

Darlingtonia

Fall 2010
Oct-Dec

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

BREWER SPRUCE | *PICEA BREWERIANA*

(also known as weeping spruce)

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Brewer spruce is a tree that once grew widely in western North America as part of the Arcto-Tertiary forests that once dominated the northern hemisphere. Fossil records from the Pliocene and Miocene place this species as far east as Nevada and Idaho, north to central Oregon, and south to central California (Wolf 1964). Now, this paleoendemic is endemic to the Klamath Mountains. It is locally common, but rare in a worldly sense, surviving fastidiously in isolated and often extensive groves in specific habitats. The most contiguous forests grow in the Siskiyou and Marble Mountains. Further east the tree is predictable at sights offering favorable slope, aspect, and elevations (map 14).

Brewer spruce prefers the cool, wet winters and warm, dry summers offered by the Klamath Mountains. Here it is never found growing in soils saturated during the growing season. Overlap with other spruces occurs only in the Russian Wilderness where Brewer spruce grows near, but rarely next to, Engelmann spruce. Nowhere is it found growing with Sitka spruce, a coastal tree in northwest California, however DNA studies suggests *P. sitkensis* is its closest relative (Eckenwalder 2009). Brewer spruce is also unlike the other spruces in cone morphology. Yes, the cones scales are soft, thin and flexible, but unlike Engelmann and Sitka spruce, the scales of Brewer spruce are smooth at the tips. Hybridization with Engelmann spruce has been documented neither in nature (Sawyer and Thornburg 1969) nor in the lab (Gordon 1986) supporting its distant relationship to these spruces. Brewer spruce is matchless in the Klamath Mountains.

My wife willingly adopted a handy cultural reference point when describing this tree's pendulous branches—dreadlocks. Though other analogies are probably more appropriate, we are in northern California. Their beautiful drooping form complements the surroundings—dangling tendrils from the cliffs they inhabit like tinsel on a Christmas tree. Brewer spruce can form pure stands under the right conditions but this is rare because it does not compete well with

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Where to find what's happening:

- ◇ Visit our website:
www.northcoastcnps.org
- ◇ Sign up for our announcements
e-mail: [NorthCoast_CNPS-
subscribe@yahoo.com](mailto:NorthCoast_CNPS-subscribe@yahoo.com)
- ◇ Read the *Darlingtonia*
- ◇ Read or hear about upcoming
events in **local media**

FIELD TRIPS AND PLANT WALKS

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

Everyone is welcome. No botanical knowledge required. We are out there to share and enjoy.

October 9, Saturday. 12 noon - 5 p.m. more or less. **Chapter picnic and book sale & auction** at the Ralphs' on Arcata Bottom. Members and friends are invited to share good food and good company around a campfire between the dune forest and the Mad River Slough. Bring a dish to share, your own item to BBQ, your own beverage, and eating gear. Fire ready for BBQ at 1; eat 1-2:30; then walk in the Lanphere Dunes or the Ralphs' agricultural wetlands. Meanwhile (in the Ralphs' house) a botanical book sale, culminating in an auction. **Bring any botanical books you can donate to the chapter to sell.** Please tell Carol you are coming (and ask directions): 822-2015.

October 16, Saturday. 1-3 p.m. **Autumn Falls on Falk: a plant walk** on Elk River Trail. BLM botanist **Jennifer Wheeler** will introduce many common redwood forest and streamside plants, both native and non-native, in an historic corner of Headwaters Forest. The trail is paved and gentle, good for any weather. From 101 exit onto Elk River Rd. After 1.5 miles take right fork; after 4.5 more miles at the bridge fork right; go 1 mile more to the trailhead parking lot. 822-2015.

October 30, Saturday. 2-4 p.m. **"Going to Seed: Late Fall Plants at the Arcata Marsh"**, a walk with lively naturalist **Jenny Hanson** on the paths of Arcata Marsh. Meet many common native and non-native species and see the results of their flowering. Meet at the Marsh Interpretive Center, 569 South G St.. Co-sponsored by Friends of the Arcata Marsh and North Coast Chapter of California Native Plant Society. 826-2359.

November 7, Sunday. **Horse Mountain day hike.** Grand vistas, diverse shrubs, and a study of seed pods will entertain us on a 2- to 4-mile hike on this popular, nearby ridge in Six Rivers National Forest. We will test a proposed route for a trail in this area. If the day is too wintry at this 4,400-ft elevation, we will opt for someplace lower. It's a day to be outside with the plants! Meet at 8:30 a.m. Pacific Standard Time at Pacific Union School (3001 Janes Rd., Arcata). Bring lunch and water. Dress for the weather!. Return late afternoon. Tell Carol you are coming: 822-2015.

CNPS 2012 Conservation Conference: *Conserving and Restoring the Roots of California's Richness*

- ◆ January 12-14, 2012
- ◆ January 10 & 11 Workshops
- ◆ January 14 Public Day

More information about submitting abstracts, workshop proposals, artwork, photographs, etc. at <http://cnps.org/cnps/education/meetings.php>

Ode to Autumn Leaves

By Sylvia Ann White

Autumn Leaves
Are on my deck
I look at them
And say, "Oh heck!".
I get the broom
And clean my floor --
The trees just laugh
And send down more!
So I just shrug
And let them lay --
Until the wind
Blows them away!

