

Darlingtonia

Fall 2008

Newsletter of the North Coast Chapter of the California Native Plant Society
Dedicated to the Preservation of California Native Flora

SUDDEN OAK DEATH DISEASE IN HUMBOLDT COUNTY

By Monica Bueno, Janelle Deshais, Leonel Arguello
from the Redwood National and State Parks



Standing tanoaks at
Point Reyes National Seashore in
Marin County, California, July 2008

What is Sudden Oak Death?

Sudden Oak Death (SOD) is a non-native plant disease infecting forests of many coastal California counties. The disease is caused by the microscopic pathogen *P. ramorum*, which causes lethal cankers and/or a non-lethal foliar blight on many native and ornamental plant species. It is believed, although not confirmed, that the pathogen arrived on ornamental plants from eastern Asia via the international nursery trade (Goheen et al. 2005, Kluz et al. 2007).

The pathogen does not kill all species of oaks, and it affects far more genera than just oaks. Currently, there are 115 host species of *P. ramorum* listed by the

USDA's Animal and Plant Health Inspection Service (as of March 2008).

Where is Sudden Oak Death?

First noticed in the United States on tanoaks in 1994 in Marin County, California, *P. ramorum* has spread to fourteen coastal California counties, Curry County, Oregon, nationwide in the nursery setting, and in the United Kingdom (Garbelotto and Rizzo 2005, Rizzo et al. 2005)

The fourteen coastal California counties with *P. ramorum* infestations and under state and federal quarantine are: Alameda, Contra Costa, Humboldt, Lake, Marin, Mendocino, Monterey, Napa, San Francisco, Santa Cruz, Santa Clara, San Mateo, Solano, and Sonoma.

The most northern wildland infestations in California occur in southern Humboldt County, in the South Fork of the Eel River, along a 6 mile stretch along Avenue of the Giants near Burlington, south of Weott; another in the Eel River drainage east and north of Weott near Eel Rock (not pictured in map). [Editor's Note: The latest SOD County map (Humboldt County's map was last updated on 2/15/2008) included in the article is best displayed as a full-sized page. If you are interested in seeing the map, please visit

<http://kellylab.berkeley.edu/SODmonitoring/SODmapsCounty.htm>.]

The most northern detection of *P. ramorum* in Humboldt County is in McKinleyville. Two streams, Widow White (southern branch) and Mill, and one retail nursery store have tested positive for the pathogen. The

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Where to find what's happening:

◇ Visit our website:
www.northcoastcnps.org

◇ Sign up for our announcements
e-mail: [NorthCoast_CNPS-
subscribe@yahoogroups.com](mailto:NorthCoast_CNPS-subscribe@yahoogroups.com)

◇ Read the *Darlingtonia*

◇ Read or hear about upcoming events
in local media

FIELD TRIPS AND PLANT WALKS

Please watch for later additions on our Web site (www.northcoastcnps.org) and in the local papers, or join our e-mail notification group (linked from our Web site). We welcome all levels of botanical knowledge on our trips. We are all out there to learn and enjoy.

October 4, Saturday. Picnic at Patrick's Point. 12 noon (or earlier)-6:00 p.m. All members, their friends, and relations are invited to share a fall afternoon outdoors connecting, conversing, exploring, sharing, trading, etc. We have reserved the Bishop Pine Picnic Area for the whole day. The fire will be ready to barbecue at 1:00 p.m. Eat 1-2:30. Bring your own item to BBQ, your own beverage, your own eating gear, and some dish to share. Bring any seeds, cuttings, starts, and such (of native plants!) that you want to give or trade. After eating we can walk and botanize in this wonderful state park, trade seeds, visit, etc. Information or suggestions: Carol 822-2015.

November 2, Sunday. Fall Day Hike. Whatever the weather offers, we will be out in it: blue skies and gentle sun, blustery winds and fast-moving clouds, or soft rain and freshly clean greenery. We will assess the weather and choose either a mountain destination, such as Lacks Creek, Waterdog Lake, or Snow Camp, or a lower elevation destination, perhaps South Fork Trinity River, Tall Trees Trail, or Mill Creek Campground trails. We will see fall colors, a few late flowers, mushrooms, and some surprise, wherever we go. Meet at 8:00 a.m. Pacific Standard Time at Pacific Union School (3001 Janes Rd, Arcata) or arrange another place. Dress for the weather; bring lunch and water. Return by 5 p.m. Tell Carol you are coming (822-2015), so she can tell you where we are going!

You can lead a field trip! Do you know a place you'd like to share with other plant aficionados? You don't have to know the names of all the plants. You just have to choose a day and tell us how to get there. We'll come explore with you. Contact Carol Ralph (822-2015) with your ideas.

UPDATE ON THE GENERAL PLAN

By Jennifer Kalt



Should the outskirts of Eureka, McKinleyville, and Fortuna be converted from timber and agricultural lands to residential development? How can we best protect dwindling salmonids, wetlands, native plant communities, water quality, and working landscapes while planning pleasant, safe places to live? How will our existing communities handle the traffic, sewage, fire protection, and stormwater runoff from such development? Will there be bicycle lanes, sidewalks, safe routes to schools, trails, and public parks?

The answers to these questions will depend on the Humboldt County General Plan Update that is chosen by the Board of Supervisors next year. The Plan is now undergoing its final revisions, and the revised alternatives are due out this fall. Once released, a 60-day review period will be followed by additional hearings before the Planning Commission, and an opportunity to submit written comments for consideration in the adoption of the final plan.

Members of the Healthy Humboldt Coalition* are working to inform the public about ways to get involved in the General Plan Update process, which will guide future development in unincorporated areas of the County for the next 20 years. The Coalition has been working for several years make policy recommendations for a General Plan Update that protects the environment, promotes public health, and sustains our local economy.

For information on educational workshops, opportunities for public comment, and other ways to improve planning and policy decisions at the County level, call the Healthy Humboldt Coalition at (707) 682-5292 or visit us online at <http://www.healthyhumboldt.org/> where you can read our Guiding Principles, sign a statement of support, and learn more about how the General Plan Update can protect native habitats and the species that rely upon them, as well as improve our quality of life through better planning for our towns, trails and transportation, public infrastructure, and other aspects of society that are governed by planning agencies.

To read more about how to promote CNPS's mission through the General Plan Process, visit <http://www.cnps.org/cnps/conservationarchive/GPGUIDE.pdf> or email Jen Kalt, North Coast Chapter Conservation Chair, at jkalt@asis.com.

