MADRONE LEAF BLIGHT
by Maia M. Beh
University of California Cooperative Extension- Humboldt and Del Norte
707-445-7351 — mmbeh@ucdavis.edu

[Many people, myself included, driving south on 101 from Eureka to the Bay Area have noticed the sorry state of many madrones. I phoned the "Ag Office" in Eureka and received this helpful response. Carol Ralph]

Most of the brown and dead-looking madrones that you have noted along the side of the road have been hit by what is known as madrone leaf blight or leaf spot. This disease can be caused by a number of different fungi (Apparently madrone leaves are particularly susceptible to these blight fungi.) and determining which species is/are causing the symptoms can be quite difficult from diagnostics. And it's not just madrones in northern California that come down with the disease. In Oregon, *Mycosphaerella arbuticola* has been isolated from diseased leaves, while more recently in Washington, *Phacidiothecis washingtonensis* has been found to cause these symptoms (And oddly enough, this fungus is also causing a new rot on apples post-harvest.). But whatever the specific fungus causing the leaf spotting, browning, and death, the important thing to know is that it rarely kills the tree. Rather, the leaves die-back and remain on the tree for awhile, and then the tree will put out new leaves again in the spring.

(Continued on page 11)
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@yahoogroups.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.

April 22, Sunday. 8-11 a.m. Native Plants in Yards and Forest. (a free Godwit Days field trip) Join experienced gardeners Kathy Dilley and Pete Haggard for a brisk, morning walk from the Arcata Community Center to the Community Forest and back, to see native plants in landscapes and the redwood forest. Besides identification, questions like "What IS a native plant?" "Why plant natives in your yard?" "How do you mimic in a yard a wild, native habitat?" will be considered. Hopefully trillium will be blooming in the forest. The walk is about 3 miles on sidewalks and good paths with about 250 ft. elevation gain. Call 826-7050 to register for this trip, or register for Godwit Days at www.godwitdays.org.

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.

April 28, Saturday. 1:00-3:00 p.m. Ferns in the Dunes. Prehistoric, persistent, and lovely describes most ferns. Naturalist and native plant enthusiast Carol Ralph will introduce participants to eight species of fern and their morphology, reproduction and identification on a walk along the Lanphere Dunes entrance road. Bring a hand lens. Meet at Pacific Union School, 3001 Janes Road in Arcata and carpool to the protected site. Co-sponsored by CNPS and Friends of the Dunes. Please register by calling 444-1397 or email: info@friendsofthedunes.org

April 29, Sunday. 1-3 p.m. Wildflowers in a Hydesville Forest. A dappled, deciduous forest along a sparkling stream, sprinkled with springtime gems like trillium, fairybells, bleeding heart, and Solomon's plume, is only one treat on show by hosts Bill and Linda Shapeero in Hydesville. A shady, grand fir forest and sunny, pasture edges offer other habitats alive with flowers and fresh, green herbaceous plants and shrubs, almost all native. Led by Carol Ralph and Janelle Egger. From 101 at the south end of Fortuna take the Highway 36 exit, go about 3 miles up to Hydesville, turn left at the church onto Rohnerville Rd., go about 1 mile, turn right onto Puddin Ln at the bottom of a gulch, follow signs and balloons to Shapeero. The ground may be damp. Kindly RSVP 768-3287 or 822-2015.

May 6, Sunday. 11:00 a.m.-12:30 p.m. Manila Dunes, a walk with Friends of the Dunes docent Laurel Goldsmith, part of the wildflower show in the Manila Community Center

May 12, Saturday. 12:30-4:30 p.m. Stony Creek Half-Day Hike. This famous and favorite botanical destination offers diverse, almost entirely native vegetation. Western azalea, Pacific rhododendron, Del Norte iris, California lady's slipper, and Oregon anemone are among the expected bloomers. Carol Ralph will lead this 2-mile roundtrip hike to the confluence of Stony Creek and North Fork Smith River. The trail is somewhat narrow and uneven, with an optional extension over boulders. Meet at 12:30 p.m. at the Ruby Van Deventer Wildflower Show at the Del Norte County Fairgrounds in Crescent City (along 101 at north end of town; opens at 11 a.m.) or at the Gasquet store-post office at 1 p.m.. Presented by the California Native Plant Society. Please tell us you are coming 822-2015.

May 27, Sunday. 1-3 p.m. Azaleas! at the Azalea State Reserve. Join experienced native plant gardener Pete Haggard to admire the azaleas blooming and to see a variety other native shrubs recommended for gardens. Exit onto North Bank Rd. off 101 just north of the Mad River; after about one mile turn left on Azalea Dr., and shortly after that, left into the parking lot. 839-0307.
**Evening Programs**

The North Coast Chapter of CNPS (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 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.

<table>
<thead>
<tr>
<th>Date</th>
<th>Program Title</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr 11</td>
<td>A Native Plant Garden Story</td>
<td>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. Their edge of a Eureka gulch was an intimidating, steep thicket and became a sanctuary for people, plants, and critters.</td>
</tr>
<tr>
<td>May 9</td>
<td>Heart Rot Fungi at the Heart of the Forest</td>
<td>Working in nearby Douglas fir and true fir forests, mycology graduate student Nikos Najarian is exploring the role of heart rot fungi in creating clearings in the forests and thus affecting the diversity and composition of the forest as a whole.</td>
</tr>
<tr>
<td>Sep 12</td>
<td>Dr. James P. Smith talks about California's early botanists</td>
<td>Botanical book recirculation night starting at 7:00 p.m.</td>
</tr>
</tbody>
</table>

**Wildflower Art Show to Benefit Children**

by Rick Tolley

Fifteen artists are selling their work to benefit the California Native Plant Society–North Coast Chapter's school transportation fund.

