# The BAY LEAF

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

# **Calendar of Events**

January 4, 11, 18 and 25, TUESDAYS:

■ **Potting and propagation** for October's sale of native plants (see below).

January 5, WEDNESDAY:

■ **Board of Directors' meeting** at the home of Heather Koshinsky, 2033 Carquinez Ave., El Cerrito. 7:30 p.m. All members welcome.

January 7, 14, 21 and 28, FRIDAYS:

■ Native Here Nursery open, 9 a.m. to 12 noon.

January 8, SATURDAY:

■ Native Plant Restoration Team meets at 1 p.m. for removing invading exotics from San Leandro Creek (see p. 3).

January 8 and 22, SATURDAYS:

■ Native Here Nursery open, 10 a.m. to 1 p.m..

January 9, SUNDAY:

■ **Deadline for February** *Bay Leaf.* Give items to Phoebe Watts or Brett Boltz.

January 16, SUNDAY:

■ **Growing Natives Group**. For time and place, phone Glenn Keator, 527-9802.

January 26, WEDNESDAY:

■ Membership meeting, 7:30 p.m. (see below).

January 29, SATURDAY:

■ Last chance to buy native plants (see plant sale article below).

# **Plant Sale Activities**

Our work sessions this month will give us the satisfaction of potting rooted cuttings into soil, and we will also be preparing more cuttings to take their places in the greenhouse.

Come and join us at Merritt on Tuesday mornings; no experience needed. (We will be there regardless of the weather; dress warmly).



Propagation and Potting this month: **Tuesdays, Jan. 4, 11, 18, 25** and **Saturday, Jan. 29**, 9 a.m.-noon

Merritt College Landscape Horticulture area

## **Last Chance to Buy**

We still have some very nice plants for sale, but only till the end of January. The nursery will be open on Saturday, January 29, for selecting plants, in addition to Tuesdays. Our limited available stock includes these plants (as of mid-December):

aster
verbena
twinberry
dogwood
iris
bunchgrass
soap plant
grape
buckwheat
ginger
sedum
yarrow
zauschneria
ceanothus (5 spp.)
manzanita (10-12 spp.)

. . . Shirley McPheeters

# Membership Meeting

# Wednesday, January 26 \* 7:30 p.m.

# Recent Acquisitions of Open Space Containing Rare Plants and Significant Communities

## Speaker: Brad Olson

Since passage of Measure AA in 1988, the East Bay Regional Park District has acquired more than 25,000 acres of open space in Alameda and Contra Costa Counties. These lands have been acquired to protect open space from development, to provide for appropriate public uses and to protect the important natural resources of the East Bay. Most of these new acquisitions include habitat for occurrences of several important populations of rare and unusual plants and animals and significant native plant communities.

Come hear Brad Olson at this slide presentation that will be focused on seven acquisitions that have taken place during the last three years that have protected more than 6282 acres of open space. These areas contain populations of soft bird's beak (Cordylanthus mollis ssp. mollis), Mason's lilaeopsis (Lilaeopsis masonii), Suisun Marsh aster (Aster lentus), big tarweed (Blepharizonia plumosa ssp. plumosa), Mt. Diablo sunflower (Helianthella castanea), Mt. Diablo globe lilly (Calochortus pulchellus), San Joaquin spearscale (Atriplex joaquiniana) and Palmer's oak (Quercus palmeri). Significant native plant communities that were protected by these acquisitions include oak woodland,

riparian woodland, chaparral, coastal prairie, valley needle grass grassland, saltmarsh, brackish marsh, freshwater marsh, hillside seeps and rock outcrops. The conservation, management and restoration needs for these and other important plant resources will be discussed during this presentation.

Brad Olson has been working on natural resource conservation and planning issues for seventeen years. He has served as Rare Plant Coordinator for the CNPS East Bay Chapter for eleven years and has been Vice Chair of the CNPS Rare Plant Scientific Advisory Committee for four years. Currently, Brad works as Environmental Specialist for the East Bay Regional Park District. His responsibilities include environmental compliance for open space acquisitions, resource inventory and habitat restoration planning, and review of development projects which may affect District interests.

