3  
Sunday, March 3: Field Trip to Bird Trail, Chabot Regional Park, p. 3

February 27, Wednesday: **Membership meeting** (see below)

## Membership Meeting

Date and Time: Wednesday, February 27, 7:30 p.m.  
Location: Conference Center, University of California Botanical Garden at Berkeley

### **Death Valley, Spring 1998: Wildflower Year of the Century**

Speaker: **Rosemary Donlon**

The El Niño rains of 1997-98 didn't all fall on the Central Coast—there was enough left to bring a record 5.8 inches of rain to Death Valley (average annual rainfall, 1.7 inches). The rains were spaced just far enough apart to ensure an extensive growth period and continuous bloom for much of the Death Valley flora. Rosemary Donlon was there for a week in March and a week in April of 1998 to see and photograph the phenomenal display.

Death Valley's geologic history, topographic diversity, and climatic extremes make it home to a fascinating flora. Of the nearly 1,000 plant species in this national park, 22 are found nowhere else and another 33 exist in only a few populations outside of Death Valley. Many of these bloomed in record profusion in the El Niño rains, some for the first time in years. Come see the vast fields of desert gold, the rare golden carpet (*Gilmania luteola*), rock

mimulus, Death Valley sage, and other beautiful treasures of one of our state's most magnificent National Parks.

Rosemary Donlon is a landscape designer and horticultural consultant in Carmel and specializes in native plant landscaping. She is past president of the Monterey Bay Chapter of CNPS and a member of the state CNPS horticultural committee. She is currently compiling and editing a collection of Lester Rowntree's articles on the horticultural use of California native plants and has given many fascinating and popular presentations on Lester Rowntree's life and work.

East Bay Chapter CNPS membership meetings are free of charge and open to everyone. This month's meeting will take place in the Conference Center of the University of California Botanical Garden on Centennial Drive, east of Memorial Stadium, above the main campus of the University of California in Berkeley. The Garden gate will open at 7:00 p.m.; the meeting begins at 7:30 p.m. Refreshments will be served after the meeting. CNPS books and other publications will be on display and available for purchase. Please contact Sue Rosenthal, 510-496-6016 or rosacalifornica@earthlink.net, if you have any questions

*Sue Rosenthal*

## Upcoming Programs

- March 27, 2002      **Steve Lowens: Lilies and friends: the genus *Calochortus* in California and the greater U.S.**
- April 24, 2002      **Tom Bruns: Mycorrhizal interactions with native plants**
- May 22, 2002      **Deborah Rogers: Biological expedition to Guadalupe and Cedros Islands**

*Sue Rosenthal*

## The Geography of California's Ferns

The heavy rains of December have already resulted in strong new growth in our native ferns. Since ferns are often neglected by amateur native plant lovers and professional botanists alike, I give here a brief overview of our pteridophytes (i.e., ferns and allied plants), focusing on regional diversity rather than species identification.

There are currently either 100 or 101 pteridophyte species accepted as native to California, depending on whether the recently described *Botrychium lineare* represents a valid entity and whether the single population of it reported here is correctly identified. In contrast, only about five alien ferns are truly naturalized in California, and none of these is widespread. This very low percentage of aliens is typical of fern floras in general. It seems that ferns know how to behave better than flowering plants, and seldom become aggressive weeds. This is in spite of their light spores, which can travel naturally over long distances. Ferns often have specialized needs, so climatic conditions and available habitat types probably define the fern flora more than limitations in dispersal. There is also a much lower percentage of endemism in our pteridophytes compared to flowering plants, with probably five full species and one subspecies being unique to the state and several more being found only here and in northern Baja California.

Our hundred or so species comprise more than a fifth of those known in the United States (excluding Hawaii) and make California the "fernniest state in the west" for species diversity. However, this is not matched by

abundance, and many of our species are very rare and local. In fact, only about 35 species are widespread and common in California.