"We want to help fund school kids' transportation to the Spring Wildflower Show, May 4-6 in Manila, where they can view specimens and attend workshops," says organizer Rick Tolley.

The art show will hang the month of April at the Upstairs Art Gallery in the Arcata Umpqua Bank, 1063 G. St, Arcata. Opening night is during "Arts Arcata," Friday, April 13th, from 6 p.m. to 8:30 p.m.

The Humboldt Wildlife Care Center will serve wine; Mon Petit Chou will play Quebecois and Acadian fiddle tunes, the music of eastern French Canada.

Everyone is invited to come and enjoy a variety of oil paintings, watercolors, acrylic paintings, monotype prints and photographs.

Participating artists are: Gary Bloomfield, Andrew Daniels, Joy Dellas, Paul Fabian, Paula Goliighty, Michael Harris, Linda Parkinson, Ken Jarvala, Joyce Jonte, Leslie Reid, Alan Sanborn, Patricia Sennott, Stock Schlueter, Rick Tolley, Ann Wallace, and Libby Yee. For information phone 668-5301.
**VOLUNTEER CORNER**

Phone Carol Ralph 822-2015 or write theralphs@humboldt1.com to volunteer, ask questions, or make suggestions.

**Thank you!**

Larry Levine for vast number of hours working on our web site over the years.

Marisa St. John for patiently pushing and pulling our web site toward a new management model and for filling in as Membership Guru.

Ann Burroughs for jumping into the web site project and propelling it with her considerable skills and energy.

Michael Kauffmann, Stephanie Klein, Elaine Allison, Barbara Kelly, Felicity Wasser, Sylvia White, Jim Waters, Virginia Waters, Audrey Miller, and Rita Zito for tending our booth at the North Country Fair.

Rita Zito and Carol Smilley for putting up and taking down booth.

Tom Carlberg and Jenny Hanson for leading the November lichen trip.

Sylvia White and Donna Wildearth for finding evening program speakers.

Chris Beresford and Anna Bernard for a fun and productive fall plant sale.

**Welcome aboard!**

Brian Dykstra as Education Chair

Rita Zito as Poster Sales Person

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

**Membership Guru.** Deep our mailing list up-to-date. Coordinating with the state office, working in Excel, add and subtract members from the list and make address changes. 2-3 hours/month.

**Spring Wildflower Show** needs **collectors** (Thursday May 3), **room preppers** (Thursday, May 3 afternoon), flower "**vasers**" (early Friday, May 4), flower **identifiers** (Friday, May 4, morning and on), **table tenders** (2-hour shifts, Friday 1-5, Saturday 10-5, Sunday 10-4), plant sales people, **refreshments** for volunteers (Friday-Sunday), and more. Don't miss the fun of being part of this grand event! Contact Chris Beresford at thegang7@pacbell.net or 707-826-0259.

**Plant Propagators** for our plant sales. Learn all aspects of raising native plants by joining others doing it and practicing yourself. Come to a dig-and-divide session or potting-up party, or care for our plants at your home, or help at the plant sale itself. All while contributing to our biggest source of funds. Contact Chris Beresford, Plant Sales Coordinator, at 707-826-0259. To be notified of future gardening activities, join the NC CNPS Gardening with Natives Group by sending an email to NorthCoast_CNPS_Gardening-subscribe@yahoo.groups.com.
Undaunted by the unseasonably cold and solidly gray day, twenty-two plant aficionados gathered at Patrick's Point State Park to botanize, to see favorite and new sites, and to look for footsteps of spring (*Sanicula arctopoides*) on the ocean bluffs. We met at 9:30 a.m. at the visitor center and shuttled a few cars to the Wedding Rock parking area, where we planned to be at lunch. The somewhat overgrown, planted bed in front of the visitor center provided a review of shrubs and trees and a palette of mosses, which remained anonymous. Then we walked to the native plant garden through a dense, dark, young Sitka spruce (*Picea sitchensis*) forest, a common habitat in this park. A ferny log caught our attention, loaded with the commonest ferns of the day, sword fern (*Polystichum munitum*), spreading wood fern (*Dryopteris expansa*), and “roadbank” fern (*Polypodium calirhiza*). Lady fern (*Athyrium felix-femina*) was common in the park, but it was still dormant and therefore inconspicuous.