*The Healthy Humboldt Coalition includes representatives of the Humboldt Watershed Council, Sierra Club, Humboldt Baykeeper, GreenWheels, Democracy Unlimited, and Northcoast Environmental Center.

CHAPTER PROGRAMS AND MEETINGS

EVENING PROGRAMS

The North Coast Chapter of CNPS (www.northcoastcnps.org) holds free Public Programs on the second Wednesday of each month (September through May) at the Six Rivers Masonic Lodge, 251 Bayside Rd., Arcata. Refreshments at 7:00 and program at 7:30 p.m. You don't have to be a CNPS member to attend! Contact Audrey Miller, Programs Chairperson at taurdreybirdbath@suddenlink.net or 786-9701, with speaker or botanical subject suggestions.

- October 8** **"Implications of Future Fire for California's Flora" by Dr. Morgan Varner, HSU**
Assistant Professor Wildland Fire Management. More information about Dr. Varner can be found at <http://www.humboldt.edu/~for/faculty/varner.html>
- Nov 12** **"Do Redwood Trees and Forests Become Decadent With Age?"**
by Dr. Steve Sillett. A paradigm in forestry holds that productivity of forest stands increases until leaf area peaks at canopy closure and then steadily declines. The implication of this is that old-growth forests are decadent and characterized by low productivity. Recent work in Humboldt Redwoods State Park indicates that a redwood tree's rate of wood production increases linearly with age and that the old-growth forest along Bull Creek is now producing more than twice as much wood as it did 100 years ago. Thus, the concept of decadence applies neither at the tree level nor the stand level in redwood forests. More information about Dr. Sillett can be found at <http://www.humboldt.edu/~sillett/sillett.html>
- December 10** **"Native Plant Show and Tell"**
An informal evening for anyone to share photos, artifacts, readings, or food related to native plants and their habitat. Coordinator to be announced later.
- January 14** to be announced
- Future Program** **WANTED** for a possible future program: Photos from the South Fork Trinity Trail. Have you hiked this popular trail and taken photos? Can you contribute to an evening of sharing photos of landscapes and flowers seen over the years along this trail.

NATIVE PLANTS NEEDED FOR HUMBOLDT COASTAL NATURE CENTER'S GREEN ROOF by Carol Vander Meer

Friends of the Dunes is launching a major initiative to develop the Humboldt Coastal Nature Center, a 113 acre coastal reserve between the Manila Dunes Recreation area and Ma-le'l Dunes, linking over 1,000 acres coastal habitat. The Nature Center will be an attractive, educational, and busy gateway to the dunes, enticing the public to get to know them and their native vegetation.

The project to develop the center started last year with the acquisition of 38 acres of coastal dunes along with the former "Stamps House," a unique, earth-sheltered building with both ocean and bay views. Over the past year, Friends of the Dunes has continued to work with the California State Coastal Conservancy, Wildlife Conservation Board, local foundations, and private donors to expand the property to 113 acres. To complete the project, the Stamps House will receive much needed renovations and repairs while being transformed into a wheel-chair accessible Nature Center for the public and home base for Friends of the Dunes. The new facility will have room for exhibits on coastal restoration and conservation, meeting space, public restrooms, signed trailheads, and more.

A key feature of the nature center will be a native-plant green roof. Currently, the roof is covered in iceplant and in need of repairs. Next spring, Friends of the Dunes will begin construction and will be uncovering the roof, removing the vegetation, installing appropriate roofing material and planting it with native dune plants. Gardeners are needed to grow these plants for use on the roof, including but not limited to; bearberry (*Arctostaphylos uva-ursi*), beach strawberry (*Fragaria chiloensis*), native dune grass (*Leymus mollis*), beach knotweed (*Polygonum paronychia*). Contact Carol Vander Meer, Executive Director, if you would like to get involved in any stage of the planning and implementation of this exciting project, from deciding which species to raising seedlings to planting on the roof. (carol@friendsofthedunes.org; 707-444-1397)

DEAR FRIEND AND COLLEAGUE PASSES AWAY



On August 25, while bicycling home, our dear friend, colleague, and former *Darlingtonia* editor **Greg Jennings** was fatally injured when struck by a car that drove onto the paved shoulder of Highway 299.

The **memorial service is Saturday, September 27** starting at 5 p.m. at the Red Radish in Blue Lake (140 H St.).

- **Memorial Service Contact:** memorial.for.greg@gmail.com
- **Pictures:** If you have a digital picture or two of Greg with friends that you would like to share at the memorial, please send them to memorial.for.greg@gmail.com
- **Any donations** to commemorate Greg can be made to either of the following organizations: Friends of Annie and Mary Rail Trail PO box 804 Blue Lake, CA 95525 and/or Friends of the Dunes, P.O. Box 186, Arcata, CA 95518. Checks to either organization can be made in Greg's name.

The memorial service will consist of a brief commemoration by several family members and friends, followed by a raising of our glasses. Afterwards, there will be some live music, some nice food and some good company. It's going to be a dinner potluck so try to bring a dish, and if you can, coordinate meal components with a few other people who you know are attending. Beverages (both alcoholic and non) and dishes and cutlery will be provided, so all you need to bring is a food item and a serving spoon.

If you would like to contribute a special memory of Greg, the North Coast CNPS would like to publish a special memorial edition of the *Darlingtonia* this Fall. Please contact the newsletter editor (e-mail marisa_nativecalifornian@yahoo.com or phone 707.601.0898).

The North Coast chapter of CNPS sends its condolences to Greg's wife Lisa and the Jennings family.

COLD SPRING, June 14, 2008**A SIX-VIOLET DAY or "HAVE WE DIED AND GONE TO HEAVEN?"**

by Carol Ralph

A mid-June journey up Highway 299 to Berry Summit and south out Forest Highway 1 (Titlow Hill Rd.) is a journey from full summer, with lupines faded and ox-eye daisies blooming, to full or even early spring, with iris and fawn lilies blooming. With resolve our group of 15 drove past these favorites, 7.4 miles from 299 and turned right on 5N27, a short, dirt road that ends in an informal parking area under the white firs beside a fenced-in small spring at elevation 4,700 ft.

