

# Darlingtonia

WINTER 2012  
Jan—Mar

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

## THE CALIFORNIA PHENOLOGY PROJECT - and how you can participate

**By Stassia Samuels, Plant Ecologist,  
Redwood National and State Parks**

Phenology -- the study of seasonal biological events, such as the flowering and fruiting of plants and the spring arrival of migratory bird species-- is one of the simplest ways to detect the effects of climate change on the living world. Phenological monitoring offers people in all walks of life the opportunity to learn and to practice observational and scientific skills while re-connecting with the rhythms of their local environment.

In order to recruit and to engage California residents in the collection and interpretation of plant phenological data, the National Park Service (NPS), the University of California-Santa Barbara, and the National Phenology Network (NPN) established a new state-wide phenology monitoring program, The California Phenology Project (CPP).

The CPP has had a very productive first year. With guidance from dozens of California botanists and ecologists, the CPP identified over 60 plant species as high-priority species for phenological monitoring in California; these species were selected based upon their ability to encourage public participation, address key scientific questions, and inform natural resource management in California's public lands (to see the CPP focal plant species, please visit [www.usanpn.org/cpp](http://www.usanpn.org/cpp)). In its first year, the CPP has been active in six of California's National Parks: our local Redwood NP, plus Lassen Volcanic NP, Golden Gate NRA, Santa Monica Mountains NRA, Joshua Tree NP, and Sequoia and Kings Canyon NPs, representing coastal, mountain and desert bioregions.

### How you can participate

As the CPP prepares for the second year of phenological monitoring across California, we seek to engage Citizen Scientists to aid in observing phenological events. We are especially excited to work with the CNPS community of plant enthusiasts, and the six pilot

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## Find out what's happening:

- Visit our website:  
**[www.northcoastcnps.org](http://www.northcoastcnps.org)**
- Sign up for our email  
announcements  
**[NorthCoast\\_CNPS-  
subscribe@yahoo.com](mailto:NorthCoast_CNPS-subscribe@yahoo.com)**

## FIELD TRIPS AND PLANT WALKS

**Please watch for later additions** on our Web site ([www.northcoastcnps.org](http://www.northcoastcnps.org)) or sign up for e-mail announcements ([Northcoast\\_CNPS-subscribe@yahoo.com](mailto:Northcoast_CNPS-subscribe@yahoo.com)).

Outings are open to everyone, not just members. All levels of expertise, from beginners to experienced botanizers, are welcome. Address questions about physical ability requirements to the leader.

**February 26, Sunday. Patrick's Point Day Hike.** Mosses and ferns are thriving in February. We will see 9 species of fern, a spikemoss (*Selaginella*), and various mosses. We will analyze the coastal bluff vegetation, much of it evergreen, as a planting plan for bank stabilization. We will see Bishop pine, two species of angelica, three of plantain, and look for an early bloom of milkmaid, skunk cabbage, or black trailing currant. We will walk 2-4 miles on the level, beautiful trails in this state park, being sure to pass through the native plant garden. Bring lunch and water; dress for a day outside. Meet at 9:00 a.m. at Pacific Union School (3001 Janes Rd., Arcata) or 9:30 at the visitor center in Patrick's Point State Park. If you don't want to support State Parks with your \$8 park entrance fee, park outside and walk in or join another car. Information: Carol Ralph 822-2015

**March 24, Saturday. Willows at the Blue Lake Fish Hatchery, Day Trip.** Besides fish and birds the hatchery has wonderful thickets of deciduous shrubbery, including ....willows! We will study them, cottonwoods, other shrubs, and anything else that catches our fancy along informal trails through this riparian habitat along the Mad River. If we have time, we might then walk along the riverside dike from the bridge or go look at willows at the Pump Station Park on Warren Creek Rd. Bring lunch and water; dress for the weather. Meet at 9 a.m. at Pacific Union School (3001 Janes Rd., Arcata) or 9:20 at the hatchery in Blue Lake. Information: Carol Ralph 822-2015

**April 22, Sunday. E-Ne-Nuk and Bluff Creek Day Hike.** The summer flowers last year at E-Ne-Nuk Campground, on Highway 96 near Orleans, suggested that spring could be fun too, and the Bluff Creek Trail was enticing. Rock faces and jumbles, a grove of oaks and conifers, a grassy old stream bed, and gravelly, serpentine slopes all offer possibilities, including fawn lilies. The trail begins by winding up a steep hill. Dramatic geology is all around, where in recent history Bluff Creek burst through a ridge to reach the Klamath River more directly. Bring lunch and water; dress for a day outside. Meet at 8:30 a.m. at Pacific Union School (3001 Janes Rd., Arcata) or arrange another place. Information: Carol Ralph 822-2015.

## Save the Date

# Spring Wildflower Show

May 4-6

**Admission is free!**

Located at the familiar: Manila Community Center, 1611 Peninsula Dr

*Want to join the team preparing and presenting the show?* Contact Richard Beresford at [thegang7@pacbell.net](mailto:thegang7@pacbell.net) or 826-0259. Many tasks do not require botanical knowledge; just a willingness to help make this Springtime Extravaganza a success!

*Are you an educator interested in bringing your school group to the show on Friday, May 4?* Contact Brian Dykstra at (616) 558-0404 or [brianjdykstra@gmail.com](mailto:brianjdykstra@gmail.com).

## CHAPTER PROGRAMS AND MEETINGS

### EVENING PROGRAMS

The North Coast Chapter of CNPS ([www.northcoastcnps.org](http://www.northcoastcnps.org)) offers 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 p.m.; program at 7:30 p.m. For information or to suggest a speaker or topic contact Audrey Miller at [taudreybirdbath@suddenlink.net](mailto:taudreybirdbath@suddenlink.net) or 786-9701.

