

Darlingtonia

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

The New and Improved California Rare Plant Ranks

Greg O'Connell, Humboldt State University Biological Sciences Graduate Student
(May 2013)

As the science of rare plant conservation has become more sophisticated with a faster paced online management of data, the classification by which we assign a designation of rarity has also transformed over the years. Two notable recent changes are the creation of the term 'California Rare Plant Ranks' (CRPR) and the development of a parallel ranking system for California's rarest plants (ranks 1 and 2). While some may cringe at the thought of more changes to keep track of, staying current with the science and language used in conservation goes a long way in being effective as botanists and concerned citizens.

The current California Rare Plant Ranks:

- 1A: Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere
- 1B: Plants Rare, Threatened, or Endangered in California and Elsewhere
- 2A: Plants Presumed Extirpated in California, But More Common Elsewhere
- 2B: Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
- 3: Plants About Which More Information is Needed - A Review List
- 4: Plants of Limited Distribution - A Watch List

Many changes have been made to the CNPS Inventory of Rare and Endangered Plants since it was first printed in 1974. Now in its eighth edition, this state-wide inventory is managed entirely online and updated continuously (thank you Larry Levine). The effort to classify rare plants in CA has been an important resource in identifying species that warrant protection under the California Environmental Quality Act (CEQA) but have not been recognized by State or Federal Endangered Species Acts. Today, management decisions behind rarity status in the CNPS Inventory are an open, collaborative effort between CNPS, California Natural Diversity Database, and regional plant status review groups. To reflect the more inclusive nature of the status review process, the term "California Rare Plant Rank" (CRPR) replaced the term "CNPS list" in order to portray the broad consensus achieved. Although the name of the ranking system has changed, the review process has not.

Another notable change occurred in the summer of 2013 when the CNPS Rare Plant Program and Rare Plant Program Committee developed the new California Rare Plant Ranks '2A' and '2B'. Previously, only rank 1 plants had an 'A' or 'B' component to indicate whether that species had been extirpated (A), or can still be found within CA (B). These subtleties are important because species with a rank of 1 or 2 qualify for protection under CEQA. To help us keep track of rare species no longer growing in CA (extirpated or extinct) versus species that can still be found growing here (extant), adding an 'A' or 'B' to rank 2 plants allows for the possibility to categorize species extirpated in CA but more common elsewhere

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FIELD TRIPS AND PLANT WALKS

Please watch for later additions on our Web site (www.northcoastcnps.org) or sign up for e-mail announcements (Northcoast_CNPS-subscribe@yahoo.com).

Outings are open to everyone. All levels of expertise, from beginners to experienced botanizers, are welcome. Address questions about physical ability requirements to the leader. It is wise to contact the leader if you are coming, in case plans change.

February 15, Saturday. McKinleyville's Pocket Parks Field Trip. We will get acquainted with at least three of the small public reserves available right in McKinleyville, good places for short walks all through the year. Leafless deciduous trees and shrubs will provide an identification challenge. We hope to walk on Parkside Trails, Mid-town Trail, Norton Creek Wildlife Area, and Hewitt Ranch. Dress for the weather; bring lunch and water. Meet at 9:00 a.m. at Pacific Union School (3001 Janes Rd., Arcata) or at 9:15 in front of McKinleyville High School. Finish mid-afternoon. Please tell Carol (822-2015) you are coming.

March 30, Sunday. Patrick's Point Day Hike--Mist Maidens, Angelicas, and Trailing Currant. These rare plants will be some of the sights we will find while walking 2-4 miles in Patrick's Point State Park. We will learn how to identify them and how rare they are. False Azalea, Selaginella, and Grape Fern are other unfamiliar, but not "rare," plants we will see. Of course we will enjoy the "common" plants as well, which include all manner of good shrubbery for thickets or hedges, as well as Western Trillium. Dress for the weather; bring lunch and water. Meet at 9:00 a.m. at Pacific Union School (3001 Janes Rd., Arcata) or at 9:30 at the park visitor center. Return mid-afternoon. Please tell Carol (822-2015) you are coming.

Early alert:

Invitation from the Milo Baker Chapter and the UC McLoughlin Natural Reserve:

Two field trips camping at the McLoughlin Natural Reserve of the University of California at Davis, 13 miles southwest of Lower Lake (east end of Clear Lake) on Morgan Valley Rd. Each trip will have a potluck dinner Saturday night in the reserve field station facility, a short drive up the hill from the campground. Details later. Contact: Wendy Smit, Milo Baker Fieldtrip Chair, wendysmit@hughes.net

April 12-13, Saturday-Sunday. Serpentine Grassland Spring Flowers. On Sunday morning the Reserve staff will lead us on a gently paced walk through fields of serpentine spring wildflowers at a nearby location. Other serpentine locations can be visited on our drive home.

June 7-8, Saturday-Sunday. Mapping rare plants in a rugged, serpentine canyon. A Rare Plant Treasure Hunt. After breakfast Sunday morning, when it's still somewhat cool, we will visit a rugged, serpentine canyon to map CNPS-listed plants. We will carpool in high clearance/ 4WD vehicles for this moderately strenuous outing. There will be opportunities to learn how to census rare plants and fill out CNDDDB field survey forms for anyone who's interested.

Help Plan Field Trips

If you would like to suggest a destination or help plan the field trips for the rest of the year, contact Carol at 822-2015 or theralphs@humboldt1.com. She will have a planning session in February.

More Native Plant Articles & Photographs

Looking for some great articles with equally terrific photographs about local(ish) natives? Visit the Shasta chapter's website (ShastaCNPS.org) and go to the Local Endemics section.

CHAPTER PROGRAMS AND MEETINGS

EVENING PROGRAMS

Evening programs are 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.; Botanical FAQ's at 7:15 p.m., and program at 7:30 p.m. For information or to suggest a speaker or topic contact Michael Kauffmann at 707-407-7686 / michael_kauffmann@yahoo.com.

Jan 8 “A Brief Delving into the Cryptic Lives of Gall Wasps infecting Oaks”

Lilliputian wasps of the family Cynipidae form galls on a variety of plants, of which certain members of the families Rosaceae and Fagaceae are good sources in northern California. This presentation will illustrate the interesting natural history, including life cycles, sites of galls, predators, and other organisms influencing particularly cynipids galling oaks, *Quercus* species. **Humboldt State University Professor emeritus John DeMartini** will take us on a photographic journey to explore the galls of northern California.

Feb 12 “Yellowstone National Park Flora vs. the Volcano” by Jennifer Whipple, Yellowstone Park Botanist

Mar 12 “Early Cretaceous Flora of the Klamath Mountains – a student-led fossil discovery near Redding, California ”

Mihai Tomescu, Biology professor at Humboldt State University, will lead us on a journey into a new regional discovery based on late 19th - early 20th century reports of layers rich in anatomically preserved plant fossils in the Klamath Mountains. The fossil flora reflects the plant diversity of the Californian coast 120 million years ago. Many plant groups, as well as other types of organisms are present, yet some of the fossils pose problems of identification; others may tell the story of their journey from the parent plant to their final resting place in the sediments of a convulsed tectonic plate margin. Join us and take a peek into what the flora of northwest California was like 120 million years ago!