CHAPTER PROGRAMS AND MEETINGS

EVENING PROGRAMS

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

- Oct 13** **"Unexpected delights: the people, fruit stands, and flora of Jamaica"** **Michael Mesler** was in Jamaica for several weeks in 2009 and 2010, working on an NSF-sponsored study of coffee pollination. He'll tell us a little about the research project, but he will mainly present photographic impressions of the crazy-quilt Jamaican cultural and botanical landscapes.
- Nov 10** **"Experience the beauty of an Oak Woodland in spring. "** **Kathy Dilley and Donna Wildearth** will share pictures from their trip to Cache Creek and Bear Valley (off Hwy. 20), where they saw masses of Indian Warrior, monumental Manzanitas, a glorious field of Cream Cups and Gilias, and two CNPS listed plants."
- Dec 8** **Native Plant Show and Tell.**
An informal evening for anyone to share photos, artifacts, readings, or food relating to native plants and their habitats. Contributors will include John Sawyer in the Rocky Mountains, Bill Wood looking at local flowers, Brian Dykstra illustrating poetry, and Davie Imper aiming at rare plants and deserts. Tell Dave Imper, coordinator, dimper@suddenlink.net, 444-2756, what you'd like to share.
- Jan 12** **"Golden Inside-out Flower,"** *Vancouveria chrysantha*, its pollination and ecology with photos and video will be shared by **Brian Dykstra**, HSU graduate student. **Kim McFarland**, HSU student will discuss her research on the **Silver Bee** native to the dunes.
- Feb 9** **"Chemicals – The Language of Plants"** **Professor William Wood**, HSU Chemical Ecologist will discuss his research covering among other things floral odors, compounds in plants that are toxic, distasteful, inhibiting to growth of other plants and how plants keep colonies of ants. The talk will also cover how people have adapted the many chemicals used by plants for their own benefit. Many toxic compounds plants make to keep from being eaten have become human medicines. Floral odors are the basis of many perfumes. Colored plant compounds are used in dyeing food and clothing. Our present lifestyle could not exist without the chemicals we use from plants.
- Mar 9** **"Lassics Lupine: Taking the Pulse of a Rare Plant. "** The rocky, in parts barren, picturesque landscape of the Lassics is home to several exceedingly rare plants, including the Lassics lupine. This lupine is without question the rarest species in Northwestern California, and may be the most threatened. **David Imper, Lisa Hoover and Sydney Carothers** will summarize 9 years of research, spanning all aspects of its ecology and threats, beginning with its life history, wildlife depredations, soils, climate and light relationships, seed bank and germination studies, and more.
- Apr 13** **"Gardening With North Coast Natives"** will be the focus of a discussion with **Walter Earle**, co-owner of **Mostly Natives Nursery** in Tomales, California.
- May 11** **Bob Case** will share interesting **"Insect-Plant Relationships"** and tips on photography with examples of Sierran insects and plants from the Yuba Pass area.

NORTH COAST CNPS VOLUNTEER CORNER

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

Thank You!

Jen Kalt, Melissa Kramer, Stephanie Klein, Sunny & David Loya, and Cara Witte Scott for establishing the monitoring procedure and counting plants along the ten transects in Freshwater Farms Restoration Project of North Coast Regional Land Trust.

Dennis Walker for leading a plant walk.

Sunny Loya for many years of running the two annual plant sales and keeping a great smile while she did it.

Tami Camper for rallying the volunteers growing plants for our sale.

Chris Beresford and Anna Bernard for very ably running our fall plant sale, the most complex ever.

Anna Bernard, Chris Brant, Eli Asarian, Sabra Steinberg, Barbara Kelly, Prairie Johnson, Debby Harrison, Tami Camper, Ron Johnson, Samara Restoration, Fish Action Council Nursery, and Freshwater Farms, and probably others (it's hard to keep track!) for growing plants for our sale.

Chris Beresford, Anna Bernard, Karen Brotsky, Sylvia White, Barbara Kelly, Chris Brant, Randi Swedenburg, Ron Johnson, Gisela Rohde, Dave Mouton, Sunny Loya, Carol Ralph, and Suzanne Isaacs for helping at our plant sale.

Bayside Grange for lending a pop-up tent for the plant sale.

Anda Webb for getting our plant sale on the front of Section B of the Times-Standard.

Jim and Virginia Waters, Barbara Kelly, Pete Haggard, Sylvia White, Felicity Wasser, Mark Fritzke, Marsha Davenport, and Carol Ralph for staffing our booth at the North Country Fair.

Frances Ferguson for scheduling people to staff our booth and securing it against the rain at night.

Felicity Wasser, Carol Ralph, and C.J. Ralph for putting up and taking down our booth.

Welcome aboard!

Chris Beresford and Anna Bernard as Plant Sale Coordinators.

Richard Beresford as Coordinator of the Spring Wildflower Show.

Volunteers Needed. Big jobs and small, every one important!

Treasurer. Learn about everything we do by how it affects the bank account. Need to know basic Excel. If you don't know basic book-keeping and budgeting, you will learn. A valuable skill! Average 1 hour per week.

Wildflower Show School Visits Coordinator for 2011. Surely one of the most rewarding jobs there is, helping appreciative teachers share the show to their students. A good procedure is established.

Education Chair. Role can be defined by the person with the title. We would like to be in touch with the school education world, but we think educating the adult public is important too.

Science Fair Award Coordinator. A very brief job once each year, in March, during HSU's spring break.

Book Worm to accumulate donated botanical books for a chapter book auction or sale.

Publicity Checker. If you regularly read a paper, listen to the radio, or check web sites, you can do this. Check whether our publicity got there.

Online Calendar Poster. Post our publicity on two or three public online calendars.

Publicity Writer. What could be more important?! Create the text and photos attractive to and useful to the press for our few big events.

Outreacher. Keep our display and handouts in good shape for use at various public events, about 6/year. We have other volunteers who man the table (booth).

T-shirt Chair. Keep our inventory of chapter t-shirts. Needs to be in Arcata and have room for 3 boxes.

FIELD TRIP REPORTS

Mendocino Coast May 28 to 31, 2010 by Carol Ralph

An invitation and an itinerary from Wilma Follette of the Marin Chapter developed into a wonderful four days in the forests, dunes, and bluffs on the Mendocino coast, in the territory of the Dorothy King Young Chapter. Our core group of 10 included members of North Coast, East Bay, and Marin Chapters, and of a native plant society in Virginia, and was joined by daytrippers from Dorothy King Young Chapter. Marin Chapter member Susan Smith was an informative, indefatigable, and invaluable guide. Plant lists from the DKY website (www.dkycnps.org/locations) were quite valuable. Some of us stayed in the farmhouse and in the camping facilities of Jug Handle Creek Farm Lodge and Nature Center (www.jughandlewreckfarm.org), which we recommend, and some stayed in a motel in Fort Bragg. We visited seven different places, each one a treat.

