Spring Native Plant Sale
At Freshwater Farms Reserve, a property of the North Coast Regional Land Trust, where cows and coho live side-by-side, 5851 Myrtle Ave., Eureka.

May 2 & 3. Saturday & Sunday, 10 a.m.-4 p.m.
CNPS Member only pre-sale 9 – 10 on Saturday!

- over 100 species grown by our chapter
- 25 species of cheerful annuals and 3 species of milkweeds
- many species of perennials, grasses, shrubs, ferns and trees
- 25 species of beautiful bulbs
- additional plants from five local participating nurseries
- plants for a variety of planting needs; sun, shade and in-between
- experienced gardeners to help you
- species list at www.northcoastcnps.org>Gardening>Native Plant Sales
- Please bring a box to carry home your plants

Spring Wildflower Show
(See more details on page 5)
the North Coast celebration of wild California plants
Jefferson Community Center, 1000 B St., Eureka.
Special theme this year: Pollination and Pollinators

Friday, May 1, 2-8 p.m.
Saturday May 2, 10 a.m.-4 p.m.
Sunday May 3, 10 a.m.-4 p.m.
**EVENING PROGRAMS AND FIELD TRIPS**

Please watch for updates on our web site (www.NorthCoastCNPS.org) or sign up (Northcoast_CNPS-subscribe@yahoogroups.com)

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<th>Date</th>
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<td><strong>Wednesday</strong></td>
<td><strong>9:30 a.m.</strong></td>
<td>Outings are open to everyone, not just members. All levels of expertise, from beginners to experienced botanizers, are welcome. Address questions about physical requirements to the leader. Contact the leader so you can be informed of any changes.</td>
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**March 11, “Tribal Uses and Stewardship of Plants, Habitats, and Ecosystems in Northwestern California.”** Join Frank Lake, a researcher with the USDA Forest Service, Pacific Southwest Research Station, Fire and Fuels Program, for a presentation focused on California tribal uses and stewardship of plants. NW California offers a dynamic range of ecosystems including coastal headlands, redwood, oak woodland prairies, Douglas-fir, tanoak, and interior mixed conifer/hardwood forests. Frank will take us on a historical, ethnographic, and ethnobotany journey across these ecosystems by weaving data and imagery to illustrate the complexity and diversity of tribal knowledge. The practices discussed will guide collaborative restoration efforts in our region into the future. He will also focus on plants used for basketry, food, and utilitarian purposes associated with tribal stewardship of those habitats.

**April 8, “Vascular Plants of Northwestern California: a Story of Plants and People.”** Dr. James P. Smith, Botany Professor emeritus at Humboldt State University, leads an evening celebrating our plants, local botanists, and our chapter's 50th anniversary. His recently published book will be for sale. Join us for cake at 7 to celebrate our 50th!!

**May 13, Wednesday, 7:30 p.m. “Botanizing the BLM Lands of the North Coast.”** Jennifer Wheeler, botanist for the Bureau of Land Management (BLM) in Arcata, will take us on a virtual journey across BLM lands on the North Coast. The BLM manages a diverse collection of habitats across Humboldt, Trinity, and Mendocino Counties, including Red Mountain, South Fork Eel, and King Range. Jennifer will introduce us to a variety of wonderful plants including the newly described Wailaki Lomatium (Lomatium kogholini) from the Red Mountain Area of Critical Environmental Concern. We will also visit the Douglas-fir forests of Butte Creek Management Area and the oak woodlands of Lacks Creek and Travis Ranch.

**FIELD TRIPS Spring 2020**

Outings are open to everyone, not just members. All levels of expertise, from beginners to experienced botanizers, are welcome. Address questions about physical requirements to the leader. Contact the leader so you can be informed of any changes.

**March 22, Sunday. Botanizing Neukom Farm Day Hike.** Neukom Farm covers rich, valley floor with some agricultural fields, but also mature trees, old meadow, a seep, and river bluff above the Trinity River in Willow Creek. The Neukom family has invited us to this special habitat. They have found Calypso Orchids, but not trilliums. With 40 recently-acquired acres to explore, these treasures are a real possibility. We will be tramping on informal paths, farm roads, and off-trail. Dress for the weather. Bring lunch and water. Meet at 9 a.m. at Pacific Union School (3001 Janes Rd., Arcata) and tell Carol you are coming: 707-822-2015; theralphs@humboldt1.com.