The native plant garden had a good diversity of shrubs, trees, and herbaceous plants. It was created and tended for a long time by the Trinidad Garden Club, but now it has outgrown the club. We could see the efforts of someone with a chain saw in controlling the vigorous growth of years. Some colorful, new plant signs for marking specimens also showed some loving attention. Most deciduous plants still looked like winter, but twinberry (*Lonicera involucrata*) sported tufts of fresh green leaves and red alders dangled male catkins. The first and only trillium of the day was just opening its pure white flower. We had a lesson in telling native from horticultural rhododendron when not blooming. The native (*Rhododendron macrophyllum*) is always at least partly shaded, is leggy and open, grows new leaves only once per year, and has narrower, pointier leaves. In the neighboring Sumeg Village we noted the Bishop pine (*Pinus muricata*), distinguished California (*Rubus ursinus*) from Himalaya blackberry (*R. armeniacus*), and saw how one yellow composite was indeed different from the other, which was rough cat's-ear (false dandelion; *Hypochaeris radicata*). We proceeded under the western red cedar (*Thuja plicata*) (planted) in the Sumeg parking area, checking the "butterfly"-shaped white smudges on the backs of leaves, into the road that is the back end of Agate Campground. At a wet place we breathed deeply of the musty, skunk cabbage (*Lysichiton americanus*) smell of spring, admired the deep pink blooms of salmonberry (*Rubus spectabilis*), and studied the translucent, bright red berries of false lily-of-the-valley (*Maianthemum dilatatum*) on short, dead stalks from last summer. No sign of the carpet of last year’s leaves remained. We found a clump of snaky-stemmed, trailing black current (*Ribes laxiflorum*) just opening its fresh leaves, which had no smelly, glandular hairs. The red flowering current (*Ribes sanguineum*), which was sprinkled throughout the park, was more upright, had smelly leaves, and was decked in cheerful, pink pendants.
In the campground the walls of salal (Gaultheria shallon), salmonberry, blackberry, huckleberry (Vaccinium ovatum), silktassel (Garrya elliptica), etc., showed how dense this coastal scrub can grow when frequently pruned. The maps showed Octopus Trees Trail as a loop with a stem between campsites 110 and 112. We turned there into an unmarked, narrow, slightly muddy trail. It was no longer a loop, but a direct route to Patrick's Point Drive. The trail was designed to feature old growth Sitka spruce on thick, crooked "legs," the roots that reached the ground from the seedling's perch on a fallen log. Most of these trees blew down in the big storm New Year's Eve 2005, so the forest is now more open. What caught our attention was a stand of a deciduous, leafless shrub with twigs often whorled and slightly hairy, and narrow, pointed buds clustered in a whorl at the branch tips. Only two possibilities came to mind: native azalea (Rhododendron occidentale) and false (or mock) azalea (Menziesia ferruginea). Later research, looking at photos of Menziesia in March and looking at azaleas in yards and Azalea State Reserve, found similar branches on both species. Older wood on azaleas is gray and crooked, but fast-growing, young wood, as on sprouts from a cut stem, was similar to what we saw. We need to return!

From Agate Campground we entered the Rim Trail, hoping to see coastal bluffs, but instead saw thick stands of the tall, native bunchgrass Pacific reedgrass (Calamagrostis nutkaensis), more dense walls of coastal scrub, steep slopes covered with coastal scrub, tangled riparian forest along Beaver Creek (and a second trailing black currant, with one inflorescence of little-cup flowers), and a sunny (when skies are clear) corner by a rock outcrop, where several old growth silk tassel --both male and female--called attention with their gnarled trunks and spring tassels. We actually made it at lunchtime to the expected lunch spot, a pair of picnic tables by the Wedding Rock parking area, sheltered by walls of coastal scrub. While eating we were treated to a lesson on fern sex, including mitosis, meiosis, sporophyte, gametophyte, archegonia, microspore, macrospore, endosporpy, and a Gray Jay landing on Dennis' head while he spoke!

After lunch, some of the group departed, and others walked directly to Ceremonial Rock. We were pleased to find seven shiny green fronds of grapefern (Botrychium multifidum) in the usual spot along the steps on the back side. The lowest parts of their fronds had escaped the trailside weed trimming, while the fertile parts had been amputated. We learned that grape fern is mycorrhizal, that it can stay dormant for years, that its gametophyte is subterranean for years, living on a fungus growing inside it, and that it has contractile roots that pull the short, vertical rhizome deeper into the soil. The contractile mechanism is thought to be cells' walls collapsing in the direction of the contraction. What an amazing plant! Also amazing was the size of the English ivy (Hedera helix) still on this important, scenic rock. The stringy, mosslike mats common on this and other rocks in this park was a spikemoss, humble relation of the plants that dominated the first forests on earth. We decided it was Selaginella oregana, even though the distance between branches was much shorter than the 3 cm called for in The Jepson Manual. From the top of the rock the view took in the very recently mowed meadow (Come back in June for lilies.), the ocean, and spruce trees that now blocked a view to the south that living people remember being clear.

To look for habitat for footsteps of spring we then walked across the meadow to Wedding Rock. The trail up this popular ocean overlook was in a serious state of construction. Where most people look out to sea for whales and ocean birds, we examined plantains. The alien Plantago coronopus, with quite lobed leaves, was the most abundant, and varied tremendously in size. With it, tucked into protected nooks among rocks of this heavily trampled

(Continued from page 5)

On the Rim Trail, looking for flowers on trailing black current

(Continued on page 16)
Steering Committee Members/Contacts

President	Carol Ralph	707-822-2015	theralphs@humboldt1.com
Vice President	Felicity Wasser	707-616-9974	wasserfw@yahoo.com
Secretary	Frances Ferguson	707-822-5079	fferguson@reninet.com
Treasurer	Michael Kauffmann	707-407-7686	michael_kauffmann@yahoo.com
Membership	Position Open	Contact Carol Ralph
Invasive Plants	Stephanie Klein	707-443-8326	StephanieKlein@w-and-k.com
Native Plant Gardening	Pete Haggard	707-839-0307	phaggard@suddenlink.net
Native Plant Consultation	Bev Zeman	707-677-9391
donjzeman@yahoo.com
Plant Sales	Chris Beresford	707-826-0259	thegang7@pacbell.net
Co-Chair Anna Bernard	707-826-7247
eabern@aol.com
Education	Brian Dykstra	616-558-0404	brianjdykstra@gmail.com
Conservation	Jennifer Kalt	707-839-1980	jenkalt@gmail.com
Programs	Audrey Miller	707-786-9701	taudreybirdbath@suddenlink.net
Hospitality	Melinda Groom	707-668-4275	mgroomster@gmail.com
Frank Milezczik (Asst.)	707-822-5360	frankm638@yahoo.com
Field Trips and Plant Walks	Carol Ralph	707-822-2015	theralphs@humboldt1.com
Rare Plants	Kim Imper	707-444-2756	dimper@softcom.net
Plant Communities	Tony LaBanca	707-826-7208	tlabanca@dfg.ca.gov
Newsletter Editor	Marisa D’Arpino	707-601-0898	marisa_nativecalifornian@yahoo.com
Website & Publicity	Larry Levine	707-822-7190	levinel@northcoast.com
Poster Sales	Rita Zito	707-443-2868
T-Shirt Sales	Position Open	Contact Carol Ralph
Workshops	Gordon Leppig	707-839-0458
gleppig@dfg.ca.gov
Wildflower Show	Richard Beresford	707-826-0259
CNPS Chapter Delegate	Larry Levine	707-822-7190
NEC NC CNPS Representative	Jennifer Kalt	707-839-1980
jemkalt@gmail.com