Apr 9 “Flora of the Italian Alps” with Kjirsten Wayman

Kjirsten, a local chemistry professor and aspiring botanist, spent two months last summer in the Dolomites. In this region of the Italian Alps, she hiked mountains and meadows to explore the diversity of flora that lives there. The Dolomites are home to many plants and wildflowers, both familiar and unfamiliar to the California botanist. The diverse and abundant alpine flora found there is complimented by impressive and majestic landscapes that dominate these mountains. This photographic botanical exploration will highlight a selection of the interesting flora and spectacular landscapes of the Dolomites with only the enthusiasm a California botanist could share!

May 14 “Hiking the John Muir Trail—botanical adventures and beyond”

Humboldt County botanists, Gary and Lauren Lester, describe their 250 mile trek along one of the world's most famous trails as seen through the eyes of naturalists. Encounters including fabled endemic Sierran plant species, the mystical southern population of Foxtail Pine, the largest Sierra Nevada wildfire in recorded history, ascents of storied landmarks of Half Dome, Clouds Rest and Mt. Whitney, all including a little help from family and friends along the way. Learn how to plan a month long backpack trip, embrace intuitive trail decisions and thoroughly enjoy the natural history trail wonders each step of the way.

VOLUNTEER CORNER

Contact Carol (822-2015 / theralphs@humboldt1.com) to volunteer, ask questions, or make suggestions.
Phone Carol 822-2015 or write theralphs@humboldt1.com to volunteer, ask questions, or make suggestions.

Thank you!

- **Chris Beresford** and **Anna Bernard** for coordinating and managing a spectacular plant sale--a very fun and very profitable event.
- **Anna Bernard** for managing occasional between-sale plant sales. We want to get our plants to new homes whenever we can!
- **Greg O'Connell** for providing our plant sale team with a list of rarity status of the plants we offer for sale.
- **Bev Zeman, Sylvia White, Virginia Waters, Carol Ralph, Cathy Dilley, Janelle Egger, Pete Haggard, Suzanne Isaacs, Chris Beresford, Jen Kalt, Stephanie Klein,** and **Colin Fiske** for visiting yards as **native plant consultants** to tell hosts what native plants they have, what invasive plants they have, and what native plants they could plant.
- **Bev Zeman** for initiating contact with people requesting native plant consultations, determining their needs, offering advice, and informing the consultants.
- **Karen Isa, Sylvia White, Rita Zito, Carol Woods, Tom Pratum,** and **Carol Ralph** for tending our booth at North Country Fair.
- **Greg O'Connell** for setting up our table and tending it at HSU's Biodiversity Conference.
- **Christine West** and **Nancy Palmer** for helping tend our table at Biodiversity Conference.
- **Jen Kalt** for assembling our page in Econews, **Sylvia White** for submitting our calendar items, and **Donna Wildearth** for writing contributions.

Welcome Aboard!

Greg O'Connell as Co-Rare Plant Chair on our Steering Committee.

Volunteers needed. Big jobs and small, every one important. Every job-holder is eligible to be on our Steering Committee.

- **Chief Outreach.** Keep our displays and handouts in good shape for use at various public events, about 6/year. A good group of volunteers help staff the table (booth).
- **Science Fair Coordinator.** A brief, fun job one day each year in mid-March, selecting the recipient of our chapter's award. Other people help judge. Criteria have been developed.
- **School Visits to the Wildflower Show.** The procedures are established for this very important and rewarding aspect of the Spring Wildflower Show. We want students to come appreciate the flowers! We need a coordinator and a class recruiter, and people to teach lessons and escort groups. To find out how we can use your talents, call or write Carol.
- **Plant Walk Scheduler.** Two-hour walks along popular, nearby trails to introduce plants are an important part of our mission to educate the public about native plants, as well as share our enthusiasm. We have a list of good places for walks and a list of people who can lead walks. We need a person to communicate with the leaders and get walks on the calendar.
- **Craftsy person** to create invent a native plant costume or puppet for the **All Species Parade** (in September) and inspire or facilitate others to make them too. Let's have a whole bog or forest of native plants in the parade!

FIELD TRIP REPORTS

Mt. Elijah, Bigelow Lakes, and Oregon Caves June 20-23, 2013 by Carol Ralph

The wonderful mountain habitats of the Siskiyou, and the flowers inhabiting them, are not all in California. Some are in Oregon. Sixteen of us spent a wonderful weekend there, in the Wild Rivers Ranger District of the Rogue River-Siskiyou National Forest, and in Oregon Caves National Monument, which this forest surrounds. The district office in Cave Junction was very helpful. They have a booklet, "Trails in the Illinois Valley," showing many enticing trails. [This contrasts with our local Lower Trinity District of Six Rivers National Forest.] Most of us camped two nights in Chinquapin Group Campground, a comfortable meadow setting just off the left side of route 46 a bit past Grayback Campground (between mile markers 11 and 12), while a couple stayed at the Chateau in the national monument farther up the road.



Relaxing in Chinquapin Campground

Besides the basic amenities Chinquapin Campground (at 1,850 ft elevation) had a loop trail through mixed evergreen forest of Douglas-fir (*Pseudotsuga menziesii*), Tanoak (*Notholithocarpus densiflorus*), Incense Cedar (*Calocedrus decurrens*), Port Orford-cedar (*Chamaecyparis lawsoniana*) (some alive, some dying of Port Orford-cedar root disease, some dead), Ponderosa Pine (*Pinus ponderosa*), Grand-White Fir hybrid (*Abies grandis* x *concolor*; note 2), and Madrone (*Arbutus menziesii*), and through a riparian forest of Big-leaf Maple (*Acer macrophyllum*) and Oregon Ash (*Fraxinus latifolia*). A few Pacific Yew (*Taxus brevifolia*), a little Poison Oak (*Toxicodendron diversilobum*), and stunning, white-blossomed Mock Orange (*Philadelphus lewisii*) were notable. We enjoyed seeing Phantom Orchid (*Cephalanthera austinae*), Woodland Phlox (*Phlox adsurgens*), California Ground-cone (*Kopsiopsis strobilacea*), and Forest Scurf-pea (*Rupertia physodes*), as well as a diverse assortment of more common forest plants. The part of the meadow that was not mowed had some grasses that

looked native among the dominant pasture grasses, but unfortunately was being enveloped by Everlasting Pea (*Lathyrus latifolia*). We found 13 species of trees immediately around the campground meadow, not one of them a Chinquapin (*Chrysolepis chrysophylla*).

