

Darlingtonia

SUMMER
2021
June-August

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

Putting the Forest Back in Forestry by Donna Wildearth

Our April CNPS chapter meeting featured an informative presentation—and a welcome bit of good news—about the Pacific Forest Trust (PFT), an accredited land trust organization headquartered in San Francisco. The program, entitled “Putting the Forest Back in Forestry,” was presented by Laurie Wayburn, who co-founded PFT in 1993. PFT’s goal was to pioneer new sources of financial return for forest landowners to reward the conservation and stewardship of privately-owned forest land, which comprises 60% of forest land in the U.S.

PFT uses several strategies to advance their mission. The “Working Forest Conservation Easement,” which they developed, functions as a land trust document and is currently applied to 110,000 acres across the country. PFT has been the driver of cutting-edge forest policy in terms of securing the acknowledgement of the role of forests in climate mitigation. They work with policy makers and law makers, primarily in California but also in Oregon, Washington, and Washington, D.C. And PFT actively manages some 14,000 acres of forest land, including the local Van Eck forest, to demonstrate their vision of the synergy of managing forests for both economic and ecological returns.

The Van Eck forest consists of 4 parcels in the Arcata-McKinleyville area totaling 2,200 acres. This is highly-productive redwood land that had been logged in the past and transitioned into pastureland. PFT assumed management of the Van Eck forest in 2003. Their management is guided by 3 performance goals:

(1) Restoring the natural composition of the forest in terms of the canopy/tree/understory/herb layers, structure, the age classes, and the deadwood component. Steve Sillett is currently working with PFT to restore canopy diversity in the Van Eck forest, with the expectation that increased canopy diversity will drive forest biodiversity and productivity as well as forest resilience under climate change. The conservation easement mandates that 25% of the forest should be trees 0-100 years old, 50% should be 101-200 years old, and 25% should be 200-600 years old.

(2) Achieving minimum values of 100,000 board feet/acre. This is in contrast to most forest land which contains only 7-12,000 BF/acre.

(3) Limiting opening sizes to naturally-occurring gaps.

Using sustainable management, forest functions such as wildlife habitat, watershed protection, and climate mitigation can be restored and conserved while harvesting timber for economic return. Carefully selecting trees to harvest frees up more light and water for the remaining trees, resulting in a consistently improving stand. This is management for the long term, where the annual economic return is a byproduct, not the driving force, of forest management.

As a side-note, Wayburn pointed out that good forest management requires good foresters on the ground. She mentioned that loggers like working in the Van Eck forest, where they can both cut big trees and grow big trees.

Since PFT assumed management of the Van Eck, they have harvested almost 21,000 MBF, at the same time the timber inventory has increased substantially from 28.28 million board feet/acre in 2002 to 53.39 MBF/acre in 2019. The carbon stock in the forest also rose over this period.

The loss and degradation of forests is the second largest source of CO2 emissions, and good forest management is considered one of the most cost-effective, multi-benefit strategies to address the climate crisis. PFT pioneered the carbon offset program, which offers an economic incentive to forest owners.

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Find out what’s happening:

- Visit our website: NorthCoastCNPS.org
- Visit our Facebook page: facebook.com/NorthCoastCNPS
- Sign-Up for Activity Notifications by emailing: theralphs@humboldt1.com and request to be added
- Visit Instagram page: instagram.com/northcoastcnps

Evening Programs and Field Trips

EVENING PROGRAMS

Evening programs are free, public presentations on the second Wednesday of each month, September through May. During Covid restrictions, programs will be via Zoom, at 7:00 p.m. The link to register will be on our website www.northcoastcnps.org during the weeks before the program.

September 8 (topic TBA)

October 13 (topic TBA)

FIELD TRIPS Summer 2021

Please watch for updates on our Web site (www.northcoastcnps.org) or sign up for e-mail announcements at activities+subscribe@NorthCoastCNPS.groups.io

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.

We are following the county's **covid protocol**, adjusting as requirements change. Please bring a face covering. Carpooling is at your discretion.

June 19, Saturday. Seawood Cape Preserve Field Trip. Continuing our botanical exploration of this new preserve just north of Trinidad, we will look for summer flowers in the Redwood and Sitka Spruce forests and on the coastal bluff. We will walk 2-3 miles on rough trails having a good review of coastal plants. Staff of The Wildland Conservancy will guide us. Attendance will be limited. Meet at 9 a.m. at the Preserve; bring lunch and water. Register with Carol at 707-822-2015 or theralphs@humboldt1.com for details.

June 27, Sunday. Canoe Fire Field Trip. Seventeen years after the Canoe Fire burned through part of Humboldt Redwoods State Park, what does it look like? Retired park ecologist Steve Underwood will show us how things have changed and how remained the same. We will hike several miles both on and off trail as we look at the fire impacts utilizing photos taken before, during, and after the fire. He will share the results of

measurements made over the years documenting a fire's long-lasting impact on the forest. Along the way we will see many favorite understory plants, like Bleeding Heart, Queen's Cup, and Douglas Iris. Register with Carol at 707-822-2015 or theralphs@humboldt1.com to learn details.