The meeting will take place in the Conference Center of the University of California Botanical Garden on Centennial Drive east of the Memorial Stadium above the main campus on the University of California in Berkeley. The Garden gate will open at 7 p.m.; the meeting will begin at 7:30 p.m. Refreshments will be served after the meeting and CNPS books and other publications will be on display and available for purchase. For more information, please call Jodi McGraw at 528-5090.

# The Wayne Roderick Lectures

# Winter 1999 - 2000

The annual Wayne Roderick Lecture Series is being held at the Regional Parks Botanic Garden, Wildcat Canyon Road and South Park Drive in Tilden Park, Berkeley (841-8732). The lectures are held on Saturday mornings as indicated, 10:30 a.m.-12 noon, and are free to the public. The Lecture Series runs through February 2000.

Date	Topic	Speaker
Jan. 8	SCOR: Botanizing the inner South Coast Range from Tesla to the Parkfield Grade	Steve Edwards
Jan. 15	A California botanist in Iran	Barbara Ertter
Jan. 22	Plants of Tilden Park	Steve Edwards
Jan. 22	Tips on wildflower photography (copiously illustrated)	Bob Case
Feb 5	Travels in Plumas County and Lakes Basin	Steve Edwards

# **Native Plant Restoration Activities**

## **Native Here Nursery**

January is still a good time to plant, especially where frosts are not hard. Come select from our newly grown things, or ask to have plants put aside for warmer weather. Volunteers are always welcome when the nursery is open, and some come up on their own once they are familiar with nursery routines. New volunteers can just show up and there will be plenty for you to do. If you haven't visited the nursery for a while, come up and see the beautiful work that John Danielsen and Al Schwittalla have done recycling old park picnic tables. The entrance is very inviting and provides a place to display notices relevant to CNPS and to native plant restoration. Not too many people are aware of the library of periodicals and books that can be browsed while visiting the nursery. A list of them is posted on the boards. While we don't loan them out, visitors are free to read at the nursery whenever it is open.

Posted hours are subject to change only if there are high winds or heavy rain (or volunteers have emergencies), so it's usually safe to come on up without calling first. We usually get too busy to answer the phone anyway. Of course, if someone would like to volunteer to answer it on a regular basis, that would be lovely. The nursery is across from Tilden Park Golf Course, between Shasta and Grizzly Peak, at 101 Golf Course Drive.

#### **Silent Auction**

A lovely pine chest with brass fittings and beautifully carved with an image of the Mount Diablo Fairy Lantern has been donated to raise money for Chapter activities A picture and description will be posted on the East Bay Chapter web site (www.ebcnps.org) as well as displayed on the board at Native Here Nursery (hours in calendar). Watch future Bay Leafs for details of the auction.

. . . Charli Danielsen

#### **Native Plant Restoration Team**

Due to Y2K conflict, we'll meet on January 8, instead of January 1. Charli Danielsen will lead the Team in a joint work day with Canyon School along the banks of San Leandro Creek. There's French broom, ivy and Himalayan blackberry to pull—and lots of lovely natives, including hazelnut, clematis, huge redwoods and ferns galore. In February, we'll return to Gwin Canyon to pull French broom and work on maytens.

Meet on the second Saturday, January 8, at 1 p.m. at the Native Here Nursery, 101 Golf Course Drive in Tilden Park, across from the Golf Course main entrance. Wear protective clothing, sturdy shoes, a rain coat just in case; bring water and snacks. Heavy rain cancels. Call Native Here at 549-0211 for a recorded update.

. . . Noah Booker

# Plant Family of the Month

#### . . . Glenn Keator

# Scrophulariaceae (figwort or snapdragon family)

Look for herbaceous plants or small shrubs, often with opposite leaves. Leaf design varies widely from simple and entire to deeply dissected and fernlike. Flowers are borne singly or in spikes, racemes, or panicles. Each usually irregular flower is two-lipped (occasionally not) usually with two smaller upper petals and three larger lower petals joined to form a tube. Two or four (rarely five) stamens are attached to the base of the tube. The single pistil has a superior ovary and sometimes a two-lobed stigma. The ovary develops into a two- chambered, multiseeded capsule in fruit.

"Scroph" flowers often resemble those of several closely related families, including mints (Lamiaceae), acanths (Acanthaceae), bignons (Bignoniaceae), and broomrapes (Orobanchaceae). Fortunately, most of these other families have traits that readily separate them from the scrophs. Perhaps the trickiest to distinguish are the mints, but their ovary differs by separating into four, one-seeded nutlets in fruit. Acanths also look closely similar, but are typified by having pairs of bracts at the base of each flower and distinctive seeds that are attached to hooked prongs.