Saturday we hiked the Bigelow Lakes-Mt. Elijah Loop Trail, east of Oregon Caves National Monument. (Note 1) We opted to walk the first part on the old road, which provided room to gather around plants and had diverse forest-edge plants, including Alpine Knotweed (*Polygonum phytolaccifolium*), Fendler's Waterleaf (*Hydrophyllum fendleri*), Western Sweet Cicely (*Osmorhiza occidentalis*), Woodland Phlox, Blue Stickseed (*Hackelia micrantha*), Marbled Wild-ginger (*Asarum marmoratum*), and Yellow-flowered Iris (*Iris chrysophylla*). Two of us who scouted the new trail that parallels this old road reported it was all under trees, which at this elevation (5,305 ft.) were Douglas-fir, Incense Cedar, and Grand x White Fir. We turned left off the old road at a conspicuous sign and, more interestingly, an *Orogenia fusiformis*, a small umbellifer (carrot family) that blooms at the edge of melting snow patches. The trail steadily ascended in Grand x White Fir forest with modest ground cover and scattered broadleaf shrubs. Sitka Valerian (*Valeriana sitchensis*) and Fendler's Waterleaf were blooming. Prairie Violet (*Viola praemorsa*), Western Trillium (*Trillium ovatum*), Western Prince's Pine (*Chimaphila umbellata*), Little Prince's Pine (*Chimaphila menziesii*), and White-veined Wintergreen (*Pyrola picta*) were not yet. Mountain Hemlock (*Tsuga mertensiana*) joined the forest as we went higher. Where the trail encountered meadow on the right, we cut across it toward Bigelow Lake but settled to eat lunch before we reached the lake. The sloped, rock-studded meadow was alive with flowers--"Best flowers I ever saw. Everything was there." --but with most of our loop trail ahead of us we couldn't tarry. We left it for another trip. We returned to the trail and zig-zagged up five zigs to the ridge. We were in closed canopy, old growth Noble Fir forest (*Abies procera*) (note 2), dark and barren underneath. Marshall's Gooseberry (*Ribes marshalii*) offered its yellow and red flowers, and in a clearing Glacier Lilies (*Erythronium grandiflorum*) dangled their yellow, dancing flowers and Western Spring Beauty (*Claytonia lanceolata*) assured us it was early spring at that elevation. We emerged from fir forest onto rocky outcrops along the crest and the summit (6,1281 ft). Dense, stiff shrubbery of Sadler Oak (*Quercus sadleriana*), manzanita (*Arctostaphylos* sp.), and Tobaccobrush (*Ceanothus velutinus*) hedged the rocky clearings where a bright red paintbrush (*Castilleja* sp.), Hot Rock Penstemon (*Penstemon deustus*), Ballhead Sandwort (*Arenaria congesta*), and a yellow-flowered stonecrop (*Sedum* sp.) decorated the outcrops. After admiring the

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mountain vastness and the broken snow on Mt. Shasta from the summit, we descended through dark Noble Fir forest and then the lighter Grand x White Fir forest. Most of us noted the important right turn at a triangular trail junction that took us down to the old road, on which we walked north to return to the trailhead. (Missing the turn continued into the monument.) Along this part of the old road were plants we hadn't seen elsewhere on the mountain: Mountain Dogwood (*Cornus nuttallii*) finishing bloom, the shrub form of Tanoak (*Notholithocarpus densiflorus* var. *echinoides*), Kneeling Angelica (*Angelica genuflexa*), Heartleaf Spring Beauty (*Claytonia cordifolia*). After roughly four miles our bodies were glad to be back at the cars, but we kept our eyes open to enjoy the blooming California Rhododendron (*Rhododendron macrophyllum*) along the drive down, and we spotted blooming Washington Lily (*Lilium washingtonianum*). It was a great day. How great? Nine species of umbellifers; five species of *Ribes*; blooming Glacier Lilies; five genera of Ranunculaceae, a new *Claytonia*. How do you measure your day?

Our Sunday hike on No Name Trail in the national monument (4,000 ft.) was not as exhilarating, but was more manageable taxonomically, as the forest plants at that elevation were mostly familiar, and still quite beautiful and enjoyable. The well graded trail went through a steep stream canyon. The forest was largely Douglas-fir and Grand x White Fir with a sprinkling of Big-leaf Maple, Canyon Live Oak (*Quercus chrysolepis*), Madrone, and Port Orford-Cedar. A boot-washing station encouraged hikers to protect the Port Orford-cedar from root disease spread. We enjoyed great, green beds of Vanilla Leaf (*Achlys triphylla*), clean white blooms nestled in green nests of Queen's Cap (*Clintonia uniflora*), intriguing saxifrage family members Leafy Mitrewort (*Mitellastra caulescens*) and Angle-leaved Mitrewort (*Ozomelis diversifolia*), and ghostly white stems of Phantom Orchid, one of the four species of mycoheterotrophs we saw in this rich, old forest. The

Spotted Coralroot (*Corallorrhiza maculata*) puzzled us considerably as it was not always spotted, and its stem color ranged from pinkish to yellowish. Mertens' Coralroot (*C. mertensiana*) and Fringed Pine Sap (*Pleuricospora fimbriolata*) were the other chlorophyll-free flowering plants living off fungi mycorrhizal with trees.



On No Name Trail Frank and Anna demonstrate boot cleaning to remove spore-laden dirt from footwear before entering Port Orford-cedar territory that does not yet have Port Orford-cedar root disease

There are plenty of rare plants in the Siskiyou. (Note 3.) Maybe we saw some, but we didn't know their names and didn't recognize their rarity. We enjoyed the rare along with the common, happy to know them by genus if not by species, by family if not by genus, and by color or character if nothing else. We enjoyed the mountains, the vistas, the flowers, the forests, and the good company of our companions. It was a rare weekend--exceptional.

Note 1. Different sources have different names for this and surrounding trails, e.g. Lake Mountain Trail, Bigelow Lake Trail #1214, Mountain Meadows Trail and Boundary Trail, so be sure to have a map with Bigelow Lakes on it. The way to the trailhead is a bit circuitous: From Cave Junction take SR 46 to Oregon Caves. Just before the monument parking lot, turn left on Forest Service 960. After 2.7 miles, at the first major intersection, turn sharp right onto 070. At mile 3.5 stay right, still on 070. The road ends at a washout, where you park. Older books, published before the washout, will describe the trailhead as farther out this road. A 1989 Forest Service map called *Illinois Valley Ranger District Siskiyou National Forest* was more helpful than the common Rogue River National Forest map. A Bureau of Land Management map of the Medford District was



Part of our group atop Mt. Elijah

also accurate.

Note 2. We didn't study these firs. This identification is based on range information in Michael Kauffmann's book *Conifer Country*.

Note 3. You might find a plant list at www.siskiyou.npsoregon.org/2012annualmeeting.

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Gold Bluff Beach Wetlands
October 12, 2013
by Carol Ralph

Most people who go to the Fern Canyon Parking Area in Prairie Creek Redwoods State Park turn inland to see the fantastic fern display in the steep-sided canyon cut into the vertical bluff by Home Creek on its way to the sea. This gorgeous, sunny, calm day we five botanical explorers turned toward the beach, specifically, the wet zone between the bluffs and the open sand. Much of the wet zone was dry or merely squishy at this time of year.

We headed first to the pond just north of the parking area, where Home Creek widens before meandering southward in a wide floodplain and turning west to the sea. We kept an eye on an elk that was looking for plants also. The margin of the pond was a thick growth of Slough Sedge (*Carex obnupta*) laced with Silverweed (*Potentilla anserina*), Water Parsley (*Oenanthe sarmentosa*), rushes (*Juncus* spp.), and Three-ribbed Arrowgrass (*Triglochin striata*). Other common aquatics were Duckweed (*Lemna* sp.), Marsh Pennywort (*Hydrocotyle ranunculoides*) and *Lilaeopsis occidentalis*, a succulent, grass-like umbellifer. I spotted one Water Hemlock (*Cicuta* sp.), a deadly poisonous (to eat), native umbellifer.