Botanical FAQ's: At 7:15 p.m. Pete Haggard or some other presenter shares a brief, hands-on demonstration and discussion of some botanical topic. (Previously advertised as "Botanical Prelude.")

- Jan 11** **Butterfly-insect-flower relationships in Humboldt Co.** Lured into butterfly watching by the large species, such as swallowtails and admirals, people inevitably want to know about the small species, such as hairstreaks, blues, and skippers, as well as other common insects that forage on flowers. **Bob Stewart**, all-around naturalist since 1962, veteran interpreter, and author of two photographic butterfly books (Common Butterflies of California, 1996 and Arizona Butterflies, a photographic guide in 2001.), will help in this pursuit by sharing photos, information, and tales of common butterflies and other flower-visitors and their relations to host and nectar plants.
- Feb 8** **The Big Story of Plant Evolution, from a Predator that Ate Photosynthesis to a Modern Flower** by **Frank Shaughnessy**. A long, long time ago, in a puddle far, far away a cyanobacterium produced oxygen during photosynthesis and changed the planet forever. Meanwhile, unicellular predators were swimming around consuming smaller cells like these, one of which continued to live inside the predator host rather than being digested. Thus evolved our first plant about 1.5 to 2.5 billion years ago. Descendants of this event include the red and green algae of the sea and the freshwater green algae from which land plants evolved about 500 million years ago. The subsequent radiation of terrestrial plants included adaptations for vertical growth, light capture, water conservation, and independence from the ancestral reliance on water for sexual reproduction. And the story continues....
- Mar 14** **Touting Trillium – Woodland and Shade Garden Essentials.** Lore, Myths and Much Much More. Terminology, propagation, culture and companions (if time allows.) **Russell and Yvonne Graham** have grown Trilliums and other specialty woodland perennials, both native and exotic, since moving to their property in 1972. They operated a mail order nursery, emphasizing native perennials for 25 years from their location near Salem, in Oregon's Willamette Valley
- Apr 11** **A Native Plant Garden Story.** Eureka residents **John and Vickie Patton** will share the inspiring story of their growing passion for native plants and the transformation of a weed-filled wasteland into a lush garden retreat.
- May 9** To be announced.



Join the North Coast Chapter of CNPS and other fans of local native plants at

<http://www.facebook.com/NorthCoastCNPS>

## VOLUNTEER CORNER

Phone Carol 822-2015 or write [theralphs@humboldt1.com](mailto:theralphs@humboldt1.com) to volunteer, ask questions, or make suggestions.

### Thank you!

On behalf of the plant sale committee; we wish to thank all of the volunteers that made the plant sale held in September such a success. To those that helped out on by assisting with set up, checking in and out the nurseries, answering plant questions, working the cashier table and helping with take-down after the sale – a Big Thank You – we could not have done this without all of your help! Those who volunteered are: **Kathy Dilley, Ron Johnson, Richard Beresford, Chris Brant, Randi Swedenburg, Judie Hinman, Donna Wildearth, Bev Zeman, Sabra Steinberg, Felicity Wasser, Jen Kalt and Sylvia White.** The sale also could not have occurred without the assistance of all of the individuals who grew and provided plants, who “baby-sat” plants between sales, and who divided or dug out native plants from their own yards for us to sell – another Big Thank You to all of you! Three local nurseries also participated by providing plants for our plant sales: **Humboldt Fish Action Council, Samara Restoration and Freshwater Farms.** These nurseries all provided the great shrubs, trees and perennials that we do not grow ourselves.

If we have missed anyone, our sincere apologies on our oversight! **Our next sale** will be held during In conjunction with the Spring Wildflower Show, **Saturday, May 5<sup>th</sup> and Sunday, May 6<sup>th</sup>.** See you there!  
Chris Beresford and Anna Bernard

**Volunteers needed.** Big jobs and small, every one important.

- **T-Shirt Quartermaster.** Store our inventory (2 large boxes) of chapter t-shirts, supply t-shirts to outreach events, and keep track of them.
- **North Coast Journal Reporter.** Submit our events to the calendars of this publication.
- **Tri-City Weekly Reporter.** Submit our events to the calendars of this publication.
- **Chief Outreach.** Keep our display and handouts in good shape for use at various public events, about 6/year. Other volunteers staff the table (booth).
- **Science Fair Award Coordinator.** A brief job once each year in March to reward students for studying native plants.
- **Writer.** Use a template and consult reference books to write descriptions for a team-effort flora of the redwood forest. Or write your kind of thing for this newsletter!
- **Plant Propagators for NC CNPS Plant Sales.** No experience is required - we will show you how to start seedlings and transplant! Would you like to contribute to our biggest fund-raisers and help to support the Chapter and it's many activities? Contact Chris Beresford, Plant Sales Coordinator at 707 826-0259. To be notified of future plant activities, join the NC CNPS Gardening with Natives Group by sending an email to [NorthCoast\\_CNPS\\_Gardening-subscribe@yahoogroups.com](mailto:NorthCoast_CNPS_Gardening-subscribe@yahoogroups.com)

### Jepson eFlora (<http://ucjeps.berkeley.edu/IJM.html>)

The Jepson eFlora initially parallels the second edition of The Jepson Manual, Vascular Plants of California, which is the work of 300 authors and editors being published by the University of California Press. The eFlora includes all of the taxonomic treatments of the print Manual and has in addition treatments for taxa that were excluded from the print Manual because of doubts about naturalization status. Interactive distribution maps linked to specimen data from the Consortium of California Herbaria are included. Words that were abbreviated to save space in the print Manual have been expanded. Keys are linked to the treatments to which they refer. Accepted names and synonyms can be searched for. The eFlora is linked to the Jepson Online Interchange, and from there to numerous electronic tools. The Jepson Herbarium will work with the treatment authors and users to keep the eFlora in sync with advances in California botanical knowledge.

