

Darlingtonia

Newsletter of the North Coast Chapter of the California Native Plant Society Dedicated to the Preservation of California Native Flora Spring 2009 April-June

TRACYINA ROSTRATA PROJECT

by Pete Warner, Rare Plant Coordinator for Sanhedrin Chapter published in Sanhedrin Chapter Newsletter, winter/spring 2009 (reprinted with permission)

In spring 2008, through a cost-share agreement between the CNPS North Coast Chapter and the U. S. Forest Service, several members of the Sanhedrin Chapter participated in surveys for Tracyina rostrata, a rare annual species (CNPS List 1B.2) in the Asteraceae [Compositae; sunflower] family]. We initially looked for plants at known occurrences at the Hopland Research and Extension Center (HREC), where the plant has been observed most years over the past decade, in order to develop a better sense of the species in its habitat. We then turned our eyes to Mendocino National Forest (MNF), where we surveyed grassland and oak woodland areas identified through the application of a *Tracyina* habitat model developed from



Tracyina photograph courtesy of Peter Stearns

environmental data from known occurrence locations.

While the model predicted locations of potential habitat reasonably well, we failed to see a single Tracyina plant, either at HREC or in the national forest. Several explanations can be offered for the lack of plants at HREC in 2008, although we know little about year-to-year variation for this population, let alone for the species across its entire range (Sonoma, Mendocino, Lake, Humboldt Counties). Among the more plausible hypotheses, a very dry and cold late winter and spring could have precluded necessary soil-moisture or -temperature conditions for seed germination. Otherwise, competition from non-native grasses and herbs could be a factor in reducing population sizes, especially when juxtaposed with unknown environmentally sensitive physiological and life history traits for the plant. In the national forest, the environmental conditions were also relevant, along with the possibility that the taxon simply doesn't exist there. Both HREC and the forest have been or are grazed by livestock (cattle or sheep), although grazing itself does not appear to result in loss of the species, based on observations over the past decade at Hopland.

In 2009, we may continue to survey habitat polygons in the MNF, albeit with some adjustments to protocols, and provided funding is available. I also intend to begin surveys for Tracyina in May at HREC,

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Where to find what's happening:

Visit our website:www.northcoastcnps.org

Sign up for our announcements e-mail: NorthCoast_CNPSsubscribe@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.

April 11, Saturday. **Burnt Ranch and Grays Falls day trip.** The very early bloomers, like fawn lily, Indian warrior, and trillium, will be finishing, and some later bloomers will be opening, like iris, "spaghetti flower", dogwood, larkspur, lomatiums, pussy ears, mission bells, etc. We'll watch for Easter bunnies as we check the fawn lilies and the rare Howell's montia (A hand lens helps!) at Burnt Ranch Campground and then explore the varied habitats at Grays Falls Picnic Area, including the short trail down to the falls. Hopefully we'll have time for some short stops as we return along Highway 299. Meet at 8:30 a.m. at Pacific Union School, 9;15 a.m. at the Buttercup Bakery in Willow Creek, or about 10:00 at Burnt Ranch Campground. Dress for the weather; bring lunch and water and clippers (If the Himalaya blackberry is still bad, we can spend a few minutes reducing it.) Return late afternoon. It helps to know you are coming: Carol 822-2015.

April 18, Saturday. 10:00 a.m.-12 noon. **Flowers in a Redwood Forest.** An easy walk through Fortuna's Rohner Park with Carol Ralph and Janelle Egger will look for early flowers and their pollinators. We will also identify trees, shrubs, ferns, and herbs in this remarkable, mature second growth forest. Turn off Main St. onto Park St. (by 16th St.) and meet at the red Fireman's Pavilion. 822-2015.

April 26, Sunday. 1 pm **- Wildflower walk in grand fir forest near Hydesville**, hosted by landowners Bill and Linda Shapeero. This small property has more species than you'll find along the trails in most public preserves. From Eureka, take 101 south past Fortuna to a left at Drake Hill Road, then right at Rohnerville Road, 1.7 miles to Puddin Lane (bottom of gulch). Follow signs to Shapeero. The ground may be damp, so bring boots or old shoes. For information call 822-7190 or 768-3287

May 2, Saturday. 3:00-4:30 p.m. **Amazing Adaptations of Dune Plants.** Join a Friends of the Dunes docent on a dune walk from the Manila Community Center, 1611 Peninsula Dr., when you go to the Spring Wildflower Show and Native Plant Sale. Meet in front of the main hall. 822-2015.

May 3, Sunday. 1:00-3:00 p.m. **Sequoia Park Plant Walk.** Get to know the plants in our own remnant, second growth, redwood forest in Eureka. See trillium, candyflower, mitella, four species of fern, willows, and the invasive, non-native species that threaten them. Also see where weed warriors have rescued the natives from the invasive English ivy. Meet botanist Liz McGee at the fountain at the south end of T St., at T and Glatt Sts. 443-5139.

May 3, Sunday. 1:30-3 p.m. **Dune Insects and Plants.** Join a Friends of the Dunes docent to look for pollinators, herbivores, and predators in action in the dunes by the Manila Community Center, 1611 Peninsula Dr., when you go to the Spring Wildflower Show and Native Plant Sale. Meet in front of the main hall. 822-2015.

May 9, Saturday. 2-4 p.m. **Cream Cups in the Eureka Dunes.** Join the California Native Plant Society to see the show of cream cups and other wildflowers in these protected dunes. Walk 1-2 miles on sand. Meet at the Samoa Boat Ramp near the south end of Route 255. 822-2015.