Pressed to choose a favorite, I would say Mendocino Headlands, the coastal prairie and bluffs immediately west of Mendocino town. Nevermind the dense fog and fierce winds that shape that coast; our day was blue, calm, warm, and overall gorgeous. Like Dorothy in the poppy field, we repeatedly settled in the green grass to examine and admire some floral treasure, while our leader Sue anxiously tugged at us because she knew how much more there was to see. I was thrilled to find *Eryngium armatum*, a spiny member of the *Apiaceae* (carrot family), whose umbels are not particularly umbel-like. Another bit of coastal prairie was on the Laguna Point Boardwalk in MacKerricher State Park. We saw *Brodiaea terrestris*, one of our beautiful, purple-flowered bulbs, there.

Another lasting memory is from the pygmy forest: fresh, pink blossoms of rhododendron in the short, twisted, twiggy, gray-and-green landscape. The pygmy forest is a habitat unique to Mendocino. We visited it in the inland portions of Van Damme State Park and Jug Handle State Reserve. It is the vegetational manifestation of the uplift of marine terraces on which iron and silicon have been leached out of the topsoil and concentrated in a hardpan that prevents drainage and root penetration. You can be walking through a diverse, tall coniferous forest, seeing redwoods, Douglas fir, grand fir, western hemlock, Bishop pine, and lodgepole pine, and suddenly step into in a 10-foot-tall, dense, spindly forest of lodgepole pine, pygmy cedar, rhododendron, western Labrador tea, and other ericaceous shrubs, with no ground cover. You have arrived on one of

the terraces. In a totally chance encounter with Earl Alexander, wielding his little pick, we learned from this world expert about this unique soil.

The dunes were interesting to compare with our Humboldt County dunes. We visited the expansive, magnificent dunes in MacKerricher State Park. Along with the familiar sand verbena *Abronia latifolia*, beach buckwheat *Eriogonum latifolium*, and beach-burr *Ambrosia chamissonis* were new acquaintances, such as round-headed Chinese houses *Collinsia corymbosa*, Mendocino paintbrush *Castilleja mendocinensis*, and Howell's spineflower *Chorizanthe howellii*. At Glass Beach in Fort Bragg the dunes were more stable and more heavily used, but still featured diverse and rare plants, especially on the "perching dunes," where blowing sand was funneled up off the beach. Unfortunately vast mats of iceplant were part of the landscape too.

A special visit to the Folette's property, lunch overlooking the ocean on their bluff and looking into their Bishop pine forest, and a couple of hours in the nearby Mendocino Coast Botanical Garden rounded out the trip. Botanizing south of Cape Mendocino was a good review of many of our Humboldt County plants, with exciting and interesting additions. We saw many species of rare plants, although we didn't always appreciate how rare they were. Rare plants are not labelled with their rarity codes, and they may be common in one spot. We spent inordinate amounts of time studying and photographing certain treats: northwestern twayblade *Listera caurina*, pinefoot *Pityopus californicus*, Hesperevax *sparsiflora*, and the best-ever show of *Clintonia andrewsiana*. It was a wonderful, botanical orgy. Wilma's itinerary makes it available to everyone. It is only three hours from Arcata to Fort Bragg.

Wilma's Botanical Itinerary of Mendocino Coast

Day 1. Van Damm State Park: morning in pygmy forest; afternoon on Bog trail and Fern Canyon trail

Day 2. Mendocino Headlands State Park, then Mendocino Coast Botanical Garden

Day 3. Glass Beach, then MacKerricher State Park

Day 4. Jug Handle State Reserve (upper trailhead reached from Gibney Ln.). Possibly also Russian Gulch State Park

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Planning for the Future: County General Plan Update Moves Forward Trails, Transit, and Active Transportation in the General Plan: "Circulation Element"

By Jen Kalt

The way a community is built—including how the streets are designed—can make it safe and easy for people to walk, bike, and take the bus to get around. Or it can make it dangerous, difficult, or unpleasant. Many communities were designed with the automobile in mind, and some—like the unincorporated town of McKinleyville—haphazardly grew along old highways. The result is that many people live where walking, biking, and public transit are simply not an option.

The less dependent we are on cars to get where we need to go, the healthier we are. Walking and biking are great forms of exercise, leading to better physical and mental health. The less dependent people are on cars, the more money stays in the local economy. Studies have found that more freedom from automobiles means fewer home foreclosures, more money spent on food and health care, and fewer deaths from auto injuries.

The need for fewer roads means a healthier environment: cleaner air and water, and less inroads for exotic species to invade. Reducing the need to drive also leads to reduced greenhouse gas emissions, and less dependence on fossil fuels.

Fewer roads also mean healthier budgets for our cash-strapped municipalities: our County Public Works Department has a \$150 million backlog in road maintenance costs. Maintaining roads in good condition costs \$20,000 per mile each year, and building new road costs the County \$1 million per mile!

Freedom from the need to drive is especially important for children and seniors. Children who can safely walk or bike to school are healthier. Seniors who can safely and easily walk where they need to go are more independent. As our population ages, we need to provide more housing options that reduce the need to drive.

What can the County do to encourage people to drive less? It can adopt policies that integrate public transit, bicycle and pedestrian travel along with better streets, trails, and safe routes to schools:

ACTIVE TRANSPORTATION FOR HEALTHY COMMUNITIES

- Prioritize bicycle and pedestrian infrastructure that connects neighborhoods, retail centers, schools, and parks.

Making it easier for people to walk and bike will help reduce our dependence on fossil fuels and keep more money in the local economy.

"COMPLETE STREETS"

- Promote affordable, multi-modal transportation that enables people of all ages and abilities to safely get where they need to go.
- Adopt road standards that encourage efficient auto travel while creating streetscapes that are safe for pedestrians and bicyclists.

Prioritize funding for maintaining existing roads and retrofitting them for "complete streets" over new road construction.

EFFICIENT & CONVENIENT PUBLIC TRANSIT

- Investment in public transit as a solution to traffic congestion and to provide convenient access to common destinations.
- Develop transit hubs near multi-family housing and village centers to increase ridership. Promote new development near public transit corridors.