**March 29, Sunday, 1:00-3:00 p.m. Meet the Willows at Arcata Marsh.** Willows are a diverse and important group of trees and shrubs famous for being difficult to identify. Local biologist John Bair (aka Mr. Willow) will show you that you can identify the four species present at the Marsh. He will also relate some of their fascinating life histories. Meet at the Marsh Interpretive Center, 569 South G St., Arcata, prepared to walk about a mile on easy, level paths. Co-sponsored by CNPS and Friends of the Arcata Marsh. 707-826-2359

**April 11, Saturday. (day before Easter) Stony Creek Day Hike.** The traditional April destination of the North Coast Chapter in its early days 50 years ago was this famous botanical trail off Highway 199 in Gasquet. It offers diverse native vegetation. We probably will see blooming Brook Wakerobin and a bed of fawn lilies. It is a 1-mile roundtrip hike to the confluence of Stony Creek and North Fork Smith River. The trail is narrow and uneven, with an optional extension over boulders. It is partly on Six Rivers National Forest and partly owned by Siskiyou Land Conservancy. Dress for the weather and all its changes; bring lunch and water. Meet at 8:30 a.m. at Pacific Union School (3001 Janes Rd., Arcata), 10:30 a.m. at the Gasquet Ranger Station, or arrange another place. Please tell Carol you are coming (822-2015).

**April 18, Saturday, 12:30-3:30. Native Plants in Arcata's Gardens and Forest.** Join Carol Ralph for a walk from the Arcata Community Center to Arcata Community Forest and back to see native plants in public and private landscapes and in a redwood forest. We will identify a range of native and invasive plants, see wildlife in a native plant garden, and think about how to mimic wild habitats in the confines of gardens. 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 free trip sponsored by California Native Plant Society at Godwit Days, or register for Godwit Days at www.godwitzdays.org.

**April 25, Saturday, 10 a.m-12 noon. Ferns in the Dunes, At the Lanphere Dunes Unit of the Humboldt Bay National Wildlife Refuge Carol Ralph will introduce eight species of common ferns during an easy walk of about 1/4 mile along the riparian edge of the dunes, and discuss some of the**

(Continued on page 3)
amazing aspects of fern life. Bring a hand lens if you have one and be prepared for mosquitoes. Meet at Pacific Union School, 3001 Janes Road in Arcata and carpool to the protected site. Co-sponsored by the California Native Plant Society and Friends of the Dunes. Please reserve your space by contacting Friends of the Dunes at (707) 444-1397 or info@friendsofthedunes.org

April 26, Sunday. 1-3:00 p.m. Botanizing the Hammond Trail Loop. Along this wonderful McKinleyville trail see remnants of the native vegetation. Wildflower author and enthusiast Elaine Allison will lead this walk of about one mile along coastal bluffs and coastal prairie, through Beach Pine forest and streamside forest, where you will see many common plants and at least one officially rare species. Meet at the west end of Murray Rd. For information: 707-822-2015 or theralphs@humboldt1.com

May 15-17, Friday-Sunday. Weaverville Weekend. The East Weaver Trail is a wildflower favorite of our neighbors in the CNPS Shasta Chapter, who we hope will join us. Camping at East Weaver Campground (group camp site is reserved), or staying at motel/B&B in nearby Weaverville, we will be in oak woodland and at the trailhead for this day hike. We will gather there Friday afternoon/evening, day hike Saturday, have a campfire dinner Saturday night, visit some other fun trail Sunday morning, and head home after lunch. Tell Carol if you are interested: theralphs@humboldt1.com or 707-822-2015.

June 27, Saturday. Likely date to visit a fun botanical spot with Green Diamond botanists.

July 25-26, Saturday and/or Sunday. Likely date of a field trip to mountains somewhere.

Nursery Thanks

Chris Beresford

Our chapter’s native plant nursery continues to be a busy, vibrant place of new plants and a new demonstration garden! Thanks to: Carol Ralph, Carol Woods, Karen Isa, Barbara Reisman, Barbara Wilkinson, Sue Marquette, Sharon King (queen of washing up containers!), Brian Dorman, Joan Tippets, Laura Guldin, Anita Gilbride-Read, Ann Wallace, Christine Kelly, Sarah Hirsch, Jocelyn, Marcia Thorndike, Vivienne Vlaskovits, Marika Chop, Ila Osburn, Shoshanna, Richard Beresford, Dave Dorman and his friend Karol. All volunteers work hard to help us grow the plants that we sell to raise awareness of the importance of native plants to our local birds, butterflies and insects, as well as to raise funds for things such as scholarships, the yearly Wildflower Show, our almost monthly programs and our support of other native plant organizations, such as the yearly Northern California Botanist Symposium and the CalFlora data base.