July 11, Sunday. Hope Creek-Ten Taypo Day Hike. This hike in Prairie Creek Redwoods State Park was revealed last summer to be rich in mycoheterotrophs, the non-green flowering plants that get nutrients from a fungus that has a mycorrhizal relationship with a tree. Besides this intriguing quarry, we will find plenty of traditional Redwood forest flowers, as well as the unfamiliar Grape Fern. The 3.8 mile loop route has uneven tread and part is steep. Bring lunch and water. Register with Carol at 707-822-2015 or theralphs@humboldt1.com to learn details.

July 31, Saturday. Groves Prairie Day Hike with optional campout. Unusual in our rugged mountains, Groves Prairie is a fairly level meadow, at 4,000 ft elevation, with a creek and surrounded by Douglas-fir forest, some of it old growth. It is time to see how it has survived the five years since our last visit. Will the Grape Fern be in the meadow, the Kneeling Angelica in the stream, the two species of yampah in the wet meadow, the Trillium-leaved Sorrel by the little bridge? Will the four species of gooseberries and currants have fruits? We will walk one to two miles in and around the meadow to answer these questions, some of it on a trail (unless it is overgrown). Groves Prairie is two hours away in Six Rivers National Forest, up Forest Service roads north out of Willow Creek. Dress for the weather (Remember, it is higher elevation) and off-trail walking; bring lunch and water. Camping Saturday night at the primitive Forest Service campground could be an option. Forest fires might disrupt this plan. Register with Carol at 707-822-2015 or theralphs@humboldt1.com to be in touch about details or changing plans.

September 19, Sunday. Field Trip. Destination to be decided

Spring Wildflower Show and Art Share

--Is still there to see

by Carol Ralph

Yes! Somewhat last-minute, our amazing volunteers pulled together another, totally new virtual wildflower show. Led by Annie Reid the art community enlarged the traditional Art Night to be Art Share April--a whole month! Led by Susan Penn 10 volunteers walked 20 favorite trails snapping portraits of the plants and submitting them to the "Spring Plant Walks in Northern California" iNaturalist project. Led by Larry Levine and Laurel Goldsmith 14 "collectors" built a collection of flowers viewable in the traditional taxonomic categories. Led by Carol Ralph four delightful and informative evening speakers gave us a good understanding of serpentine habitats, and Robin Bencie gave us a wonderful introduction to the Heath Family and to the Humboldt State University Vascular Plant Herbarium, all on Zoom, of course. The nine consecutive evening Zooms gave participants a chance to interact.

What's more, the virtual wildflower show is still viewable! Find our four iNaturalist projects through the links on the Wildflower Show webpage on our website. The Zoom speakers on serpentine habitat are still viewable! Recorded videos are under the Education tab of our website. And the real art is still being shared in the Little Free Wildflower Galleries. Find the 15 locations on the Art Share page of the Wildflower Show tab of our website.



A Little Free Wildflower Gallery. Photo by Annie Reid

A 3 x 3-inch art-share by Julienne Johnson in one of the Little Free Wildflower Galleries.



Grasswidows, in the iris family, a photo in the Wildflower Show

CALL FOR NOMINATIONS

Elections in October! Now's your chance! The chapter elects four officers--president, vice president, treasurer, and secretary--for 2-year terms every two years. A person may nominate him/herself or another member for any position by submitting his/her name by August 20 to Tony Labanca. The ballot will be published in the newsletter mailed September 1. Votes may be cast by mail or at the October Steering Committee meeting (Wednesday, October 2) or evening program (Wednesday, October 9). Our chapter is governed by a Steering Committee composed of "job-holders," following our Operating Procedures. The four elected officers are part of the Steering Committee. Any "job-holder" may join the Steering Committee, when approved by that body. Not all job-holders choose to join the Steering Committee. Some jobs are essential and well-defined, e.g. treasurer, while some are specialized, e.g. Econews CNPS page editor. Some jobs are broad and open to the interpretation of the holder, e.g. Conservation Chair. All are important and improve the effectiveness of the chapter. (See Volunteer Corner in previous issues for some un-elected jobs that need people, maybe you!) The Steering Committee meets one evening each month for 1.5 hours, September through May, currently first Wednesdays, 6:30-8:00 p.m. All chapter members are welcome to attend these meetings. We value input from all sources. If you'd like to attend, tell Carol (822-2015;

North Coast Otters - A Merger of Art & Science

North Coast Otters are preparing for a summer of thoughtful celebration! CNPS and NEC have co-sponsored "Fern Lily" by Patricia Sennott, which will be sited at The Garden Gate on the Arcata Plaza.