As we headed down the dirt trail past the left side of the spring, we noted the familiar yellow blooms and green rounded leaves of stream violet (*Viola glabella*) in this damp environs. In the shade of the trees were the fan-shaped, gray-green leaves of cut-leaf violet (*Viola sheltonii*), but we saw no blossoms. Shortly we were in a clearing carpeted with dainty, little cream-faced, purple-eared (or purple-hatted) violets all facing the same way above their finely divided leaves--Hall's violet (*Viola hallii*). Close by, harbinger of the meadow below, was another yellow-flowered violet, with the backs of the upper two petals maroon and the leaves somewhat upright, tapered, and green --Astoria, prairie, or yellow montane violet (*Viola praemorsa*).

A little farther downhill we emerged from the pines, Douglas fir, and incense cedar to the high, blue sky and the top end of the large meadow, which sloped out of sight down toward Redwood Creek far below. A small gully marked the left side with a line of rushes, small willows, and damp ground. Beyond it was open conifer forest. Islands of cream bush (*Holodiscus discolor*), chokecherry (*Prunus virginiana*), mock orange (*Philadelphus lewisii*), snowberry (*Symphoricarpos alba*), and Oregon white oaks (*Quercus garryana*) clustered around rocky outcrops in the meadow. The oaks were just breaking buds, and sun dappled the fresh, green carpet and all the flower treasures therein. A delightful odor of cilantro wafted up where we stepped on *Sanicula tuberosa*, a small but sturdy, finely divided umbellifer common in this meadow. Wavering between trancelike moments absorbing it all and diligent focus on each wonderful new thing, we walked a few hundred yards past white baby blue-eyes (*Nemophila menziesii* ssp. *atomaria*), giant blue-eyed Mary (*Collinsia grandiflora*), giant white wakerobin (*Trillium albidum*), California waterleaf (*Hydrophyllum occidentale*), long-tubed iris (*Iris tenuissima*), hound's tongue (*Cynoglossum grande*), sea blush (*Plectritis congesta*), and countless others to the ridge along the right edge of the meadow, for a necessary lunch stop.

We sat among the lush, green lupine and lomatium foliage, seeking the weak shade of the still-bare Oregon oak. Beside us, too small to sit under, were small versions of this oak, probably Brewer oaks (*Quercus garryana* var. *breweri*). Meadow and oaks fell off below us and ran along the whole west-facing slope of the long, north south ridge, with patches and stripes of conifers. Rows of forested ridges faced us, some familiar, some distant and mysterious. Fingers of fog poked over from the coast, while we basked in deliciously warm sun, listening to jumbled song of Lazuli Buntings. Bright yellow spots of buttercup (*Ranunculus* sp.), brushes of butterweed (*Senecio* sp.), sunflower faces of mule's-ears (*Wyethia* probably *angustifolia*), and starburst umbels of fern-leaved lomatium (*Lomatium dissectum*) intensified the green, while purple blue balls of blue dicks (*Dichelostemma capitata*) hovering above the grass and deep purple helmets of delphiniums (*Delphinium* sp.) sequestered in it added to the allure. Little white stars of *Lewisia nevadensis* snug on the ground added enchantment. "Have we died and gone to heaven?" asked one of our most eloquent.

During afternoon exploration we found a very photogenic cluster of *Trillium albidum* among weathered oak logs and gray boulders. Less photogenic but certainly exciting was the 2-inch tall stem with single, purple, tubular flower of naked broomrape (*Orobanche uniflora*), a parasite on roots of other plants, right beside a cow pat. Several gravelly knolls were otherwise barren but amply decorated with bright pink heads of onions (*Allium siskiyouense*). Other hot, gravelly knolls featured buckwheat, lomatium, lupine, clarkia, and paintbrush.

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Among the conifers across the small watercourse, in a patch of sparse clover, grass, and herbs, a gathering of pussyears (*Calochortus tolmei*) gazed up from the bases of their shiny, flat leaf tapers, like gray eyes under the constellations of shiny yellow buttercups, drops of sun trembling on the their delicate stalks in the light breeze. Nearer the tiny stream remarkably deep purple dog violets (*Viola adunca*) were rich against lush, short turf, also set off by buttercups. A tiny, dainty monkeyflower with red tongue and whiskers (*Mimulus alsinoides*) perched in a mossy nook of a shaded rock face.

Of special personal note was the diversity of umbellifers (Apiaceae): *Lomatium utriculatum*, *Lomatium californicum*, *Lomatium dissectum*, *Lomatium macrocarpum*, western sweet cicely (*Osmorhiza occidentalis*), mountain sweet cicely (*Osmorhiza chilensis*), and *Sanicula tuberosa*. From a previous visit I know a yampah (*Perideridia*) is there also.

Only the high end of the meadow is in the national forest. Downhill is private land, posted in a few places. Grazing is obviously the land use here. The diversity of flowers in the meadow suggests that the current grazing regime has been appropriate, even though we find it distressing that cows have trampled or even eaten some of our favorite flowers. If the cows weren't grazing at all, the grasses might crowd out the herbaceous plants, or shrubs and trees might invade the meadow. Managing this landscape is not a simple matter.

It was only a 5-violet day when we departed Cold Spring. We added the sixth in the serpentine woodland along the road before the plunge down to The Intersection (where the side road goes to Horse Mountain summit). There, in company with blooming fawn lilies (*Erythronium californicum*) and non-blooming beargrass (*Xerophyllum tenax*), were the purple-eyed, all-purple-backed, white faces of wedge-leaved violet (*Viola cuneata*).

We are truly lucky to have within an hour of our homes, on public land, this mountain ridge of complex geology and diverse flora. Get to know it, in all its seasons and moods. Share it with friends. Tell Six Rivers National Forest that you appreciate it.

CRESCENT CITY MARSH, 28 June 2008

by Carol Ralph



After hearing about the wonders of Crescent City Marsh for years, twenty three of us joined its champion, USF&WS rare plant botanist David (Kim) Imper to see this difficult-to-access habitat. Part of the marsh is visible from Highway 101 just south of Crescent City, but we visited the inland side at two separate sites.

The first site was a large clearing in a young spruce forest, waist high in swishing, green rushes, grasses, and sedges. White heads of labrador tea flowers (*Ledum glandulosum*) dotted the scene, in an effect usually created by umbellifer blooms. Azalea (*Rhododendron occidentale*), and spiraea (*Spiraea douglasii*) flowers decorated the surrounding thickets, where shrubby thin-leaf alder (*Alnus viridis*), finely toothed leaves familiar from higher elevations, joined the mass. The ground was soft, occasionally squishy.