TRAILS

- Develop a regional trail system that enables safe commuting options between communities and provides a recreational and tourist destination. Promote "railbanking" as a means to develop local and regional trails while preserving the right-of-way for a variety of public uses (particularly for the Annie and Mary corridor and the Humboldt Bay rail corridor).

For meeting updates or to find out more, visit www.healthyhumboldt.org.

SUBMIT WRITTEN COMMENTS via email to: [mspencer@co.humboldt.ca.us](mailto:m Spencer@co.humboldt.ca.us) OR by U.S. mail to: Humboldt County Community Development Services, 3015 H Street, Eureka, CA 95501

ATTEND A HEARING on Thursday, October 14th at the County Courthouse, 825 Fifth Street, Eureka (corner of 5th and I Streets).

STEERING COMMITTEE MEMBERS/CONTACTS

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COMMUNICATIONS

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

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

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

EcoNEWS AND YOU

We, the North Coast Chapter of CNPS, are a member organization of the **Northcoast Environmental Center (NEC)**, a valuable voice for conservation in our area. This means we have a seat on the board of directors. It also means that as our member you are automatically entitled to receive the NEC's monthly publication, *EcoNews*.

Due to the vagaries of membership lists, you might not be receiving this informative newsletter. If you are a member of our chapter, do not receive *EcoNews*, and want to receive it, phone 707-822-6918 or e-mail nec@yourec.org and leave the pertinent information.

NATIVE PLANT CONSULTATION SERVICE



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

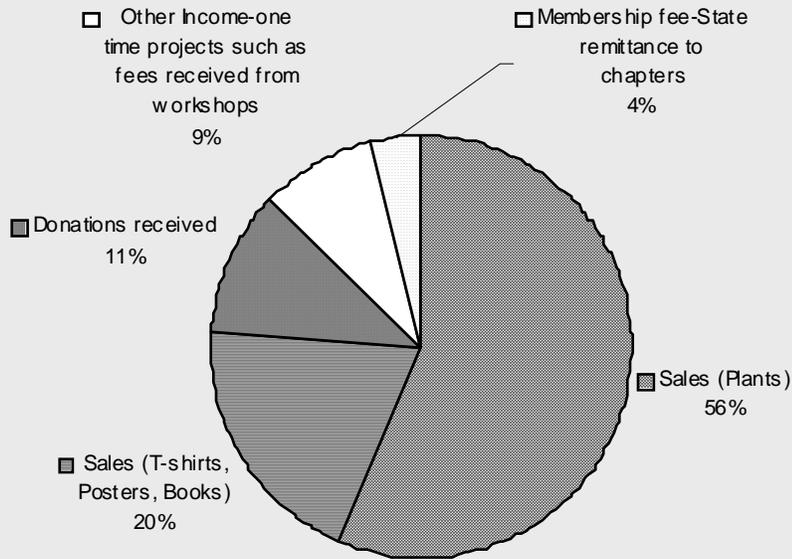
The North Coast Chapter of the California Native Plant Society offers the Native Plant Consultation Service to answer these questions and to give advice on gardening with natives. If you are a member of CNPS, this service is free, if not, you can join or make a donation to our chapter.

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

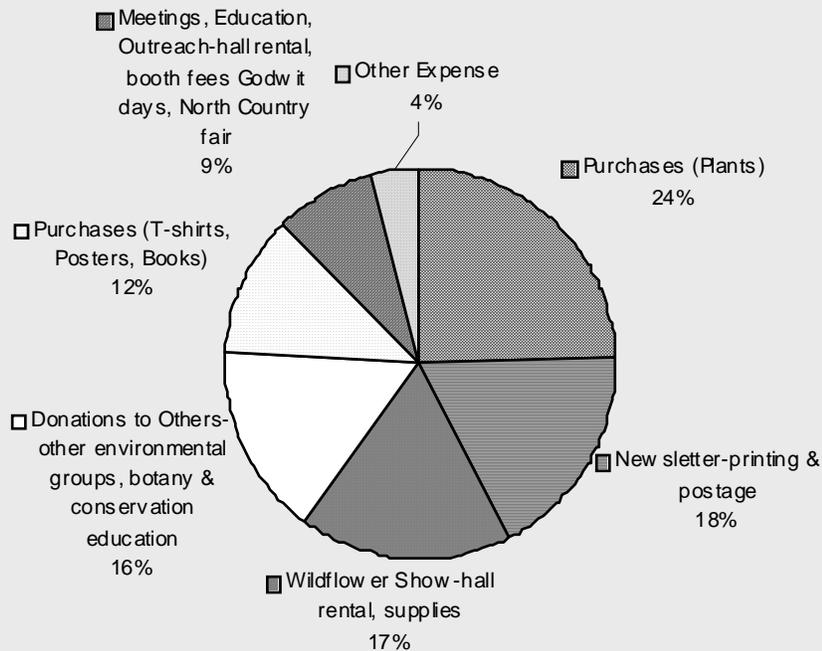
Chapter Finances

By Felicity Wasser, Chapter Vice-President

The pie charts below show Sources of Income and Expenditures for the North Coast Chapter for our latest fiscal year which ended March 31, 2010. We spent approximately \$11,500 dollars last year and took in \$15,000. We prepare our budget so as to break even each year, while maintaining enough reserve to survive one year with no income.



Income (above) / Expenditures (below)



Please feel free to contact Felicity vice-president wasserfw@yahoo.com (707-616-9974) for further information about these charts. The chapter encourages input from members, who are welcome to attend our Steering Committee meetings. For information about them contact Carol Ralph (theralphs@humboldt1.com; 822-2015).