A special thanks to Barbara Reisman who ably takes the lead while I am away, who spends many other hours puttering at the nursery and keeps me on my toes! Barbara also leads our wonderful watering team: Sharon King, Sydney Carothers and Christy Wagner. These volunteers water and monitor the nursery plants; thanks so much for doing this important task!

Christine Kelly continues to take care of our native plant stand. She checks, stocks and tracks the plants we put out for sale, adds new species as plants look their best, makes plant signs as needed, and helps post to our Facebook page current information about what is for sale. Sales help pay our rent and utilities to the North Coast Regional Land Trust. The plant stand, at the Kneeland Glen Farm Stand, Freshwater Farms Reserve, 5851 Myrtle Ave., is open daily from 12-6. You can purchase plants thru the Farm Stand. If you don’t find what you are looking for, contact us northcoastcnps@gmail.com.

A special thanks to Richard Beresford who always steps up when needed! Richard fixed, upon our return from Colorado, the broken support for one of our “winter” poly tunnels where we put plants that require less water over the winter. He also repaired the shade structure’s “broken PVC bone” that occurred during a heavy wind event.

I would also like to thank Barbara Wilkinson for the plants she provides our nursery from her amazing garden, bringing items we cannot grow ourselves such as Asarum caudatum (Wild Ginger), Dicentra formosa (Bleeding Heart), Vancouveria hexandra (Inside-Out Flower) and Viola sempervirens (Woodland Violet), to name a few. Thank you so much Barbara! It is greatly appreciated.

If you would like to help out at the nursery, contact us at northcoastcnps@gmail.com and we will add you to our nursery-only contact list. Currently we work Wednesdays 10 – 1 and other days as needed, usually a Sunday.

Re-Using Plastics

At the nursery, we try to re-use plastic containers and other items. We clean (dry brush out old soil, rinse, and sterilize in 10% bleach 10 minutes) all 6 gallons that we empty. We also wash and sterilize used plastic labels and orange sale-indicator knives. This has reduced the amount of plastic we throw away and reduces the number of containers we order each year.

Rebecca Zettler, whom we affectionately refer to as “the pot lady,” continues to pick up stacks of dirty containers and takes them home where she cleans and sterilizes them, bringing us back clean pots. She is so conscientious that she did “extra” pot cleaning before she left on an extended trip! Rebecca’s efforts have been a tremendous help as we cannot wash and sterilize all of our dirty pots with everything else we do. To date, Rebecca has cleaned thousands of containers, freeing us from purchasing more. Thank you so much Rebecca, it is greatly appreciated! If anyone else would like to do the same...just let me know.

In addition to re-using plastic containers and labels, we take all of our empty soil bags to the Northcoast Environmental Center (NEC) in Arcata where they use...
them for trash & recyclables pick-up for Coastal Cleanup and other beach clean-ups. They tell us that folks are thrilled to be re-using soil bags before they go to the landfill as waste. Thanks to Casey Cruikshank at NEC for recognizing the absurdity of using single use plastic bags and for being thrilled to re-use our potting soil bags!

We also re-use the soil bags to make water-proof gardening aprons which will be for sale at the spring plant sale. Barbara Wilkinson designed and made the apron with help from other volunteers. Directions available to make your own; contact us northcoastcnps@gmail.com.

Demonstration Garden News

Thanks to everyone who helped with the demonstration garden. Special thanks to Alan & Barbara Wilkinson, Tim & Anita Gilbride-Read, and Richard Beresford for helping pick up 5-yards of soil to finish filling the beds. To Tim for installing 2 additional hose bibs for garden watering and for installing the metal flashing “backing” that we used between the soil and our deer fence.

To the folks at Healthy Humboldt who once again came to our aid and helped to off-load garden soil, not once, but twice, thanks so much. We really appreciate your help!

To all of the volunteers who helped work on the garden in addition to our regular volunteers on Sunday workdays, including; Nancy Brockington, Melanie Bright, Christine Kelly, Barbara Reisman, Barbara Wilkinson, Karen Isa and Anita Gilbride-Read. I came back from visiting my granddaughter in Colorado and it was nearly ready to plant, what a difference! We worked another Sunday in December adding the last amount of needed soil (and yes, I doubted we needed 5 yards as Christine had said, and in fact, we did…) that Tim and Anita Gilbride-Read picked up and planted the garden. Thanks to Barbara Reisman, Barbara Wilkinson, Marcia Thormdike, Alicia, Karen Isa, Joan Tibbets, Sue Marquette, Ann Wallace, Sharon King and especially Christine Kelly, who has overseen this entire project. She designed the garden into bio-regions, coming up with a list of plants for each area. Christine and I are working on metal signage with the scientific and common names large enough to be easily read. Thank you Christine for your hard work and for taking on this extra project! We are all very excited to see how it fills in.