This large and important family can be subdivided in various ways. One of the best ways is to start with the unusual or exceptional genera: Verbascum (mullein; nonnative), is biennial with large rosettes of basal leaves and spikelike racemes of nearly symmetrical white or yellow flowers with five stamens. Veronica (speedwell; some natives and some nonnative weeds) is annual or perennial, often typified by creeping, leafy stems and slightly irregular, four-petalled blue or purple flowers with only two stamens. V. peregrina and V. persica are common garden weeds, while V. americana (American brooklime) is common along marshes, meadows, and sluggish streams. Digitalis purpurea (foxglove; European origin) is a biennial with tall, spikelike racemes of long, tubular or bell-shaped white, pink, or purple flowers with large spots leading into the tube. Look for it along the edge of coastal forests. Scrophularia (figwort, bee plant) is perennial with square stems, triangular leaves, and open panicles of small blackish to maroon-red flowers. Each flower has an overarching upper lip and a receding lower lip. The common bee plant (S. californica) is widespread in many habitats.

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Many of our "scrophs" can be separated according to the shape of their upper petals; some have the conventional upper lip consisting of two, usually smaller petals that sit above the lower three at the entrance to the flower tube. Several genera, however, differ in having the upper two petals fused into a galea, a folded beak, horn, or hood that envelops the stamens and style. Let's start with the genera that have galeas.

Two of these are nonnative aliens: Parentucellia viscosa (no common name), with sticky leaves and bright yellow flowers, is widely naturalized in the north Coast Ranges; and Bellardia trixago (no common name), with smooth leaves and bicolored, purple and white flowers, is naturalized along the central and north coast. Natives that have a galea include Castilleja (Indian paintbrushes), mostly perennials with yellow, orange, red, or pink bracts and sepals and usually greenish petals; Orthocarpus (owl's clover, cream sacs, johnny tuck), annuals with often finely divided leaves, green, red, or purple-tipped bracts, and colorful petals, the lower three often inflated; *Pedicularis* (Indian warrior, lousewort), perennials with often ferny leaves, dense spikes of flowers whose galea is hatchet-shaped or snoutlike, and colorful petals; and Cordylanthus (pelican beak), annuals with branched stems, leaves with threadlike divisions, and white or pinkish flowers with a conspicuously inflated lower lip that resembles the pouch of a pelican's beak.

The Indian paintbrushes are a tricky group to key to species, although some can be anticipated according to location and habitat. For example, in the high mountains, *C. miniata* (meadow paintbrush) is a tall plant with vividly colored flowers from meadows; *C. applegatei* (mountain paintbrush) is a shorter plant with wavy leaves, orange-red flowers, and grows in dry rocky or sandy habitats; *C. lemmonii* (Lemmon's paintbrush) is a relatively short plant with magenta pink flowers and is found in wet subalpine meadows; and *C. nana* (alpine paintbrush) is a diminutive plant with whitish to pale pink bracts and inconspicuous flowers, and typifies dry, open areas near and above timberline.

Recently, the orthocarpuses have been dispatched into several different genera, and some, such as the common owl's clovers (O. purpurascens and O. densiflorus) have been moved into the castillejas. For the beginner, it is much easier to maintain the orthocarpuses as they were, since by that definition, they're all annuals. Besides the two widespread pink-purple-flowered owl's clovers mentioned above, we have O. attenuatus (valley tassels), with narrows spikes of white flowers borne amid white-tipped bracts; O. lithospermoides (cream sacs), with green leaves and bracts, and inflated yellow flowers; O. erianthus (johnny tuck), with red-purple leaves and bracts, and smaller inflated yellow flowers; and O. pusillus (no common name), an inches-high annual with red- purple leaves and bracts, and truly tiny flowers of similar color.