May 17, Sunday. **Bald Hills Day Trip.** The prairies and woodland on this ridge of Redwood National Park offer much more than great shows of lupine--iris, lomatiums, delphiniums, blue dicks, shooting stars, and more. We will walk short distances from various stops along the road, adjusting to the energy of the group. Dress for the weather, remembering it could be cooler up on that ridge. Bring lunch and water. Meet at Pacific Union School (3001 Janes Rd., Arcata) at 8:30 a.m. or arrange another place. Return late afternoon. It helps to know you are coming. Carol Ralph 822-2015.

May 24, Sunday. 1:00-3:00 p.m. **Azalea Reserve Plant Walk.** See many of our native plants that are recommended for gardens, both shrubs and herbs, including the native azalea, which should be blooming. Take North Bank Rd. off 101 just north of the Mad River; after a little more than one mile turn left on Azalea Dr., and shortly after that, left into the parking lot. Pete Haggard 839-0307.

May 30, Saturday. **Mail Ridge Day Trip.** Dyerville Loop Rd. along this ridge is the inland, scenic route from Myers Flat to Garberville. It offers panoramas to the east, oak woodland, grazed grasslands, and road cuts, all of which provide rich, roadside botanizing. From trilliums to goldfields, hounds tongue to meadowfoam, delphiniums to iris; shooting stars, false baby stars; wall flower, popcorn flower, firecracker flower; tomcat and bull clovers; sky, miniature, and silver lupines--it's all there. We will walk 1-2 miles along the road, a packed gravel road, respecting the private property. Dress for the weather, remembering the higher elevation there; bring lunch and water. Meet at 8:30 a.m. at Pacific Union School (3001 Janes Rd., Arcata), 9 a.m. at the Mervyns end of Bayshore Mall parking lot, or about 10 a.m. in Myers Flat. Return late afternoon. Tell Carol 822-2015 you are coming.

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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.

- April 8 **"Blooming Beauties and Graceful Glaciers in the Swiss Alps** " by **Birgit Semstrott** The Swiss Alps are rich in botanical treasures and beautiful landscapes. Botanist Birgit Semsrott will share her pictures of Grindelwald, Switzerland. Located in the Bernese Oberland Region, Grindelwald is in the heart of a massive mountain range and surrounded by majestic, ice-clad peaks. Many of Birgit's pictures were taken at Schynige Platte Alpine Garden, one of only a few botanical gardens in the world that show alpine plants in their natural environment
- May 13 **"Hidden Treasure—navigating the forest Service's Celebrating Wildflowers website*** Forest botanist for the Shasta-Trinity National Forest, **Julie Nelson**, will take you on a journey through the website, focusing on he newly posted piece on serpentine plants and plant communities of northwestern California and adjacent Oregon. Forest Service botanists have poured their collective knowledge and passion for plants into the Celebrating Wildflowers website, yet the site still is undiscovered by most plant lovers. Whether you are a teacher, gardener, hiker, photographer, weed warrior, plant conservationist or just want to know more about plants of your national forests and grasslands, there is something here for you: http://www.fs.fed.us/wildflowers/
- Sept. 09 To be announced
- Oct. 14 **"The Rare and Beautiful Flora of Death Valley National Park**" with botanist **Dana York**
- Nov. 11 To be announced
- Dec. 10 Members Show and Tell Night



HUMBOLDT BOTANICAL GARDEN FOUNDATION GARDEN TOUR SHOWS NATIVE PLANTS

Sunday, June 28 is the 2009 Humboldt Botanical Garden Foundation Garden Tour. This year's gardens are in Eureka and Jacoby Creek. At least five gardens on the tour feature native plants. The gardens are open 10 a.m.-5 p.m. Tickets and details are forthcoming.

The tour benefits the botanical garden, which has large native plant components. Part of the mission statement of HBGF is "To work with schools, colleges, universities, agencies, individuals, and organizations to promote the study, use and preservation of native plants and other species." HBGF can be reached at 442-5139 or www.hbgf.org/



May 16-17. Landscaping with Northwest Native Plants.

Discover which northwest native trees, shrubs and flowers adapt to life in a cultivated landscape. Learn which plants transplant well, offer seasonal color and easy maintenance, attract wildlife, and are available at nurseries. While at it, learn to identify local native trees and shrubs to expand your botanical knowledge. Rachel will show some basic propagation techniques so you can get more of your favorites from those plants easiest to grow. More Information: 541– 597-8530 / institute@thesfi.org / www.thesfi.org

2009 offerings:

- April 3. Day Hike--Damnation Creek Trail. \$50 •
- May 7-20. Klamath River Canyon Wildflower & Plant Identification. \$270. At Sandy Bar Ranch. •
- May 16. Blooms and Birds Family Field Course. \$25
- May 6. Wetlands and Riparian Ecology of the Klamath-Siskiyou Region. 450 •
- May 16-17. Wildland Grasses. \$100 •
- May 16-17. Landscaping with Northwest Native Plants. \$100 •
- May 17. Rough and Ready; Birds and Botany. \$50 •
- May 22-24. Crash Course in Plant Identification--western Siskiyous. \$160
- Jun 6. Noxious Weeds 101. Free •
- June 14. Botany for Beginners. \$50. In Ashland. •
- June 19-21. Advanced Plant ID: Asteraceae. \$180.
- June 23-25. Redwoods Coastal Tidepools & Wildflwoer Bluffs. \$170. In Crescent City. .
- June 26-28. Advanced Plant ID: Gramminoids. \$180 •
- June 26-28. High Desert Botany. \$125. At Lava Beds.
- July 24. Day Hike--South Kelsey Historical Trail. \$50 •
- July 25. Conifers. \$50
- Sept. 19. Trees and Shrubs of the Illinois Valley. \$50
- Sept. 25. Backroad Scenic Van Tour--Redwoods. \$50

NORTH COAST CNPS VOLUNTEER CORNER

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

Ŵ Thank You!

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Ŵ Adam Canter, Sunny Loya, Virginia Waters, and Barbara Kelly for leading plant walks.