Sitka Spruce, Coyote Brush, European Beachgrass, and Mexican Tea on higher ground, with a swale of Slough Sedge between it and the Gold Bluffs.

Around the stream was wet turf that included blooming Seep Monkeyflower (*Mimulus guttatus*), Yellow-eyed Grass (*Sisyrinchium californicum*), and Cow Clover (*Trifolium wormskioldii*). The non-native, stinky Pennyroyal (*Mentha pulegium*) was abundant. Nearby slightly upland areas featured Riverbank Lupine (*Lupinus rivularis*) (a few flowers even!) and Seacoast Angelica (*Angelica lucida*) mixed with Coyote Brush (*Baccharis pilularis*) and European Beachgrass

(*Ammophila arenaria*). In the stream an underwater, narrow-leaved, lush plant proved to be a water-starwort (*Callitriche* sp.), when we noticed the surface leaves, which are wider and arranged in rosettes.

To proceed north on the beach side of the stream we crossed on a plank thoughtfully installed for that purpose. We lunched on a log and then tramped north to an area that looked possibly wet on the Google Earth image. There we found a swale of Slough Sedge in varying densities, from small clumps to larger clumps to seas of it. The only water in this swale was one modest, ephemeral pool of water, now about 6 inches deep, a product of the one nice rain in September. Debris rings indicated the water level had fallen 5 inches already. Great masses of Red-legged Frog eggs were in it. Where Slough Sedge was sparse were dry beds of Saltgrass (*Distichlis spicata*) and Pennyroyal. We noticed small, dry tufts of a spikerush (*Eleocharis* sp.), most of their tops nipped off. Rabbit droppings indicated one possible nipper. One of our group knew that in the past Home Creek had flowed north from Fern Canyon. Presumably this swale was its former bed. It is much less diverse than the newer, wetter bed.

Other than wetlands much of the gently undulating, sandy terrain between the bluffs and the beach was covered with European Beachgrass being populated by Sitka Spruce (*Picea sitchensis*). Young spruces from waist high to giraffe high were conspicuous and common. What prompted the onset of spruce sprouting? One hypothesis is that the mining activity in the bluffs in the 1850's raised the ground level at the back of the beach, raising it above the reach of high tides that previously would have killed spruce seedlings.

From the swale we crossed east to the Coastal Trail at the foot of the bluffs and walked south to return to the parking area. The most unfamiliar plant of the day was along here: Mexican Tea (*Dysphania* (formerly *Chenopodium*) *ambrosioides*). I'm certain Mexicans wouldn't think of making tea from this strongly resinous-smelling weed from tropical America.

Looking back on the day, I realized that species of the *Scirpus* group, now including *Schoenoplectus*, *Isolepis*, and *Bolboschoenus*) were almost totally lacking. This surprised me, considering that in the old bed of the Mad River, also close to the beach, we had found four such species very common. At Gold Bluff Beach I only saw a few sprigs of Three-square Bulrush (*Scirpus* sp.), normally abundant in coastal wetlands. Likewise we saw no Cattails (*Typha latifolia*), generally ubiquitous in fresh water, though avoiding salt. Perhaps the water in the pond was not as fresh as I thought, although the herbage around the perimeter suggested fresh at this time. The scarcity of *Scirpus* could

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MEMBERS' CORNER

WELCOME NEW MEMBERS

DANIEL BARTON
GARY BLOOMFIELD
FRAN FREE
MARIA JORGENSON
RYAN LAWLER
BOBBIE MCKAY
RACHAEL OLLIFF
JOE TYBURCZY
ERIN ARIEL YOUNG

THANK YOU RENEWING MEMBERS

TOM ALLEN / KATY ALLEN
COLETTE BEAUPRE
ANNA BERNARD
MIGNONNE BIVIN
STEFANI BRANDT
NANCY BUCK
BUREAU OF LAND MANAGEMENT
SUSAN CAMPBELL
KATHRYN CORBETT
MATTIE CULVER
JANELLE EGGER /NEIL PALMER
ALINE FABEN
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NED FORSYTH
GREGORY FREER
RONALD FRITZSCHE
MARA GALVEZ
MELINDA GROOM
DEBRA HARRISON
JUDITH HINMAN
JEFF HOGUE
MICHELE KAMPRATH
BARBARA KELLY
JOYCE KING
LAURIE LAWRENCE
KIMBERLY MCFARLAND
WANDA NAYLOR
GREGORY O'CONNELL

VICTORIA PATTON / JOHN PATTON
TOM PRATUM
BECKY PRICE-HALL
CAROL RALPH /C.J. RALPH
PETER RYAN
APRIL SAHARA
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DONNA M. THOMPSON
JAMES F. WATERS
JENNIFER WHIPPLE
KATHERINE WHITE
WILLIAM WOOD
DANA YORK

MEMBERSHIP BENEFITS

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

- Greenlot Nursery**, 10% discount on plants, 443-9484
- Lost Foods Native Plant Nursery**: 10% discount on plants, 268-8447, LostFoods.org
- 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!

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/>

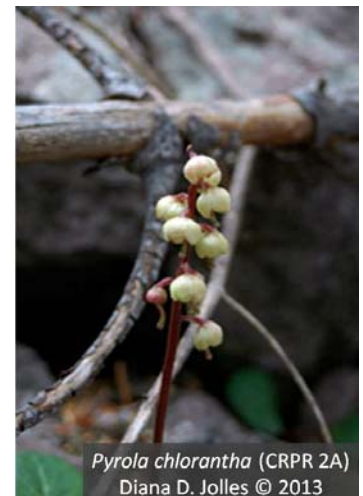
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throughout its range. These new ranks help further clarify that CRPR '2' plants are rare in CA but more common outside of the state, while emphasizing that CRPR '1' plants are rare throughout their entire range. Additionally, an 'A' designation indicates species that have been extirpated from CA while 'B' signifies an extant species. Most of the former CRPR 2 plants, such as *Erythronium revolutum*, have been assigned to CRPR 2B. Only 5 taxa (presumed extirpated in CA, but more common elsewhere) were moved from 1A to 2A. Examples of 2A plants include *Carex livida* (livid sedge) from the Mendocino coast and *Pyrola chlorantha* (green-flowered wintergreen) north of Emigrant Gap near Downieville.

Threat Ranks:

- 0.1 Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- 0.2 Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
- 0.3 Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

The final code designation, the Threat Rank, appears as a decimal extension to the CRPR. This metric indicates the percent of a species occurrences that are in jeopardy. Take for example, *Romanzoffia tracyi* (CRPR 2B.3), which can be found along the North Coast's rocky ocean bluff community. Its rank indicates that it's rare in CA but more common elsewhere (2), still found growing in CA (B), and less than 20% of its occurrences are considered threatened (.3). Plants with an 'A' such as *Pyrola chlorantha* (CRPR 2A) do not receive a threat rank because populations in CA no longer exist.