In the meantime, you may view the otter art online and find out all about the project: otterart@humboldt.edu

Jeff Black, HSU Wildlife Professor

Cell 707 273 9761 (for otter sightings in this area)

Grays Falls Day Use Area February 27 2021

by Carol Ralph

Traditionally, people visit Grays Falls in April to revel in the glorious display of fawn lilies, checker lilies, violets, Indian Warriors, and countless other species. Our group of eleven headed inland on Highway 299 to the Grays Falls Day Use area at the eastern edge of Six Rivers National Forest to see what was happening on a nice February day.

The answer was, just the first enticements of spring. We could identify many species by the



Admiring the falls and the vegetation across the canyon. By Susan Thorsell

new leaves they had made already, like the Checker Lily (*Fritillaria affinis*) common in the central picnic area and the California Fawn Lily (*Erythronium californicum*) at the head of the trail. Eventually we found an "embryonic" Indian warrior (*Pedicularis densiflora*) just emerging from the ground but identifiable. The only species really blooming were California Milkmaids (*Cardamine californica*), Serpentine Snow Queen (*Synthyris cordata*), Sierra Gooseberry (*Ribes roezlii*), and a manzanita (*Arctostaphylos* sp.). These are all very early bloomers, the first signs of spring.

The paths down to the river go through a mature Douglas-fir (*Pseudotsuga menziesii*)-Tanoak (*Notholithocarpus densiflorus*) forest and past wet patches, one of which is a spectacular stand of Chain Fern (*Woodwardia fimbriata*), unfortunately now losing a battle with Himalaya Blackberry (*Rubus armeniacus*). At a trail junction in the forest we found six species of fern: Sword, Western Wood, Chain, Fragile, Gold-back, and Roadbank (*Polystichum munitum*, *Dryopteris arguta*, *Woodwardia fimbriata*, *Cystopteris fragilis*, *Pentagramma triangularis*, and *Polypodium calirhiza*). The huge boulders by the river provided another habitat. Its denizens included a good variety of bryophytes (mosses and liverworts) and a spikemoss (*Selaginella* sp.). The spikemoss creeps in a different way than mosses, with robust stems densely clothed in tiny, scale-like leaves. The leaves on the underside of the stem may be different from those on the topside. These are true leaves, each with a vein, but you're not going to see that in the field. Another visible difference is that the ends of some branches of the spikemoss are squarish in cross-section. These are the "spikes," the spore-bearing structures. If you peek in under a leaf you should see sporangia.

After lunch we walked the trace of old dirt road that goes east from the picnic area. This habitat on an ancient alluvial terrace is drier than in the river canyon. It has scattered Ponderosa and Sugar Pines (*Pinus ponderosa* and *lambertiana*) with a diverse shrub understory--good shrub review--and sun-loving plants like mule ears (*Wyethia*). We identified one plant here on the basis of the dried stalk from last year--Sugar Stick (*Allotropia virgata*). The leafless stem, the dry, four-parted capsules, and old stamens were easily visible. We were excited to meet the hand-somely marked Hartweg's Wild-ginger (*Asarum hartwegii*).



Hartweg's Wild-ginger. By Carol Ralph

Now about that snow queen... The plant list from the Humboldt State University Vascular Plant Herbarium, compiled by respected botanists and several plant taxonomy classes that visited Grays Falls, lists Snow Queen (*Synthyris reniformis*), so I was happily calling it that. Then a visiting, keen, plant-keying botanizer pointed out to me that there is a second species of *Synthyris*, and the ones we were seeing



Serpentine Snow Queen. Note the long leaves. By Carol Ralph

had leaves longer than wide, which made it *S. cordata*. *S. reniformis* has leaves wider than long. Never mind that the common name of *S. cordata* is Serpentine Snow Queen, and Grays Falls is not serpentine. To report here to you the correct, certain name of this dainty, early flower, I would have to research the taxonomic history of this genus. Meanwhile, I will give you my best guess, just as the people compiling the plant list were giving their best guesses.

A report on Grays Falls Day Use Area is not complete without mention of the ubiquitous Poison Oak (*Toxicodendron diversilobum*) and the rampant Himalaya Blackberry. The former we have to accept, but appreciate that the Forest Service mows the picnic area and keeps it down. The blackberry is truly distressing and begging for control.

We all thoroughly enjoyed this day on the cusp of spring, testing our identification skills without the benefit of flowers, and savoring each flower we encountered.

Horse Mountain and Cold Spring

April 18, 2021

by Carol Ralph

To design a covid-safe outing, our 22 field trippers met at the junction of Titlow Hill Rd and Highway 299, where we split into 3 smaller groups, for 3 different hikes at Horse Mt.: Trinity Alps Vista Loop, Indian Butte Rd., and Lookout Rock & Horse Mt. Mine Rd. Then we drove south 4.6 miles to The Intersection, where the Lookout Rock group stayed while the others turned left up the hill to the other trails. We were all in the heart of the Horse Mountain Botanical Area, established "for protection of unique botanical values, for educational purposes, and for recreational use compatible with these values." The botanical specialty is the flora on these strongly serpentine soils.