In the second Crescent City Marsh site we visited Dave Imper wields his machete as he declares, "Western lily used to grow right here!"

Hesitant to tread on botanical marvels, we gently poked around, discovering special herbs among the monocots. We sorted out the similarly textured leaves of pinnately compound great burnet *Sanguisorba officinalis* and palmately compound marsh cinquefoil *Potentilla palustris* (*Comarum palustre*). We found a few of the purple brown cinquefoil flowers and also spikes of demure, fragrant, white bog-orchid *Platanthera leucostachys*. Hidden close to the ground were the broad leaflets of

bogbean *Menyanthes trifoliata* and a trio of arctic starflower *Trientalis arctica*, easily distinguished from the more familiar *T. latifolia* by the leaves on the stem. Fresh, green plants of kneeling angelica *Angelica genuflexa*, water hemlock *Cicuta douglasii*, corn lily *Veratrum californicum*, and western lily *Lilium occidentale* were sprinkled in the mass of sedge and grass.

The second site showed no sign of being marsh. It was a small, grassy meadow among 30-50-ft tall spruce. Dave pointed out a few burnet and bog-orchids, saying they were "coming back." He remembers

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COMMUNICATIONS

North Coast CNPS members have three ways to share information with each other:

1. The **Darlingtonia Newsletter** (quarterly),
2. Our chapter's website (www.northcoastcnps.org - updated regularly), and
3. E-mail lists/forums (Announcements, Business, and Gardening – subscribe from the **E-mail lists and Forums** page on www.northcoastcnps.org).

The *Darlingtonia* is the quarterly newsletter of the North Coast Chapter of CNPS. Items for submittal to *Darlingtonia* should be sent to marisa_nativecalifornian@yahoo.com by each quarterly deadline: December 1, March 1, June 1, and September 1. Botanical articles, poetry, stories, photographs, illustrations, sightings, news items, action alerts, events, factoids, tidbits, etc. are welcome and appreciated.

EcoNEWS AND You

We, the North Coast Chapter of CNPS, are a member organization of the **Northcoast Environmental Center (NEC)**, a valuable voice for conservation in our area. This means we have a seat on the board of directors. It also means that as our member you are automatically entitled to receive the NEC's monthly publication, *EcoNews*. Due to the vagaries of membership lists, you might not be receiving this informative newsletter. If you are a member of our chapter, do not receive *EcoNews*, and want to receive it, phone 707-822-6918 or e-mail ericanec@yournec.org and leave the pertinent information.

NATIVE PLANT CONSULTATION SERVICE



Are you wondering which plants in your yard are native? Are you unsure if that vine in the corner is an invasive exotic? Would you like to know some native species that would grow well in your yard?

The North Coast Chapter of the California Native Plant Society offers the Native Plant Consultation Service to answer these questions and to give advice on gardening with natives. If you are a member of CNPS, this service is free, if not, you can join or make a donation to our chapter.

A phone call to our coordinator, Bev Zeman at 677-9391 or donizeman@yahoo.com, will put you in touch with a team of volunteer consultants who will arrange a visit to your property to look at what you have and help choose suitable plants for your garden.

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clearly when this place was entirely grazed, open pasture and home to a good population of western lily, and he is not very old. When it was "protected" by Fish and Game, the grazing stopped, and woody vegetation and slough sedge *Carex obnupta* took over. Marsh plants were gone within 5 years. The sedge crowded out the lily bulbs underground, and the woody vegetation shaded the lilies above ground. The spruces sucked up water, lowering the ground water. An experimental grazing by goats, after manually removing the azalea, which is toxic to them, did reverse succession successfully in a small fenced area.

The western lily's predicament in Crescent City Marsh represents that of many rare plants today, including the 13 or so CNPS-listed species in this marsh. It requires open, early succession habitat. Dave has been counting lilies since 1997, monitoring populations, watching the slough sedge spread, the spruces grow, and the lilies disappear, despite their "protection" in a Fish and Game wildlife area. 90% of the flowering individuals of the entire species live in Crescent City Marsh, but they are disappearing. The situation looks desperate.

The marsh itself is about 130 acres in a 350-acre protected area. Prehistorically, it was burned by the Native Americans and grazed by elk. Historically, all of the marsh was grazed until the 1940's. Every site that has or had western lilies was grazed until the 1980's. When grazing was halted, the more upland sites were overgrown faster than wetter sites. Meanwhile, insufficient drainage through the culverts under Highway 101 has changed the water table, and land development around the marsh is threatening the ground water and encroaching on habitat. Threatened by poor drainage, vegetation encroachment, and development, Crescent City Marsh and its botanical treasures need some creative management as well as watershed protection.

Our visit to Crescent City Marsh was a good lesson in "What you see is not what it was." Dave's dramatic interpretation prodded us not to accept what we see as what is "right." Having seen the slender-leaved western lily plants, smelled the Labrador tea, and squished in the mud, we know this place is worth protecting, with some serious management.



"Two CNPSers admire a bog orchid in Crescent City Marsh."

ROCK CREEK RANCH ON SOUTH FORK SMITH RIVER, June 28-29, 2008

by Carol Ralph

In the afternoon of the last Saturday in June our group of fifteen turned left at #2475 on South Fork Rd., 8.1 miles south of Highway 199 inland of Crescent City. Here in the Douglas fir *Pseudotsuga menziesii*, canyon live oak *Quercus chrysolepis*, and evergreen huckleberry *Vaccinium ovatum*, right beside the South Fork Smith River, the Smith River Alliance's recently opened Rock Creek Ranch would be our headquarters for a brief exploration of this beautiful, dramatic, botanically interesting corner of California. Some of us pitched tents and located the composting toilet; some of us claimed beds in the fully plumbed house shared with the caretaker; all of us noted the kitchen and dining area in the open-air Long House, where we cooked, ate, and hung out. The ranch is proudly off the grid, powered by hydro.