Ŵ Welcome Aboard Ŵ

- Frank Milelzcik as Hospitality Assistant. • °N M
 - Katy Allen as Wildflower Show Refreshment Provider.

Ŵ **Volunteers Needed**

- **Econews Reporter.** Submit our calendar items to *Econews* on the 15th of each month. An important cog in our publicity machine. Without publicity, our planning is wasted.
- . Elo Elo Elo : Wildflower Show Queen Bee (or drone). The coordinator of this beautiful, botanical, and social event gets to hear appreciation from the community. Worker bees are in place, jobs and timeline are defined, we just need the person to oversee.
- °¶ ₩ **Booth Designer.** Use your artistic, graphic design, and advertising skills to help us make our booth display more effective. ° M

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. Table Bluff County Park February 28, 2009 by Carol Ralph

On the last day of February thirteen people hungry to be outside and eager to find signs of spring ignored the intimidating, wet weather forecasts and had a great, dry day walking about 3 miles round trip along the dirt vehicle track and through nearby habitats south of the parking area at the bottom of Table Bluff, where the road turns north to South Spit. Our lunch break on ancient logs and dune mat was enriched by a vigorous discussion of the evolution of birds and the philosophy of taxonomic names.

In this short distance we distinguished a variety of habitats, all devoid of trees. First, mostly to the west of road, was the dune mat, including variations. A fine, diverse lichen crust and tiny plant turf caught our attention, especially when we found it sprinkled with the tiny, white flowers of *Lepidium nitidum*, a tiny peppergrass. The 4-petaled flowers and flat, round seed pods told us it was a crucifer (family Brassicaceae). Here was a world to explore on your belly, if you could avoid squashing it or putting your knees or hands on the prickly seeds of sand mat *Cardionema* ramosissima. There were seedlings of Gilia, finely pinnately divided leaves, possibly the rare *millefoliata.* Tiny, light green, palmate leaves were the common Aphanes occidentalis, which never gets much bigger in this setting and seeds prolifically despite total lack of petals on its unnoticeable flowers (and it's in the rose family!). Tiny, gray, triangular-leaved, cudweed-like seedlings might have been the rare *Hesperevax* sparsiflora var. brevifolia, which would not be much bigger when it bloomed. Scattered around these small-scale meadows were the macro dune plants, beach buckwheat Eriogonum latifolium, seaside daisy Erigeron glaucus, dune goldenrod Solidago spathulata, and sea thrift Armeria *maritima*. The thrift in particular formed pure stands, checkerboards of grass-like leaf tufts, each bearing a single, erect, gray, old stalk with a gray pompom on top.

Creeping over the dunes from the beach side was the tide of *Ammophila arenaria* European beachgrass invading the remaining dune mat. Small, scattered tufts of *Ammophila* were in the edges of dune mat, clearly spreading underground. Occasional dune mat plants were among the large *Ammophila* clumps where they had not yet coalesced. The beachside foredune and the swale between it and the inland dune were both deserts of *Ammophila*. Coyote brush *Baccharis pilularis* was established in it. In one little clearing we found four hand-sized piles of carrot family seeds, last year's crop of a few beach silvertop *Glehnia littoralis*. The beach itself was covered with a remarkable quantity of large driftwood. The remarkable beach traveller, sea rocket *Cakile maritima*, the one with the deeply lobed leaves, was there too.

East of the road the dune mat transitioned to wetlands, first offering zones of grassland. Some were thick with robust, non-native grasses and with creeping rushes. Others were short, fine grasses, with room for some of our belly plants among them. Here was the treasure of the trip, the yellow-green, flattened rosettes of footstepsof-spring Sanicula arctopoides, each claiming its patch of turf. If these rosettes were spaced in a line, they could look like flattened grass footprints. Tucked in the centers of a few rosettes were tight heads of tiny, yellow flowers, a good find for any hardy pollinators out this early in spring. We saw only 25-30 plants of this umbellifer and wondered why it was concentrated in that one "Sanicula Flat."

Beyond the narrow grassland a fringe of shrubs marked the edge of a long arm of the Eel River estuary. Shrubby coastal willow Salix hookeriana showed us its first, silky catkins. This tree was female. Tiny, two-headed pistils peeked out of the fuzz. We spotted angelica by its 4-foot-tall, old flower stalks. The lush, dark green new leaves were emerging in a thick tuft at the bases of the stalks. We saw at least one Angelica hendersonii, with finely fuzzy undersides of the leaves, and many *Angelica lucida*, with glabrous leaves. The one blooming individual had the greenish white flowers and the long bractlets of this latter species. Along the slough edge the gumplant Grindelia stricta, pickleweed Salicornia, and saltgrass Distichlis spicata told us that the water was brackish.

Call it winter; call it early spring. Whichever it was, we are spoiled here to be seeing at the same time diminutive but important blooms of very early spring--*Lepidium nitidum, Sanicula arctopoides, Claytonia exigua, Cardamine oligosperma* bittercress, *Salix hookeriana*--and a

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CNPS 2009 CONSERVATION CONFERENCE SCHOLARSHIP RECIPIENT COMMENTS

The North Coast Chapter has a tradition of sending students to conferences. We gave out 14 scholarships to Humboldt State University students (twelve undergraduates and most botany majors) so that they could attend this conference and have the potential to be inspired into natural resource careers. Here are comments from some of the recipients:

"Thanks to the North Coast chapter of the CNPS for giving me the opportunity to explore major issues for California species conservation. The conference did an excellent job at fulfilling it's title: "Strategies and Solutions." It also gave participants the chance to talk one on one with researchers from all over the state and from diverse backgrounds. As a student, I found that their were many opportunities to introduce myself the professionals and ask questions pertaining to native species conservation and other ecological issues." Patrick Reilly