**Looking at Lichens' Day Hike**  
**November 5, 2011**  
**By Brian Dykstra**

"They [lichens] are the sort of winter greens which we gather and assimilate with our eyes." Henry David Thoreau (1859)

we still learn about them in botany class and hear them referred to as plants today. The Kingdom Plantae in the strictest sense (*sensu strictissimo*) no longer includes the fungi, algae, or cyanobacteria. But it is thought that the photosynthetic abilities of plants (*sensu strictissimo*) originated eons ago with the cyanobacteria, which were engulfed by other organisms and eventually became the chloroplasts found in plant cells today. Wow!



On the walk we learned about some different growth habits of lichens (foliose, fruticose, crustose) and found foliicolous lichens growing on evergreen huckleberry (*Vaccinium ovatum*) leaves. We examined sugar (*Pertusaria*), pixie cup (*Cladonia*), frog pelt (*Peltigera*), old man's beard (*Usnea*), secret writing/pencil script (*Enterographa*), horse-hair (*Bryoria*), lace (*Ramalina*), and eye-lash (*Parmotrema*) lichens. Eye-lash lichens are commonly used as hummingbird nest camouflage. Lichens have many important ecological roles and can be indicators of environmental quality.

I had to leave early, but joined another lichen walk one week

I joined the 'Looking at Lichens' day hike led by **Tom Carlberg** on Saturday, November 5, 2011. Weather conditions on Horse Mountain were a little too cold and snowy so we went to the Ma-le'l dunes on the Samoa peninsula, where the moistness of the day made for a perfect lichen foray. We used our hand-lenses and stopped often. Our experienced guide answered all our questions, explained lichen biology, and showed us a variety of lichens.

Lichens are composite organisms made of a fungus and one or more photosynthetic partners. The fungi have been described as agricultural, in the sense that they benefit from the food (carbohydrates and nitrogen) produced/fixed by the algae and/or cyanobacteria (aka blue-green algae) that grow within them. The photosynthetic partners benefit from having a protective physical structure. It is a symbiosis, without which the fungal species, for whom the lichen is named, would fare very poorly. In the not so distant past, lichens and their components were included in the Kingdom Plantae, which is why

later, being led by Tom at North Ma-le'l Dunes, where we see gold dust lichen (*Chrysothrix candelaris*), reindeer lichen (*Cladonia*), plus an orange-colored green alga (*Trentepohlia*) growing alone on tree bark, free from its "scripted" symbiosis with *Enterographa*. We all stop to examine some speckled frog-pelt lichens (*Peltigera leucophlebia*), and I experience a moment of wonder, as the concept takes hold: in that one lichen are three biological kingdoms living in a one tight symbiosis. Phenomenal!

"There is no such colyrium or salve for sore eyes as these brightening lichens in a moist day. Go and bathe and screen your eyes with them in the softened light of the woods." Thoreau (1859)

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**Waterdog Lake  
August 13, 2011  
by Carol Ralph**

Enticed by the butterfly fame and montane location of Waterdog Lake, on a perfect summer day twenty CNPSers and Auduboners caravanned up the dirt roads out of Hoopa into the western side of the



Admiring the monument plant in a sea of hackelia and coyote mint. Note the many snags from the 1999 fire.

Trinity Alps Wilderness of Six Rivers National Forest. Planned annually since 2008, twice cancelled due to forest fires, once dropped because of numerous fallen trees blocking the access road and the trail, this trip was long anticipated. Road and trail blockages will continue to be a problem, as the trees killed in the 1999 Megram Fire are decayed and falling readily. Forest Service crews had recently cleared trees and made water bars on both road and trail, making the trailhead accessible to even 2WD vehicles and the trail easily passable. The trailhead, at 5,300 ft., serves the Mill Creek Lakes Trail as well as the Waterdog Lake Trail. The latter climbed steadily, and occasionally steeply, to a crest on the shoulder of North Trinity Mountain before descending to the lakes. Without botanizing it would be about a two-hour walk to Waterdog Lake.

The trail started in an unburned stand of white fir (*Abies concolor*) with a wonderful, thick undergrowth of a shrub with broad, tough leaves, whose oak affiliation always surprises newcomers. This was Sadler oak (*Quercus sadleri*), one of our Klamath Mountain specialties. Soon we were among gray, straight spires, the skeletons of the previous forest, emerging from the green cover of shrubs and

herbs, and softened by scattered clumps and individuals of surviving firs (*Abies spp.*) and cedars (*Calocedrus decurrens*). We soon had spotted four common wintergreen family denizens of mountain forests: Prince's pine (*Chimaphila umbellata*), little prince's pine (*Chimaphila menziesii*), one-sided wintergreen (*Orthilia secunda*), and white-veined wintergreen (*Pyrola picta*). An inconspicuous, trailside plant with bedstraw-like leaves and tiny, pink, flowers on long peduncles was *Kelloggia galioides*.