Communications

North Coast CNPS members have four ways to share information with each other:
1. The Darlingtonia Newsletter (quarterly),
2. Chapter website www.northcoastcnps.org
3. E-mail lists/forums (Announcements, Business, and Gardening – subscribe from the E-mail lists and Forums page on www.northcoastcnps.org).
4. Facebook http://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 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 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.
MEMBERS’ CORNER

Welcome New Members

Adam Canter
Jeanlouis Carmona
Samantha Dudman-Miller
Sandra Jerabek
Kindred Gardens Dupret
Howard Kullian
Gregory O’Connell
Georgia Salmon
Sierra Spooner
Rebecca Swanz

Thank You Renewing Members

Anthony Andreoli
Lillian Bluman
Richard D. Booth / Joyce A. Booth
David Callow
Marisa D’Arpino
Nancy Fahey
Christy Graham
Bret Harvey
Sandra Hazel
Michael Kauffmann / Allison Poklemba
Mary Jo Kenny
Nona H. Kraus
Helen Kurkjian
Cheryl Lisin
Elizabeth McGee-Houghton
Audrey Miller
Christina Wagner
Hope Woodward

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](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.

Please notify the state office when your address changes. Email 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.
Pruning Tips for California Native Plants

Ted Kipping, Certified Arborist excerpted from State’s website http://cnps.org/cnps/grownative/pruning-kipping.php

So, it’s been 5-10 years since you filled up your garden space with a buying spree at your local Native Plant Society Sale. Somehow all those little gallon-sized plants looked rather lonely when you first set them out. Now they have all grown bigger than you could have imagined. It’s time either to remove some (perish the thought!), or to play referee with the pruning tools. What you need are good muscles, sharp clean tools and most importantly, a clear idea of what you want to achieve to attain a vegetative truce in the garden for a year or two.

Your garden vision with proper timing and techniques:

• Do you want a hedge? Decide whether tightly or informally shaped is right for your plant and space, then use shears or hand pruners, respectively. Make the tops of hedges narrower than the bases or the top growth will shade out the bottom leaving bare twigs and branches and a litter of dead leaves.

• Do you want an espalier to hide a wall or an unwanted view over the fence? Start tipping back lateral growths to growing leafy nodes close to the plane of desired growth. Do you want a tree or tree-like effect? Gradually trim off the lower growth as it becomes shaded by the upper canopy’s more recent growth. Avoid exposing young thin bark to direct blazing sun. Some light structural thinning will allow for dappled light to reclaim the growing space below, which now becomes the start of your new woodland plantings in part shade.

• Are you after a “see-through” look from your larger shrubs to tease the eye, create some feeling of mystery and fool the senses into thinking that your gardening domain is vaster and more promising than it seems? Do you want to show off the sexy bark of your Manzanitas? Trim up the lower side shoots, and remove the inner crossing twigs and stems. Remember to step back, have that needed swig of refreshing water, and assess your work for consistency of density and form, not just within the framework of this present specimen, but also within the context of the rest of the garden. Be consistent!

Some pruning techniques:

• KNOW BEFORE YOU GO. Decide what effect you want to create before you pick up your tools. TIP BEFORE YOU STRIP. If a size reduction is important, do that first before you crawl inside to remove any inner density. It will save you frustration and embarrassment.

• THE 4 D’S: - What to prune out when uncertainty strikes:
  • Dead - Always start here. You can’t go wrong and will get oriented to the specimens patterns of growth.
  • Damaged and …..
  • Diseased – Next remove damaged and diseased growth as feasible.
  • Deranged – Remove those branches which cross or rub on another or break the pattern or rhythm of the rest of the structure, such as a weeping branch on an upsweeping shrub or tree or an upsweeping on a weeping form. Branches which do not make it to the outside or especially those which take a long wiggly way to get there require a lot of high maintenance “plumbing” to do the job.

• THOU SHALT NOT MAKE STUBS. Trim back the target branch to the “collar” or swollen base of the branch, leaving the ring or partial collar belonging to the tissues of the larger limb where it appears to be trying to overgrow the target branch. Do not damage this “collar” as it is the tree’s first line of defense when the branch dies.

• UNDERCUT HEAVY BRANCHES TO PREVENT RIPS, then make your final cuts. On more massive limbs three or more cuts might be in order.

• BUY QUALITY TOOLS. Keep them safe, clean & sharp!

• WEAR GLOVES & EYE PROTECTION, especially when working above your head. If using pole-saws & pole-pruners also wear a hardhat.

• ON BIG TREES HIRE A CERTIFIED ARBORIST.

Finally, step back to enjoy the fruits of all your labors!
MORE ABOUT PHENOLOGY MONITORING AT REDWOOD NATIONAL PARK

[Editor’s Note: See the original article in the Winter 2012 Darlingtonia issue—available for download at http://northcoastcnps.org/2011/images/stories/Darlingtonia/darlingtonia_12_1_winter.pdf]

Phenology monitoring at Redwood National Park entails visiting one or more of our existing three phenology sites and collecting phenology data on pre-selected plants, according to the established National Phenology Network protocols. Expansion of the program could include new sites and additional species. For further information, see the California Phenology Project website http://www.usanpn.org/cpp/about, as well as the National Phenology Network website http://www.usanpn.org/.