"At the conference I went up to the Jepson table and asked about the American-Iranian Botany Program. Luckily Dr. Ertter, who is involved with the program, was walking passed me and I was introduced to her. I told her about my plans to go to Iran and do a collection for my senior project. Now, she is helping me get set up to go this summer. It was a great opportunity for networking." Sasan Hariri

"I had a great time at the CNPS Conference. I learned not only about the native endemics and threatened species of California, but also about the diverse habitats where they occur, including vernal pools, Siskiyou Mountains, deserts, and serpentine outcrops, to mention just a few. I enjoyed hearing about the types of conservation strategies that local chapters and land managers are engaging in to preserve the rich flora of the state. Additionally, the interactions among fellow graduate students and researchers was invaluable. And finally, I was able to take a native, Arctostaphylos refugiosum, home from one of the native nurseries along with a bumper sticker; 'I killed my lawn, ask me how.' " Simona Augyte

"Briefly, I should tell you what I expected. I was under the impression that there would be lots of posters, and there were, but didn't understand that there would be so many speakers. It was astonishing to find that so many people were involved in the protection/management of rare and endangered species in California. However it's a shame that the common people haven't a clue about the threat that suburban development posses to our California environment. One particular topic of interest to me was seminar on the "Ethics of a Professional Botanist". The speaker called out a need for oversight of professional botanists to ensure that they are doing their job morally. Keeping the interests of the flora and fauna second to none. In general I found the trip enlightening and most beneficial to me in my academic goals." Elena George

"The 2009 CNPS conference was incredible! I was particularly moved by Jerome Ringo's powerful keynote address which stressed the importance of environmental ethics. He called for us to instill these values into younger generations and above all inspire awareness. Without knowledge of the issue, he said, how could we hope to change it." Philip Wright,

"I felt inspired by my immersion in the discussions and research conducted by the leading plant biologists and conversationalists. I am incredibly fortunate, as an undergraduate, to have experienced and participated in the issues concerning the management and preservation of California's native flora. I feel that my attendance at the conference allowed for a more linear vision as to what my future professional goals should be and will be. I am thankful for the diligence of the CNPS to host such an amazing event that has the capacity to truly produce results." Megan Kavanaugh

"I had a great time overall. The speakers were amazing and I loved the variety of people from botanists to a lawyer I saw speak. There were also young people fresh out of graduate school and people who have been in the conservation business for years. After I went I really felt like I was one step closer to being prepared to be a botanist one day from hearing about other peoples experiences, successes and studies. I really loved the botanical art display, there are definitely some very talented people out there. The booths in general were very informative and I loved wandering around in between speakers. I had a wonderful time and I hope to go again next year. "Adrienne Simmons

"The convention for me was exciting and overwhelming. I felt so honored to be surrounded by other people who love plants like I do. The energy there was inspiring; so much work being done on how to help our planet through the plant kingdom. It opened my eyes about how much work there still needs to be done, that was the overwhelming part. The convention has made me decide to become more active in my CNPS chapter because it truly is an amazing organization." Rhiannon Korhummel

STEERING COMMITTEE MEMBERS/CONTACTS

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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 email 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 donjzeman@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.

NORTH COAST CNPS WILDFLOWER SHOW AND AND PLANT SALE

Free Admission

SPRING WILDFLOWER SHOW

May 1, 2, and 3

Fri 1-5, Sat 10-5, and Sun 10-4

- Hundreds of wildflowers from seashore to mountains, labeled and displayed by family in vases and pots
- Displays of plant life in the dunes and in the redwood forest, of invasive plants, of edible wild plants, and of local insects
- Presentations by Tsnungwe Families on using native plants, Donna Wildearth on gardening with native plants, George Meindl on California pitcher plant, and an herbalist on wild medicínals
- Artists' Night--free drawing workshop with Rick Tolley and friends, Friday evening
- Continuous slide show of lilies and other favorites by Dave Imper
- Guided walks in the dunes
- Books to browse
- Wildflower posters for sale

You can help this festive event! We need people to collect flowers, identify them, arrange them, set up tables, work shifts at tables, bring refreshments for volunteers, lead school groups, etc. We have small

and big jobs, indoor and outdoor jobs, public and behind-the-scene jobs. Most jobs require no botanical knowledge.

For more information: see our web site www.northcoastcnps.org or call 822-2015/822-7190.

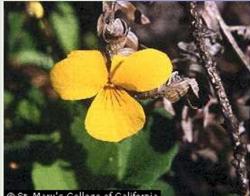
Manila Community Center 1611 Península Dr., Manila (between Arcata and Samoa Bridge off Hwy 255)

NATIVE PLANT SALE

May 2 and 3

Sat 10-5 and Sun 10-4

- Trees and shrubs
- Perennials, including ferns and bulbs
- Annuals
- Experienced gardeners to help you
- Bring the beauties of Humboldt's forests, meadows, and dunes to your garden!