Soon we were studying flowers around the camping area and along the riverbed. In the landscaped slope below the Long House were the bright purple, upright funnels with white "tongues" of harvest brodiaea *Brodiaea elegans* and the 4-ft. tall, slender, branched flower stalk of soap plant *Chlorogalum pomeridianum*, easily missed in daylight because its small, white flowers only open at night. On the flat area pink flowers of a checker mallow *Sidalcea malvaeflora* ssp. *asprella*, modest purple flowers of the low milkwort *Polygala californica*, a pale violet flower of Bolander's phacelia *Phacelia bolanderi* caught our eye under the trees, and the succulent leaves and pale flowers of creamy-flowered stonecrop *Sedum oregonense*, violet aster-type flowers of leafy fleabane *Erigeron foliosus*, and dark green, tough tufts of the fern Indian's dream *Aspidotis densa* among the rocks. It was important to recognize poison oak *Toxicodendron diversilobum*. We puzzled over the honeysuckles scrambling in the shrubs. Some were definitely not hairy honeysuckle *Lonicera hispidula*. By the river we could compare the leaves of alders: flat, finely toothed white alder *Alnus rhombifolia* and wavy-margined, coarse-, blunt-toothed, margin-slightly-rolled-under red alder *A. rubra*. The robust stems and red-veined, green flowers of stream orchid *Epipactis gigantea* delighted us by the water, along with the delicate, white plumes of goatsbeard *Aruncus dioica*.

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(Continued from page 8)

When hunger called, we cooked a shared meal on the stove and on the campfire. Some of us walked up the road at dusk and discovered the roadside cliffs that needed exploration the next day. We made use of the electric lights to key some plants, read, and converse, and some of us enjoyed marshmallows and Girl Scout songs around the campfire.

Sunday morning we drove the short distance back to "Rock Creek Rd.", Forest Service 16N23, right by Rock Creek, where we parked and walked up this rough road before lunch. The fastest explorers determined that this road goes "about a mile" to a level campsite by the creek. Most of us were delayed by the botanical sights in this serpentine landscape: a vertical, trickling waterfall draped with California pitcher plant *Darlingtonia californica*, some even hanging upside down; pale yellow rosettes of butterworts *Pinguicula macroceras*, another insectivorous plant, splashed on the wet, rocky roadcut; a clump of lady's slipper *Cypripedium californica* dangling its white pouches beside a five-finger fern *Adiantum aleuticum* under the fragrant boughs of western azalea *Rhododendron occidentale*; cheerful yellow blooms of a butterweed that keyed to be *Senecio bolanderi*. Around another corner, under the huckleberry oaks, was the third tribute to Mr. Bolander: the deep red trumpets on gray-green stem and whorled leaves of Bolander's lily *Lilium bolanderi*.

After lunch and cleaning up some of us visited the roadside cliffs just a quarter mile up the road. Water trickled down over high, bare, gray-green rock. Small Port Orford cedar *Chamaecyparis lawsoniana*, Douglas fir, and creambush *Holodiscus discolor* perched in nooks. Mats of thick, dark brown, spongy vegetable matter (alga?moss?) soaked up and slowed the water, and glowing, green hoods of *Darlingtonia* clung onto these and squeezed into crevices. Butterworts were plastered on the wet face. In the gutter other species made use of this water: stream orchid, *Tofieldia occidentalis*, a cheerful yellow bird's-foot trefoil *Lotus oblongifolius*, a cotton grass with barbs on its bristles *Eriophorum criniger*, and other members of the sedge family. A checkerboard-patterned garter snake distracted us awhile. On the gravelly shoulder farther on we found more Bolander's lilies.

Our brief visit to this remote, but accessible, watershed confirmed that we want to return, making use of the convenient facilities of Rock Creek Ranch. Information about the lodge and the important conservation activities of the Smith River Alliance are at info@smithriveralliance.org.

HELP CREATE A SHOWCASE GARDEN AT NEC



The Northcoast Environmental Center (NEC) is actively reshaping and recomposing the diverse, old garden at their recently acquired home at 1456 G St., Arcata (adjacent to the gas station at 14th and G). They would like to make the yard a demonstration garden, showing integration of natives into an existing landscape, while creating a welcoming entrance to the NEC. Reducing and shaping the overgrown vegetation has already mostly happened, thanks to CNPS members and others participating in several Friday Hoe-ups (with beer and pizza). The yard has good structure in terms of beds and paths. It is waiting for the unwanted herbaceous plants to be removed and the right plants to be added.

From the point of view of native plant gardening this project is extremely important. Most gardeners with traditional landscapes need to see how natives can be incorporated into what they have already. The NEC yard is a place they can see that.

Are you ready for this gardening challenge? Would you like to plan the planting in part of this yard?

Would you like to participate in the weeding, digging, planting, etc., with other fun people? Contact Georgianna Wood at 822-6918, georgianna@ournec.org.

Join the next Hoe-Up: Friday, October 11, 3-6 p.m.

CNPS 2009 CONSERVATION CONFERENCE: STRATEGIES AND SOLUTIONS

January 17 - 19, 2009 (Registration opens July 1, 2008)

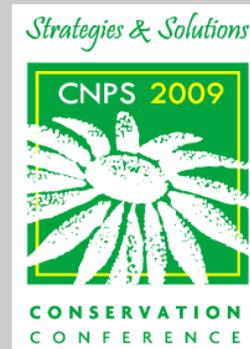
Sacramento Convention Center & Sheraton Grand Hotel, Sacramento, California

The CNPS 2009 Conservation Conference: Strategies and Solutions will bring together over 1,000 amateur and professional botanists, conservationists, university students, public policy makers, local and regional planners, land managers and plant enthusiasts from all regions of the state and beyond to share and learn about the latest developments in conservation science and public policy.

This is much more than a scientific conference; it will be the largest native plant convention the state has ever experienced. Anyone interested in the biology and conservation of California's natural communities and native plants should attend!

Activities include:

- Poster sessions
- Keynote speakers
- A welcome reception
- Scientific presentations
- Exhibitors & trade show
- A banquet and silent auction
- Photo & botanical illustration contests
- Poster displays of CNPS chapter activities
- A series of technical and artistic workshops
- Associated meetings of other botanical and conservation organizations



Numerous Student Scholarships will be available.

Volunteer opportunities Abound! To volunteer during the conference, or for more information on volunteer opportunities, contact Andrea Williams at 415-331-0639 or Andrea.Williams@nps.gov. For volunteering before or for post-conference workshops, contact Josie Crawford at 916-447-2677 or jcrawford@cnps.org.

See the conference webpage to register or for more information
<http://cnps.org/cnps/conservation/conference/2009/>



***DARLINGTONIA* NOW AVAILABLE ELECTRONICALLY**

- Look up an article from an old issue
- Search for articles about a specific native plant or fun place to hike
- Save a tree

Whatever your reason, visit our chapter's website at www.northcoastcnps.org, then click on the Newsletter link to download a free copy of the *Darlingtonia*.