It was barely spring. Indeed, we encountered a few patches of snow, and significant snow fell later in the month. Along the informal path to Lookout Rock we found blooming only the dainty Nuttall's Milkmaid (*Cardamine nuttallii*), the very dainty yellow umbels of Tracy's Lomatium (*Lomatium tracyi*), and the first Wedge-leafed Violet (*Viola cuneata*). The Trinity Alps Vista Trail group found one Oregon Anemone (*Anemone oregana*) blooming. We found only leaves of the Calypso Orchids (*Calypso bulbosa*) and Lemon-colored (or is it California?) Fawn Lilies (*Erythronium citrinum* or *californicum*?). The early-blooming shrubs were Silk Tassel (*Garrya* sp.), Green-leaved Manzanita (*Arctostaphylos patula*), and right on the top of Lookout Rock, a Sierra Gooseberry (*Ribes roezlii*). No one got excited about the blooming woodrush (*Luzula* sp.). Such is the lot of the grasses and grass-like species.

On all three walks a person could find a good variety of conifers: Jeffrey, Western White, Sugar, and Knobcone Pine (*Pinus jeffreyi*, *monticola*, *lambertiana*, and *attenuata*); Port Orford and Incense Cedars (*Chamaecyparis lawsoniana* and *Calocedrus decurrens*); and Douglas-fir (*Pseudotsuga menziesii*). Right near the top of Horse Mtn. Mine Rd. we were surprised to find a sapling (in size, probably not in years) of Pacific Yew (*Taxus brevifolia*).

The group walking the Trinity Alps Vista Trail encountered the problem that Six Rivers National Forest is facing target shooting in the botanical area.



Snow patch at the top of Horse Mountain Mine Rd.

The parking area for this loop trail is a site that has been used by target shooters for a long time. With increased use by hikers, the conflict between these two forms of recreation is clear. Additionally, though many target shooters are respectful and tidy, some leave gross amounts of trash in the form of blasted objects, shells, and lead. And some shoot trees, which may seem resistant but are indeed killed by shot and bullets. Target shooting is clearly not compatible with the stated purpose of the botanical area. Our botanizing group arranged phone contact with this day's target shooter, so the hikers could alert him when they were coming back into range. The district ranger is working up courage to prohibit target shooting in the botanical area. If you want to encourage him, or to report target shooting, phone 530-629-2118 x 4789

After lunch at The Intersection, we drove 2.6 miles farther south, parked in a small clearing on the left at Titlow Hill, and walked downhill to Cold Spring, not a serpentine area. There we continued downhill along the left side of the spring, through gravelly clearings to the meadow and oak woodlands.

In the clearings a scattering of the tiny, elegant Hall's Violet (*Viola hallii*), with creamy faces topped by royal purple ears, hinted at the spectacle developing. In the meadow one



Dormant meadow and oaks below Cold Spring.

cheery yellow Dandelion (*Taraxacum officinale*), a few yellow Astoria Violet (*Viola praemorsa*) and White-flowered Baby Blue-eyes (*Nemophila menziesii* var. *atomaria*) and a sprinkling of the small, yellow umbels of the cilantro-smelling Turkey Pea (*Sanicula tuberosa*) were the only flowers in a generally dormant landscape. Under the nearby still-leafless oaks, where in later spring Giant White Trillium (*Trillium albidum*) grows huge and stunning, we found small trillium leaves with a few flower buds.

By midafternoon the air temperature was 70 degrees. We came prepared for 40 degrees. This is what spring is about--changeability. It is the time chosen by violets, gooseberries, silk tassels, manzanitas, and a few umbellifers to bloom. They all have back-up plans if the pollinators aren't out. We all enjoyed our peek at mountain spring.

Thank you's – Nursery

By Chris Beresford

The CNPS nursery volunteers continued working on growing and tending all the plants that we had available for our recent spring plant sale. We have had a very trying growing season with a variety of issues, including the potting soil being too base and plants were consequently not growing properly! I met with our soil representative and conducted soil tests to see what was going on. Turns out that the potting soil chemistry was too base/alkaline. We ended up getting a pallet of potting soil that was more acidic, via Mad River Gardens (thank you so much MRG for the help when it was needed!) and mixed the two soils together to get a balanced blend. This all took extra time as we needed to re-pot a lot of our plants, an additional task that I had never thought we would need to do. There is never a shortage of work to do at our nursery!