The louseworts or pedicularises are widespread in woodlands, forests, and mountain meadows. A familiar foothill species is Indian warrior *(P. densiflorus)*, with dense spikes of blood red flowers that appear in early spring. Other widespread species

include *P. semibarbata* (mountain lousewort), with short leafy stems that sometimes partially hide the short, dense spikes of yellow-orange blossoms; *P. groenlandica* (elephant snouts), with slender spikes of rose-purple flowers whose upper lip looks like the trunk of an elephant; and *P. attollens* (baby elephant snouts), a similar species with shorter trunklike upper lip. The last two species are common in high, wet meadows.

The several cordylathuses are poorly known, partly because some are rare but also partly because their threadlike leaf divisions and stems, and inconspicuous flowers are seldom noticed. Most have white, pale yellow, or pale pink flowers, and grow in a variety of open habitats.

The remaining scrophs have more normal looking two-lipped flowers. The two most prominent of these are *Mimulus* (monkeyflower), a large genus of small shrubs, perennials, and annuals with four stamens; and *Penstemon* (penstemon, beardtongue), an even larger genus of perennials or subshrubs from rocky situations, characterized by four functional stamens and a fifth sterile stamen (no pollen-producing anther). Closely related to the penstemons is a similar-looking small genus, *Keckiella*, with decidedly woody shrubs with similar flower design.

Monkeyflowers run the gamut from diminutive annuals to three-foot shrubs and three- to four-foot perennials. Recently all of the shrubby species have been combined into a single species (M. aurantiacus), although few botanists agree with this view. Other widespread perennial monkeyflowers include M. guttatus (golden or seep monkeyflower), with large golden snapdragonlike blossoms dotted with brown spots on the lower lip; M. cardinalis (scarlet monkeyflower), with large, unusually shaped, scarlet or red-orange flowers; M. lewisii (pink monkeyflower), with robust leafy stalks carrying many large pale to rose-pink flowers marked with yellow; and M. moschatus (musk monkeyflower), with multiple branches forming low colonies, slimy feeling leaves, and nearly regular yellow flowers. The annual monkeyflowers are generally yellow, rose-purple, or pink, and too numerous to enumerate.

Penstemons are difficult to key because of the technical language that describes the stamen's anthers. The majority of species have showy blue or purple flowers, but a few are noted for pale yellow, pink, white, or red flowers. Most species occur in the mountains or on deserts. By contrast, the keckiellas are a small group with a few fairly distinctive species, including *K. corymbosa* (red rock penstemon), with scarlet flowers and glossy leaves, growing in rock outcrops in the Coast Ranges; *K. cordifolia* (climbing penstemon), with gaping scarlet flowers, scrambling over vegetation in southern California's woodlands; *K. breviflora* (gaping penstemon), with yawning pale purple or white flowers with purple lines, widespread in the foothills.

In addition to these large, diverse genera, we have several smaller ones, including *Collinsia* (blue-eyed Mary, Chinese houses), a

(Continued on back page)

# 2000 Board of Directors

#### **Elected Officers**

#### President:

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

Vice-president:

Administration:

Tony Morosco

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

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Recording:

Michele Lee 1601 Broadway St., #401, Concord 94520 (925) 686-6932

Corresponding:

Vacant position

#### **Advisors**

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## **Bay Leaf Editors**

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#### Recorded Chapter Information: 464-4977

#### **CNPS Home Page:**

http://www.cnps.org

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http://www.ebcnps.org

All area codes are 510 unless noted



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### **Committee Coordinators**

#### Conservation:

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#### **Plant Communities:**

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#### **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:**

David Bigham 2413 Fulton St., Berkeley 94705 843-4247 Myrtle Wolf 181 Stonewall Rd., Berkeley 94704 843-8759

#### **Education:**

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

#### Field trips:

Vacant position

#### Growing natives group:

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#### Hospitality:

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## Legislation:

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#### Membership:

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#### **Native Here Nursery:**

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#### **Native Plant Restoration Team:**

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#### Posters:

Heather Koshinsky 2033 Carquinez Ave., El Cerrito 94530 w/559-5977

#### Plant Sale:

Shirley McPheeters 104 lvy Dr., Orinda 94563 (925) 376-4095 Phoebe Watts 1419 Grant St., Berkeley 94703 525-6614 *Publicity:* 

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

#### **Programs:**

Jodi McGraw 8259 Terrace Dr., El Cerrito 94730 **528-5090** email: jmmcgraw@socrates.berkeley.edu

#### **EBRP Botanic Garden Liaison:**

Jenny Fleming 2750 Shasta Rd., Berkeley 94708 848-3455

# **New Membership Application**

The California Native Plant Society is open to all. The mission of the California Native Plant Society is to increase understanding and appreciation of California's native plants and to preserve them in their natural habitat through scientific activities, education, and conservation. Membership includes a subscription to the quarterly journal *Fremontia*.