If you prefer to receive only an electronic copy, please e-mail me (the newsletter editor marisa_nativecalifornian@yahoo.com). You will receive an e-mail publication notification with a link to the downloadable newsletter (no attachments).

nursery has been working with the Humboldt County Agriculture Department to eradicate the infestation. Monitors have surveyed intensively within the streams to determine the source of the infestations, however, to date nothing specific has been located in either stream.

How Does the Disease Spread?

P. ramorum spores are dispersed mainly via moist air currents. They can spread up to 200 meters in normal wind and rain events and from 1-5 kilometers in more extreme storms (Mascheretti et al. 2008). The disease can also spread long distances by human means including: planting of infected nursery plants, movement of soil, and transportation of infected plant matter.

Widespread dispersal of *P. ramorum* depends on the presence of certain host species that act as "transmission highways". These species are foliar hosts and foster intense spore production which drives the pathogen across the landscape. California bay laurel (*Umbellularia californica*) and tanoak have played this role in California and Oregon wildlands.

Why Should You Care?

Since its discovery in California in 1994, Sudden Oak Death (SOD) has been responsible for the death of over one million oak and tanoak trees in California alone (COMTF 2008).

P. ramorum kills tanoak, black oak (*Quercus kelloggii*), canyon live oak (*Quercus chrysolepis*), coast live oak (*Quercus agrifolia*), Shreve oak (*Quercus parvula* var. *shrevei*) and less commonly Pacific madrone (*Arbutus menziesii*) and Pacific yew (*Taxus brevifolia*).

Tanoak is proving to be extremely susceptible to SOD. In the Big Sur Ecoregion of Monterey County, tanoak mortality has reach 63% in redwood-tanoak forests and this number is expected to climb even higher (Meentemeyer et al. 2007). Point Reyes National Seashore in Marin County may have areas with 90-100% tanoak mortality (Moritz et al. 2008). The specific ecological consequences related to this level of loss are still largely undetermined.

Tanoak is a prolific acorn producer. The annual production of a healthy, mature tanoak (a 30 to 40 year old tree) is 3,900 to 110,000 acorns, which is equivalent to 35 to 1000 lbs of acorns (Tappeiner et al. 1990). Tanoaks provide needed habitat and food resources for a variety of organisms. Many mammals, birds and insects rely on tanoaks for nesting habitat, shelter and food (Raphael 1986, Garbelotto and Rizzo 2005). Regression models predict population declines for tanoak- and oak-dependent bird species as a result sudden oak death induced mortality (Monahan and Koenig 2006).

Tanoak is important to the structure and composition of forest plant communities. They are the dominant hardwood trees species in redwood and mixed conifer/hardwood stands. They provide mid-canopy cover and structure, provide understory shading, and are important sources of forest floor nutrients via leaf drop. Losing tanoaks could alter decomposition rates and the chemical and nutrient balance of forest soils due to the strong association of tanoaks with ectomycorrhizal fungi species (Bergemann and Garbelotto 2006).

The spread of *P. ramorum* has the potential to increase fire intensities in areas of tanoak mortality. Dying or dead tanoak trees can provide ample fuel to alter fire spread, fireline intensity, and smoke production. Fires burning into areas with hundreds of dead or dying, small diameter tanoak trees per acre may see simple ground fires swell to hazardous fire conditions, impacting other forest species. Increased fire intensities could also severely impact soils, as high fuel loadings from dead tanoaks allow fires to burn soil organics and nutrients. Hazardous fuels conditions associated with SOD could be mitigated, but would require development of hazard fuel plans and significant input of dollars; difficult propositions in tight budgetary climates.

Native American cultures of the North Coast would also be impacted from the loss of tanoak. Forest resources on the North Coast are revered as the cultural, spiritual, and economic base of local tribes, and tanoak is highly valued in this context. The Forest provides for tribes at all levels of their culture, past and present, and will continue to serve as the pillar of their society into the future. A significant loss of tanoak trees, from an introduced pathogen, would be another serious blow to tribal cultures on the North Coast.

CHAPTER PICNIC

Saturday October 4, 2008 12 noon - 6:00 p.m.

Patrick's Point State Park At the Bishop Pine Picnic Area

All members, their friends, and relations are invited to share a fall afternoon outdoors connecting, conversing, exploring, sharing, trading, etc. We have reserved this picnic area for the whole day. Come when you can.



1:00 p.m. Fire ready to BBQ. 1:00-2:30. Eat and share food. Bring your own item to BBQ, your own beverage, your own eating gear. Bring a dish to share. Bring any seeds, cuttings, starts, and such (of native plants!) that you want to give or trade. After 2:30 possible activities include walking and botanizing--the Rim Trail, in the meadow, to Wedding Rock, up Ceremonial rock, through Native Plant Garden; a botanical game; a treasure hunt. Any suggestions?

In case of rain, wear your rain gear, bring a canopy, tarp, ropes, and umbrellas. The park will be ours.

Information or suggestions: Carol Ralph 822-2015

ATTENTION PHOTOGRAPHERS!

Conservation Conference Photo Contest

CNPS is offering serious prizes in a photo contest featured at the 2009 Conservation Conference in Sacramento January 17-19, 2009. Within the broad requirement that photos be of California native plants, taken in California, the judges will consider anything. This includes species portraits, landscapes, trees, mosses, grasses, flowers, and people interacting with natives. Entries must be received at the Sacramento CNPS office by November 15, 2008. Find the details on the Conference page at www.cnps.org, from Stacey Flowerdew at sflowerdew@cnps.org, or talk to Carol Ralph at 822-2015.



Godwit Days Slideshow

North Coast Chapter is excited to be chosen as the "Spotlight Organization" at the 2009 Godwit Days birding festival in April, 2009. We will have the opportunity to show this group of local and out-of-town nature enthusiasts what we do. A slide show and talk at the Friday reception will be one way we do this. We need photos of our members at chapter activities! Do you have photos of field trips, plant sales, lily work days, evening programs, the wildflower show, research projects, restoration projects, or anything else? If you would like to share them, contact Carol Ralph or Jen Kalt. (See contact list.)

NORTH COAST CNPS VOLUNTEERS WANTED

Phone Carol 822-2015 to volunteer, ask questions, or make suggestions.