Soon we arrived at the one stream crossing and shady, wet patch. It was rich with species familiar from coastal habitats (some finished blooming): tailed wild ginger (*Asarum caudatum*), columbine (*Aquilegia formosa*), baneberry (*Actaea rubra*), monkshood (*Aconitum columbianum*), twisted stalk (*Streptopus amplexifolius*), candyflower (*Claytonia sibirica*), star Solomon's seal (*Smilacina stellata*), enchanter's nightshade (*Circaea alpina*), western trillium (*Trillium ovatum*), leopard lily (*Lilium pardalinum*). Among the less familiar faces were three giant relatives of coastal species: mountain boykinia (*Boykinia major*), three-leaf woodsorrel (*Oxalis trilliifolia*; large leaves, several flowers/inflorescence), and tall phacelia (*Phacelia procera*;



Waterdog Lake

clumps of robust stems 1 m tall or more). A green false hellebore (corn lily) (*Veratrum viride*), was notable, growing alone in this shady spot, green flowers on drooping branches of the inflorescence.

In contrast, a bit farther was a sunny meadow packed full of waist-high stickseed (*Hackelia sp.*) going to seed, clumps of coyote mint (*Monardella odoratissima*) in flower, and mats of sulphur buckwheat (*Eriogonum umbellatum*) in bud. Emerging majestically from this floriferous mix were

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## STEERING COMMITTEE MEMBERS/CONTACTS

<b>President</b>	Carol Ralph	707-822-2015	theralphs@humboldt1.com
<b>Vice President</b>	Felicity Wasser	707-616-9974	wasserfw@yahoo.com
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<b>Field Trips and Plant Walks</b>	Carol Ralph	707-822-2015	theralphs@humboldt1.com
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<b>T-Shirt Sales</b>	Position Open		Contact Carol Ralph
<b>Workshops</b>	Gordon Leppig	707-839-0458	gleppig@dfg.ca.gov
<b>Wildflower Show</b>	Richard Beresford	707-826-0259	thegang7@pacbell.net
<b>CNPS Chapter Delegate</b>	Larry Levine	707-822-7190	levinel@northcoast.com
<b>NEC NC CNPS Representative</b>	Jennifer Kalt	707-839-1980	jenkalt@gmail.com

### 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](http://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](http://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](mailto: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. We have a seat on their board of directors.

The NEC is the only organization with which we share our mailing list. We think it is important that our members receive *EcoNews*, an informative publication about conservation issues in our area. Our chapter pays NEC to mail *EcoNews* to our members who are not also NEC members. You can reduce this cost to our chapter by joining NEC at [www.yournec.org](http://www.yournec.org) or requesting your *EcoNews* be electronic (contact [jenkalt@gmail.com](mailto:jenkalt@gmail.com)).

### 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](mailto: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.

## MEMBERS' CORNER

### WELCOME NEW MEMBERS

TOM PRATUM / PEGGY LEVITON  
AYALA TALPAI  
TAYLOR JOHNSON  
ADRIANNA WENZEL  
BRYAN DUNN  
BIANCA HAYASHI  
CHRISTOPHER STEENBOCK  
ROSALIND LITZKY  
ROGER PRYOR  
SONIA WARAICH

### THANK YOU RENEWING MEMBERS

TOM ALLEN / KATY ALLEN  
BARNEY BARTELLE  
COLETTE BEAUPRE  
BUREAU OF LAND MANAGEMENT  
JIM BELSHER-HOWE  
ANNA BERNARD  
NANCY BUCK  
FRANK CALLAHAN  
SUSAN CAMPBELL  
SYDNEY CAROTHERS  
GWYNETH CAROTHERS / PAUL  
CAROTHERS  
KATHRYN CORBETT  
MATTIE CULVER  
DOMINIC DIPALO  
DIANA DUSHECK  
BILL EASTWOOD  
JANELLE EGGER / NEIL PALMER  
YVONNE EVERETT  
GARY FALXA  
BRENDA FORD / ROBERT SNYDER  
NED FORSYTH  
DAWN GRAYDON  
MELINDA GROOM  
PETE HAGGARD / JUDY HAGGARD  
DEBRA HARRISON / GREG  
BLOMSTROM

JUDITH HINMAN  
JEFF HOGUE  
GAIL HOVORKA  
DAVID IMPER  
BOJAN INGLE  
CHRIS JENICAN-BERESFORD /  
RICHARD BERESFORD  
LAURA JULIAN  
MICHELE KAMPRATH  
BARBARA KELLY  
LAURIE LAWRENCE  
DAVID LEABERRY  
GORDON LEPPIG  
JULIE MCNIEL  
JAN MOUNTJOY / BOB MOUNTJOY  
JOHN NICKLAS  
JOHN PATTON / VICTORIA PATTON  
ANDREA PICKART  
C. RALPH / CAROL RALPH  
ROBERT REINSVOLD  
JOSEPH ROBERTS  
DIANE RYERSON  
BRADLEY THOMPSON / KAREN  
SHEPHERD  
DONNA THOMPSON / THOMPSON  
JAMES WATERS / VIRGINIA WATERS  
WILLIAM WOOD  
BOB WUNNER  
DANA YORK

### MEMBERSHIP BENEFITS

Support these local businesses and with proof of your North Coast membership, receive discounts on your purchases.

- ◆ **Bamboo & Maples**, 10% discount on plants, 445-1281
- ◆ **Freshwater Farms**: 10% off plant purchases, 444-8261
- ◆ **Greenlot Nursery**, 10% discount on plants, 443-9484
- ◆ **Mad River Gardens**: 10% discount on plant purchases, 822-7049
- ◆ **Miller Farms**: 5% discount on plant materials, 839-1571

◆ **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

◆ **Samara Restoration LLC**, 10% discount on plants, 834.4379 / samararestoration.com

### 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, and *Darlingtonia*.
- ◆ Receive discounts at local businesses

Membership fees:

- ◆ Individual \$45; Family \$75; Student or Limited Income \$25
- ◆ Organization (For consultants, companies, agencies, small nonprofits, and nurseries) - Details at <http://cnps.org/cnps/join/organizations.php>

To join or renew, you can either:

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

Please notify the state office when your address changes. Email [cnps@cnps.org](mailto:cnps@cnps.org) and put 'Member Address Change' in the subject line.