Proceeds support the North Coast Chapter's Activities

For Information: 441-9545

a St Mary's College of California

Photograph of Viola sempervirens (Evergreen Violet) by Brother Alfred Brousseau Courtesy St. Mary'ys College of California

- Cash and checks accepted
- Bring your empty flower pots for re-use



North Coast Chapter of the California Native Plant Society www.northcoastcnps.org Dedicated to the Preservation of California Native Flora

DARLINGTONIA

MORE THAN JUST FLOWERS

The Spring Wildflower Show is more than "just" flowers. It provides information about each flower-its names, its uses, its range, its toxicity, is it native or not. It shows flower art created by artists at the show. It has showy, local insects that eat plants. It shows what plants are invasive in our area, that we should keep out of our gardens. It features two special, local habitats, the dunes and the redwood forest. It shows some edible wild plants. It offers stunning photographs of many showy flowers not currently blooming. At the Native Plant Sale alongside it provides native plants to take home and create your own little piece of natural habitat. Its scheduled activites cover varied topics:

Friday May 1

- Show open 1 p.m.-5 p.m.
- 10 a.m.- 2 p.m. School groups tour the show.
- 7:00 p.m. "Art Night" free drawing workshop with live music, Rick Tolley and friends

Saturday May 2

- Show open 10 a.m.- 5 p.m.
- Plant Sale 10 a.m.-4 p.m.
- "Designing Native Plant Gardens" by Donna Wildearth
- 11a.m. 1:00 p.m. wild medicinals--to be announced
- 10 a.m.-12 noon and 2 p.m.-4 p.m. Edible plant table hosted by Frank Milelzcik
- 3 p.m.-4:30 p.m. "Amazing Adaptations of Dune Plants" a walk with a Friends of the Dunes docent

Sunday May 4

- Show open 10 a.m.-4 p.m.
- Plant Sale 10 a.m.-4 p.m.
- 11 a.m. "Meet the Cobra Lily" by George Meindl
- 12 noon "North Coast Plants Used by Native People" by the Tsnungwe Families
- 1:30 p.m.-3 p.m. "Dune Insects and Plants" a walk with Friends of the Dunes docent

If you would like to be involved in presenting this marvelous array of wild plant fun, call 822-2015 or 822-7190.

THIRD CONFERENCE ON KLAMATH-SISKIYOU ECOLOGY: "SUSTAINING BIODIVERSITY IN A CHANGING ENVIRONMENT" MAY 28TH – MAY 30TH, 2009 IN SELMA, OREGON.

The Deer Creek Center for Field Research and Education, the Siskiyou Field Institute and Southern Oregon University are pleased to announce this conference that will bring together scientists, resource managers, and engaged citizens to discuss the scope and consequences of environmental change in the ecologically diverse Klamath-Siskiyou bioregion. The conference will include a broad spectrum of topics including, (1) forest ecology and management, (2) watersheds, rivers, and fish, (3) wildlife ecology, (4) endemic and sensitive species, (5) forest pathogens and invasive species, and (6) hidden diversity ("the small things that run the world"). "One of our main goals is to advance knowledge about environmental change," says Andrew Englehorn, Conference Coordinator. "The Siskiyous have long been known among ecologists as one of the most biologically diverse places in North America. The research presented at this event will bring science to the public, providing a forum to discuss the impacts of a changing environment in this bioregion." Dr. Susan Harrison, Department of Environmental Science and Policy, University of California, Davis will deliver the keynote address entitled "Revisiting Robert Whittaker: Botanical Responses to Climate

> Change in the Klamath-Siskiyous." For further information, please contact Andrew Englehorn at the Siskiyou Field Institute (<u>andrew@thesfi.org</u>; 541-597-8530) or visit us on the website at <u>www.thesfi.org</u> for updates and registration information.

MEMBERS' CORNER

WELCOME TO OUR NEW MEMBERS

Allen, Roberta Calabrese, Trinity Davis, Martha S. Dieter, Michael DiPaolo, Dominic Hunt-Von Arb, Alexandra Irwin, Rosamund Korhummel, Rhiannon March, Sara McCullough, Christine Rolin, Gregory Sesser, Kristin Van Mantgem, Philip

THANK YOU TO OUR RENEWING MEMBERS

Adams, Marjorie E. Allen, Roberta Allison, Carol Anderson, Helen G. Anderson, Paul Andreoli, Anthony Augyte, Simona Baefsky, Dr. Pauline M. Bailey, Ingrid Bailey, Melinda Barker, Linda M. Beaupre, Colette Begnoche, Donna Belsher-Howe, Jim Berman, Jennifer Birks, Carl Bishop, Korrin L. Bitton, Pat M. Blume, Katherine Boothe, Richard D. Brucker, Peter Coleman, Lesa D'Arpino, Marisa Dobak, Jan Dusheck, Diana Eickhoff, Kaylea

Elk, Joan Evans, Consuelo Fahey, Nancy Ford, Brenda Graham, Christy Green, Shayne Hamilton, John D. & Jackie Harvey, Bret Hino, Stanley Hogue, Jeff Humboldt Redwoods Inter. Assn. Ingle, Bojan Jenican-Beresford, Chris Justice, Alan Kenny, Mary Jo Klein, Stephanie Knight, John Knight, Marla A. Kraus, Nona LaBlanca, Tony Leppig, Gordon Leroy, Tom & Susan Lisin, Cheryl Lova, Sunny Markowitz, T. Zephyr McGee-Houghton, Elizabeth Miller, Audrey Miller, Ken Mone, Carol Naylor, Wanda Newman, Allison Orlandini, Rita Palazzo, Michele Palladini, Jennifer Peterson, Eric Poklemba, Allison Popham, Gail Ryan, Pete Ryerson, Diane Sibbet, Laing Stansell, Veva Tietz, Jim Wade, Nezzie Watson, Louise Wildearth, Donna Wilson, Jessica Woodward, Hope

MEMBERSHIP BENEFITS

Support these local businesses and receive discounts on your purchases. Please show proof of your North Coast membership to receive the discount.

•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

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

BOOK REVIEW By Donna Wildearth



BRINGING NATURE HOME: HOW NATIVE PLANTS SUSTAIN WILDLIFE IN OUR GARDENS Douglas W. Tallamy, Portland, OR: Timber Press, 2007.