Poker Flat and Kelly Lake in the Siskiyou July 9-11, 2010 by Carol Ralph

Being near the crest of the Siskiyou Mountains in Klamath National Forest, Poker Flat can be reached from the O'Brien side (Highway 199 in Oregon) via Waldo Road or from the Happy Camp side (Highway 96 north of Orleans) via Indian Creek Rd.. We chose the O'Brien way, which passed through a magnificent stand of Brewer's spruce (Indian Creek Brewer Spruce Botanical Area). The turn-off onto gravel Forest Service Road 18N30 was well marked. One-half hour on this road and 18N33 brought us to Poker Flat, four hours from Arcata, at 5,200 ft. elevation. (The Klamath National Forest Map can relieve the anxiety of navigating these roads.) Fourteen of us set up camp in one of the large campsites. Here we shared meals and campfires, conversed, enumerated the differences between birdwatchers and botanizers, and studied plant books when we weren't out exploring over the next two days. The weather cooperated fully, being more or less idyllic.

The campsite looked out over the meadow, a pleasingly large, fairly level, green oasis surrounded by a dark wall of narrow, pointy conifers and steep, forested mountains. About 1/2 mile long and 1/4 mile wide, it sloped up at the north end (where we spotted a bear), had a squishy, wet swath down the middle, a dry hummock, and a willowy drainage leading south to West Branch Indian Creek. A few weeks before our visit, Mike Kaufmann reported, the meadow had been a lake under a blanket of snow. This extended period under water may explain the lack of tree saplings out in the meadow. The vegetation was mostly less than 2 ft tall, with the corn lily *Veratrum* sp. still growing.

Ready to explore, we were first drawn out into the lush, green, wet part of the meadow. It was a brilliant pink Milky Way of shooting stars *Dodecatheon alpina*, dotted with white "planets" of bistort *Polygonum bistortoides*, scattered red flares of paintbrush *Castilleja* sp., cool white spears of bog orchid *Platanthera leucostachys*, and small yellow suns of buttercups *Ranunculus* sp. Marsh marigold *Caltha leptosepala* marked where the ground became too wet to walk on. We retreated to where our feet would do less damage. The no-see-ums were enjoying the damp atmosphere of the evening meadow also.

In the dry zone of the meadow were mats of sulphur buckwheat *Eriogonum umbellatum*. (no signs of flowers) and mounds of two species of cinquefoils barely started blooming, the very fuzzy *Potentilla glandulosa* and the silky, crowded-leafleted *P. drummondii* ssp. *breweri*.

Portulacaceae (purslane family) were well represented by three small, succulent species with dainty white or pinkish flowers: spring beauty *Claytonia lanceolata*, Nevada lewisia *Lewisia nevadensis*, and a tiny miner's lettuce *Claytonia* sp., plus the gray rosettes of pussy-paws *Calyptidium monospermum*, each shooting out several puffs of pale pink flowers on the ends of long flower stems. Even the most barren, even trampled parts of the meadow and campsite proved interesting. There the scent of cilantro alerted us to *Sanicula tuberosa*, a small, finely leafed, yellow-flowered, early blooming umbellifer (carrot family). Exceedingly tiny monkey flowers, both pink *Mimulus breweri* and yellow *M.*

guttatus, and the abundant but almost invisible *Phlox gracilis*, two inches of thread-thick stem with a couple flakes of leaves and one or two tiny, pink-white flowers, rewarded those who got down to look at them.

This meadow was appreciated by people long before us. We learned from Erin Rentz, the District Botanist, that Native Americans came here to harvest acorns from the Sadler oaks *Quercus sadleriana*, abundant in the understory. Perhaps they managed the meadow, by burning it, to keep it meadow. Miners came through here, and their old

roads are followed by the trails now. The Forest Service had a cabin and grazed stock here for awhile. They plan to prevent trees from encroaching on the meadow.

On Saturday, our one full day, we hiked down to Kelly Lake, after first shuttling a vehicle down there to save some people the hike back up, about 3 miles. From the trailhead at the foot of the meadow we soon crossed a clear, cold, fast creek, where we met stream saxifrage *Saxifraga odontoloma*, its round, toothed leaves on the streamside rocks. Not far beyond we stopped at a great *Ribes* display: red-flowering currant *R. sanguineum* (erect; no spines; sprays of dark pink, short-tubed flowers), swamp currant *R. lacustre* (sprawly; spiny; dangling sprays of shallow bowl-shaped, creamy flowers), Hupa gooseberry *R. marshallii* (sprawly; nodal spines; dangling, bright red-and-yellow, tubular flowers), sticky currant *R. viscosissima* (erect or leaning; clusters of creamy, short-tubed flowers; everything sticky). It was definitely the *Ribes* season! Violets are also early bloomers,

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Poker Flat from the entrance at the north, over a stand of corn lily.
Photo courtesy of Carol Ralph

MEMBERS' CORNER

WELCOME TO OUR NEW MEMBERS

RAY BRAMLETTE
NED FORSYTH
JAMES GAYNER / ELEANOR A. GAYNOR
BEN LUCKENS
LLOYD MCCLELLAND

THANK YOU TO OUR RENEWING MEMBERS

PAUL ANDERSON
MELINDA BAILEY
ANNA BERNARD
HEATHER BRENT
ANN BURROUGHS
SUSAN CAMPBELL
DIANA CHAPMAN
JEANNE CHARLES
KATHERINE J. CLAGUE
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JULIE MCNIEL
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DIANE RYERSON
ANN SIERKA
PAT THOMAS /JOHN KULSTAD
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CARL TUCK
THEODORE UTECHT
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ELAINE WEINREB

SUSAN WHALEY / RICHARD WHALEY
SYLVIA WHITE
ART WILSON
AMANDA WINDSOR
JOHN YOAKLEY
BEVERLY ZEMAN

MEMBERSHIP BENEFITS

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

- **Freshwater Farms:** 10% off plant purchases, 444-8261
- **Miller Farms:** 5% discount on plant materials, 839-1571
- **Mad River Gardens:** 10% discount on plant purchases, 822-7049
- **Let it Grow Horticultural Supplies:** 10% discount on all merchandise, 822-8733
- **Greenlot Nursery,** 10% discount on plants, 443-9484
- **Sherwood Forest Nursery,** 10% discount on plants, 442-3339
- **Bamboo & Maples,** 10% discount on plants, 445-1281
- **Pierson's Garden Shop,** 10% discount on all garden shop items (except sale or non-discountable items—please ask staff before going to register), 441-2713

JOIN THE CNPS NORTH COAST CHAPTER!