We still have some additional design and planting to do in a center bed and will work on that as time allows. We are planning on having the garden open for Native Plant week in April, 2021 after the plants fill in more and the garden looks, well, more like a garden.

If I missed anyone who helped in the garden, I apologize. I see now I need to take better notes on when we do what!

Spring Plant Sale

The spring plant sale will be here before we know it! It will be held on-site at the nursery (located at Freshwater Farms Reserve) on Saturday, May 2nd from 10 – 4 with a CNPS member only pre-sale from 9 – 10. We will also have the sale on Sunday, May 3rd from 10 – 4. Our hours on the weekend are the same as those of the Wildflower Show at the Jefferson Community Center in Eureka, so that folks can visit both places.

Volunteers are needed for Friday, Saturday and Sunday. If you can help all day, for one shift, a partial shift, or any time during the sale, your help will be appreciated. Shifts are normally all morning and all afternoon. If you have questions about the schedule or the tasks, please contact Sarah Hirsch via email” sarah415info@gmail.com. or phone: (707) 822-9243. Last year’s Saturday morning was crazy busy and we are expecting another busy sale this year as more and more folks realize the importance of and appreciate native plants!

Friday 9 – 2: help is needed with setting up the plant sale, putting out the remaining participating nursery plants, putting up all of the signage, setting up the cashiering & holding areas, putting up tables, etc.

Saturday 8:30 - 4: last minute set up, parking assistance, advise and assist customers, tally purchases, cashier, carry purchases to cars, tidy stock. Many tasks require no botanical knowledge.

Sunday 9:30 – 4: last minute set up, parking assistance, advise and assist customers, tally purchases, take money, checks & credit cards, carry purchases to cars, tidy stock, clean-up at end of the sale.

Sunday 3:30 until 5ish: clean up from plant sale. Take down pop-up canopies and tables, re-organize CNPS plants. Help nurseries collect their unsold plants.

The plant sale is always a busy, fun day with lots of folks looking for native plants. Come and be part of this event which raises the bulk of the funds for our chapter’s activities. If you have any questions, contact Chris Beresford: northcoastcnps@gmail.com or at 826-0259.

Plant Stand

The chapter continues to maintain a plant stand of native plants at the Kneeland Glen Farm Stand at Freshwater Farms Reserve, 5851 Myrtle Ave., Eureka. The Farm Stand is open daily from 12 – 6. We rotate stock to have plants in bloom and looking their best. If you can’t wait for the plant sale, come by and see what we have. Look for a “Plant of the Month” on our Facebook page and also plants for sale as they start looking their best. If you don’t find what you are looking for, contact us: northcoastcnps@gmail.com.
Spring Wildflower Show

Spring Wildflower Show features pollination and pollinators

The hundreds of fresh wildflowers from all over Humboldt and Del Norte Counties, are all "wild" flowers, some of them native species, some of them not. A surprising number of our roadside wildflowers are not native. Some of them are even invasive. At the show you can learn which are which.

The importance of pollination, how it happens, and who does it are topics that will be covered by speakers and in special displays. Brian Dykstra, Bill Rodstrom, Clint Pogue, and Jean Paul Ponte, will be speaking about native bees, pollinator gardens, butterflies, and pollination basics, respectively. Pete Haggard will bring his popular insects to share.

Additional displays include Native American cultural plants, edible native plants, invasive plants, plants of the dunes, and special plants in Six Rivers National Forest.

Artists can take advantage of the fresh flowers Friday evening at Art Night, 7-9 p.m., a drawing and painting workshop with guidance by local artists. Photographers can bring their wildflower photos (or come without) to an informal class sharing how-to ideas on Sunday at 11 a.m..

Botanists will be on hand to identify wild plants brought in as samples or photos.

Plant books, posters, postcards, and t-shirts will be available for purchase. CNPS sells five different wildflower postcards, 19 different Dorothy Klein postcards, and a popular t-shirt depicting California Pitcher Plant (by local artist Gary Bloomfield). Northtown Books offers a remarkable selection of plant books—identification, edible or medicinal, etc.

For more information contact Susan 707-672-3346. To volunteer to help contact Carol 707-822-2015.