In summary, recent changes in rare plant rankings improve the precision by which we can describe rarity within CA's flora. Using the term 'California Rare Plant Rank' instead of 'CNPS list' emphasizes that the status review process is a collaborative effort with input from a variety of stakeholders. The new system facilitates the logic that the first CRPR number indicates the rarity of a species within its range and the letter signifies whether our rarest species can still be found growing in CA. The decimal is an estimate of 'threat' to known populations of that species in CA. The new California Rare Plant Ranks give us a multifaceted system that allows for the designation of very rare species with stable populations (1B.3), as well as species more common throughout their range but extirpated in CA (2A). The CRPR system is a tool by which we can describe several levels of conservation concern. These tools are essential in describing the components of California's floral biodiversity: what we have, what we've lost, and what we need to protect. If you haven't done so lately, check out the latest version of The Online CNPS Inventory of Rare and Endangered Plants at rareplants.cnps.org.

Preventing “McDonaldization,” or Global Homogenization, on a Local Level, or “Stems Clear and Shining:” a New Geranium in the Park

by Laura Julian, Redwood National State Parks Biotechnician-Plants

“If you preserve it well, a pretty specimen will it look on paper, with its pink stem, beautifully-cut leaves, and pink-veined, rarely pure white, corolla. It is the *Geranium Robertianum*, Herb Robert, or stinking crane’s bill; but as pretty as it is, it is less so than its relative, the *Geranium lucidum*, with stems clear and shining, almost like those of a balsam, with leaves at times nearly as pink as the small pretty flowers.” So Spenser Thomson wrote, in 1864, in his book “Wildflowers: Where to Find, and How to Know Them, with Remarks on the Economical and Medicinal Uses of our Native Plants.” I have to admit that on that June morning, I wasn’t finding *Geranium lucidum*, or Shining Geranium, pretty at all. My coworker and I had spent the last two hours within earshot of the trucks and tourists of Highway 101, pulling the “stems clear and shining” and the “small pretty flowers” of this plant from underneath spruces and alders, carefully sealing them into black-plastic trash bags. Why?

Shining Geranium is a small, annual plant, less than 20 inches tall, with lobed, shiny leaves, often reddish stems and small magenta flowers. In Europe, Asia and North Africa, where it is native, it can be found growing on shady rocks, walls and hedgebanks, on soils rich in calcium carbonate (lime). It was first recorded growing in North America in Yamhill County, Oregon, in 1971. The plant was discovered in the Eugene area in 2002, and has now spread throughout Oregon’s Willamette Valley, and into neighboring Coos County. In 1998, Shining Geranium was found in wildlands adjacent to the University of California Berkeley campus, and by 2002, it was “spreading like a weed” in the UC Berkeley Botanic Gardens. Shining Geranium was detected in Washington in 2005, and it is now found in over 5 counties in that state. So what?

In the Pacific Northwest, Shining Geranium is predominately a

forest understory plant. It is shade tolerant, and capable of moving into undisturbed areas. In oak woodlands and forest openings, shining geranium can quickly become the dominant, and at times, only forb present. Dense blankets of Shining Geranium can cover small mossy boulders and extend up the trunks of trees. In rare oak savannahs at Mt. Pisgah, Oregon, Shining Geranium forms extensive, pure stands in shady areas, where few native wildflowers and grasses seem to be able to grow in its presence. “This weed is spreading like wildfire in our endangered oak woodlands in western Oregon,” Mary Widmer wrote, in 2009. “Where it has invaded on top of the established camas stands near my house, the camas has actually ceased to come up through the mats in one year! And camas is a tough, long-lived native, one of the last to disappear from our fields and hedgerows! This invasive needs no obvious disturbance and the land I’m referring to has never been ploughed or built on. The camas stands here could be tens to hundreds of years old, but this very tough native bulb is no match for the *Geranium lucidum*. It is a very noticeable effect: in areas once covered by stands of pure camas that I have lived next to for 15 years, there are now large, flattened circles of pure Shining Geranium with no camas coming through.” Note- Susan Kephart writes that *the names camas, Camassia, qém’es, quamash, and pa-siko, all refer to the group of spring herbs whose white to blue-purple flowers form spectacular displays in wetlands, grasslands, and oak*



Geranium lucidum at Del Norte Redwoods State Park

savannahs in the Pacific Northwest. Camas is a North American plant whose greatest diversity lies in Oregon, which is home to over 65 percent of the named species.

Geranium lucidum has medicinal uses. In its native habitat, Shining Geranium has been used to heal wounds, increase urine flow and as an astringent (an agent that draws tissues together). *Geranium lucidum* oil has a suppressant effect on the growth of *Klebsiella pneumoniae* bacteria, a

cause of human pneumonia and *Pseudomonas aeruginosa*, an opportunistic bacterium that can cause inflammation and sepsis in wounds. In a 1986 study, extracts of *Geranium lucidum* inhibited pregnancy in 60% of the rats tested. Hopefully it does not affect fertility in grazing animals, as it is used as animal fodder in Pakistan.

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(Continued from page 10)

In the United States, Shining Geranium was probably introduced in the soil of nursery stock. Once escaped from cultivation, Shining Geranium has several characteristics that allow it to spread rapidly. Its fruits are elongated capsules that dehisce explosively to disperse seeds, allowing shining geranium to spread upward into the crevices of trees or up steep slopes. The seeds germinate en masse in the late summer or early fall after the first heavy rains, allowing seedling plants to establish quickly in early spring and outcompete native spring annuals and the seedlings of native perennial plants. Shining Geranium suppresses native plant growth as the season progresses because, as soils dry, few plants are able to push through the mass of their drying vegetation. And though each seed capsule produces only five seeds, this annual species may produce up to five generations of plants in a year, forming a persistent seedbank. Shining Geranium is also suspected of producing chemicals that inhibit the growth of other plants.

Invasive species are costly, through loss of biodiversity and financial losses. In 1995, ecologist Robert May wrote that the five casual factors that account for the most extinctions are habitat destruction, habitat fragmentation, overkill, invasive species and secondary effects cascading through an ecosystem from other extinctions. A report from the U.N. Environmental Program states that almost 20% of the world's endangered vertebrates suffer from pressures created by invasive species. Of the 1,880 imperiled species in the United State, 49% are endangered because of introduced species alone or because of the impact of invasive species combined with other forces. Wittenberg (2005) wrote about this global homogenization as a consequence of biodiversity loss as the "McDonaldization" of the natural world. Losses due to invasive species also hit us in the pocketbook. Damage by invasive organisms to agriculture, forestry, fisheries and other human activities is estimated to cost the U.S. economy \$137 billion per year. (Simberloff, 2000). So what can we do?

Invasive species invasions follow a pattern described as "lag and log". In the lag, or "sleeper" stage, invasive species are present, but low in abundance and their impacts are not noticeable. In time (anywhere from a few years to over a century), the species goes into the log, or explosion stage, where it expands to fill all available niches, and the damage it causes becomes very evident. Those of us working to control invasive species can exploit this biology through a technique called Early Detection / Rapid Response. When a species known to be a threat elsewhere is detected when its population is not yet large, well-established or widely spread, the species is eradicated relatively easily and at much less cost.