Thanks to: Barbara Reisman, Carol Ralph, Karen Isa, Barbara Wilkinson, Sharon King, Brian Dorman, Joan Tippetts, Laura Guildin, Anita Gilbride-Read, Christine Kelly, Marika Chop, Jessi vanFloto, Sydney Carothers, Nancy Brockington, Stephen Underwood, Alexa DeJoannis, Ava Biscoe, Rebecca Zettler, David Callow, Christy Wagner, Tim Hickman, Kate Rowe, Mandy Hackney, Katrina Henderson, Kit Mann, Ron Melin, Julie Neander, Marina Gagarina, Ashley Dickinson, Gordon Leppig, Henri Holbrook and Celeste Thaine. All of our volunteers work hard growing our plants so we can fund the chapter's many activities and scholarships, as well as raise awareness of the importance of planting native plants in our gardens and landscapes.

I would especially like to thank the following volunteers who spend many more hours of time at the nursery by coming in when others aren't there to work on special projects such as transplant, general clean-up, re-pot and trim held-over plants, take the lead on work days and do whatever else needs to be done! A special thank you to Karen Isa and Barbara Reisman!

We also have a dedicated team of volunteers lead by Barbara Reisman who water our hoop house and shade house plants that are not on a timed sprinkler system. They also check to make sure that the sprinklers are adjusted correctly for all plants and the demonstration garden. Thanks to Sydney Carothers, Christy Wagner, and Sharon King for regularly watering our plants; a big task.

As many of you saw at our plant sale, the demonstration garden continues to grow and is looking absolutely amazing. Thanks to Sydney Carothers, Christine Kelly and Barbara Reisman for weeding and filling in new plants. We have added the last bed, which has a *Philadelphus lewisii* (Lewis' mock-orange) and some annuals. A special thanks to Christine for taking the lead on getting the new signs made. She worked with local artist Jenna Catsos of Pen & Pine to make these wonderful informational signs. We hope to have our plants signed with their scientific and common names prior to the fall sale.

A very special thank you to our ever-dependable Jessi

VonFloto for continuing to take excellent care of our plant stand. On Wednesdays, Jessi re-stocks, pulls old plants and adds new ones to our plant stand currently located at the Kneeland Glen Farm Stand. He adds new species as plants look their best, makes up informational plant signs, and provides us with weekly updated information, which we post to our Facebook page and website.

I would also like to thank Tim Hickman for his help with our soil issues. He helped me figure out the correct blend of our 2 potting soils by taking soil samples and testing their PH levels with strips he provided. I will now check every batch of soil from Kellogg's for its PH level. Thanks to Tim, I got to do science at the nursery, and I learned a lot!

A special thanks to Rebecca Zettler, who continues to pick up and return literally hundreds of washed & sterilized containers to re-use. Please see Rebecca's article on our website to see how to clean and sterilize pots. We always need more help with this ongoing project.

Thanks to everyone who help out with our chapter's nursery! We could not do this without all of you.

Volunteers needed

If you are looking for a way to make a meaningful contribution to help spread the importance of native plants, we can always use more help at our chapter's volunteer run nursery located at Freshwater Farms Reserve, 5851 Myrtle Ave, right by 3 Corners.

Our nursery operations support all of the activities that our chapter engages in: paying for our NEC membership, EcoNews page and EcoNews mailings, supporting other non-profit organizations, and providing scholarships for college students as well as supporting all the costs of our nursery. (see p. 8 for scholarship winners)

Currently we work 3 days a week, Wednesday, Friday and Sunday from 10-1. For the next few months, we'll be transplanting plants into larger containers, watering and feeding plants to keep them healthy, cleaning up plants to keep them looking their very best, and cleaning and sterilizing used containers and flats. We also will work on keeping our demonstration garden watered and weed-free.

At this time, we limit the number of volunteers due to Covid restrictions, so we ask volunteers to sign up in advance at: <https://www.signupgenius.com/go/904054da5a823a2f94-weekly>. If you have questions, please contact us at our nursery email: northcoastcnps@gmail.com. Hope to see you soon!

Fall Plant Sale Date

Put September 25th and 26th on your calendar as the dates for our fall plant sale which will be held at our nursery location. More information will be coming out prior to the event, so watch our website at: www.northcoast.org > Native Plant Sales as the time gets closer.