Friday, May 1. 2-8 p.m. open to public

7-9 p.m. Art Night Artists Annie Reid, Joyce Jonte, and Patricia Sennott will provide a creative and congenial atmosphere for artists, from beginners to professionals, to sit down together and draw the flowers of their choice borrowed from the show. Please tell us you are coming 677-0927.

Saturday, May 2. 10 a.m.-4 p.m. open to public

12 noon "Native Bees and Plants: a Vital Symbiosis." Brian Dykstra, founder of the Native Bee Society, operator of Bee Friendly Farm in Willow Creek, Master of Science at Humboldt State University, field botanist, and occasional, inspiring teacher, introduces the ways bee and plant diversity support each other. Native bee ecology and the bee relationship with functioning ecosystems is portrayed in a colorful and engaging manner.

2 p.m. Wildlife biologist with the U.S. Fish and Wildlife Service, Clint Pogue will introduce some common, local butterflies.

Sunday, May 3. 10 a.m.-4 p.m. Open to public

11 a.m. "Photographing Wildflowers," an interactive session with life-long photographer Janet Stock about how to make your wildflower photos look the way you want them to. By looking at examples, both hers and others' (Bring some!), participants will judge whether a photo is effective, learn how it was made, and suggest different techniques.

12 noon. "Pollination basics and intricacies." Join Jean-Paul Ponte to refresh your understanding of the pollination process and be amazed at some of the ways it is accomplished.

1:30 p.m. "Gardening for Pollinators: Restoring the Earth, One Garden at a Time." Pollinators like bees and butterflies have been declining rapidly, but we can all do our part to restore their habitat at our homes, workplaces, and public areas. Naturalist Bill Rodstrom will talk about the best plants for native bees and butterflies, the California Native Plant Society's guide to butterflies and host plants, and the pollinator gardens at the Jefferson Community Center. Gary Falxa adds a short discussion on Monarch Butterfly conservation and ecology. Come and get inspired to replace some lawn with a pollinator garden!
Spike Buck Mountain      October 7, 2019

Carol Ralph

One of the enticing place names along the Forest Highway 1 corridor in Six Rivers National Forest is Spike Buck Mountain. With the encouragement of hike #87 in Hiking Humboldt Vol. 2 I planned this trip to see the summit. Later careful map study revealed that most of this small mountain is private land, so I will not suggest it as a destination. Forest Service Road N8 that goes by it, however, was a dandy place to botanize, and is worth reporting on.

Our group of 12 parked at the junction of N18 and FH 1, where there is a gate, currently broken.

At about 5,200 ft. elevation we were in White Fir (Abies concolor) with a good dose of Incense Cedar (Calocedrus decurrens). We walked east along this level road, which hugs the north side of Spike Buck Mt. We saw a few seedlings of White Oak (Quercus garryana) and Black Oak (Quercus kelloggii), suggesting the proximity of oak woodlands on sunnier slopes nearby.

Though our tree list was quite short, we quickly listed many of our herbaceous forest friends, such as Siskiyou Penstemon (Penstemon anguineus), One-sided Wintergreen (Orthilia secunda), White-veined Wintergreen (Pyrola picta), Rattlesnake Orchid (Goodyera oblongifolia), as well as gravelly roadside encounters including Pussy Paws (Calyptridium sp.), Naked-stemmed Buckwheat (Eriogonum nudum), and coyote mint (Monardella sp.). In the roadside shrubbery we noted berry-sized fruits on Baneberry (Actea rubra), Snowberry (Symphoricarpos albus), Wood Rose (Rosa gymnocarpa), Bitter Cherry (Prunus emarginata), Green-leaf Manzanita (Arctostaphylos patula), Red-flowering Currant (Ribes sanguineum), Gummy Gooseberry (Ribes lobbii), Sticky Currant (Ribes viscosissimum), and Blue Elderberry (Sambucus nigra ssp. caerulea). At a cool damp curve in the road, where small piles of hail lingered on the matted vegetation, a thicket of Mountain Dogwood (Cornus nuttallii) laden with balls of tightly packed fruits, offered the most bountiful repast to any birds. A few American Robins enjoyed the offerings. In this damp roadside ditch was a dense patch of tall Mountain Larkspur (Delphinium glaucum), still green but fallen with the weight of recent rain and hail.

The ascent to the top of the mountain (5,450 ft.) was notable only for the dense brush that had grown up in the dozer track, a mix of Bitter Cherry, Tobacco Brush (Ceanothus velutinus), Green-leaf Manzanita, and Sticky Currant. The forest was White Fir of small to medium size, I suspect grown since a past timber harvest indicated by scattered, well-decayed stumps and the dozer track. One of these stumps about two feet diameter was about 100 years old when it was cut. This is timberland.