Wildflower Show Queen Bee. (or drone?) **Our most urgent need.** Help bring native plants to the public. Our most important education and outreach event needs someone to be sure all the worker bees are doing their jobs. If you enjoyed this year's show, consider helping with next year's, as queen or worker. The many jobs are already defined, and workers are doing many of them.

Wildflower Show School Visit Coordinator. Friday, May 1, the show will be available to school groups to visit. The schedule, procedures, and lessons have been worked out and tested. We need someone to recruit classes and docents and to schedule them. Lists of previous visitors and docents are available, as well as help from previous people who did this job.

Econews Reporter. *Econews* is an important avenue of publicity. We need someone to submit for publication our calendar items the 15th of each month.

Booth Display Person. Another important way to make the world aware of native plants! This person is in charge of having all the necessary display and hand-out material on hand at 4-6 events/year at which we publicize CNPS through our booth or a table. We have a good group of people who like to take shifts at the events.

Wildflower Show Refreshment Provider. Our many volunteers at this event appreciate modest sustenance. The Provider gets it there.

Projectionists. Our evening programs usually need someone who understands digital projectors. If we had several people who can deal with computer, projector, cables, and memory sticks, they could take turns, and enjoy the programs too.

What Can We Do?

Prevention and early detection are the best weapons in the fight against SOD disease because once established in the wildlands, it has proven to be extremely difficult to eradicate. Do your part to slow the spread of SOD by following the BMPs outlined in the text box above and stay informed by periodically visiting the sudden oak death website at www.suddenoakdeath.org or http://ucanr.org/blogs/Sudden_Oak_Death_Updates/ for periodic SOD updates for the North Coast posted by the University of California Cooperative Extension office in Eureka.

Cited literature:

- Bergemann, S. E., and M. Garbelotto. 2006. High diversity of fungi recovered from the roots of mature tanoak (*Lithocarpus densiflorus*) in northern California. *Canadian Journal of Botany* 84:1380-1394.
- COMTF. 2008. <http://nature.berkeley.edu/comtf/index.html>. California Oak Mortality Task Force.
- Department for Environment, Food and Rural Affairs,. 2007. Understanding *Phytophthora ramorum*: Key Findings from UK Research. <http://www.defra.gov.uk/plant/pestnote/2006/pramres.pdf>,.
- Garbelotto, M., and D. M. Rizzo. 2005. A California-based chronological review (1995-2004) of research on *Phytophthora ramorum*, the causal agent of sudden oak death. *Phytopathol. Mediterr.* 44:1-17.
- Goheen, E. M., T. L. Kuisiak, and W. Zhao. 2005. The search for the origin of *Phytophthora ramorum*: A first look in Yunnan Province, People's Republic of China. *The Sudden Oak Death Science Symposium: The State of Our Knowledge*. USDA Forest Service, Monterey, California.
- Kluza, D. A., D. A. Vieglais, J. K. Andreasen, and A. T. Peterson. 2007. Sudden oak death: geographic risk estimates and predictions of origins. *Plant Pathology (Oxford)* 56:580-587.
- Mascheretti, S., P. J. Croucher, A. Vettriano, S. Prospero, and M. Garbelotto. 2008. Reconstruction of the Sudden Oak Death epidemic in California through micro-satellite analysis of the pathogen *Phytophthora ramorum*. *Mol Ecol* 17:2755-2768.
- Meentemeyer, R., N. Rank, D. Shoemaker, C. Oneal, A. Wickland, K. Frangioso, and D. Rizzo. 2007. Impact of sudden oak death on tree mortality in the Big Sur Ecoregion of California. *Biological Invasions*.
- Monahan, William B.; Koenig, Walter D. 2006. Estimating the potential effects of sudden oak death on oak-dependent birds. *Biological Conservation*. 127(2): 146-157. [60416]
- Moritz, M. A., T. Moody, B. Ramage, and A. Forestel. 2008. Spatial distribution and impacts of *Phytophthora ramorum* and Sudden Oak Death in Point Reyes National Seashore
- Raphael, M. G. 1986. Wildlife-Tanoak associations in Douglas-fir forests of Northwestern California. Pages 183-189 in T. R. Plumb and H. H. Pillsbury, editors. *Symposium on the Multiple-Use Management of California's Hardwood Resources*. USDA Forest Service, Pacific Southwest Forest and Range Experiment Station, General Technical Report PSW-100, San Luis Obispo, California.
- Rizzo, D. M., M. Garbelotto, and E. M. Hansen. 2005. *Phytophthora ramorum*: integrative research and management of an emerging pathogen in California and Oregon forests. *Annu Rev Phytopathol* 43:309-335.
- Tappeiner, J. C., II, P. M. McDonald, and D. F. Roy. 1990. *Lithocarpus densiflorus* (Hook. & Arn.) Rehd. Tanoak. Washington, DC.

HELP SLOW THE SPREAD OF SOD!

You can help slow the spread of *P. ramorum* by following the regulations and best management practices (BMP) promoted by the California Oak Mortality Task Force (www.suddenoakdeath.org). Those who are traveling the "redwood circuit" should be especially vigilant. Sudden Oak Death is present in the most highly visited redwood forests such as Muir Woods National Monument, Point Reyes National Seashore and Humboldt Redwoods State Park.

- Do not transport infected plant material into uninfected areas
- Stay on established trails.
- If you have been in an infected area remove mud and debris from shoes, vehicles, bikes, horses' hooves and pets' paws before going into uninfected areas.
- Clean and disinfect boots, bike tires, equipment, and tools used at Infected sites by removing mud and debris and spraying with Lysol or a 10% bleach solution.