If I ruled the world, this book would be required reading for all gardeners, birders, and of course all native plant aficionados! Douglas Tallamy is a professor and chair of the Department of Entomology and Wildlife Ecology at the University of Delaware. He has written a passionate, carefully argued book explaining why using native plants in our gardens is not just a nice idea, but crucially important, particularly in suburban areas. In his words: "All plants are not created equal, particularly in their ability to support wildlife. Most of our native planteaters are not able to eat alien plants, and we are replacing native plants with alien species at an alarming rate, especially in the suburban

gardens on which our wildlife increasingly depends. My central message is that unless we restore native plants to our suburban ecosystems, the future of biodiversity in the United States is dim."

Tallamy explains the important role insects play in transferring energy from plants to animals in higher trophic levels. He notes that insects are especially important to birds--in fact, 97% of terrestrial bird species in North American rely on insects and other arthropods (typically spiders that eat insects) to feed their young. He then goes on to explain why, as a general rule, native insects can't eat alien plants. This is largely due to the fact that plants protect themselves from predation by producing an array of physical and chemical defenses. In the majority of cases, only insects that have co-evolved with a specific plant for thousands of generations are able to overcome these defenses and use the plant for nourishment.

In a research study he conducted, Tallamy found that: "... native plants produced over 4 times more herbivore biomass than did alien species and supported 3.2 times as many herbivore species. When I compared natives and aliens in terms of their production of Lepidoptera and sawfly caterpillars—the largest diet components of insectivorous birds—I found that the native plants in the study supported a whopping 35 times more caterpillar biomass than the aliens. We know that most bird populations are limited by the amount of food they can find, so if there is 35 times less food available for birds in habitats that comprise primarily alien plants, there will be 35 times less bird biomass in those habitats as well."

In a chapter entitled "What Should I Plant?", Tallamy explores which native species produce the most insect biodiversity. And in a chapter entitled, "What Does Bird Food Look Like?", he takes readers on a guided tour through the life-cycle of various "creepy-crawlies", complete with striking photographs and fascinating facts. (There's a wonderful picture of his young daughter with a very large cicada on her nose!)

He goes on to discuss the problem of exotic invasive plants and to debunk the conventional gardening wisdom that a garden devoid of insects is a desirable goal. Tallamy contends that, on the contrary, only a garden with a dynamic population of insects is healthy and capable of sustaining itself.

As a landscape designer, I have advocated the use of native plants for many years, but after reading this book I feel a new sense of urgency about this issue. The good news is that, as gardeners, we *can* make a difference. As Tallamy concludes: "... Because food for all animals starts with the energy harnessed by plants, the plants we grow in our gardens have the critical role of sustaining, directly or indirectly, all of the animals with which we share our living spaces. ... Which animals will make it and which will not? We help make this decision every time we plant or remove something from our yards."

(Continued from page 1) and , perhaps, at other historically documented sites. Conservation of this taxon will require enhancing and sustaining observations at known locations, including monitoring of populations and refining our knowledge of the plant's habitat and life-history traits. Until we can achieve a better understanding of this taxon, the model will



Tracyina photograph courtesy of Peter Stearns

remain a thoughtful yet tantalizingly inconclusive attempt to predict its whereabouts

MORE ABOUT THE TRACYINA PROJECT By Sydney Carothers and Lisa Hoover

The cryptic annual *Tracyina rostrata*—beaked Tracyina—was described by S. F. Blake in the journal Madroňo in 1937 and was named for local botanist Joseph Prince Tracy, who discovered the taxon in annual grasslands near the town of Alderpoint in 1903. While *Tracyina rostrata* has been documented from several locations in the Lower Eel River watershed over the past 100 years, it has not been verified in Humboldt Co. since 1997. And while *Tracyina* has been on the Regional Forester's Sensitive list for the Mendocino and Six Rivers national forests (NF) since 1990 based on a historic record from the Mendocino NF and potential habitat on both forests, it has not yet been encountered in botanical field surveys on either forest.

A Challenge Cost-Share Agreement was developed in 2007 between the respective national Forests and the North Coast Chapter in cooperation with the Sanhedrin Chapter of CNPS. The objective of the cost-share was to collate existing information on population status, location, and habitat variables in order to stratify the landscape and guide survey efforts on the two National Forests. After consultation with those most familiar with the taxon, a habitat "model" was developed by Tom Carlberg. The product was based on a compilation of biotic and abiotic variables that are likely to be biologically important to the taxon, including plant community, soil type, precipitation amounts, elevation and aspect. Survey areas were based on the resulting GIS maps.

Before commencing surveys on the Six Rivers NF, CNPS members Sydney Carothers, Jen Kalt, and Frannie Martin searched the site most recently documented for *Tracyina* in Humboldt Co., a location above Dobbyn Creek near Alderpoint. This site was intensively examined in three separate surveys during May and June but *Tracyina* was not located, nor was it found at other historic sites surveyed on the Six Rivers NF. Likewise Peter Warner of the SanHedrin Chapter visited

(Continued on page 13)

AN INVITATION TO THE HAGGARD GARDEN

Pete and Judy Haggard have been gardening with natives for many years at their Fieldbrook home, and they generously share their accumulating knowledge and their garden. Their one-acre lot has a corner devoted to native plants grouped into habitats, and elsewhere natives are interplanted with horticultural species, many edible. Like any garden, this one is always changing, by design or by natural event or process. Pete guides it with the native wildlife, of all sizes, in mind.

This summer Pete and Judy are offering the public two opportunities to visit the garden in small groups, to learn how Pete is building habitats and how critters small and large appreciate it, to see diverse native plants in a garden setting, and to ask questions.



For reservations and directions call 839-0307. Suggested \$5 donation to the chapter. Limited to 12 guests each day.

June 21, Sunday. 1:00-3:00 p.m. Summer Solstice in a Native Plant Garden. See what is blooming on the longest day of the year. Everything from annuals (clarkia), herbaceous perennials (lilies), shrubs (ninebark), trees (oaks), herbs (angelica & yerba buena) and lichen can be found.