Shining Geranium has been newly discovered in our area. In 2011, Dana York, Cal-Trans Senior Environmental Planner, detected shining geranium at two new locations: on Cal-Trans right-of-way and National Park lands at the Crescent City Overlook, and a more extensive population along the 101 corridor bordering Del Norte Redwoods at Hamilton Road. That year, Dominc Bongio, Cal-Trans Landscape Specialist, found Shining Geranium growing in the Cal-Trans right-of-way bordering Yurok Tribal lands at the Klamath Bridge. In 2013, he discovered the first Humboldt County

(Continued on page 12)



**2014 FIRST ANNUAL
WINTER GARDEN MAINTENANCE
AT THE
ARCATA COMMUNITY CENTER
NATIVE PLANT AND WILDLIFE GARDEN**

JANUARY IS A GREAT TIME TO PRUNE TREES AND BRUSH, WEED, SOW SEED AND PLANT NATIVE PLANTS AND PERFORM GENERAL GARDEN MAINTENANCE.

PLEASE JOIN ME ON A SATURDAY OR SUNDAY MORNING 10 AM 2:00 PM IN JANUARY FOR A DAY OF GARDENING. SEE HOW THE GARDEN HAS CHANGED SINCE IT WAS PLANTED IN 1999.

BRING DRY WARM CLOTHES THAT ARE EASY TO SHED IF IT GETS WARMER DURING THE DAY. WORK GLOVES, GARDEN TOOLS, AND HEAVY SHOES. PLUS LOTS OF DRINKING WATER.

TO GET MORE INFORMATION OR VOLUNTEER PLEASE SEND ME YOUR E-MAIL ADDRESSES AND I WILL TRY AND PICK A DRY JANUARY WEEKEND AND CONTACT EVERYONE INTERESTED IN HELPING.

PETE HAGGARD
haggard@suddenlink.net

occurrence of Shining Geranium in the Cal-Trans right-of-way at Humboldt Lagoons State Park, immediately south of its boundary with Redwood National Park. This year, I discovered a new occurrence in Del Norte Redwoods State Park, in a drainage ditch that goes into Mill Creek. Dennehy et al. (2011) write: "Few, if any, botanists in the Willamette Valley recognized the threat posed by *G. lucidum* for the first two decades following its discovery, and at many sites it is now so abundant that eradication does not seem feasible."

So that's why RNSP seasonal Michael Shelley and I were out in the rain this last June, pulling up tiny plants of shining geranium. Shining Geranium is new to our area, it is new to Redwood National and State Parks, and we stand a chance of eradicating it now if we act quickly. Coordinating control will not be easy, given the number of jurisdictions, and the different constraints to control in each jurisdiction. But if we don't succeed, the loss to the integrity of the native ecosystems within our park will be immeasurable. When the State of Washington first detected Shining Geranium, they acted quickly to legally define *Geranium lucidum* as a Class A noxious weed, meaning that landowners are required to completely eradicate the plant when it is found. California Department of Food and Agriculture has yet to list Shining Geranium: it is up to us to work to eradicate this small plant that looms large as a threat to the biodiversity of our oak woodlands and our park as a whole. Contact me (Laura Julian 707.465.7787) for a one page plant ID guide to Shining Geranium that you can carry in your pack or keep in your vehicle. Contact me or Stassia Samuels (707.465.7784) if you suspect that you have discovered this plant at a new location.

Side Bar: How can I tell its Shining Geranium?

Geranium lucidum is in the cranesbill genus, in the family *Geraniaceae*, in the order *Geraniales*. There are seven annual geranium species found on the North Coast (Humboldt and Del Norte County). All are not native to California, but only three species are considered invasive. *Geranium dissectum*, (Cutleaf Geranium) is considered moderately invasive, while *Geranium lucidum*, (Shining Geranium), and *Geranium robertianum*, (Herb Robert), are considered highly invasive. Both species are listed as Class A noxious weeds in Oregon and Washington. *Geranium columbinum*, (Long-stalked Cranesbill), *G. molle*, (Dovefoot Geranium), *G. solanderii*, (Solander's Geranium), and *G. pusillum*, (Small Flowered Geranium), are non-natives not considered invasive.

This suite of similar-looking species might make it seem that only a botanist can tell our annual geraniums apart. Fortunately, Shining Geranium has a character that makes it very obvious to identify in the field: its leaves are only sparsely hairy on top, giving the plant its characteristic, shiny appearance. Shining Geranium and Dovefoot Geranium share a similar leaf shape and have similar red-hued stems, but

Dovefoot Geranium has a very hairy upper leaf surface. If you aren't sure which geranium you have – pet it! Dovefoot Geranium is soft.

For more information:

Shining Geranium:

<http://www.botanicalkeys.co.uk/flora/content/species.asp?50>
<http://www.brickfieldspark.org/data/shiningcranesbill.htm>
http://www.first-nature.com/flowers/geranium_lucidum.php
http://www.nwcb.wa.gov/siteFiles/Geranium_lucidum.pdf
http://www.oregon.gov/ODA/plant/weeds/Pages/profile_shinygeranium.aspx
<http://pfaf.org/user/Plant.aspx?LatinName=Geranium+lucidum>
<http://www.co.thurston.wa.us/tcweeds/docs/factsheet-geranium-shiny.pdf>
http://www.nwcb.wa.gov/siteFiles/Geranium_lucidum.pdf
<http://www.kingcounty.gov/environment/animalsAndPlants/noxious-weeds/weed-identification/shiny-geranium.aspx>

Invasives Species:

<http://www.actionbioscience.org/biodiversity/simberloff.html>
http://www.issg.org/pdf/publications/GISP/Resources/IAS_ProtectedAreas_Scoping_I.pdf
Camas:
<http://www.oregonencyclopedia.org/entry/view/camas/>

References:

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BULBS ON THE MOVE
BY CAROL RALPH

Sometimes doing gardening chores at the wrong time of year has benefits. If I had repotted my brodiaeas in August, while they were good and dormant, I would not have caught them in the act of moving. Any gardener who has grown brodiaeas, triteleias, dichelostemmas, or lilies knows that they don't stay put. Two species planted in clusters side-by-side come up all mixed together. Tiny bulbs (These are botanically corms.) planted very shallow turn out larger and deeper the following year. Even a full size bulb you KNOW you planted two inches deep you find snuggled in the bottom of the pot. One experienced bulb grower recommends covering the holes in the bottom of the pot with screen, so the bulbs can't escape!

Familiar with and continually amazed by these observations, in November, when I finally got around to repotting some brodiaeas, I was excited to find some of them had a thick, white, long, fairly straight "root," as well as a halo of fine, white, squiggly roots. Surely these white "tubes" were going where the bulb "wanted" to go. Was this structure like an amoeba's pseudopod, leading the body's way? Or was this a "contractile root," a structure I had heard about from reliable sources but could not imagine? I have not researched the matter further, but I am sharing this wonder with you now. Maybe some reader will interpret the photo for us.



Brodiaea terrestris bulbs on November 25. Most had produced a green stem above ground. Each had produced a ring of fine, white roots. Some had produced a thick, long, white "root."

CALL FOR ARTICLES
MEMBER NATIVE
PLANT GARDENS

The CNPS Horticulture Program began running a series of articles in the CNPS Bulletin on native plant gardens of CNPS members. The first one appeared in the Oct.–Dec. 2013 issue on page 7. Depending on the response, this series could become a regular feature in the state newsletter. The purpose of the series is to inspire others to create their own native plant gardens, or to add natives to an already existing garden.