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



## **TRANSFORMING A BIG PROBLEM INTO A BIG FEATURE** (Part 2 in a series)

**By Randi Swedenburg**

Fall of 2008 brought with it high hopes of planting our native garden but a major obstacle loomed before us. We had not figured out how to divert all the rainwater from going under our house. We watched the rain flow over our grass, puddle around our front steps and flow into the perpetual lake under our house for yet another winter. We were stuck in indecision; we had been successful with our first native garden in LA and wanted to solve the problem ourselves. Another fall was approaching and we realized if we were ever going to have a garden, we needed advice from experienced people.

In Fall of 2009, we sought professional help. We hired a local company, Streamline Planning Consultants to assist us in our project. They sent a soil scientist and a landscape designer to visit and assess our yard. Our focus was on the soil analysis and how to divert the flow of water flooding under the house, but we opted for a design drawing and a plant list as well to help us jump-start our project. We met and shared our vision of a native garden, including as many edible native plants as possible. Their botanist compiled a list of possible plants, so with drawing in hand, plant list and some knowledge about our clay soil, we ----- procrastinated and let another winter wash over our grass-covered yard and flow under our house.

In August of 2010, we made the commitment to begin our landscaping adventure and took our first step. Step one consisted of removing the massive 15 ft. tall, 6 feet wide privet hedge that spanned 45 feet across the front of our yard and had stood watch over the yard for some 35+ years. Once the hedge was gone, all that stood between the neighborhood and us was a chain link fence. We went from a very private yard to an exposed yard in a few hours. We were definitely on display, we had better keep moving on our project.

During the following month, September, I volunteered to help at the Fall CNPS plant sale and

while helping to unload plants I struck up a conversation with Suzanne from the Humboldt Fish Action Council. I shared with her what we were doing to manage our drainage problem and how we were trying to find plants that could tolerate standing in water in the winter, and yet be dry all summer. She said, sounds like a seasonal wetland. Yes! That name described exactly what we were attempting to create. I was able to use that concept to guide my online research regarding plants that could straddle both the wet and the dry world. I was surprised to learn how many plants could thrive in that environment. I made plans to contact Suzanne in a month or two to discuss possible plants for our seasonal wetland.

The end of October found us in the yard measuring out our seasonal wetland. We estimated its size based on the square footage of the roof. Our lot is a large rectangle, 80ft. by 112ft. with the house along the northern property line and the yard lies all along the south side of the house. The downspouts from the gutters delivered rain from the roof into the yard and under the house. We needed to get that water away from the house, across the path and into the wetland. This put the wetland about 16 feet from the house and smack dab in the middle of our yard. I now realized the sunniest prime location in the garden would be underwater for several months of the year. We laid out the hose to form the shape of our wetland. We marked out a sort of lopsided hourglass with a skinny middle and two round large ends, with one end bigger than the other. It measured roughly 37 ft long and at the widest point, 12 ft. and about 2.5 feet deep. Once we decided on the shape, we sprayed it with pink marking paint.

We hired a friend with a mini excavator to dig our wetland. We rented a sod remover and removed a two-foot swath of grass along the edge of the wetland. We set about to kill the grass around the wetland and throughout the yard by covering it with cardboard and topping it off with rice straw. My husband discovered a great source of large cardboard boxes, auto body shops. He extended the gutters downspouts to empty into the wetland

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and then we sat back to observe. At this point, our wetland was a dirt hole surrounded with cardboard, topped with straw. I am sure our neighbors thought we were crazy. (See photo with cardboard).

In November, the rains tumbled down and we watched as our wetland swelled with water. We were amazed at how quickly it filled up. The first night of rain found us peaking out our kitchen window in the middle of the night to see what was happening. The sound of the heavy rain was now wedded to the thought, how much water can the wetland absorb? The rain continued and we awoke one night, reached for the flashlight and shone it on our wetland, it had filled to overflowing. We realized we had to make it deeper and wider, especially in the middle. We enlarged it and put in another pipe to drain any overflow to the alley. Now it was definitely a major feature of our yard.



Late November, Kathy Dilly, who worked with Suzanne, came to our yard to measure the wetland to help figure out how many plants we needed. Kathy was instrumental in helping us with details about how to create our wetland. She suggested we

first line it with shredded redwood bark and then river rocks of various sizes, termed cobble at Taylor Landscape Supplies.



The next step was to plant sedges (*Carex obnupta*) in the bottom, reeds (*Juncus effuses*, *Juncus patens*) along the sides and a beautiful collection of plants to adorn the edges. Kathy supplied me with a list of appropriate plants and I chose the following:

- Beach strawberries (*Fragaria chilensis*)
- Monkeyflower (*Mimulus guttatus* and *cardinalis*)
- Yellow-eyed grass (*Sisyrinchium californicum*)
- Red twig dogwood (*Cornus sericea*)
- Ninebark (*Physocarpus capitatus*)
- Aster (*Aster chilensis*)
- Camassia quamash

I purchased most of the plants as rootstock, except the Red Twig Dogwood and the Ninebark, which were in 1 gallon pots.