July 12, Sunday. 1:00-3:00 p.m. A Buzzy Day in a Native Plant Garden. Native Bees, one of the important forms of wildlife encouraged in this garden, should be busy at the flowers. Learn some bee basics and then explore the garden to see what is being pollinated by whom and where their nests are.

(Continued from page 12)

Hopland Research Station where a known location exists. Weekly visits from mid-May to mid-June yielded no findings of Tracyina in the summer of 2008.

Pilot visits of potentially suitable habitat polygons (based upon the model effort) were visited and field data were collected. Habitat criteria that were consistent across the polygons visited include: open grassland and grassland/oak woodland interface, seasonally mesic soils, low to moderate slopes, and lower to mid-slope positions with either springs up-slope or near-surface hydrology within the habitat. An additional habitat variable not used in the model but consistent across polygons was the presence of dry and rock or fast-draining soils.

Further surveys of potential habitat on the National Forests will be contingent on finding *Tracyina* at known locations in Humboldt and Mendocino counties this spring. Locally, we'll be looking for *Tracyina* in well-documented historic locations in the Lower Eel watershed in May and June, and we welcome any volunteers who would be interested in helping us search for this elusive plant. If you would like to join us in our pursuit of this enigmatic little yellow composite, please contact Lisa Hoover at 441-3612 (<u>lhoover@fs.fed.us</u>) or Sydney Carothers at 822-4316 (<u>sydneyc@humboldt1.com</u>).

We can use your Fremontias

If you have no further use for issues of *Fremontia*, the magazine that comes from state CNPS, you can bring them to us. We will give them to people interested in learning about CNPS.



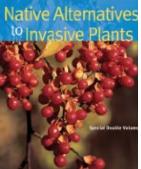
NATIVE ALTERNATIVES TO INVASIVE PLANTS Book Review By Stephanie Klein

Environmental Scientist

Lately we have heard about the deleterious

effects invasive plant species has on our economy, environment, and wildlife. Plant guides are available on the market to help identify and get rid of these unwanted weedy plants in our landscape. But as an ecological restoration practitioner, I have been grappling with how to fill the niche. Without a comprehensive invasive species manual for the northwest I have had to do a





lot of literature reviews to identify the appropriate native plants to regenerate these degrading lands. While attending the CNPS conference in Sacramento I was fortunate to come across the Native Alternatives to Invasive Plants, a book published by Brooklyn Botanic Garden- an all regions guide. This book is laid out in a user friendly format for anyone interested in plants. This book is an encyclopedia of native alternatives. This book covers all strata from trees, shrubs, vines, grasses and herbaceous groundcovers, and includes invaded ranges, pictures and resources for additional information. This book is all encompassing and highly recommended to anyone working plants



For a limited time (until June 1), CNPS is offering a special incentive to new members!

Join online (www.cnps.org) at the \$45.00 member or higher levels and we'll send you one of three of our beautiful wildflower posters: Wildflowers of the Desert, Wildflowers of the Coast, or Wildflowers of the Redwood Forest.

STRETCHING FEDERAL FUNDING TO CONDUCT LONG-TERM MONITORING AND RESEARCH Poster presented at the January 2009 CNPS Conservation Conference

by Jennifer Kalt and Sydney Carothers

Many of the North Coast's most sensitive species occur primarily on lands managed by the U.S. Forest Service, which is faced with declining funding for rare plant monitoring and research.

Through several Challenge Cost-Share Agreements with Six Rivers National Forest, the North Coast Chapter has conducted various long-term monitoring and research projects since 1991. Through these agreements, we have provided expertise and volunteers to monitor rare species, to develop conservation assessments and strategies to inform federal land managers, and to collect the consistent, long-term monitoring data that agencies are unable to guarantee due to inconsistent funding.

THE CHALLENGE COST-SHARE PROGRAM

Congress initiated the Challenge Cost-Share Program in 1986 to encourage direct public involvement in managing wildlife and fish habitats on the national forests and grasslands. Congressional funding of Forest Service Challenge Cost-Share projects is contingent upon receipt of matching contributions.

The goal of the Challenge Cost-Share Program is to maintain and enhance the fish, wildlife, and endangered species resources of the National Forest System through active partnerships between the Forest Service and conservation and service organizations, other government agencies (Federal, State, and local), private groups, and individuals. This partnership approach is strengthening the Forest Service's ability to restore, maintain, and enhance habitats, while expanding knowledge of the flora and fauna of our public lands.

Through cost-share programs, the North Coast Chapter has provided expertise and volunteers to monitor rare species, to develop conservation assessments and strategies to inform federal land managers, and to collect the consistent, long-term monitoring data that agencies are unable to guarantee due to inconsistent funding sources.

Nationally, the Forest Service Wildlife, Fish, and Rare Plants Challenge Cost-Share program grew from 57 partners and 120 projects in 1986 to nearly 2,200 partners and over 1,800 projects in 2000.



Dave Imper downloading data from soil data loggers at the Lassics Botanical Area



Tony LaBanca counting Lassics lupine (*Lupinus constancei*) at the Lassics Botanical Area



Sydney Carothers counting Howell's jewelflower (*Streptanthus howellii*) fruits, Smith River National Recreation Area



"National Forest management today involves carrying out more tasks with fewer resources....Either less gets done, what gets done is done poorly, agency workers get much more productive, or they find alternative ways to acquire needed resources... perhaps the best opportunity for dealing with resources constraints lies in forming relationships with groups outside the agency that leverage needed capabilities and resources."