If you have a native plant garden you feel is special and beautiful, and if you would like to share it with others in CNPS, send us an inspiring article draft of 575–600 words. We hope you'll include your experiences with the garden, as well as just describing what's there. Also include two high-quality photos (in jpg format, not close-ups) that show off your garden, and one-sentence captions for each. Send your submission to Susan Krzywicki, CNPS Horticulture Program Director, at skrzywicki@cnps.org. If we feel your article can be published, we will work with you through the editing process until it's in a final form. We look forward to hearing from a number of CNPS members!

P.S. Visit the CNPS Growing Native Program web resources (<http://cnps.org/cnps/grownative/>) that include: sample garden plans, native plant identification, native plant lists, and more.

(Continued from page 7)

be explained if it is palatable to elk, which spend considerable time in this area. Slough Sedge is clearly is not palatable.

This coastal wetland and dune area was clearly a dynamic area, subject to stream floods, ocean storms, wind storms, landslides, and earthquakes. We'll never see old-growth trees here! It was a good place to see quick-moving plants of the wetlands and sand.

PS On the drive out along the base of the bluff we spotted Chain Fern (*Woodwardia fimbriata*) growing with Lady Fern (*Athyrium felix-femina*) out of a damp layer of sediment. I was surprised to see it right on the coast. This west-facing bluff, sheltered by short Sitka Spruces from the wind off the ocean, oozing water year round apparently provides the warm and moisture that Chain Fern likes.

**Russ Park, Ferndale
November 2, 2013
by Carol Ralph**

Russ Park on the edge of Ferndale offers a wild, diverse coastal forest within minutes of a sidewalk. Four of us saw it in its fall aspect on a humid, gray, pleasant day. With a map from Michael Kauffmann's book *Conifer Country* and one printed by the City of Ferndale (available again soon at City Hall and The Emporium) we walked a figure 8 route, up the Lytel Ridge (Main) Trail, side trip to Zipporah's Pond, then up the Francis Creek (Maple Leaf) Loop Trail, out a spur to Bunker Hill Viewpoint (Eagle Point Spur), down Daddy Bush Trail, down Eucalyptus (Ferndale View) Trail, and across Bluff Street Trail. (Trails have different names on the new sign kiosk than they do on the handout maps.) That was about 2.4 miles. Given the steep terrain the trail was almost always climbing or descending, and given the tree roots, it demanded watching your step, but it was well cleared of encroaching vegetation (by volunteers) and not a difficult trail.

The trails ascend and descend along ridges clothed in conifers, dominated by Sitka Spruce (*Picea sitchensis*) in places and Grand Fir (*Abies grandis*) in others. The largest tree is an 8-foot DBH Sitka Spruce dated to the 1870's, when the forest started reclaiming land cleared for grazing only 20 years prior (a really bad idea where it is this steep!). Douglas-fir (*Pseudotsuga menziesii*) were also common. Western Redcedar (*Thuja plicata*) was occasional, and a few Redwood (*Sequoia sempervirens*), probably planted, were available for comparison. We compared the sharp needles of Sitka Spruce to the soft needles of Douglas-fir. We compared the bottlebrush arrangement of both these to the flat sprays of Grand Fir. We compared the cone-laden crowns of Sitka Spruce and Douglas-fir to the cone-bereft canopies of Grand Fir, whose cones stand upright on top branches and

disintegrate there. We compared the deeply furrowed bark of Douglas-fir, the flaky bark of Sitka Spruce, the smooth or lightly furrowed bark of Grand Fir, the red, deeply furrowed, ropy bark of Redwood, and the red, narrowly furrowed, stringy bark of Western Redcedar. We compared the flat, sharp needles of Redwood to the flat, blunt needles of Grand Fir. The size and abundance of the Sitka Spruce did not suggest, as is true, that here it is approaching its southern limit. The Western Redcedar, another species of the Pacific temperate rainforest, is also at its southern limit here.



Grand Fir, Douglas-fir, and Redwood (left to right) look down on David.

Between the ridges are steep-sided, wide draws that probably were created by ancient landslides. These were damp and rich with deciduous shrubs and trees--Red Elderberry (*Sambucus racemosa*), Salmonberry (*Rubus spectabilis*), Ocean Spray (*Holodiscus discolor*), Red Alder (*Alnus rubra*), Big-leaf Maple (*Acer macrophyllum*) glowing gold. The trailside here was clothed in moss, Piggy-back Plant (*Tolmiea menziesii*), and Inside-out Flower (*Vancouveria hexandra*).

At the trail nexus, at the heads of the two draws, downstream of nothing, not contributing a stream to anything, is Zipporah's Pond, where we detoured for lunch under its small grove of redwoods. The pond was embarrassingly bereft of water. We could walk right up to the sad Skunk Cabbage (*Lysichiton americanus*) and tussocks of Slough Sedge (*Carex obnupta*), which must rarely experience this waterless state.

The highest, farthest ridge was different from the others, south-facing and dry, its hard, gravelly conglomerate substrate exposed. Coast Silk Tassel (*Garrya elliptica*) was the canopy here, Poison Oak (*Toxicodendron diversilobum*) was under it, and Bush Monkeyflower (*Mimulus aurantiacus*) and Coast Buckwheat (*Eriogonum latifolium*) grew on the outcrops.

Ferndalians with their dogs were making good use of the park. Evidence indicated that many deer do also: browsed Piggy-back Plant along the trail, browsed elderberry, trails into the dense shrubs, scratched up mossy ground. It was indeed

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COMMUNICATIONS

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

- The **Darlingtonia Newsletter** (quarterly),
- Our **chapter's website**: www.northcoastcnps.org
- **E-mail lists/forums** To subscribe, send an email to:
 - For Announcements: NorthCoast_CNPS-subscribe@yahoogroups.com
 - For Gardening: NorthCoast_CNPS_Gardening-subscribe@yahoogroups.com
- **Facebook** www.facebook.com/NorthCoastCNPS

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 no later than: 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 or requesting your *EcoNews* be electronic (contact 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, 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.

Fall Plant Sale Volunteer Thank You



On behalf of the plant sale committee, we wish to thank all of the volunteers that made the plant sale held at the Bayside Grange in October such a success – it was our best fall plant sale to date! To those that helped out on by assisting with publicity; making our labels for all of our CNPS provided plants as well as the nursery plant labels; moving plants from Anna Bernard's house, moving plants from the Beresford's home to the sale and back; helping to set up for the sale; checking in and out the participating nurseries; answering the many numerous plant questions for folks coming to the plant sale; adding up plant sales; working the cashiering table; providing food for the volunteers; helping to clean up after the sale; talking home plants to plant sit until the spring sale and anything else that we may have missed – a Big Thank You – we could not have done this without everyone's assistance!

Those who volunteered to work on the sale are: Richard Beresford, Randi Swedenburg, Judie Hinman, Donna Wildearth, Bev Zeman, Karen Isa, Kim McFarland, Carole Smilie, Kathy Goodman, Colin Fiske, Sam Rich, Tami Camper, Wanda Naylor, Pete Haggard, Bojan Ingle, Gura Lashee, Fred Martin, Carol Ralph, CJ Ralph, Leonel Arguello, Connie Gregerson, Sydney Carothers, Barbara Kelly, Kim McFarland, Chris Brant, Ann Burroughs 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-sit" plants between sales, and who divided or dug out native plants from their own yards or enabled us to do so providing plants for us to sell – another Big Thank You to all of you!