Our current phenology sites and species:

Freshwater Beach – adjacent to the Kuchel Visitor Center: Coyote brush (Baccharis pilularis) is monitored around the boardwalk adjacent to the visitor center, and the silky beach pea (Lathrys littoralis) is monitored at three sites adjacent to the visitor center.

Ladybird Johnson Trail – Rhododendron (Rhododendron macrophyllum) and Pacific trillium (Trillium ovatum) are monitored at several locations around this easy 1.5 mile loop trail.

Crescent Beach – Coyote brush, cow parsnip (Heracleum maximum formerly H. lanatum) and red elderberry (Sambucus racemosa) are monitored at various locations adjacent to the parking lots and a short distance along an easy trail.

Species profiles are available at: http://www.usanpn.org/cpp/taxonomy/term/4

Google map points for the sites are available at: http://www.usanpn.org/cpp/node/34

Protocols

The above sites were established in 2011. The specific plants to be monitored have been tagged and mapped, allowing us to visit the same plants year after year. Herbaceous species are marked with tagged 6” steel weedmat staples, driven into the ground next to the plant.

Monitoring protocols are relatively simple and include locating each plant from a map and photopoints, and recording Yes and No data on which phenological stages are visible on each tagged plant. Stages observed vary slightly by plant habit (woody, herbaceous, single flowered, multflowered, etc), but generally include for leaves- breaking leaf buds, leaves, colored leaves, falling leaves, and for flowers -inflorescences, open flowers, fruits, ripe fruits and fruit drop.

Volunteers with an eye for detail can easily be trained to observe the phenological stages for the various species, and should be willing to keep track of their datasheets and communicate with the project coordinator about any problems encountered.

Please contact Stassia Samuels at Redwood National Park for further details, 707-465-7784, Stassia_samuels@nps.gov.
Like many fungal pathogens of foliage, the madrone leaf blight fungi thrive in moist weather. That is why symptoms of these pathogens are particularly severe in the winter and spring, and in sites like valleys, creek bottoms, and beneath large overstory trees. These site-specific micro-climates may account for why madrones in certain areas along 101 look totally blasted and in other areas look fine. A sunnier, airier site will not be as good an environment for the fungi, and thus the madrones will look better there. As an aside, I was driving back to Humboldt over the 299 yesterday, and the madrones between Willow Creek and Blue Lake also look very bad. I expect that all these trees will look and be fine by later spring and summer, however. I think it would take multiple repeated defoliations of a young madrone for these leaf blight fungi to kill it.

However, as I hinted in the very first sentence with "Most of the madrones.....," there is another serious disease of madrones out there that is entirely capable of killing trees. This is called madrone canker, and it is also caused by fungi, though these pathogens target the main stem and woody branches, leading to total dieback of the upper branches, not just defoliation, as is the case with the leaf blight. One easy way to distinguish symptoms of leaf blight from madrone canker is that leaves with blight will actually have distinct blotches and spots before the leaves turn totally brown. With madrone canker, the cankers themselves have a blackened and burned appearance on the bark.

I do think that the highly visible brown madrones along the roads that we have noted of late are caused by these leaf blight fungi, but I don't know why they should be so active this winter in particular, especially as it hasn't been so rainy. One possible reason for the severe disease symptoms this winter, even with the dry weather, is that the prior two winters were relatively wet, and they could have helped the leaf blight fungi build up to high levels. Old madrone leaves on the ground underneath trees serve as a reservoir for the fungi, so maybe inoculum levels of the fungi were just building over the past two winters and then caused an explosion of disease this winter.

For more information, and for ways to participate in mapping severe disease outbreaks, check out these websites:


What is Native Plant Week?

California Native Plant Week (CNPW) is a week dedicated to the appreciation, education, and conservation of California's fabulous flora. The CNPW legislation (ACR 173) was sponsored by CNPS, and introduced by Senator Noreen Evens during the 2010 legislative session to help protect California's native plant heritage and preserve it for future generations by raising awareness about our state's rich botanical diversity. California Native Plant Society promotes CNPW through native plant sales, wildflower shows, gardening workshops, lectures, hikes, and many more events. CNPW events like these allow all California residents to take an active role in preserving the majesty of California's native flora.

http://californianativeplantweek.org/
The second edition of *The Jepson Manual* (THM) is out and in use. One consequence is that those of us waiting for its release to start learning and using the new names taxonomists have put on California plants since 1993, now have to do it! Thanks to the Shasta Chapter newsletter I can steer you to the place to convert your lists of plant names to the updated names used in the second edition. This page, called Dynamic Concordance, is on the Jepson Interchange part of the Jepson Flora Project:

http://ucjeps.berkeley.edu/interchange/JMtoJMII.html

On this page you can type in one or many names, or paste in a list of names. You can ask for the new family assignments. For example, you enter Smilacina racemosa, that wonderful, large, fragrant forest plant some of us call Solomon's plume, tick the "include family" box, click the "Look up names" button, and it comes back "Maianthemum racemosum (L.) Lin RUSCACEAE". Not only did this species get shifted to a different genus, it is one of the many species shifted out of the old Liliaceae into new families. It won't tell you why the name was changed, and it won't deal with common names. You'll have to look elsewhere for those. Meanwhile, remember that a *Smilacina racemosa* by any name smells just as sweet.