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Spring Plant Sale Thank You's

I would like to thank everyone who helped with our recent spring plant sale, which was again, very successful! Everyone worked so hard preparing for the sale. There are many different components in getting ready for the sale and working the sale itself. I would like to thank those who took the plant inventory; ordered plant labels; put informational posters out in various locations and our quarter sheets in the nurseries; helped clean-up our outdoor space; put labels in plants; found volunteers; helped rearrange tables; checked in and placed the plants we received from our participating nurseries; got signage and informational plant signs out; did traffic control and helped attendees park; greeted people, ensuring that they were on our list of appointments; assisted with plant selection and answered questions; processed plant purchases; acquired boxes; moved plants to vehicles; sold CNPS merchandise; restocked tables to keep them full of plants, and cleaned up and put things away after the sale. As you can see, there is a lot to do to get our plant sale together and it takes a lot of volunteers to make it happen! Thank you to all of our wonderful volunteers, many of whom worked multiple days in multiple tasks: Jessi vanFloto, Celeste Thaine, Laura Guildin, Sue Halpin, Tim Gilbride-Read, Stephen Underwood, Richard Beresford, Brian Dorman, Barbara Reisman, Ann Burroughs, Sharon King, Christine Kelly, Chris Brant, Randi Swedenburg, Nancy Brockington, Bill Rodstrom, Carol Ralph, Lisa Hintz, Julie Neander, Karen Isa, Anita Gilbride-Read, Gisela Rohde, Ashley Dickinson, Rebecca Zettler, Kit Mann, Sue Marquette, Henri Holbrook, Ron Melin, David Callow, Donna Wildearth, Kate Rowe, Tim Hickman and Gordon Leppig. Thank you again for all of your help! We could not have had the sale without help from all of you!

I would also like to thank volunteers who do specific tasks: Sharon King is in charge of getting our publicity out for the plant sales. She submitted our information to the CNPS statewide publications and our sale was listed as well as on the statewide calendar of events. She also got an article in Times Standard in plenty of time for folks to sign up. Sharon also sent out press releases to all media contacts and got the information about the sale in the Northcoast Journal. Thank you, Sharon, so much, for doing this!

I can't thank Barbara Reisman enough for all that she does for the nursery and plant sale. In addition to working at all work days and other days, Barbara orders the plant labels from Ann. She also washes and sterilizes old labels with Sharon's help. Thanks, Barbara, for everything that you do!

Chris Brant again weed-whacked and cleaned up the area where we put our pop-ups for cashiering and merchandise. Thank you, Chris! You always help out when I ask.

A very special thanks to Christine Kelly who works with our participating nurseries coordinating as to which plants and how many they will provide, and when they will be delivered. She tracks the plants and counts all of the surplus plants after the sale, so we can reimburse their percentage and ordered labels for these nurseries. Thanks, Christine

for continuing to take the lead on this very important task.

Sam O'Connell continues to help out making new informational plant signs or re-doing old ones that have seen better days. She checks our signs against a list, making new ones or re-doing ones that need it. Thanks so much Sam, I appreciate that you take this on every plant sale!

Anita Gilbride-Read, in addition to being in charge of cashiering for the sale, also coordinated and found all of the volunteers that we needed for the plant sale. Thank you so much Anita!

Thanks to Brian Dorman for picking up plants with his horse trailer at Samara Restoration. He picked up so many he filled his truck bed and triple stacked the plants, which he carefully drove. Thanks so much Brian!

Richard Beresford and Christine Kelly went to Lost Foods to pick up plants for the sale. Richard and Christine both filled up their truck beds. Thanks to both for doing this!

A very special thank you to Ann Burroughs who continues to print all of the stickers with our plant names and other information as well as for our participating nurseries. Thanks Ann, for continuing to create all of our plant labels!

A special thanks to Karen Isa, box collector extraordinaire, who yet again, started collecting boxes from local stores weeks before our sale and stashing them in the barn next to the nursery. In addition to getting all of the boxes, Karen also tracks, organizes and sells CNPS merchandise at our sales. Thanks Karen!

I sincerely hope that I have thanked and acknowledged everyone who was involved in our spring plant sale. If not, I apologize for the oversight.

Our apologies

During the plant sale, we discovered we had made an error in identifying one of our 4" plants. The plant we thought was *Silene californica* (Indian Pink) was actually *Erythranthe cardinalis* (Scarlet Monkeyflower). If prior to our pulling the plant you purchased one in error please let us know: northcoastcnps@gmail.com. We can give you a \$4 credit at the fall plant sale or replace the plant. We expect to have *Silene californica* in the fall from the Mattole Restoration Council. We apologize for the error.



Inspiring a new generation of native plant gardeners!

Photo by Sharon King

Chapter Grants Awarded 2021

Caitlyn Allchin--Assessing relocation habitats and assisted migration of the Lassics lupine, an endangered California serpentine-endemic

The purpose of this research project is to aid in the management strategies of preserving an endangered endemic plant, the Lassics lupine (*Lupinus constancei*). Through evaluation of habitat characteristics of viable relocation sites, an assisted migration plan can be produced that will support the recovery of the Lassics lupine. Additionally, this research can serve as a foundation of methodology for the translocation of other endangered species that face similar threats from climate change.