One pattern of fern rarity differs from that commonly seen in our flowering plants. In this pattern, uncommon ferns are found in just a few small populations in widely scattered sites, but the total range encompassed by these sites may be large. This again is a pattern observed elsewhere in ferns and is consistent with specialized habitat needs combined with long distance dispersal abilities. Species that show this pattern in California include several *Botrychium* species, *Woodsia scopulina* and *W. oregana*, *Dryopteris filix-mas*, *Polystichum kruckebergii*, *Adiantum capillus-veneris*, *Cheilanthes cooperae* and *Polypodium hesperium*. Some of our rarest species, such as *Botrychium virginianum*, are in fact very widely distributed in the northern hemisphere or beyond, but may also be rare in many other parts of their range. In contrast, the majority of our rarest flowering plants is unique to California and typically confined to quite small regions of the state.

The wide overall distribution of some ferns may mask their rarity. In my view several ferns that are not currently tracked by CNPS should be on our list 2 (rare here but commoner elsewhere) or list 4 (our "watch" list).

Two other features stand out in Californian fern geography. First, as expected, the richest part of the state for ferns is the region with the highest rainfall - Northwest California. This region, defined by the *Jepson Manual* to include the North Coast Ranges, the North Coast and the Klamath Ranges, contains about seventy pteridophyte species. These include distinctive ferns such as *Polystichum lonchitis* that are circumboreal and do not extend further south in the state, as well as virtually all the species that are widespread in California.

In contrast, in the opposite corner of the state, the southeastern deserts and the desert mountains give California the other big element in its fern flora. About 33 pteridophyte species are recognized in the soon-to-be published *Jepson Desert Manual*. Many of these are confined to desert habitats and are small but attractive specialized rock ferns in the family Pteridaceae, which includes the genera *Cheilanthes*, *Argyrochosma*, *Astrolepis*, *Notholaena* and others. They are often uncommon and hard to find and, as in the northwest, one must travel to the far corners of California to see them. Probably no one person has ever seen all our native ferns in the wild in this state. While we lack many of the large and abundant ferns of the eastern U.S., our many rarities continue to provide a wonderful challenge for enthusiasts to seek out.

*John Game*



*Cheilanthes cooperae*, endemic to California, seen here on limestone rocks near Shasta Lake. Photo: John Game

## Field Trips

Saturday, February 9, from 10 a.m. to about 12 p.m., **Field Trip to Redwood Regional Park.** Steve Cochrane will lead a field trip starting from the Skyline Staging Area of Redwood Regional Park. Participants can expect to see western leatherwood, *Ribes* species, and a few late manzanitas in flower. In addition to the flowering shrubs, the field trip will also take in early annual wildflowers, including a watch for shooting stars (*Dodecatheon* species), which may have been eradicated in some areas of the park.

**Directions:** From Berkeley and northward: Take Highway 13 and get off at the Moraga/Thornhill exit. Follow Moraga through the traffic light after the exit, and it will become Mountain Boulevard. At the intersection of Snake Road and Mountain Boulevard, turn left and follow Snake Road uphill all the way to Skyline Boulevard. At Skyline, turn right and follow the winding Skyline Boulevard up to the parking lot for the Skyline Staging Area, on the left side of Skyline. Water and restrooms are available. From south of Joaquin Miller Road in Oakland: Take 580 and turn off to Highway 13 north. Exit at Joaquin Miller Road, and follow Joaquin Miller uphill to the intersection with Skyline Blvd. Turn left at Skyline, and follow it north past Chabot Observatory to the Skyline Staging Area.

Sunday, March 3, 2:00-4:00 p.m.: **Field Trip to Bird Trail, Chabot Regional Park** in Oakland. This short trail (about 1/2 mile, insignificant elevation gain) is located in a transition zone between redwood forest and mixed evergreen forest (mostly oak/bay). As a result, it is botanically very interesting, being particularly rich in shrubs. At this relatively early date in the season, there

will be osoberry, flowering currant, gooseberries, and lots of western leatherwood in bloom, along with early wildflowers such as Giant Trillium (*Trillium chloropetalum*).

**Directions:** Take the Redwood Road exit from Highway 13 south (13 is Ashby Avenue in Berkeley, accessible from the north end of Broadway in Oakland). The junction of 13 with Highway 24 in either direction is just west of the Caldecott Tunnel. Once on Redwood Road, go east, past Skyline Boulevard. Look for the MacDonald Staging area on the right, just before the entrance (on the left) to Redwood Regional Park. From Castro Valley: take Redwood Road north to the MacDonald Staging Area, on the left just after the entrance to Redwood Regional Park. Contact David Margolies (510) 654-0283, or dm@franz.com for information, or just show up.