### GILDED DARLINGTONIA AWARD

by Carol Ralph

Everything our chapter does is a product of volunteer ideas, skills, time, and energy. We appreciate, and ultimately native plants benefit from, every volunteer effort, small to large. A few of our chapter volunteers are remarkable for how long and consistently they have been an active part of our chapter. Each has served in various capacities from the "distant past" into the present. They have recently been honored with the Gilded Darlingtonia Award as appreciation for serving our chapter and advancing the conservation of California's native plants for so many years. We are pleased to recognize these recipients:

- Jen Kalt (latest recipient pictured above)
- Dave Imper
- Felicity Wasser
- Larry Levine
- Pete Haggard
WHAT HAPPENED AT THE 2012 CONSERVATION CONFERENCE?
compiled by Carol Ralph

The 2012 Conservation Conference in San Diego was a lively focus of botanical energy January 10-14, 2012. Our chapter paid registration for five Humboldt State University graduate students to help them attend this distant event. We are proud to support these exceptional young botanists.

Graduate student Jade Paget-Seekins reports:

"There were a somewhat overwhelming number of short presentations by botanists and plant enthusiasts from all over the state on varied topics. I attended an interesting panel discussion about huge proposed solar "farms" out in the deserts and habitat loss from them. I also went to a session about education of both youth and adults, and involving lots of people in botany related projects, including the California Phenology Project, and the Rare Plant Treasure Hunt. I also went to a short workshop on using the CNPS curriculum "Opening the World Through Nature Journaling." There were a lot of good presentations by students, both undergrads and grad students about the work they have been doing in all aspects of botany and plant ecology. Unfortunately there were also presentations, mainly not by students, which were not as well done as I would have liked. The sing-along evening was fun. People brought songs whose words they had rewritten to be about plants and they were projected on a screen so everyone could sing along.

I did meet some interesting people. I talked to a lot of people who had gone to HSU either as graduate students or as undergrads and are now out working in some plant related job.

Unfortunately I did not get out to look at plants enough. April went to both the field trips, on the two days before the conference but I did not, they filled up fast."

A letter from Vince Scheidt (Conference Chair), Brett Hall (CNPS President), and Josie Crawford (Education Program Director) to our chapter says

"On behalf of the California Native Plant Society, we want to thank you for your contribution to making the CNPS 2012 Conservation Conference a big success. Your contribution towards Student Funding was one of the most important contributions one could make. In the end, all students who applied for funding received it, thanks to you! This was a tremendous accomplishment. Over 150 students attended the conference and they added so much enthusiasm, good energy, and great talks and posters. Thank you for investing in our future. It means a great deal to the students, it means a great deal to us......

More than 1000 people attended...over 700 people and organizations....contributed....more than 300 people presented talks, posters, workshops, field trips, and Public Day events....over 100 artists, photographers, poets, and musicians...over 100 volunteers and staff... this [evaluation] from Alan Harper:

'I think that this conference is cementing CNPS's reputation as "the" science-based conservation organization in California. Because you involve so many levels of scientific input--from top-level university professors, to active researchers, to agency staff, to professionals, to grad students, to aficionados--and because CNPS is involved on the ground with so many conservation issues, you raise your effectiveness may fold...CNPS is the California organization that is linking conservation biology with conservation action, and you are doing it in a way that non-volunteer organization cannot possibly do.'"

Additional information available on the State's website http://cnps.org/cnps/conservation/conference/2012/
**BUDDING, YOUNG SCIENTISTS**
by Carol Ralph

The chapter is pleased to recognize the work of young scientists presented at the 2012 Humboldt County Science Fair, March 13-16. Several of our members scouted the hundreds of projects looking for ones dealing with native plants and then chose the best project that best reflected the CNPS mission of understanding and increasing appreciation of California's native plants. To this project we awarded $50, a wildflower poster, and a year membership in CNPS.

This year's best such project was "The effect of nitrogen and phosphorus on competition between a non-native and a native dune plant" by David Pickart-Jain, a seventh-grader at Jacoby Creek Charter School. David clearly knew the dune environment and its plants and did a careful experiment. He collected (with permission) seedlings of beach buckwheat (Eriogonum latifolium) and ripgut brome (Bromus diandrus); planted them 6/pot in various ratios; and then watered them with high-nitrogen, high-phosphorus, or high-nitrogen-and-phosphorus fertilizer, or plain water. He measured the stem length of the seedlings to see the responses. Although some curious things happened, the dramatic boost that nitrogen gave to the annual grass was obvious, demonstrating how non-native, yellow bush lupine (Lupinus arboreus) and its nitrogen-fixing bacteria can change vegetation in the dunes by altering the soil fertility. Good work, David!

We also want to commend the following young people for their work with native plants: Natalie Opalach of Sunny Brae Middle School working on "Correlations between rainfall and tree growth;" Jacob Ireland of Sunny Brae Middle School studying "Dune Ecology--transpiration rates of invasive dune plant species;" and Angel Rivera of Bridgeville School observing "Are ornamentals invading our school?".

---

**RECYCLING BOTANICAL BOOKS**

- Are you running out of space for all those books?
- Do you like books on plants but can't afford book stores?
- Are you no longer using that tree field guide?
- Have you enjoyed that coffee table book long enough?
- Have you moved on to pollination and have too many fern books?

Donate books to or come shop at the chapter's botanical book sale September 12 at the evening program. All plants and only plants, including taxonomy, gardening, field guides, world plants, etc. Books donated to the chapter will be available, priced-to-sell, to benefit the chapter.