MEMBERS' CORNER

WELCOME TO OUR NEW MEMBERS

Carol Allison
Tanya Chapple
Jeanne Charles
Melissa Dattola
Ronald W. Hildebrant
Jolynn Mahmoudi
Erin Rentz
Ted Winfield

THANK YOU TO OUR RENEWING MEMBERS

Paul Anderson
Dr. Pauline M. Baefsky
Melinda & Mark Bailey
Katherine Blume
Heather Brent
Susan Calla
Tamara Camper
Bryon Cariss
Diana Chapman
Katherine J. Clague
George G. Cocks
Don Davis
Frank Demling
Susan Erwin
Sarah Flowers
Brenda Ford
Leia Giambastiani
Valerie Gizinski
Jackie & John Hamilton
Debra Harrison & Greg Blomstrom
Kimberly Hayler
Joanne Holmes
Alisa A. Hove
David K. Imper
Thomas Jimerson
Wilma W. Johnston
Bruce & Pam Kessler
Margaret MacDonald
Marilyn Machi

Carol McNeill
Stephanie Morrisette
David Mouton
Rosemary Murphy
Steve Norman
Claire Perricelli
Cassie M. Pinnell
Gail Popham
Wesley Reinhardt
Jeffrey Reynolds
William E. Rodstrom
Chris Shaini
James Stockley
Michael Stuart
Randi & Ray Swedenburg
Donna M. Thompson
Jennifer Tompkins
Troy K. Vought
Wendy Wahlund
Winifred A. Walker
Aimee Weber
Jean Weese
Elaine Weinreb
Sylvia White
Art Wilson
Jessica Wilson
Cara Witte
John Yoakley
Beverly Zeman

MEMBERSHIP BENEFITS

New for 2008: CNPS has begun issuing **membership cards!** These will be sent to members as they renew in the future months. To attract and reward members, we are contacting business owners to request support in the way of **discounts.**

•**Freshwater Farms:** 10% off plant purchases, 444-8261

•**Miller Farms:** 5% discount on plant materials, 839-1571

•**Mad River Gardens:** 10% discount on plant purchases, 822-7049

•**Let it Grow Horticultural Supplies:** 10% discount on all merchandise, 822-8733

•**Greenlot Nursery,** 10% discount on plants, 443-9484

•**Sherwood Forest Nursery,** 10% discount on plants, 442-3339

•**Bamboo & Maples,** 10% discount on plants, 445-1281

•**Pierson's Garden Shop,** 10% discount on all garden shop items (except sale or non-discountable items... please ask staff before going to register), 441-2713

Please show proof of membership in the form of your current *Darlingtonia* newsletter with mailing label, until such time as you receive your membership card. (Note: **Discounts on plants** are those **not already on sale** for the above merchants.).

See the back page for details about how to sign up for North Coast CNPS Membership.

WELCOME ABOARD

Cara Witte as Treasurer

ELECTION OF OFFICERS



PLEASE VOTE.

We have elections too! Every two years we elect our chapter's president, vice-president, treasurer, and secretary. Nominations were open all summer. Chapter members may vote in person at our October 8 evening program or our October 14 business meeting, or by mailing the ballot below by October 10, 2008.

Mail the ballot to: Election, North Coast CNPS, P.O. Box 1067, Arcata CA 95518-1067 by October 10.

- President** Carol Ralph Write in _____
- Vice-President** Felicity Wasser Write in _____
- Secretary** Frances Ferguson Write in _____
- Treasurer** Cara Witte Write in _____

CREATING A COASTAL MEADOW

Your help needed on October 11 and/or October 25.

by Ken Burton

Board Member of Friends of Arcata Marsh

As wonderful a place as the Arcata Marsh and Wildlife Sanctuary is, it certainly is not a pristine environment. Originally part of Humboldt Bay, it is now a mosaic of salt water, estuarine, freshwater, and upland habitats that are home to a variety of species. Unfortunately, invasive, exotic plants such as Himalaya blackberry, poison hemlock, wild radish, teasel, fennel, Eurasian grasses, sweet pea, Chilean cordgrass, and many other non-natives compete with native plants for resources, often crowding them out.

Many of these exotic plants are too firmly established to be eradicated and some do provide valuable wildlife habitat and food. However, it is both practical and desirable to try to shift the balance in favor of native species in some areas. In addition to the new McDaniel Slough restoration project, current restoration efforts at the Marsh are focusing on Mt. Trashmore, the central, gentle hill and the old landfill site. Not only is it mostly overgrown with exotics, but the City of Arcata's objective for managing Mt. Trashmore is to prevent the establishment of woody vegetation, whose roots could penetrate the landfill cap and cause leakage.

Friends of Arcata Marsh (FOAM) is teaming with CNPS to replace the exotic plants and woody native plants now growing on the site with a mix of native grasses and herbs such as tufted hairgrass, cow parsnip, rush, and wild aster. Since last year, volunteers have been collecting seeds of these plants. The City will mow the site this fall and on October 11 and 25 will sponsor volunteer workdays to pull up root crowns of unwanted species and disperse the collected seeds.

Please join us at the Marsh on October 11 and/or 25 to participate in this exciting project. Help us realize our goal of turning Mt. Trashmore into something resembling a native prairie.

9:00 a.m. - 1:00 p.m. Come for all or part.

Wear work clothes, and closed-toe shoes. Bring gloves and a shovel if you have them. Drinks and snacks will be provided. On Oct 11 meet at the sharp bend of South I St. On Oct 25 meet at the big lot at the end of South I St. Call Arcata Environmental Services at 822-8184 for workday information. Contact Ken (brdnrd@sbcglobal.net) if you want to help collect seeds.

**CNPS, North Coast Chapter
P.O. Box 1067
Arcata, CA 95518**

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CALENDAR

How to know what's happening:

1. Go to our Web site, www.northcoastcnps.org and/or
2. Send an e-mail

NorthCoast_CNPS-subscribe@yahoo.com to subscribe to our announcements e-mail list.

DATE	EVENT
OCT 4, SAT	PICNIC
OCT 8, WED	PROGRAM
NOV 2, SUN	HIKE
NOV 12, WED	PROGRAM
DEC 10, WED	PROGRAM
JAN 14, WED	PROGRAM

JOIN THE NORTH COAST CNPS!

By joining CNPS you:

- Add your voice to that of other native plant enthusiasts wishing to increase awareness, understanding, appreciation, and conservation of California's native flora.
- Receive the quarterly journal *Fremontia* (the statewide newsletter), our chapter's quarterly newsletter, *Darlingtonia*, and the Northcoast Environmental Center's (NEC) newsletter, *EcoNews*.
- Receive discounts at local businesses (see page 9 for the details)

Membership fees: Individual \$45; Family \$75; Student or Limited Income \$25 (Membership fee minus \$12 is tax deductible).

To join or renew, you can either:

- Send your name and address, check (payable to CNPS) or credit card information to CNPS, 2707K Street, Suite 1, Sacramento, CA 95816-5113.
- Pay on-line <http://www.cnps.org/cnps/join/>

Please notify the state office and/or our Membership