This half-mile section of dirt road provided plenty of botanical entertainment. We saw a good show of the fall fruits the mountain offers to migrating birds. What will the Mountain Dogwood look like in the spring? When will the Mountain Larkspur delight us with blooms? What is beyond that, around the next bend? PS: Despite it being hunting season, we heard no shots and saw no hunters.

(All photos by author)
Stone Lagoon North End  15 Sept 2019

Carol Ralph

Driving north on Highway 101, after passing close to the waters of Stone Lagoon in Humboldt Lagoons State Park, a traveler might think he has left the lagoon behind, when a park sign indicates a sudden, modest side road to the left. This is the entrance to a somewhat informal, unpaved parking area right by the ocean and the lagoon. It offers no facilities, but plenty of nature. Eight of us arrived to botanize there this gray day.

Being observant and interested in everything, we lived up to our reputation and started botanizing where we stepped out of the cars. As at most places, the parking area is a good place to orient yourselves to the habitat and focus on the dominant plants. We were standing at the junction of three major habitats, the sand, the freshwater wetland, and the ocean bluffs. At our feet were Dune Tansy (Tanacetum bipinnatum) and Beach Morning Glory (Calystegia soldanella) from the sand, Gumplant (Grindelia stricta) from the wetland edge, and Coyote Brush (Baccharis pilularis) and California Blackberry (Rubus ursinus) from the ocean bluffs. As we walked from the parking area toward the lagoon, we went from sand laced with Beach Morning Glory, through dense Dune Tansy, to a bed of Gumplant (Grindelia stricta), then a grass and much dock (Rumex, a non-native one), then Salt Grass (Distichlis), and finally the shore of the receding lagoon.

On the shore, only in the zone recently exposed, was a mystery plant which I recognized from photos sent me from Big Lagoon in September a previous year. It was a small, herbaceous plant spreading its red stems on the ground from a central point, with succulent, green leaves and no clues to flower arrangement or structure. Searching around we found a few with tiny flower buds clustered close to the stem. Only later, at home, using the "brute force" method of identification (reading all the descriptions and looking at all the pictures in the genus you suspect it is), did I deduce this humble, late-growing plant is Red Goosefoot (Chenopodium rubrum var. humile). This is a non-native variety of a species with a native variety as well, which is erect with lobed leaves. Goosefoots are one of the plant groups that invest very little in flower show.

More immediately gratifying was discovering sprinkled through a meadow-like expanse of Salt Grass an unfamiliar, herbaceous plant with long coils of white flowers. We easily identified it as Seaside Heliotrope (Heliotropium curassavicum). Clearly a late bloomer, probably not noticeable until fall.

The gentle shore of the lagoon was well infiltrated with the single, three-sided stems of Three-square (Schoenoplectus pungens). On the inland side of this narrow, northernmost inlet of the lagoon, the growth of Coastal Willows (Salix hookeriana) and Red Alder (Alnus rubra) suggested a freshwater seep. In that thicket was American Wild Mint (Mentha arvensis), Water Parsley (Oenanthe sarmentosa), and slough Sedge (Carex obovata). The shore was richly clothed with mats of Silverweed (Potentilla anserina), Lilaepsis (Lilaepsis occidentalis), Seaside Arrowgrass (Triglochin maritima), and a spikerush (Eleocharis sp.). This last was the only one eaten down by a passing elk, who left footprints in the mud.

After eating lunch by the driftwood, watching the waves, we walked north along the toe of the bluff. The less rocky parts were densely covered by a mix of herbs and shrubs. I was pleased to see in an accessible place the dried, prickly stems of an annual I had seen here before and at Moonstone Beach but couldn't reach. Using again the brute force ID, I concluded this was Stinging Phacelia (Phacelia malvifolia), which I hope to see in bloom some day. The rocky outcrops of the bluff were studded with a succulent, which I won't mention by name, to prevent plant poachers from Google-searching for it. Catching the cold, salty ocean winds on the bluff, along with Coast Strawberry (Fragaria chiloensis), wind-swept Sitka Spruce (Picea sitchensis) and Coyote Brush was a dispersed patch of Elegant Rein Orchid (Piperia elegans), a dramatic demonstration that our native orchids are much harder than the tropical house-plants people associate with the family. This less-developed corner of our state park provided a satisfying diversity of plants for very little walking.