By joining CNPS you:

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

Membership fees:

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

To join or renew, you can either:

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

Please notify the state office and/or our Membership Chairperson if your address changes.

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

other conifers; hence favoring the poorer sites in the mountains. More commonly, it grows individually or in groves with other conifers. Two noteworthy pure stands exist on exposed and wind-swept sites, on the south shore of Lower Canyon Creek Lake in the Trinity Alps (hike 20) and along the Happy Camp-O'Brien Road (hike 9) in Siskiyou County; the latter site has been designated the Indian Creek Botanical Area. Pure stands of Brewer spruce are primordial—a stroll parting the weeping branches into an unknown grove is as I envisioned a trip through the closet into Narnia when I was read to by my dad as a youngster.

At a distance, the tree is easily identifiable. Well named for its distinctive “weeping” habit, its pendulous branches often hang down eight feet, and the crowns are sparse and open. Only occasionally confused with the sometimes-pendulous form of Douglas-fir, Brewer spruce can be distinguished from the Douglas-fir in several ways. The bark is scaly not furrowed, the cones lack exerted bracts, and needles of Douglas-fir are soft in ones hand, while those of Brewer spruce feel mildly spiky. This is also the only spruce with stomatal bloom on the upper surface of the needles. The cones are sometimes similar to those of mountain hemlock because *Tsuga mertensiana* has the proclivity, in northern California, to have large cones. Regardless, Brewer spruce cones are longer. Small Brewer spruce can be confused with hemlocks, but with close study and repeated meetings, you will discover their distinctiveness.

Editor's Note: Visit Michael's website to view some spectacular photographs http://www.conifercountry.com/conifers/conifer_pics/bs/index.html

Brewer Spruce *Picea breweriana*

By David Fix

When I was just into my teens, poring through field guides when I was supposed to be studying, I came to savor a modest and charming book entitled *Trees To Know In Oregon*. I'd like to claim that I can swivel at the computer and pick out its faded spine on the bookshelf, but I misplaced or loaned out my copy years ago. Among the dozens of trees illustrated, described, and mapped was Brewer, or weeping, spruce. The artwork accompanying the descriptive blurb featured a hale and capable-looking guy, possibly Mark Trail's little-known younger brother, Clark. With a pack on his back and a walking stick in his fist, Clark Trail paused before a sign announcing--as if any trail sign in Oregon ever would--5,000 FEET. Alluding to the tree under discussion, the caption to the drawing said KNOWN TO A FEW EXPLORERS. As I learned more about trees, I moved on to other reference works, and yet I kept remembering that homespun treatment of Brewer spruce. Someday, I thought, I'll see that tree and, in so doing, will dilute by one additional person the concept of only “a few explorers.”

Eventually, I came to work in the woods, to cruise timber, help lay out sale units, plant trees, and learn quite a lot about forestry. And the day came when I did see Brewer spruce for the first time. As it happened, it wasn't in Oregon, but up Canyon Creek (the one with the pretty lakes, reached after that long hike). Aside from the strange and understated beauty of the trees themselves, I was struck, in afterthought, that here was a tree that didn't cause me to think of forest products. I didn't shift my weight, nudge my cap up, and figure diameter, height to a Girard top, number of saw logs, or defect. I didn't care to recall which learned person of European descent described it--ages after people without a written botany had first encountered it and, no doubt, had appreciated it. Nor did I have to consider whether this stand of trees was threatened by an introduced root rot, blister rust, or some other dread pathogen. Instead, I simply stood and took them in.

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and we saw the deep yellow blooms of Shelton's violet *Viola sheltonii*, whose dainty, dissected-leaf "umbrellas" are visible all season on the forest floor. Sharp eyes found the first Howell's lousewort *Pedicularis howellii*, a rare species the district botanist wanted to monitor, and we saw scattered individuals of this pale pink, snapdragon family flower along much of the way. The trail traversed a mixed conifer forest dominated by white fir *Abies concolor* but also including noble fir *A. procera*, Shasta red fir *A. magnifica*, Douglas-fir *Pseudotsuga menziesii*, incense-cedar *Calocedrus decurrens*, western white pine *Pinus monticola*, sugar pine *P. lambertiana*, and a few Brewer's spruce *Picea breweriana*, with Sadler oak understory. At a junction we took the left fork, which turned southeast to Kelly Lake. Soon we were in more open, dry forest of firs and western white pine with good mats of pinemat manzanita *Arctostaphylos nevadensis* on the ground. We detoured left off the trail to a serpentine knoll, where we found the favorite, hairy-petaled, violet-gray pussy ears *Calochortus tolmei* in the gravel and branched, dainty inflorescences of pink quill-leaved lewisia *Lewisia leana* perched on the rocks. A Goshawk added excitement to our lunch break by the third stream and its thicket of willow *Salix* sp. and red-stem dogwood *Cornus sericea*. The fourth stream featured leafy mitrewort *Mitella caulescens* and twisted stalk *Streptopus amplexifolius* among its lush herbiage, and in a tangle of fallen branches were the large burrows of mountain beaver

Aplodontia rufa. After a steeper descent through a 3-*Abies*-Douglas fir forest, the trail contoured across a rocky zone with Port Orford Cedar *Chamaecyparis lawsoniana*, some quite large, with western azalea *Rhododendron occidentale* in bloom, and a few beargrass *Xerophyllum tenax*. Then it descended steeply through a dense white fir stand and arrived among large trees and Sadler oak in the basin of Kelly Lake. The warmish water of Kelly Lake was refreshing, but its dirt shoreline was bereft of rocks, logs, green turf, or any botanical interest. Where exactly did chapter trips to this lake in the 1970's botanize? Some of our group walked to the car at the far end of the lake and drove up to camp; some of us walked back, returning in 2 hours.

Sunday morning we headed out the trail again, but this time we took the right fork, the trail that goes southwest to Twin Valley and beyond. It climbed the ridge, taking us past small patches of snow. A small, white-flowered umbellifer, the only plant in the barren dirt by a receding snow patch, caught our eyes.