Janet Gawthrop

## Plant Sale Activities

### Propagation and Potting Sessions

Tuesdays: February 5, 12, 19, 26  
9:00 a.m. to 2:00 p.m.  
Merritt College, Oakland  
Landscape Horticulture  
Parking fee: 50 cents  
*Rain does not cancel.*



Everyone is welcome for all or part of the sessions. Bring a bag lunch for the noon break.

For information call 925-376-4095.

*Plant Sale Committee*

## Native Here Nursery

Every so often, someone phones or drops by the nursery and asks if we sell to the public. Yes! Whenever Native Here Nursery is open, we sell from the nursery floor. Usually plants are at least large enough to be in a 4 inch or "D" pot before they are put out for sale. Many plants are being grown on contract, or on verbal agreement for special projects. The nursery has a pricing structure that allows discounts for professionals and public service projects, as well as for volume.

Because our goal is to produce locally native plants for restoration, we love to be consulted early in the planning stages of a project. That gives us opportunity to collect from as near the project as possible, sometimes even from a site that will be impacted by the planned project. Collection is not uniform, as native plants vary from

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## Native Here Nursery *continued from page 3*

year to year in the volume and viability of seed produced. Native Here gives an even deeper discount to clients who provide seed that they have collected for their projects.

Collecting is done from May through October, with small groups setting off Tuesday mornings from the nursery. Mark your calendars if you'd like to join these groups. Volunteers are always welcome to help whenever the nursery is open, and a few take on tasks such as watering, even when the nursery is not open. New volunteers are welcome to **just come**, there is no need to call ahead or register ahead of time, you are welcome whenever and as often as you can help.

The nursery is at 101 Golf Course Drive, Berkeley 94708, in Tilden Park across the road from the main entrance to the Tilden Park Golf Course. The phone number is 510-549-0211.

*Charli Daniels*

## Native Plant Restoration Team

Meet on Saturday, February 2 at 10 a.m. at the Skyline Serpentine Prairie, in the EBRPD's Redwood Regional Park in Oakland. Our first winter work party at this site is to tackle French broom, and perhaps pampas (jubata) grass. *Come see one of the richest relict grasslands in the East Bay.* Meet in the parking lot at the old EBRPD headquarters (on Joaquin Miller Road, just south of its intersection with Skyline Boulevard). Thanks to Park Supervisor Dee Rosario for having us.

On Saturday, March 2: join with SPAWNERS at the El Sobrante Library. Left off San Pablo Dam Road onto Appian Way; first left and first left again into the Library parking lot. Meet at 9:30 a.m. Thanks to Gudrun Kleist for hosting.

Bring your favorite gloves or tools; we also have such to share. Call 840-9367 if rain is falling for a recorded update on the morning of the event.

*Noah Booker*

## Vote Yes on EBRPD "Parks 2002" - Measure K

Please make every effort to vote in the March 5, 2002 election, and to vote YES on **Measure K**.

This parcel tax will support critical East Bay Regional Parks District (EBRPD) operations and maintenance activities—focusing a significant portion of the funding

on badly needed habitat protection and restoration—over the next 12 years.

The funds will also allow the District to open up public access to a number of spectacular newly acquired properties now being held in "land bank" status for lack of operating funds.

Our CNPS East Bay chapter is not only confident that the funds raised will be used to enhance natural resources protection in our EBRPD parks, but they will also help us to continue to enjoy these great local natural areas.

Perhaps even more importantly, the amount of high-quality habitat which is still available for purchase in Alameda and Contra Costa counties is fast dwindling as more and more of it succumbs to the developers' bulldozers. Putting in place the operating funds provided by Measure K—with your Yes vote—will allow the EBRPD to then pursue a new bond measure to acquire these last vestiges of the East Bay's extraordinarily rich biodiversity.

But, first things first - Please vote Yes for the East Bay Regional Park District's "Parks 2002", Measure K, in the March 5, 2002 election.

(See the January 2002 *Bay Leaf*, page 2, "(Past) President's Message" for additional details on Measure K.)

*Peter Rauch*

## New East Bay Public Lands Committee

The CNPS East Bay Chapter has formed a new committee intended to follow natural resources (plant/habitat conservation) issues on our East Bay public agency lands. We will establish liaisons with the various public agencies, attend their public meetings on resource and conservation policy and operations issues, and recommend action on such matters to the CNPS EB Chapter Board.