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4-5-foot columns of monument plant (*Frasera speciosa*, for awhile *Swertia radiata*) packed with green flowers and developing fruits. Where it was studied in the Rocky Mountains, this member of the gentian family bloomed at an average age of 30-40 years (range 20-80 years) and then died. We knew it looked special!

Some of us took the "fir challenge," focusing on the trees we passed. From the flat-sprayed, small-coned white firs we progressed into the tight-sprayed, large-coned firs that could be red (*Abies magnifica*) or noble (*Abies procera*). These higher elevation firs had J-shaped needle bases, grooves on the top sides of the needles, and exerted bracts entirely covering the surfaces of the cones. In some books these characters would make it noble fir. The newest The Jepson Manual distinguishes Shasta red fir (*A.*



Large cones of noble fir or Shasta red fir. As in all true firs (as opposed to Douglas-fir), the cones sit upright on the branches and disintegrate there.

*magnifica* var. *shastensis*) from noble fir by relatively short awns (narrow points) on the bracts. Our photos suggested short awns. As usual, this left us ....confused, but with more practiced eyes.

Less ambiguous were the showy umbellifers along the path. The widespread, familiar cow parsnip (*Heracleum maximum*, formerly *H. lanatum*) held its sturdy, flat-topped, clusters of white flowers above its very broad, dark green, hairy leaflets. Somewhat less robust, but still a large presence, the gray-green *Angelica tomentosa*, was glaucous (white, waxy coating) and had slightly rounded umbels, swollen petiole bases, and fairly simple, smooth leaflets.



## BUTTERFLIES

By Bob Stewart

The weather was great for butterflies for the North Trinity Mountain hike. Maybe 2011's heavy snowfall and late spring threw butterflies off their game, as butterfly diversity on this trip wasn't as high as it sometimes is around North Trinity Mountain. Nonetheless, a number of winged beauties were around, occasionally stopping to give us good looks. Hoffman's checkerspot butterflies seemed always around to keep things interesting. Blues were also in good numbers—while often hard to identify, we found at least 3 species: acmon blues, greenish blues and silvery blues. A treat at our lunch stop was a gorgeous common buckeye that perched with wings spread, long enough for many to get good looks. For those that hiked to the top of North Trinity Mountain, one quest, great spangled fritillary, was a no-show, but pale swallowtails were abundant. Finally, a notable observation was the many conifers with bark stripped near the base. The narrow, parallel grooves left behind in the exposed wood showed this to be the work of porcupines, who strip the bark and feed on the underlying cambium layer. Porcupines have been fairly scarce in the mountains of NW California, so it was good to see they were around.

A partial list of butterflies observed:

- Duskywing (*Erynnis* species)
- Pale tiger swallowtail (*Papilio eurymedon*)
- Western tiger swallowtail (*Papilio rutulus*)
- Sulphur species (clouded sulphur?- *Colias philodice*)
- Acmon blue (*Icaricia acmon*)
- Greenish blue (*Plebejus saepiolus*)\*
- Silvery blue (*Glaucopsyche lygdamus*)
- Zerene fritillary (*Speyeria zerene*)
- Callippe fritillary (*Speyeria callippe*)
- West coast lady (*Vanessa annabella*)
- Common buckeye (*Junonia coenia*)
- Lorquin's admiral (*Limentitis lorquini*)

\*Pictured—Note the small orange spot near the base of the underhind wing, but more importantly distinguishing it from a Boisduval's Blue, the under front wing spot rows are about the same intensity of darkness instead of the second row being much darker.

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Less robust yet, but still a meter tall, Gray's lovage (*Ligusticum grayi*) had smaller umbels and smooth, dark green foliage divided celery-like into pointed leaflets.

At the crest the trail crossed a dusty flat thick with lupines (*Lupinus sp.*), pussypaws (*Calyptridium monospermum*), jewelflower (*Streptanthus sp.*), and gopher mounds. Some of us detoured through massive, minty-stinky mats of coyote mint, its white to pale violet flowers humming with bees, to the summit of North Trinity Mountain (6,342 ft.). The summit was gentle, clothed with thickets of young firs less than 1 m tall promising to replace the gray snags in a hundred years or so. The grand view encompassed Mt. Shasta, the Trinity Alps, and Preston Peak. Just off the west side was a cluster of blooming Washington lilies (*Lilium washingtonianum*).

Down a rock-strewn slope from the crest, through one more stand of dark green firs was our destination, a green bowl with a shallow pond beside its one large rock, complete with newts (waterdogs). No cows had ravaged the sedgy sward...yet this season. A large patch of corn lily (*Veratrum sp.*) anchored one side of the bowl. Bistort (*Polygonum bistortoides*) stuck its oblong, white balls of tiny flowers up for pollinators to find. An aster, a monkeyflower (*Mimulus sp.*), and a butterwort (*Senecio triangularis*) added small touches of color. Having heard that a gentian was here, I inspected a dense cluster of fresh, green leafy stems with round, opposite, sessile leaves and three large flower buds crowded among the stem-tip leaves. I'm sure this was Klamath gentian (*Gentiana plurisetosa*).



White fir (left) with straight needle bases and noble or red fir (right) with J-shaped, or "hockey stick" needle bases.

It was time to return to the cars already. We had found yet another place that needs an overnight trip, not just one day with four hours of driving. By most measures it was a great day. We had a dose of mountain air, mountain vistas, and mountain species, as well as a variety of species also found in the lowlands, almost entirely native species. We saw spring flowers that were long finished blooming at lower elevations. We saw that 12 years of healing can start the forest regrowing, even after a hot fire. We saw vast nectar resources in great beds of coyote mint, buckwheat, and dogbane (*Apocynum androsaemifolium*). We found a satisfying diversity of butterflies. (See nearby box.) Thanks to the Forest Service crews, we enjoyed hiking a good length trail with an interesting destination. A great day in the Klamath Mountain bioregion (as defined in The Jepson Manual)!