Four-local nurseries also participated by providing plants for our fall plant sale: Samara Restoration, Lost Foods, Brant Landscaping, and Freshwater Farms. These nurseries all provided the great shrubs, trees and perennials that we do not grow ourselves.



A special thanks to Sara Turner for providing free poppy starts for folks to take home and plant in their gardens, to Gura Lashee for taking photos of our plant sale event (credit for photos here), and to Karen Isa for making our plant sale banner.

If we have missed anyone, our sincere apologies on our oversight.

Chris Beresford and Anna Bernard

(Continued on page 17)



SPRING WILDFLOWER SHOW

MAY 2-4 at the Manila Community Center

School groups welcome on Friday May 2

Plant Growers Group

As was evident at our recent plant sale, the Chapter has been working hard on increasing the number of species of plants that we provide. It is that time of year again when we start many different species in flats and soon we will need to move these new starts up into larger containers for the upcoming spring sale in May. We will also be organizing some "dig-n-divide" adventures to local gardens to get starts from established landscapes or divisions.

If you have time to volunteer to help transplant seedlings, to participate in one of our "dig-n-divides" or have space to put a dozen or more 1-gallon pots, you can contribute to our biggest fund-raiser and help to support the Chapter and its many activities. To volunteer: No experience is required - we will show you how!

If you would like to assist in this on-going project, the easiest way to do so is to sign up to receive email notification of upcoming transplanting sessions or "dig-n-divides" via our chapter's Yahoo gardening group. To join the NC-CNPS Gardening with Natives Group, send an email to northcoast_cnps_gardening_subscribe@yahoo.com. For information contact Chris Beresford at 707 826-0259 or at thegang7@pacbell.net.



POTS NEEDED

The plant propagation committee is in need of small 6-packs, 4" square pots and 1-gallon pots for the chapter's native plant sales. We literally go through hundreds of these every year. If you have any extra of the above, you can drop them off at Chris Beresford's house at 4688 Jacoby Creek Road, Bayside or at Anna Bernard's house at 3232 Alliance Road (in the subdivision at the end of K Street), Arcata. For additional information or to arrange for one of us to come and pick them up, contact Chris at thegang7@pacbell.net or at 826-0259 or Anna at eabern@aol.com or at 826-7247.

On Facebook? Join the CNPS Facebook Group!

If you're on Facebook, consider joining the CNPS Facebook Group (<https://www.facebook.com/login.php?next=https%3A%2F%2Fwww.facebook.com%2Fgroups%2F38417209275%2F>). Facebook Groups, unlike "fan pages", were designed to make it easier for people with a common interest to communicate and share content with each other. On the CNPS Group, you can post a picture of a mystery plant and have people from across the state pitch in their best guesses. Share events in your area or find out about a new species that was discovered near your town! Recent pictures include showy buckwheats, succulents from the desert and coastal islands, and dainty ferns flourishing in the cool fall season. Have a question about the use of redwood as mulch, what species to plant in your Orange County yard, or if the desert is blooming yet? Get the answers online and make a few comments of your own. With almost 3,000 members socially connected on the CNPS Facebook Group, we can all share our knowledge and passion for native plants.

& PLANT SALE

Join our volunteers (no botanical knowledge required)! Contact a Beresford (WFS-Richard / Plant Show-Chris at thegang7@pacbell.net / 826-0259).



CALIFORNIA NATIVE PLANT SOCIETY RIPARIAN (STREAMSIDE) WORDSEARCH

H	H	B	E	R	O	M	A	C	Y	S	K	N	J	V	Y	L
V	U	B	Y	E	R	B	A	M	A	N	S	A	H	E	E	I
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A	D	K	N	R	E	F	T	O	O	F	S	D	R	I	B	H

CAN YOU FIND THESE WILDFLOWERS?

ALDER
ARROYO WILLOW
BIG LEAF MAPLE
BIRDS FOOT FERN
BLACKBERRY
CATTAIL
COTTONWOOD
CURRANT
FERN
HUMBOLDT LILY
HUMMINGBIRD SAGE
LIVE FOREVER
MEADOW RUE

MUGWORT
MULEFAT
RED WILLOW
REED
RUSH
SILKTASSEL
SWEET PEA
SYCAMORE
VIRGINS BOWER
WILD GRAPE
WOOD ROSE
YERBA MANSA

By Betsey Landis

RIPARIAN (STREAMSIDE)

Riparian means streamside. Riparian and pond plant communities are found anywhere there are streams flowing year-round, streams that only flow when the rains are heavy, springs, seeps or ponds.

Trees are tall and often are winter deciduous (shed their leaves in winter) like sycamores and cottonwoods. Coast live oaks will grow in damp shady canyons on slopes above the flowing canyon streams.

Shrubs such as roses, blackberries, currants, mulefat, and the six-foot humboldt lilies enjoy the extra water.

There are native cattails, rushes, reeds and many ferns.

Watch out if you go hiking in these plant communities! Poison oak grows very well here and in the cooler, moister, shaded chaparral environments. Poison oak often climbs into the canopies of neighboring shrubs and trees so be careful when you walk under leafy boughs. Leaves three, let it be!

Here are some native plants found in riparian plant communities:

TREES

Alder
Big leaf maple
Cottonwood
Red willow
Sycamore

SHRUBS

Arroyo willow
Golden currant
Mulefat
Blackberry
Silktassel
Wood rose
Cattail

SUCCULENTS

Chalk live forever
Lance-leaved live forever

PERENNIALS

Hummingbird sage
Meadow rue
Mugwort
Reed
Rush
Yerba mansa

VINES

Virgin's bower
Wild grape
Wild sweet pea

FERNS

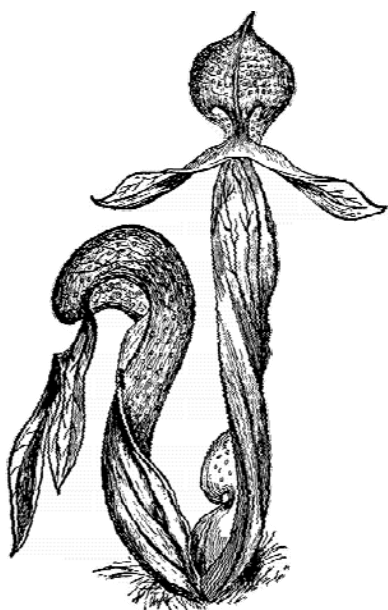
Bird's foot fern
Bracken fern
California polypody
Chain fern
Goldback fern

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

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CHANGE SERVICE REQUESTED

Darlingtonia



Visit us at
NorthCoastCNPS.org

CALENDAR of EVENTS

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

January

- ◆ Wed 8: Program

February

- ◆ Wed 12: Program
- ◆ Sat 15: Field Trip

March

- ◆ Wed 12: Program
- ◆ Sun 30: Day Hike

April

- ◆ Wed 9: Program
- ◆ Sat-Sun 12-13: Field Trip

May

- ◆ Fri-Sun 2-4: Wild Flower Show
- ◆ Sat-Sun 3-4: Plant Sale
- ◆ Wed 14: Program

June

- ◆ Sat-Sun 7-8: Field Trip