In the shade of intertwined Jeffrey pine and incense cedar some of our group relaxes at lunch. (Margaret Widdowson, Carol Ralph, Erin Rentz, Jude Powers, Hope Woodward, Tony Kendrew)
Photo courtesy of Carol Ralph

(Well, it caught mine, at least.) No distinctive odor or form helped place it in a familiar genus. Later book work revealed it to be *Orogenia fusiformis*, found on "gravelly flats near melting snow" only in the high mountains of northern California and southern Oregon. Other early spring blooms we saw were mountain violet *Viola purpurea*, Oregon anemone *Anemone oregana*, western trillium *Trillium ovatum*, and yet another *Ribes*, gummy gooseberry *Ribes lobbii* (erect; nodal spines; dangling, dark red flowers with pink "skirts"). On a shady north slope and in a narrow, trough-like valley thick white fir forest shaded out most understory and even ground cover. One majestic Douglas-fir spoke of a more open habitat in the past. We marvelled at the Tyvek-like mycelium of a shelf fungus, exposed where a dead tree had broken off. Passing onto sunnier slopes the trail traversed the edge of a small, dry meadow, passed above a small, lush green meadow, and entered a patch of serpentine, gray-green, rocky, and sparsely shaded by Jeffrey pine *Pinus jeffreyi*, huckleberry oak (a shrub) *Quercus vaccinifolia*, incense cedar, and Douglas-fir. We spent time discovering the colorful, smaller denizens of this sunny habitat: a *Lomatium*, a *Senecio*, an *Allium*, an *Iris*, a *Delphinium*, a *Collinsia*, a *Penstemon*, a *Swertia*, spreading phlox *Phlox diffusa*, mountain pea *Lathyrus lanszwertii* var. *tracyi* (linear leaflets; stipule a tiny bristle; flowers pale yellow with dark lines), yellow triteleia *Triteleia crocea* (bright yellow; filaments attached at two levels; UNCOMMON), Klamath

Mountain buckwheat *Eriogonum hirtellum* (perennial, bright green leaves; long, naked peduncle; ball of yellow buds that open to be white flowers; RARE).

A little farther along we exited the trail up onto a larger, even more rocky knoll studded with bright, shiny green rocks, stunning red-purple *Penstemon rupicola*, three buckwheats (*Eriogonum umbellatum*, *E. congdonii*, and *E. ternatum*) and more, and found at the top a vast vista and an enchanted spot in which to eat lunch. Seeking shade we squeezed into a twiggy clump of greenleaf manzanita *Arctostaphylos patula*, huckleberry oak, dwarf silktassel *Garrya buxifolia*, serviceberry

Amelanchier sp., and small white fir and Douglas-fir, and sat under a stunted Jeffrey pine and incense cedar twisted together at their bases. Our magic spot included all the woody species we could see except for western white pine, plus a lily, which we guessed would be Bolander's *Lilium bolanderi*, being in a dry, serpentine habitat. Who will return to see its bloom?

We were about 1.5 miles from Twin Valley, but we had used up

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our time and at 2 p.m. headed back for camp and cars and roads to the towns. If only we had more time to savor the place and study its treasures! How will we ever learn all these plants if we always have to dash back home? We saw so much more than can be reported here. We were aided greatly by a plant list Erin compiled from the Jepson Interchange database, which lists plants actually in herbarium collections. Fifteen species of *Carex* are on this list for Poker Flat, reflecting the collection here by Lawrence Janeway studying sedges, but many common plants are not, because no one bothered to collect them here.

Poker Flat was a great headquarters for botanizing. The meadow itself was lush and diverse, and the trail provided ready access to diverse forest types, streams, meadows, ridges, and serpentine outcrops over a wide range of elevation. We'll be back!

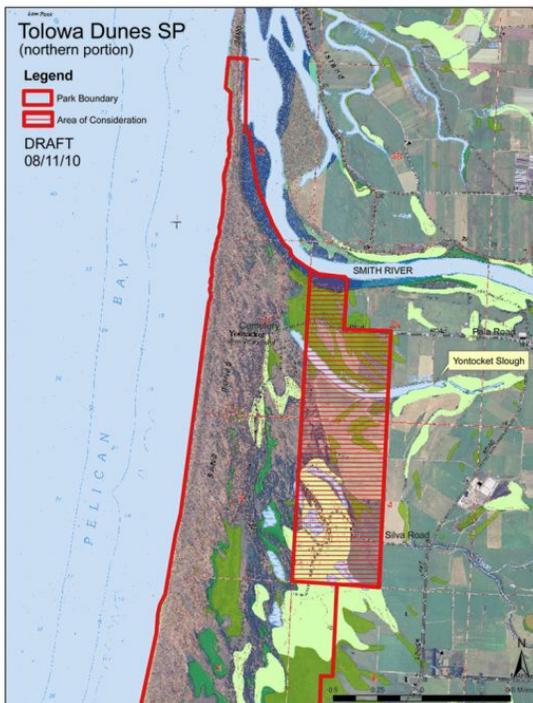
Apology. I'm sorry not to identify everything to species. I don't want to affix a species name unless I personally know that is the correct one. If I took the most likely name off someone's list or the best fit out of a book that doesn't have all the species possible, I could be reporting erroneous names and starting rumors. Given the time constraints of field trips, the vast number of species out there, and the limited capacity of my brain, we'll just have to make do with a lot of half-identified species.



Photographs courtesy of Donna Wildearth: Manzanita



Vanilla Leaf



YOUR CONSERVATION EFFORTS PAY OFF TOLOWA DUNES STATE PARK UPDATE

The proposal to reclassify Tolowa Dunes State Park to allow hunting was taken off the Oct. 8th State Parks Commission agenda. 1,200 acres of Tolowa Dunes State Park, including the Yontocket Memorial Indian Cemetery, will not be handed over to Fish & Game for hunting. The California Department of Parks Commissioner, in a September 23, 2010 News Release, continues to want resume hunting on the property and will make it one of the considerations to be studied in the process of preparing a General Plan for the Park .