**To get there:** Use a Six Rivers National Forest map! About 2 miles north of Hoopa town, at the north edge of a burned area, turn right on Big Hill Rd. The sign on the southbound side is still there; the northbound has disappeared. Set your odometer. At 6.4 miles take the left fork. At 7.8 miles take the right fork. At 13.8 miles turn right off pavement onto 10NO2. At 14.9 miles, where a "Don't pollute" sign and two other roads join, turn left onto 8N10. Go about 2 miles to the end, a trailhead with a campsite and a corral. It is about two hours from Arcata. Consult with the Lower Trinity Ranger District (Willow Creek) for road conditions. They appreciate reports of road or trail problems. Go prepared for mountain weather!

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### **Cold Spring Loop Trail September 11, 2011 by Carol Ralph**

On a fine, fall day, a group of 11 botanizers set out to our favorite, nearby montane habitat, Horse Mountain area in Six Rivers National Forest, to see the sights along a newly flagged loop trail centered on Cold Spring. We parked at the newly christened Titlow Hill Parking Area, a dirt area on the left side of Forest Highway 1, 7.2 miles south of Highway 299. Parking space here was ample, whereas at Cold Spring itself, down a side road just a little further south, it is cramped. The loop was approximately 2 miles, but it could be short-circuited almost anywhere. It was carefully laid out to avoid leaving National Forest lands onto neighboring private property. Luckily our group included one of the Horse Mountain Trails Group who helped flag the trail a month ago, so where the flagging had disappeared, we had guidance.

From the parking area we started south on the east-

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I purchased plants from CPNS that I was plant sitting, several Checkerbloom (*Sidalcea malvaeflora*) and Coast Hedge Nettle (*Stachys chamissonis*). I also bought some Lupine (sorry I don't have the scientific name) and I won a native Azalea that I planted along the side of the wetland.

It was raining as I joyfully planted in and around the wetland on Saturday Dec. 4, 2010. It was such a pleasure to finally be putting plants into the ground. A raven landed on the fence next to me, glanced down at me and squawked. I am sure he was saying it is about time.

We watched our wetland fill up and empty all winter long and in late May 2011 I spotted the first flowers, bright yellow Seep Monkey flowers. They continued to bloom all around the wetland and became big bountiful bouquets of yellow delight, (in fact they bloomed all summer long and even today in Dec. there are still a few flowers blooming). In July, the Scarlet Monkey flowers (which were really bright orange) appeared along with the long spears of tiny delicate purple Hedge Nettle flowers and the brown seed heads of the reeds. August saw tall spikes of magenta Checkerbloom and purple Asters grace the edge of the wetland. The yard was alive all summer long with insects of all types.



Weeding has been a delight, on hands and knees moving along the edge of the wetland in the midst of the plants and listening to the bees buzzing. I found amazing stones among the wetland, it was like going to the river and discovering beautiful stones, only you

did not feel the need to bring your favorite ones home because they already lived in your yard. I am amazed at the growth of our wetland in only one year. The Ninebark is almost over my head and the Red Twig Dogwood is thriving. The Seep Monkey flowers have covered large areas of the wetland and the strawberries have become quite a ground cover. I can hardly wait to see what next Spring brings. One day after a recent rain, three different types of birds, including humming birds, all flew down into the wetland. They were darting about eating insects, hovering in front of flowers and eating seeds. What an amazing reward to share in that moment, knowing that we helped to establish a habitat that supports so much life. I am a lucky gardener.



Mid-July 2011



August 2011

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facing slope of the long ridge through a dark white fir (*Abies concolor*) forest. The trail dropped down to a clearing with serpentine soils, indicated by the change from firs to Jeffrey pine (*Pinus jeffreyi*), bunch grasses, and yampah (*Perideridia* sp.), one of the few species still blooming. Here also was a patch of the large-leaved rosettes and a few tall inflorescences of monument plant (*Frasera speciosa*). Cutting back up through the white fir, the trail joined a segment of the old, dirt road, now used by four-wheelers. We soon spotted three orchid-family mycoheterotrophs (chlorophyll-free vascular plants that get nutrients from fungi, which in turn get them from green plants): spotted and Mertens' coralroots (*Corallorhiza maculata* and *C. mertensiana*) and phantom orchid (*Cephalanthera austinae*). Even in fruit, these could be identified by spots on the dried lip, the lump on the ovary, or that ghostly white color.

Soon the trail crossed the paved road to the west-facing slope.

Here the forest was more diverse, a mix of Douglas-fir (*Pseudotsuga menziesii*), white fir, incense cedar (*Calocedrus decurrens*), white and black oaks (*Quercus garryana* and *Q. kelloggii*), and occasional ponderosa and Jeffrey pines (*Pinus ponderosa* and *P. jeffreyi*).

The trail passed numerous rock outcrops, all in the 4,600-4,700-ft elevation band, most with grand vistas, and each bearing a different assortment of rock plants and needing a distinctive name. Fingers of steep meadow intersected the path. The meadows were very closely cropped and dry. Some of the grass tufts were even uprooted and left lying on the ground. Fresh cow sign was evident. This solved the mystery of the missing flagging and explained the absence of any sign of trillium and the other spring abundance we had seen earlier in the year. Most of the meadows are private land, unfenced, and the cows have free access to the forest and the spring. The trail swung uphill to pass the actual Cold Spring, a good water source for people as well as stock, and

from there continued north along the line of rock outcrops. Young Douglas-fir among the oaks along here indicated that a former oak woodland was being invaded and converted to evergreen forest. The trail dropped out of the forest into a meadow punctuated by spears of monument plant, apparently unpalatable to cows, and climbed up to Split Rock, among the largest of the outcrops.