Seaside heliotrope
Photo by Annie Reis

Red Goosefoot
Photo by Chelsea Kiefer

Caroline Ralph
The following articles represent recent presentations by winners of CNPS scholarship awards.

**Conifer Removal in an Encroached Quercus garryana Woodland: Effects on Ecosystem Physiology and Biodiversity**

Gabe Goff, Department of Forestry and Wildland Resources, Humboldt State University

Under conditions supported by its archetypal fire regime, Oregon white oak woodlands are composed of widely spaced, broad-crowned oaks with a predominantly fire tolerant understory (Devine et al. 2007). However, when fire is excluded from these systems, structural and compositional changes occur and fire sensitive species are favored (Devine et al. 2007; Engber et al. 2011). Without fire, shade tolerant Douglas-fir (*Pseudotsuga menziesii*) saplings have the opportunity to establish and grow, eventually overtopping oaks, leading to growth reductions, crown dieback, and mortality (Agee 1998; Devine and Harrington 2006; Engber et al. 2011). The result of this type of encroachment is a transition from more open, woodland conditions to a closed canopy composed primarily of Douglas-fir (Engber et al. 2011; Cocking et al. 2012). Unfortunately, these impacts are widespread, as Oregon white oak communities are declining throughout their range between central California and southern British Columbia (Thysell and Carey 2001; Gedalof et al. 2006; Gilligan and Muir 2011). Restoring these landscapes to presettlement conditions requires the prioritized retention of existing oak trees coupled with the removal of conifers to release oaks from resource competition (Devine and Harrington 2006; Devine et al. 2007).

The objective of our study was to understand the physiological effects of conifer encroachment on Oregon white oaks (*Quercus garryana*) in open, moderately encroached, and heavily encroached woodlands of northwestern California. Our results suggest that despite increasing competition for water, a moderate level of conifer encroachment may increase water availability to oaks by reducing evaporative losses of soil water.

**Biological Assessment of Two Darlingtonia Fens in the Mill Creek Watershed Addition of Del Norte Coast Redwoods State Park**

Len Mazur, HSU Undergraduate in Environmental Science and Management minor in Botany

*Darlingtonia* fens are biological hotspots for many rare and unique species of plants. They are high-risk communities with complex ecological systems that are host to a fascinating, charismatic flora. Each fen community is the result of its own unique subset of environmental conditions and history of disturbance. There is no one-size-fits-all solution to fen management, which could explain why very little restoration work regarding fens and peatlands has been attempted in the Pacific Northwest. Because the ecology of *Darlingtonia* fens across the state are not well understood, careful inventory of site-specific conditions must be completed prior to management prescriptions. The Cobra Lily, *Darlingtonia californica* is the primary plant constituent of these unique wetlands. It is both enigmatic, charismatic, and in unfortunate decline across its range.

Thanks to funding from the North Coast chapter of the California Native Plant Society and in collaboration with California State Parks North Coast District and Humboldt State University, I was able to complete a biological inventory of two *Darlingtonia* fens found in Del Norte Coast Redwoods State Park in Del Norte county. One of the fens had been recently rediscovered by California State Parks staff in the summer of 2018. Measurements taken at both fens included: wetland delineation, gap light analysis, understory composition, and depth of peat measurements. In addition, stem mapping and dendrochronology assessments were taken at the Dry Lake fen to quantify the degree of woody encroachment on the fen. This project seeks to supplement the initiative on behalf of California State Parks to identify rare and sensitive plant communities in need of management.
VOLUNTEER CORNER

See here some of the things our volunteers have done and are doing. Everything we do is with volunteer labor. Every job, small or large, is important for getting things done. We appreciate our many, talented, generous volunteers. You can be one too! Contact Carol at 707-822-2015 or theralphs@humboldt1.com

THANK YOU!

Rebecca Manion for carefully guarding and updating our membership list for three years. Under Rebecca’s leadership our membership increased to almost 400 from almost 300!

Joan Tippetts for following the Humboldt Wind Energy Project to the exciting end.

Sydney Carothers, Dave Imper, Steve Underwood, Ned Forsyth, Joan Tippetts, and Carol Ralph for studying and thinking about the Six Rivers Hazardous Fuels and Fire Management Project proposal. Dave, Joan, and Carol also met for 2.5 hours with Six Rivers staff.

Anna Bernard for capturing Miner’s Lettuce in her garden and potting it up for us to distribute at the seed exchange.

Carol Moné and Karen Isa for doing a native plant consultation.

Sam O’Connell for diligently contacting people who want native plant consultations and organizing it to happen.