Sarah Norvell--Macrolichen Inventory of Horse Mountain Botanical Area, Six Rivers National Forest

My goal is to complete a stand-level macrolichen inventory of the Horse Mountain Botanical Area (HMBA) in the Six Rivers National Forest. Cataloging biodiversity is more important than ever before as we are currently experiencing Earth's sixth mass extinction event (Pykala 2019). Lichens are among the more poorly-documented major taxonomic groups of our region, and there is a conspicuous lack of published intra-state lichen inventories (Jovan & McCune 2004). The Horse Mountain Botanical Area's complex geology is responsible for a unique flora that includes a diverse assemblage of conifers. The southern extent of the range of *Chamaecyparis lawsoniana* is located within the HMBA, as well as a stand of *Pinus jeffreyi* that survives unusually close to the coast due to the presence of serpentine barrens (Kauffmann 2013, Witte Scott 2010). The presence of these unique stand types and ultramafic rock, as well as the surrounding late-seral mixed-evergreen forests, is indicative of a potentially unique macrolichen community (Király 2013). One study found that the North Coast of California had the highest diversity of epiphytic macrolichens relative to that known from other areas of California (Jovan 2002). I will not only survey the epiphytic macrolichens, but all macrolichens present, and anticipate encountering an exciting array of lichen diversity. I will additionally be collecting stand-level metadata that will be used to elucidate linkages of macrolichen community composition to forest alliances found within the HMBA.

Sophia Lemmo--Tree Mortality and Regeneration Across Competitive Gradients and Varying Habitats in Northern California

The 2012-2015 California drought was the worst in

the state's recorded history, contributing to the death of millions of trees with subsequent detrimental environmental and social consequences. While the effects of the 2012-2015 drought on forests are relatively well-studied in the central and southern Sierra Nevada, relatively less is known about its effects on the heavily-timbered and diverse forests of Northern California. Additionally, in a continually warming climate there will be shifts in ecological communities' distributions and compositions. Studying forest regeneration, especially in relation to an extended drought, can provide insight into future forest conditions.

Megan Tiegan--Plant-microbiota interactions in *Darlingtonia californica*: microbial communities facilitating prey item breakdown and nutrient acquisition

The purpose of this project is to understand how variations in the microbial community of the carnivorous plant *D. californica* affect host survival. My objectives are to determine how microbial biodiversity and species richness increase the acquisition of nutrients from prey items in *D. californica*, as well as what role species identity plays in this relationship. I hypothesize that greater microbial diversity in the bacterial microbiome of *D. californica* aids in increased nutrient processing.

(Continued from page 1)

This set off a nation-wide trend and caught the eye of the *Wall Street Journal*, which published an article about it in Feb. 2008. Over 4.3 million acres in 29 states are enrolled in the carbon offset program.

Managed by PFT for almost 20 years, the small Van Eck forest has provided a practical model for rewarding land owners for management that restores and maintains forest functions while providing public benefits and monetary returns. Along with other PFT-managed forests, it demonstrates that this approach can result in older forests, more timber, and increased carbon storage.

I found this program interesting and encouraging. Humboldt County has been on the front line of the timber wars for decades. With the work of the Pacific Forest Trust, I hope we may now become known as one of the leaders in a new era of forest restoration and sustainable management.

Look for a CNPS field trip to the Van Eck forest sometime in the future. And if you would like to watch the video of Wayburn's presentation go to <https://youtu.be/VeMF8cWLpVs>.

What is 30x30?

30x30 is a global campaign to protect 30% of the Earth's surface from human exploitation by 2030. It provides a framework for wildlife and conservation efforts and a roadmap to immediately begin addressing the twin crises of extinction and a changing climate. On October 7, 2020, Governor Newsom signed into law N-82-20, an Executive Order on Biodiversity and Climate Change, with the objective of conserving a minimum of 30% of California's land and waters by 2030. The Executive Order mandates that, 30x30 initiatives must also:

- further efforts to protect and restore biodiversity,
- enable enduring conservation measures on natural and working lands,
- build climate resilience,
- reduce climate risk and help address climate change,
- maintain California's economic prosperity and food security, and
- expand equitable access to outdoor lands and recreation.

California Natural Resources Agency 30 X 30 North Coast Region Workshop: North Coast Chapter CNPS

Comments submitted by Gordon Leppig May 4, 2021

What are the habitats and species most important to you?

Sensitive Natural Communities, rare plants, coastal dunes, serpentine outcrops, coastal wetlands, montane fens, later seral forests, riparian habitats and floodplains.

Thinking about this region, what nature-based climate solutions are important to you?

Allowing natural hydrology and flooding regimes along major rivers that connect the river with its floodplain and riparian habitat. Allowing for more natural fire regimes and coastal dune processes.

Allowing for ocean and estuarine landward migration due to sea level rise.

With regard to 30x30 and/or nature-based solutions, how can we advance equity and opportunity in the region?

Improved access to Humboldt Bay and the Ocean, better access to lower river systems and riparian habitat such as on the Eel, Van Duzen, Mad, and Little Rivers.