Name	Membership category:
Address	Student, Retired, Limited income, \$20 Individual, Library, \$35
Addless	Household, Family, or Group, \$45
Zip Telephone	Supporting, \$75
	Plant lover, \$100
I wish to affiliate with:	Patron, \$250
East Bay Chapter (Alameda and Contra Costa Counties)	Benefactor, \$500
Other	Life. \$1000

#### Mail application and check to:

Membership Chairman, California Native Plant Society, 1722 J St., Suite 17, Sacramento, CA 95814.

# **Activities of Others**

Winter courses offered by Friends of the Regional Parks Botanic Garden: California's Plant Habitats: Secrets of their Botany and Chemistry. Walks through the garden with Glenn Keator, botanist and Greti Sequin, organic chemist. Sundays, January 23, 30 and February 6, 10 a.m.-2 p.m. \$90 members/\$105 nonmembers. No previous chemistry is needed. Hidden World of Ferns and their Relatives. Fern life cycles and identification of native ferns and related groups, taught by Glenn Keator. Saturday, March 4 at the Garden, Sunday, March 5 field trip to Armstrong Redwoods in Sonoma County. \$75 members/\$90 nonmembers. Botany Basics. Taught by Glenn Keator and Judy Adler on Saturdays, January 22 and February 5, 1 - 4:30 p.m. at the Visitor Center at the Garden. Call Judy Adler, (925) 937-3044, for specific information. \$50 members/\$60 nonmembers. For information on all courses, call Ron Clendenen, (925) 631-6614. You may register on line at www.nativeplants.org

A new class at Merritt College: **Special Projects in Landscape Horticulture**. Get hands-on experience with an individual horticultural project at the Merritt College Landscape Horticulture facility or in a community garden—possibly in the native plant area at the college. Tuesdays, beginning January 18. Lecture 9:30-ll:30 a.m., projects in field 12-3 p.m. Call Judy Thomas, instructor, for details at 436-2547.

The Jepson Herbarium is offering the Weekend Workshop *Arctostaphylos*. This workshop is being held on January 21-23 at the UC Hastings Reserve in Carmel Valley. This class on manzanitas will focus on key taxonomic characters during the first day, as well as some background on manzanita evolution, distribution patterns and ecology. The second day will involve a field trip to several different habitats. The workshop is taught by Tom Parker and Mike Vasey, both affiliated with San

Francisco State University. The course fee is \$160 members, \$175 non-members. Contact Staci Markos or Betsy Ringrose at the Jepson Herbarium (643-7008) for more information or a registration form.

The Oakland Museum of California is looking for **volun**teer tour guides to take groups through the galleries of art, history and natural science. Five three-hour training sessions will be held on Tuesday afternoons, February 1-29. No previous education is necessary, but volunteers should have an enthusiasm for working with school groups in a museum setting. The Museum still has opening in training courses for men and women who want to serve as **docents** in the history or natural sciences galleries. Classes in natural sciences will be held Monday afternoons from 1-3:30 p.m., late January 2000 to April 2001. Participants are asked to make a two-year commitment to volunteer as docents after completing the course. For more information on both programs, call the Docent Center, 238-3514, or visit the museum web site at www.museumca.org.

# Plant Family . . . (continued from page 4)

group of annuals with often two-toned purple flowers that appear to have only four petals (the middle lower petal is keel-like and hidden between its two neighboring petals); *Antirrhinum* (wild snapdragon), short-lived perennials or annuals with snapdragon-shaped flowers whose two lips are tightly closed; *Linaria canadensis* (blue toadflax), a small annual or biennial with snapdragonlike flowers that are spurred; and *Galvezia speciosa* (island snapdragon), a sprawling island shrub with whorled leaves and red snapdragonlike flowers. Despite this seemingly long list, there are several small or poorly known scroph genera that I have not covered.

California Native Plant Society East Bay Chapter P.O. Box 5597, Elmwood Station Berkeley, CA 94705

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