Focus on Grasslands by Lori Hubbart

Reprinted with the author's permission from *Calypso*, July-August 2010, the newsletter of the Dorothy King Young Chapter of the California Native Plant Society. This chapter is our neighbor to the south, on the coast in Mendocino and northern Sonoma Counties.

The DKY Chapter of CNPS co-sponsored a two-day symposium organized by The California Native Grasslands Association (CNGA), held in Arcata, Humboldt County, June, 2010. I attended as a representative of the DKY Chapter.

It was an excellent symposium, attended by researchers, long-time native grass advocates, young entrepreneurs, students, agency biologists, and nursery professionals. North coast attendees were thrilled that CNGA was paying attention to grass issues in our region; the group has tended to focus on the Central Valley and Bay Area.

One factor that distinguishes the grasslands here is that the dominant non-native grasses are usually perennial, rather than annual. This has implications for management and restoration. Native bunchgrass prairie habitat is still sometimes found on sea bluffs. Even weedy grasses may have a hard time adapting to powerful winds and salt-laden air, but tough little natives like tufted hairgrass (*Deschampsia caespitosa*) or red fescue (*Festuca rubra*) make lovely prairies, dotted with purple grass iris (*Sisyrinchium bellum*), checkerbloom (*Sidalcea malviflora*) and other small flowering plants.

While we may long for large meadows composed of all native grass species, the reality is that we are lucky to find natives growing in with the exotics that now dominate California's grasslands. The symposium made me think about ways to manage my own grasslands.

One of the most adaptable, tough, local native grasses is *Bromus carinatus*, a tall, robust perennial, often found holding its own in stands of exotic sweet vernal grass and velvet grass. A few years ago, purple needle grass (*Nasella pulchra*) appeared on the coast, and has persisted. We also have California oatgrass (*Danthonia californica*) growing as a sort of understory to the taller grasses. It gets higher inland, but on the coast it remains small. Since Greg and I must mow our meadows for fire protection, our strategy has been mow after the native grasses have gone to seed. Of course, by then the non-natives have also set seed. We also mow gradually, giving the animals in the grasslands time to re-locate. If we had ground nesting birds out there, we would need additional strategies for dealing with them.

We hope the CNGA will continue to focus on the coast, and will look at smaller projects, like garden uses of native grasses, and creation of backyard native bunchgrass meadows.

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Here were the famous Klamath-Siskiyou endemics, some tall, some short, some "weeping" more, some less, serving the forest community as they might.

I have long recalled Brewer spruce as a tree that, unwittingly, is fortunate to live in rather wild places, far from urban centers, and lucky not to be in great demand in foreign markets. It is still to be seen mostly by those Clark Trails who pause at some remote pass--shaggy with sweat, waving off deerflies—and who think, Hey, there's that weird spruce I've read about...and, boy oh boy, I wish I'd brought another liter of water...

About the authors—

Michael Kauffman is a local naturalist, hiker, teacher, photographer, and author. See his work and buy his poster at www.conifercountry.com.

David Fix observes nature and wrangles words, as both professional and volunteer, home-based in Bayside. He and his partner Jude have exceptional talent in sharing nature with other human beings.

ELECTION OF OFFICERS



PLEASE VOTE.

We have elections too! Every two years we elect our chapter's president, vice-president, treasurer, and secretary. Nominations were open all summer. Chapter members may vote in person at our October 13 evening program, at the October 5 business meeting, or by mailing the ballot (Election, North Coast CNPS, P.O. Box 1067, Arcata CA 95518-1067) by October 10, 2010.

President	<input type="checkbox"/> Carol Ralph	<input type="checkbox"/> Write in _____
Vice-President	<input type="checkbox"/> Felicity Wasser	<input type="checkbox"/> Write in _____
Secretary	<input type="checkbox"/> Frances Ferguson	<input type="checkbox"/> Write in _____
Treasurer	<input type="checkbox"/> Cara Witte Scott	<input type="checkbox"/> Write in _____

NATIVE PLANT PROPAGATION FOR BEGINNERS A workshop with Pete Haggard, Garden Chair



Native plant enthusiast Pete Haggard will share some of what he has learned over many years of gardening with native plants. He will talk about growing medium, dormancy, timing, seeds, cuttings, and water. Using local native species participants will learn by doing. Seeds, cuttings, and herbaceous perennials for separating will be provided as well as planting medium and pots. Participants take home what they plant.

Dress warm and bring a hand pruner (if you have one) and gloves. Class size will be limited to ten enthusiastic gardeners. If demand is sufficient, we will repeat the workshop.

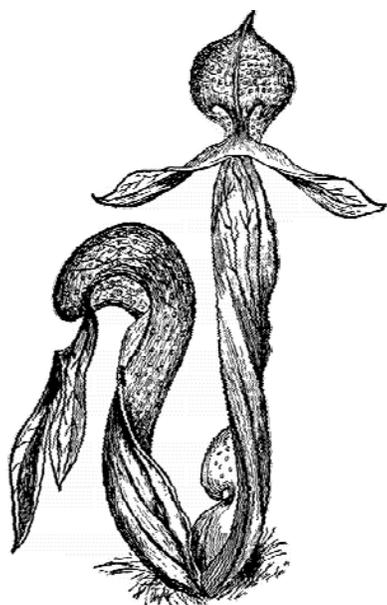
Date/Time: January 15, 2011, Saturday, 10 a.m.-1 p.m.
Location: To be decided
Fee: \$10.00 (covers materials) collected at door
Reservations: To reserve a place or get more information contact Pete at phaggard@suddenlink.net or 839-0307

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CALENDAR of EVENTS

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

October

- ◆ Sat 9—Chapter Picnic
- ◆ Sat 9-Botanical Book Sale
- ◆ Wed 13-Program
- ◆ Sat 30—Plant Walk

November

- ◆ Sun 7 —Day Hike
- ◆ Wed 10- Program

December

- ◆ Wed 8- Program

January

- ◆ Wed 12- Program
- ◆ Sat 15 —Plant Propagation Workshop

February

- ◆ Wed 9- Program

March

- ◆ Wed 9- Program

April

- ◆ Wed 13- Program

May

- ◆ Wed 11- Program