WELCOME ABOARD!

Steve Underwood as Invasive Plant Chair

Sarah Hirsch as scheduler of Plant Sale volunteers

Sue Marquette as Membership Guru

HELP NEEDED!

contact Carol Ralph 707-822-2015 or theralphs@humboldt1.com

Native Plants in Public Gardens List. To encourage people to plant native plants in their gardens and public landscapes, we need to show them good examples of what it can look like. With a list of places like the Trinidad Museum Native Plant Garden and the Sequoia Park Zoo, plus various, small, street-side private gardens, people can see them on their own time. We just need someone to assemble the list.

Workshop Organizer. Workshops are part of our education mission. They can cover topics as diverse as keying sedges or landscape design. With a few good ideas and some communication one person could make this kind of fun happen.

iPad 4 or newer. Just when we had a credit card reader system working, the state upgraded the readers, and we need to upgrade our device that reads it. We will give a good home to a used iPad 4.
MEMBERS’ CORNER

THANK YOU NEW MEMBERS

Bruce Palmer
Christian Hernandez
Christina Pierce
Audrey Szutu
Katrina Henderson
John Russell McCallen
Toni McFadden
Felicia Smith
Celeste Thaine
Sarah Hirsch
Malama Macneil

THANK YOU RENEWING MEMBERS

Monica Scholey
Marisa D’Arpino
Lori Hendrick
Winifred Walker
Kjirsten Wayman
Cynthia Hammond
Melissa Kraemer
Robert Melendez
Kenton Chambers
Kaylea Eickhoff
Bradley Thompson
Sharon McCarrell
Alan Justice
Gary Balcerak
David Callow
Audrey Miller
Jane Wilson
Joan Boulden
Cindy Watter
Chris Miller
Elaine Allison
Margaret Becker
Sharon Edell
Gail Kenny
Kale McNeill
Mark Moore
Dan Paquette
Mark Pringle
Robert Reinsvold
Diane Ryerson
Petra Unger
Donna Wildearth
Gordon Leppig
Peter Haggard
David Imper
Valerie Williamson
Frank Callahan

MEMBERSHIP BENEFITS

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

Greenlot Nursery, 10% discount on plants, 443-9484
Lost Foods Native Plant Nursery: 10% discount on plants, 268-8447, LostFoods.org
Mad River Gardens: 10% discount on plant purchases, 822-7049
Miller Farms: 5% discount on plant materials, 839-1571
Pierson’s Garden Shop, 10% discount on all garden shop items (except sale or non-discountable items—please ask staff before going to register), 441-2713
Samara Restoration LLC, 10% discount on plants, 834-4379 samararestoration.com.
North Coast CNPS members have four ways to share information with each other:

- Contact Joan Tippetts at jtippetts@yahoo.co.uk
- The NEC is the only organization with which we share our mailing list. We think it is important that 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 chapter pays NEC to mail EcoNews.
- To subscribe, please contact Carol Ralph at theralphs@humboldt1.com
- Like us on Facebook www.facebook.com/NorthCoastCNPS

## 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. 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 chapter pays NEC to mail EcoNews.

## Communications

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

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<thead>
<tr>
<th>Issue</th>
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<th>Print Date</th>
<th>Announce Events In</th>
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<td>Summer</td>
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<tr>
<td>Fall</td>
<td>August 15</td>
<td>September 1</td>
<td>Sept, Oct, Nov</td>
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</tbody>
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- The **Darlingtonia Newsletter** (quarterly),
- Our chapter’s website: www.northcoastcnps.org
- **E-mail lists** To subscribe, please contact Carol Ralph: theralphs@humboldt1.com
- **E-mail lists** To subscribe, please contact Carol Ralph: theralphs@humboldt1.com
- E-mail lists/forums To subscribe, please contact Carol Ralph: theralphs@humboldt1.com
- Like us on Facebook www.facebook.com/NorthCoastCNPS

## 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 share our experiences gardening with natives. This service is free. We hope it will inspire you to join CNPS or make a donation.

Contact our coordinator Samantha O’Connell at 707-601-0650 or maineflower@gmail.com to put you in touch with volunteer consultants who will arrange a visit to look at what you have and help choose suitable plants for your garden.
Darlingtonia

Visit us at northcoastcnps.org

CALENDAR OF EVENTS

March
♦ 11 Evening program
♦ 22 Day hike
♦ 29 Walk

April
♦ 8 Evening program
♦ 11 Day hike
♦ 25 Walk

May
♦ 13 Evening program
♦ 15-17 Camping weekend