To donate contact Carol Ralph 822-2015.
Humboldt Weed Management Area

2011 Annual Report

Excerpt - For a full report contact Stephanie Klein at Stephanie.Klein@GHD.com

The Humboldt Weed Management Area (HWMA) steering committee is comprised of resource agencies, and conservation groups, including non-profits and land-trusts. The current committee includes: Humboldt County Department of Agriculture, Bureau of Land Management, Redwood National Park, Redwood State Park, Caltrans, McKinleyville Land Trust, California Native Plant Society, Friends of the Dunes, Mid-Klamath Watershed Council, Mattole Restoration Council, U.S. Forest Service (Six Rivers N.F.), U.S Fish and Wildlife Service and Redwood Community Action Agency. A total of 39 individuals participated in HMWA meetings last year.

The following is a summary of the achievements made by the HWMA during the last year (the last year of funding provided by the California Department of Agriculture).

<table>
<thead>
<tr>
<th>Project Number (if applicable) and Title</th>
<th>Project Lead Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meadow Knapweed Population Assessment</td>
<td>Mid-Klamath Watershed Council</td>
</tr>
<tr>
<td>Project 1: Eradication of <em>Senecio elegans</em> and <em>Coineya monensis</em> from Humboldt Bay's North Spit</td>
<td>Friends of the Dunes</td>
</tr>
<tr>
<td>Project 2: Meadow Knapweed Containment in Humboldt County</td>
<td>Mid-Klamath Watershed Council</td>
</tr>
<tr>
<td>Project 3: Mattole River Japanese Knotweed and Cape Ivy eradication</td>
<td>Mattole Restoration Council</td>
</tr>
<tr>
<td>Project 4: Humboldt County Invasives Outreach and Education</td>
<td>Humboldt Weed Management Area</td>
</tr>
</tbody>
</table>

The outcomes of these projects include approximately 35 invasive weed populations eradicated, and another 6,664 acres of weeds controlled. A total of 1,231 acres (35 miles) of weeds were surveyed.

In order to achieve these successes, the HWMA received in-kind donations for projects totaling $344,136 and another $170,386 in direct matches of money for HWMA projects.

The HWMA partners participated in several outreach events that contacted thousands of individuals. Our annual meeting co-sponsored by CNPS, hosted Bay Area Early Detection Network speaker Dan Gluesenkamp. In addition, members arranged displays at the California Native Plant Society Spring Wildflower Show with an attendance of over 500 people; the Science, Engineering and Technology Expo, which drew in hundreds more; and the Humboldt County Fair with an estimated attendance of 55,000 people. The Friends of the Dunes estimated reaching at least 1500 students and interested adults with Bay to Dunes in-class presentations and weekend volunteer restoration events. We continued our theater ad campaign at local theaters reaching thousands of viewers and hundreds of copies of our Invasive Weeds of Humboldt County, 2nd edition booklet have been distributed throughout the area.
The wet, mild coastal climate of this park supports lush vegetation, which keeps the park staff busy keeping trails and campsites clear. The weed-eating must be constant. It is important for ecological reasons, as well as visitor access. The trail-side grape fern could not live overgrown by the shrubbery that the weed-eaters remove. Mowing the meadow is similarly important to maintain the violets, milkmaids, irises, lilies, and native grasses by cutting the seedling spruces, alders, salal, and huckleberry. Another consequence of the mild climate is the easy establishment of serious weeds. English ivy is ubiquitous and of epic proportions. Given the continually frugal budget of state parks, we can not expect them alone to deal with this threat. The park is ours, the people's, and we must help find the people with time and energy to devote to removing invasive plants.

GLORIOUS WALKER RIDGE
By Donna Wildearth

[Editor’s Note: Due to my error, this report was not included in the Winter 2012 newsletter.]

Once upon a time, in an out-of-the-way corner of the northern California inner Coast Ranges, there was a place where wildflowers, some of them exceedingly rare, bloomed in abundance, where visitors could catch a glimpse of how the landscape might have appeared long ago. For thirty years, botanists, students, and wildflower lovers made pilgrimages to this place and marveled over the beautiful plants. But then they learned that it was threatened by a proposed development . . .

This place is Walker Ridge, on the east side of Bear Valley, straddling the county line between Lake and Colusa Counties (roughly 3-1/2 hours from Eureka). Walker Ridge Road is approximately 11 miles long, running generally north from Hwy. 20 to Brim Grade/Bartlett Springs Road. Large portions of Walker Ridge are serpentine soil which, because of its chemical composition, gives rise to an array of interesting and unusual plants found only or predominately on serpentine. Plant lists for the area are extensive; a few highlights include: deep pink Clarkia; fragrant Snowdrop Bush; Spicebush; Stream Orchids; a rare Buckwheat; Fritillaries; Prickly Poppy; Yellow Bleeding Heart; Diogenes Lantern; serpentine Paintbrush; serpentine Milkweed; and McNab Cypress.

Walker Ridge also offers sweeping views of the Sutter Buttes and Sierras to the east, Clear Lake to the southwest,
and the peaks of the Mendocino National Forest to the north. Much of the area is administered by the Bureau of Land Management through the Ukiah field office.

The current issue of The Four Seasons, a journal of the Regional Parks Botanic Garden which is associated with Tilden Regional Park in Berkeley, is titled “Glorious Walker Ridge.” It includes a brief essay on the botanical importance of Walker Ridge, followed by 66 pages of breathtaking color photographs of wildflowers there.

Breathtaking and sobering, because Walker Ridge is now slated for a proposed wind farm. AltaGas, a Canadian company, is seeking permission from the BLM to erect 29 - 42 wind turbines, 240' tall, primarily in serpentine areas of the ridge. The project would entail widening portions of the road, constructing new roads, and building a substation and related facilities, including a high-voltage transmission line.