Committee member meetings will generally be held ad hoc, as issues and situations arise that require attention and discussion.

Initially, the EBPL committee will focus on the East Bay Regional Park District, the East Bay Municipal Utilities District, and the Contra Costa Water District. There are a dozen or more other significant public agency landholders/managers in the East Bay whose habitat resource management policies and practices we'd like to track as well.

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## Board of Directors

### Elected Officers

**President:**

Tony Morosco, 2329 7<sup>th</sup> St., Berkeley 94710, 549-2238, w/642-8468, tony-morosco@calflora.org

**Vice President, Administration:**

Elaine Jackson, 3311 Estudillo St., Martinez 94553, 925-372-0687

**Treasurer:**

Holly Forbes, 7128 Blake St., El Cerrito 94530, 234-2913, w/643-8040

**Secretaries:****Recording:**

Michele Lee, 2923 Sheldon Dr., Richmond 94803, 243-1265

**Corresponding:**

Joanne Kerbavaz, 1709 Berkeley Way, Apt. B, Berkeley 94703, JKERB@parks.ca.gov

### Past President

Barbara Ertter, 1859 Catalina Ave., Berkeley 94707, h/526-4592, w/643-0600

### Advisors

**Members at large:**

John Game, 1155 Spruce St., Berkeley 94707, 527-7855

Jim Sharp, 2663 LeConte Ave., Berkeley 94709, 644-9344

### Bay Leaf Editors

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Joe Willingham, 2512 Etna St., Berkeley 94704, 841-4681, pepe@dnai.com

**Recorded Chapter Information: 464-4977**

**CNPS Home Page:** <http://www.cnps.org>

**East Bay Chapter CNPS Home Page:**

<http://www.ebcnps.org>

**See the Bay Leaf online**

**Chapter CNPS-EB-Alerts E-mail List:**

Find out more; email to [listserv@usobi.org](mailto:listserv@usobi.org) with:

**INFO CNPS-EB Alerts**

All area codes are 510 unless noted

### Committee Coordinators

**Bay Leaf Mailing:**

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**Bryophytes:**

Dan Norris, 802 Lexington Ave., El Cerrito 94530, 435-2004  
email [norris\\_daniel@hotmail.com](mailto:norris_daniel@hotmail.com)

**Conservation:**

Steve Asztalos, 839 York St., Oakland 94610, [asztalos1@lnl.gov](mailto:asztalos1@lnl.gov)

**Plant Communities:**

Susan Bainbridge, 2408 Parker St., Berkeley 94704, 548-2918

**Rare Plants:**

Brad Olson, 4442 Arcadia Ave., Oakland 94602, 482-0794

**Unusual Plants:**

Dianne Lake, 1050 Bayview Farm Rd. #121, Pinole 94564, 741-8066

**Donations:**

Sandy McCoy, 1311 Bay View Place, Berkeley 94708,  
[wbmccoy@earthlink.net](mailto:wbmccoy@earthlink.net)

**Education:**

Elly Bade, 2699 Shasta Rd., Berkeley 94708, 644-1656

**Field Trips:**

Janet Gawthrop, 360 Monte Vista Ave. #214, Oakland 94610, 654

**3066-Hospitality:**

Irene Wilkinson, 440 Camino Sobrante, Orinda 94563, 925-254-3675

**Legislation:**

Roy Buck, 848-4169, email [roybuck@msn.com](mailto:roybuck@msn.com)

**Membership:**

Delia Taylor, 1851 Catalina Ave., Berkeley 94707, 527-3912,  
[deliataylor@mac.com](mailto:deliataylor@mac.com)

**Native Here Nursery:**

Charli Danielsen, 101 Golf Course Dr., Berkeley 94708, 549-0211, email [charlid@pacbell.net](mailto:charlid@pacbell.net)

**Native Plant Restoration Team:**

Noah Booker, 6366 Valley View Rd., Oakland 94611, h/339-1588, w/840-9367, email [casartunda@aol.com](mailto:casartunda@aol.com)