-Yaffee & Wondolleck, Building Bridges Across Agency Boundaries The Six Rivers National Forest Cost Share Program has funded many important projects, including:

- 1991: A Field Investigation of the Two-Flowered Pea, *Lathyrus biflorus.*
- 2004: Monitoring and Status of Bensoniella oregona at Rooster Rock
- 2005: Surveys of Historic Locations for Forest Sensitive Plants in the Smith River National Recreation Area
- 2006: Conservation Assessment for Four Upland Serpentine Endemics in the Smith River National Recreation Area
- 2006: Post-Fire Monitoring of Gentiana setigera and Viola occidentalis ssp. primulifolia in Serpentine Fens
- 2007: Darlingtonia Fen Conservation Strategy 2009: Lassics Botanical and Geological Area Conservation Strategy

The chapter appreciates the staff of the Six River National Forest for making these projects possible, with special thanks to Lisa Hoover and John McRae. June 5, 6, 7, Friday, Saturday, Sunday. Illinois Valley-Deer Creek Center-Rough & Ready Botanical Area day trips and overnights. The Deer Creek Center of the Sisikiyou Field Institute in Selma, Oregon, will be our headquarters for exploring this special corner of Oregon. (See Winter 2008 Darlingtonia.) It provides camping (\$6/ person), dormitory (\$12/person), or private room (2) (\$50/couple) communal kitchen facilities. (See www.thesfi.org>Stay at DCC) On Saturday starting at 9 a.m. we will walk across Deer Creek to explore an enormous Darlingtonia fen, and later drive up Eight Dollar Mountain for more botanizing fun. Sunday we will head south and spend some hours at Rough and Ready Botanical Area. We will be at Deer Creek Center Friday and Saturday nights. You may stay elsewhere and join us at any point. It is a bit less than 3 hours from Arcata. You must make your own reservations at the center: 541-597-8530x307, Mon-Thurs 9-4, or candy@thesfi.org. Tell them you are with CNPS. Tell Carol 822-2015 you are coming.

June 13, Saturday. 10 a.m.-12 noon. **Elk River Trail in Headwaters Forest.** Learn many of our common redwood forest and streamside plants, both native and non-native, with BLM botanist Jennifer Wheeler. She will also tell what BLM has done to rehabilitate this easily accessed, historic corner of a famous forest. The trail is paved and gentle, good for any weather. From 101 exit onto Elk River Rd. After 1.5 miles take right fork; after 4.5 more miles at the bridge fork right; go 1 mile more to the trailhead parking lot. 822-2015.

June 14, Sunday. 1:00-3:00 p.m. **Blooms and Bugs at Mad River Beach.** Join Pete Haggard to see blooming beach buckwheat, seaside daisy, sand verbena, and others and to watch for pollinators in action. Easy walking, partly on sand, partly on swale. Meet at the beach parking lot at the very end of Mad River Rd. 839-0307.

July 11, Saturday. **Waterdog Lake: Plant, Butterfly, and Bird Day Hike.** A CNPS-Audubon joint event. Famous for its butterfly diversity, tiny Waterdog Lake is our destination on a two-mile trail through diverse mountain habitats: white fir and Sadler oak; regeneration from the 1999 Megram Fire; creekside mountain alder thicket; gravelly bald; wet, rocky hillside; red fir; and a small, sedgy meadow (with gentians) around the land-locked pond. The trail gains about 1,000 ft elevation, starting at 5,300 ft., but is not steep. Bring lunch, snack, at least 2 quarts water, and many layers of clothing. Meet at 7:30 a.m. sharp at Pacific Union School (3001 Janes Rd., Arcata) or arrange another place. Two hour drive to the trailhead northeast of Hoopa. Return 6 p.m. or earlier. Call Carol 822-2015.

July (25)26-28, (Saturday), Sunday, Monday. **Bear Basin Butte Day Hikes and Overnight.** Great roadside botanizing, a great day hike trail, and a spectacular overnight spot at 5,300 ft. in Smith River National Recreation Area by the Bear Basin Butte Botanical Area. We have reserved the lookout and cabin for Sunday and Monday nights. The itinerary will develop around that. Tell Carol 822-2015 soon if you are interested. The cabin is about 3 hours from Arcata, 45 min. from Gasquet. Non-campers could join us for the day activities.

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.

(Continued from page 5)

few exceedingly late or exceedingly early blooms--*Angelica lucida, Solidago spathulata, Grindelia stricta, Fragaria chiloensis, Armeria maritima--*and blooms of some long-blooming species-- *Claytonia perfoliata* miners' lettuce, *Senecio vulgaris* groundsel, *Stellaria media* chickweed, *Bellis perennis* English daisy, *Cakile maritima* sea rocket, *Polygonum paronychia* dune knotweed. Our climate allows a certain degree of asynchrony in blooming, and these species take advantage. We saw many species that were not tempted by mild weather, that were waiting for their proper seasons. They promised a later show-- cream cups *Platystemon californicus*, sea thrift, lupines *Lupinus bicolor, arboreus, rivularis*, gilia, dune tansy *Tanacetum camphoratum*, seaside daisy, beach buckwheat, beach pea *Lathyrus littoralis*. In any season these dunes deserve a visit.

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How to know what's happening:

1. Go to our Web site, <u>www.northcoastcnps.org</u> and/or

2. Send an e-mail

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

DATE	EVENT
April 8 , WED	PROGRAM
April 11 , SAT	DAY TRIP
April 18 , SAT	PLANT WALK
APRIL 26, SUN	PLANT WALK
MAY 2, SAT	PLANT WALK
MAY 3, SUN	PLANT WALK
MAY 9, SAT	PLANT WALK
MAY 17, SUN	DAY TRIP
MAY 24, SUN	PLANT WALK

GO TO PAGES 2 AND 3 FOR MORE PLANT WALKS, DAY TRIPS, AND PROGRAMS

JOIN THE CNPS NORTH COAST CHAPTER!

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

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 Chairperson if your address changes.

MEMBERS—see your membership expiration date on the first line of your newsletter's address label.