Beyond a few more outcrops the trail traversed a band of somewhat barren, serpentine soil right on the shoulder of the ridge, a good place to look for different plants, and then arrived at a small, green, rushy, level meadow with some drying corn lily (*Veratrum* sp.). The source of moisture for this meadow was just uphill behind a curtain of conifers, a boggy place no bigger than two tennis courts, fed by a slow seep from under a thicket of bitter cherry (*Prunus emarginata*), cascara (*Frangula* (formerly *Rhamnus*) *purshiana*), and more. In September dress this boggy place was a bit tattered, brown, and seedy, but the species list suggested a summer

glory: leopard lily (*Lilium pardalinum*), monkshood (*Aconitum columbianum*), mountain boykinia (*Boykinia major*), white-flowered bog orchid (*Platanthera dilatata* var. *leucostachys*), butterweed (*Senecio triangularis*), tinker's penny (*Hypericum anagalloides*). What a delightful surprise, this sheltered pocket of moisture on a summer-dry landscape! How had all these denizens of wet places arrived at this tiny patch of reliable moisture? As a final touch at the edge of the clearing, under a fir, was a dirty white mycoheterotroph that barely emerged above the duff. It was pinefoot (*Pityopus californicus*),



California pinefoot. The hairy, unfused petals are still clear around the swelling fruit.

developing its plump berries. This special wet spot is just inside the National Forest boundary. Its waters cross out into private land and are an important water source for cows. Its green vegetation is good forage late in the season. From the "surprise bog" the trail headed uphill, crossed the road, and turned south, skirting the ridge-top meadows while paralleling the road back to the cars.

Our day on the "rough draft" of the Cold Spring Loop Trail found it to be a great start on an interesting route. The trail passed through noteworthy fir forest, rock outcrops, meadows, woodland, serpentine

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barrens, and wetland. All will be rich with flowers in June. Regardless of vegetation, the vistas and scenery were rewarding. Horse Mountain Trails Group is to be commended, and the Forest staff is encouraged to develop this and other hiking opportunities in the Horse Mountain area. The obvious and widespread grazing in the Cold Spring area calls for some Forest Service attention. While some grazing in some habitats can be beneficial, the cattle in this area had thoroughly browsed the forest floor and perhaps overgrazed the meadows. This botanically rich area deserves some careful management.

(Continued from page 1)

parks are eager to include CNPS volunteers in their monitoring efforts.

**Redwood National Park will be hosting a phenology monitoring workshop some time the week of March 26<sup>th</sup>, 2012, in the Arcata area.**

For more information about this workshop, to get involved in phenology monitoring at Redwood National Park, or for information on establishing *new* sites in the state-wide monitoring network, please contact **Stassia Samuels, Plant Ecologist, Redwood National Park (stassia\_samuels@nps.gov, 707-465-7784)** and visit the CPP website ([www.usanpn.org/cpp](http://www.usanpn.org/cpp)) to learn more!

**Looking for legacy phenological data**

In an effort to increase the value of contemporary phenological data, the California Phenology Project also aims to discover and document existing phenology datasets for the California flora. We are aware of several categories of historical datasets with phenological information that the CNPS community might have collected, acquired, or have access to; these categories include seed collection records that include the date and location of seed collection, historical photographs repeated at the same location (s), naturalist's journals, and wildflower lists with date and location information, among many others. If you are aware of any such datasets, particularly those that include information about the CPP focal species, please contact Liz Matthews (CPP Postdoctoral Associate; [matthews@lifesci.ucsb.edu](mailto:matthews@lifesci.ucsb.edu)).

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September 2011



October 2011

Future plans for our garden include:

- Planning apple trees and native berries.
- Designing a Native garden in the front yard.
- Greenhouse /garden house

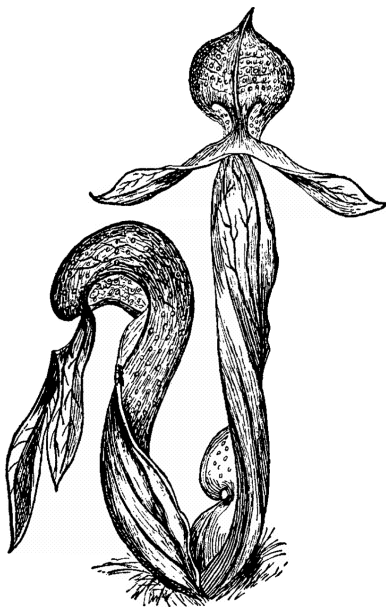
Please feel free to contact me at  
[Swedenburg@earthlink.net](mailto:Swedenburg@earthlink.net)  
with any questions or for a list of resources.

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### **CALENDAR of EVENTS**

**(Plant Walks & Hikes—Page 2 / Programs— Page 3)**

#### ***January***

- ◆ Wed 11: Program

#### ***February***

- ◆ Wed 8: Program
- ◆ Sun 26: Day Hike

#### ***March***

- ◆ Wed 14: Program
- ◆ Sat 24: Day Trip

#### ***April***

- ◆ Wed 11: Program
- ◆ Sun 22: Day Hike

#### ***May***

- ◆ Fri 4: Wildflower Show
- ◆ Sat 5: Wildflower Show
- ◆ Sun 6: Wildflower Show
- ◆ Wed 9: Program