**Posters:**

Heather Koshinsky, 2033 Carquinez Ave., El Cerrito 94530, w/522-8180

**Plant Sale:**

Shirley McPheeters, 104 Ivy Dr., Orinda 94563, 925-376-4095

Phoebe Watts, 1419 Grant St., Berkeley 94703, 525-6614,  
[phoebewatts@cs.com](mailto:phoebewatts@cs.com)

**Plant Sale Publicity:**

Elaine Jackson, 3311 Estudillo St., Martinez 94553, 925-372-0687

**Programs:**

Sue Rosenthal, P.O. Box 20489, Oakland 94620, 496-6016, email [rosacalifornica@earthlink.net](mailto:rosacalifornica@earthlink.net)

**East Bay Public Lands:**

Peter Rauch, 526-8155, [peterr@socrates.berkeley.edu](mailto:peterr@socrates.berkeley.edu)

**EBRP Botanic Garden Liaison:**

Sue Rosenthal, P.O. Box 20489, Oakland 94620, 496-6016

## Membership Application

Name \_\_\_\_\_

Address \_\_\_\_\_

Zip \_\_\_\_\_ Telephone \_\_\_\_\_

I wish to affiliate with:

\_\_\_ East Bay Chapter (Alameda and Contra Costa Counties)

\_\_\_ Other \_\_\_\_\_

**Membership category:**

\_\_\_ Student, Retired, Limited income, \$20

\_\_\_ Individual, Library, \$35

\_\_\_ Household, Family, or Group, \$45

\_\_\_ Supporting, \$75

\_\_\_ Plant lover, \$100

\_\_\_ Benefactor, \$500

\_\_\_ Life, \$1000

Mail application and check to: California Native Plant Society, 1722 J Street, Suite 17, Sacramento CA 95814

## New East Bay Public Lands Committee

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If you are concerned about public lands management issues, and would like to volunteer to participate in the CNPS-EB East Bay Public Lands Committee's work, please contact the current committee chair, Peter Rauch at [peterr@socrates.berkeley.edu](mailto:peterr@socrates.berkeley.edu), or 510-526-8155.

*Peter Rauch*



Each year, and for long periods of every year, fire can propagate somewhere everywhere. Humans ensured that ignition remained more or less constant. California nourished an intricate melange of native tribes, none of which, interestingly enough, practiced agriculture. Instead, with fire for plow, rake, and ax, they harvested the native flora and hunted the resident fauna. Fire use was most intense and the fires smallest near settlements, particularly abundant in grasslands, oak savannas, or ecotones of grass and chaparral, precisely those sites most amenable to anthropogenic burning. Some sites burned annually; others, as needed. Probably the most frequented mountains had their slopes dappled with chaparral and grass, the signature of an anthropogenic economy.

Colonizing Spaniards arrived in the eighteenth century, and found the native fire regime not to their liking. . .

[After the American acquisition and the Forest Reserve Act of 1891, programs] to control fire and grazing promptly appeared. . . To the attrition of fire that accompanied the disintegration of aboriginal and Hispanic society, the new colonists promoted active fire suppression. . .

Active suppression changed all this [the old pattern of smaller fires], much as levees and channelizing could eliminate nuisance floods but lead to more frequent large floods. Fire control could, by deferment, contain the wildfire menace for several decades. . .

Not everyone accepted fire control as necessary or practical. No less a figure than William Mulholland, architect of the Los Angeles water system, refused to send men to battle fires that raged in the mountains in 1908 and again in 1919. Big fires, he insisted, were "beyond the power of man to stop". Those big fires were dangerous, and putting them out was, over the long term, no less dangerous. It was better, Mulholland insisted, to "have a fire every year" that burned off a small plot than to wait several years "and have a big one denuding the whole watershed at once". . . The greatest check on unrestricted fire exclusion, however, was simply the lack of tools, men, and money. That began to change during the New Deal, and the sense of limits—limits of any kind—appeared to vanish completely with World War II.

Stephen J. Pyne, *World Fire: The Culture of Fire on Earth*



One of the penalties of an ecological education is that one lives alone in a world of wounds. Much of the damage inflicted on land is quite invisible to laymen. An ecologist must either harden his shell and make believe that the consequences of science are none of his business, or he must be the doctor who sees the marks of death in a community that believes itself well and does not want to be told otherwise.

Aldo Leopold, *A Sand County Almanac*

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**California Native Plant Society  
East Bay Chapter  
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