Greater access, control, and management by first nation people to their ancestral lands.

Thinking about recreation and access in this region, what types of places are important to you?

Improved access to Humboldt Bay, continues access to the Ocean, better access to lower rivers systems and riparian habitat such as on the Eel, Van Duzen, Mad, and Little Rivers.

What is working in this region to conserve lands and/or coastal waters, implement nature-based solutions to climate change, or increase equitable access to nature and its benefits?

Greater access, control, and management by first nation people to their ancestral lands. Coastal estuarine, freshwater wetland, and dune ecosystem restoration.

The State of California is committed to conserving 30% of its lands and coastal waters by 2030. What does conservation mean to you?

Habitat should be self-sustaining

No need for extensive long term maintenance

Natural ecological processes dominate

Enough funding to monitor ecosystem health and conduct what management is needed to meet properly functioning conditions and ultimately be self-sustaining.

Ecological connectivity to other conserved lands

Functional wildlife corridors for migrations and gene-flow

Incorporates sensitive natural communities and Important Plant Areas (IPAs).

Describe the greatest challenges to conserving lands and/or coastal waters and implementing nature-based solutions to climate change.

Landscape and watershed-level land use planning and management for optimal biodiversity on lands owned by numerous private and public entities.

Even-aged forest management on private industrial forest lands.

Please describe the greatest challenges to increasing equitable access to nature and its benefits.

Physical access in the form of trails, boat launches, etc. to rivers and wetlands on private lands or some state lands such as that owned by Caltrans.

What does long-term success look like for nature-based climate solutions in this region?

Habitats and ecosystems adapted to their local current natural disturbance regimes such wildfire or flooding and to anticipated climate change-related disturbances.

MEMBERS' CORNER

THANK YOU NEW MEMBERS

Sandi Sommer
Barbara Sopjes
Cora Rose
Jennifer Leos
Savanna Ommaha-Howland
James Piper
Desiree Davenport
Mary Gaterud
Courtney Copper
Nalani Ludington
Drew Estrada
Sophia Lemmo
Megan Teigen
Karen Conant
Thea Rowan
Mary Ann Machi
Myra Beals
Van Donohue
Nancy Brockington
Cynthia McLeod-Graves
Tim Hickman
Robert Lachance

THANK YOU RENEWING MEMBERS

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Claire Perricelli
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Keith Wiley
Jessica Wilson
Mark Youdall
Gail Baker
Susan Hubbard
Barbara Kelly
Jean Schlesinger
Mark Pringle

MEMBERSHIP BENEFITS

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

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At-large	Melissa Kraemer	707-822-4189	

COMMUNICATIONS

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

Issue	Submission Date	Print Date	Announce Events In
Winter	November 15	December 1	Dec, Jan, Feb
Spring	February 15	March 1	Mar, Apr, May
Summer	May 15	June 1	June, Jul, Aug
Fall	August 15	September 1	Sept, Oct, Nov

E-mail newsletter articles, factoids, tidbits, etc. to the Newsletter Editor by the submission date.

Articles should generally be no more than 1,000 words and images can be any size and in these formats: JPG, JPEG, BMP, GIF, or PNG (note preferred location in the article and send image as a separate attachment).

- The **Darlingtonia Newsletter** (quarterly),
- Our **chapter's website**: www.northcoastcnps.org
- **E-mail lists/forums** To subscribe, please contact Carol Ralph: theralphs@humboldt1
- **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. 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 Chelsea at nec@yournec.org

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.

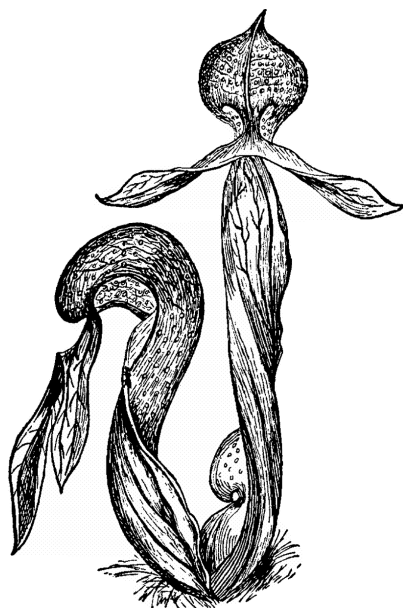
Contact our coordinator Melanie Johnson at (707) 502-8856 or mjokega@reninet.com to put you in touch with volunteer consultants who will arrange a visit to look at what you have and help choose suitable plants for your garden.

**CNPS, North Coast Chapter
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CHANGE SERVICE REQUESTED

Darlingtonia



Visit us at
northcoastcnps.org

CALENDAR OF EVENTS

June

- ◆ 19 Field Trip
- ◆ 27 Field Trip

July

- ◆ 11 Day Hike
- ◆ 31 Day Hike

September

- ◆ 19 Field Trip