One reason Walker Ridge is considered exceptional is that many rare and unusual wildflowers grow right next to the road. As the Four Seasons essay states: “What Walker Ridge offers is extremely high-quality encounters with fabulous diversity and beauty, right by the road, so anyone can see and enjoy them.” Opponents of the wind farm project fear that it would not only eradicate many plants, but that the soil disturbed by the project could be a magnet for invasive weeds that would threaten the integrity of the native plant community.

Several groups, including The California Native Plant Society, are deeply concerned about the project. Walker Ridge is listed on the state CNPS website as one of its Statewide Conservation Initiatives. The Sanhedrin CNPS chapter, based in Ukiah, has worked for years to raise public awareness of Walker Ridge by leading field trips, maintaining plant lists, and submitting comments for the public record.

In 2006 the BLM designated three separate small parcels on Walker Ridge as Areas of Critical Environmental Concern (ACEC). On February 3, 2011, CNPS sent a lengthy petition to the BLM asking them to expand the ACEC. The petition argued that:

“Current ACEC parcels are disjunct and can lead to the eventual fragmentation of rare and unique habitats on Walker Ridge public lands. These resources include a high diversity of plant species, serpentine-associated plant species, special-status plants, potentially undescribed plant taxa, unusual plant associations, wetlands and its ecosystem significance at the headwaters of the Bear Creek (Upper Cache Creek) watershed. The public lands along Walker Ridge also have significant educational, recreational and scenic values: the complex geologic substrates and soils, elevation gradients, expansive viewsheds, rich flora and vegetation, water resources, and proximity to Bear Valley all contribute to these public values. These resources and values require special management attention, particularly as many current and potential future uses of these lands might be incompatible with conservation of these resources and values under the current ACEC design. . . . Thus, designation of an expanded ACEC is merited.”

Jennifer Kalt, the Conservation Chair for our Chapter, sent a letter to the BLM on March 31, 2011, in support of this petition.

The story is still unfolding. On October 9, 2011, the Lake County News announced that AltaGas had asked BLM to extend the deadline for the submission of a draft EIR until 2012. Stay tuned for future developments. And in the meantime, consider a visit to Walker Ridge next spring or summer to see for yourself why it is such a special place.

---

**Spring Garden Walk**

Join other native plant gardeners for a plant filled walk in Fieldbrook and a reflective discussion afterwards. Visit the North Coast Gardening discussion group (membership required NorthCoast_CNPS_Gardening- subscribe@yahoo.groups.com / http://groups.yahoo.com/group/ NorthCoast_CNPS_Gardening/) or contact Pete Haggard (707.839.0307) for more information.
Native Plant Sale

MAY 5 & MAY 6

Saturday and Sunday
10 A.M. TO 4 P.M.

Manila Community Center
1611 Peninsula Dr., Manila

What better way to know the charm of local natives than to have them right outside your door? Experienced gardeners will be on hand to help you choose from a wide variety of plants, from ferns to trees.

Cash or check accepted. Please bring your own box.
Questions, please call 826-0259.
30th SPRING WILDFLOWER SHOW

...the North Coast annual celebration of wild California plants

The California Native Plant Society invites everyone to the annual Spring Wildflower Show

Friday May 4 1-5 p.m. ☢️ Saturday May 5 10 a.m.-5 p.m. ☢️ Sunday May 6 10 a.m.-4 p.m.

at the Manila Community Center, 1611 Peninsula Dr., Manila (off Hwy 255 between Arcata and Samoa Bridge). Open to the public. All activities are free.

The Wildflower Show is more than flowers, it’s a community event. Besides hundreds of specimens from prairies, dunes, woodlands and wetlands, there are demonstrations about gardening, edible and medicinal plants, ferns, rare plants, invasive plants, Native American traditions, an art class, book table, live insects, and guided walks in the nearby dunes. A native plant sale accompanies the show on Saturday and Sunday.

ACTIVITIES

FRIDAY May 4 7 p.m. main hall - ‘Art Night’ free art workshop with Rick Tolley and other local artists, accompanied by live music. Novice or expert, everyone can draw or paint their choice of the flowers on display. Materials will be provided or bring your own.

SATURDAY May 5 - main hall
10 a.m. to 4 p.m. - Native Plant Sale, in courtyard
11 a.m. - "Flora of the Dunes," guided walk by Patty Sennott
Noon - "Introducing the Lily Family" - demonstration by Judie Hinman
1 p.m. - "Focus on Lupines," informative presentation by Dana York

SUNDAY May 6 - main hall 10-4 p.m.
10 a.m. to 4 p.m. - Native Plant Sale, in courtyard
11 a.m. - “Amazing Adaptations of Dune Plants,” guided walk by Laurel Goldsmith
    "Native Medicinal Plants," presentation by Christa Sinadinos

For more information or the latest list of activities visit our website www.northcoastcnps.org or call 707-826-0259 / 707-822-7190. Teachers and Youth Group leaders wishing to bring students to the show on Friday, May 4 are advised to contact Brian Dykstra immediately (616-558-0404 / briandykstra@gmail.com).
### CALENDAR of EVENTS

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

**April**
- Wed 11: Program
- Fri 13: Art Show Benefit
- Sun 15—Sun 22: California Native Plant Week
- Sun 22: Day Hike
- Sun 22: Field Trip
- Sat 28: Plant Walk
- Sun 29: Field Trip

**May**
- Fri 4: Wildflower Show
- Sat 5: Wildflower Show & Plant Sale
- Sun 6: Wildflower Show & Plant Sale
- Sun 6: Plant Walk
- Wed 9: Program
- Sat 12: Day Hike
- Sun 27: Plant Walk

**Sep**
- Wed 12: Program
- Wed 12: Recycled Botanical Book Sale