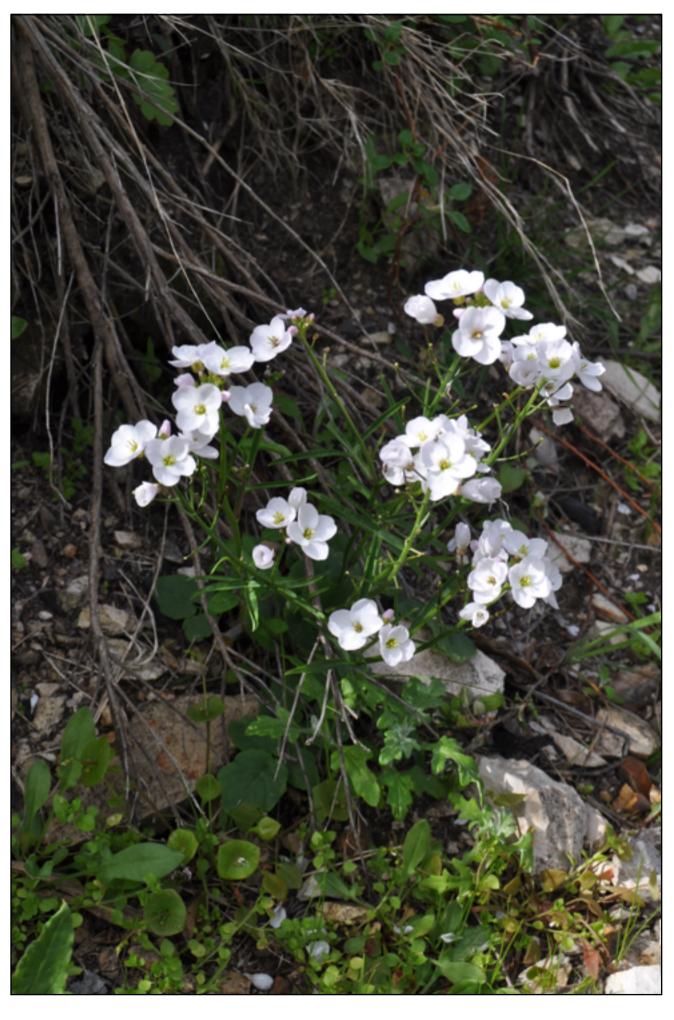
Obispoensis

Newsletter of the San Luis Obispo Chapter of the California Native Plant Society



December 2022

Cardamine californica (Milk Maids)

The cover photograph of *Cardamine californica* was made along Coon Creek, and Bonnie's drawing accompanying this article was made for the original edition of Dr. David Keil and my plant taxonomy textbook. It was completed back in 1975! My guess is that many of you will have already recognized it as milk maids (*Cardamine californica*). It belongs to the mustard family, Brassicaceae or Cruciferae. The four petals characteristic of this family are apparent in the drawing. To be absolutely sure it's a member of the mustard family, get up close and count the stamens. There will usually be six and four of them will be longer than the other two, although plants with four or two stamens can be found in other genera (see photo). It is said that many species in this family display their four petals as a cross or crucifix. Thus, the older, irregular family name, Cruciferae, which translates as 'to bear' = *iferae* and 'cross' = *cruc*. The other name, Brassicaceae, is the one preferred by the current Rules of Nomenclature. It is derived from the genus *Brassica* paired with the family suffix –aceae.



Its white to occasionally slightly pinkish flowers are a treat for us wildflower lovers. In good to moderate rain-years, milkmaids is one of our earliest bloomers. It usually can be found as early as late January or more commonly early February. Occasional flowers can be found as late as April from the coast through the Santa Lucia Mountains. Flowers have been found in full bloom even in December. Dr. Hoover reports that it's occasionally found east of the Santa Lucia Mountains but at the time of the publication of his Flora, he had no specimens to verify it. Look for it on moist wooded slopes throughout our Chapter area. It is a perennial, growing each year from a deep-seated, tuber-like rhizome.

It is one of the first wildflowers I identified after coming to California and Cal Poly. I first identified it back in the winter of 1970. I had known a similar species from the eastern U.S called toothwort (*Dentaria lacinata*) which, by the way, was also an early bloomer. Our milkmaids also used to be placed in the genus, *Dentaria*. I was told back then that both the names *Dentaria* and toothwort referred to the use of its short rhizome as an antidote for toothache. I was told by Mr. Ralph Baker, a CNPS member and Chapter president at the time, that he and his childhood buddies had used the cut surface of the short rhizome as an antidote for toothache. I could not find any reference to either genus in any of the books on medicinal or poisonous plants on my shelf. So, its use as a toothache antidote must be taken on hearsay for now. I did hear the same story about the source of the name toothwort for the Eastern U.S. species as well. Besides, there are plenty of toothache remedies at the local drug store, so the best use of this plant is to enjoy it where it grows.

Dirk Walters

... and a close relative Cardamine oligosperma (Few-seeded Bittercress)

The small annual *Cardamine oligosperma* is also an early bloomer and is native, unlike the very similar and weedy introduced *Cardamine hirsuta*. The native plant is much smaller and small-flowered and is found in shaded and damp shrub understory from the coast to the Salinas Valley. The left and center photographs show *Cardamine oligosperma*, and the old German print at right shows the morphologically, almost identical, *Cardamine hirsuta*.







Cover and photographs above David Chipping, Print is Public Domain

"Tiny Critters on Giant Trees"

Dr. Rikke Næsborg

December Monthly Zoom Meeting

Dec 1, 2022 07:00 PM Pacific Time (US and Canada)

Register in advance for this meeting:

https://cnps-org.zoom.us/meeting/register/tZMuf-itqDsoHtEH-Pji7SauGtN--espkfqm After registering, you will receive a confirmation email containing information about joining the meeting.

Summary: Dr. Rikke Næsborg is the Tucker Lichenologist at Santa Barbara Botanic Garden and curator of the Garden's lichenarium. Join us on December 1 to hear about her exciting work with tiny critters on giant trees! Coast redwood (Sequoia sempervirens) supports rich communities of epiphytes growing high in their crowns, including a diversity of lichens, bryophytes, and vascular plants. Join us for an exploration of the results from two separate studies of epiphyte communities in the northern and southern part of the coast redwood range. We address questions such as, which factors drive community composition, and how do coast redwood epiphytes compare with those on other conifers?

Rikke earned her bachelor's and master's degrees at University of Southern Denmark and went on to earn a doctorate in systematic botany from Uppsala University in Sweden. She has lived in California since 2011, and has worked on research projects throughout the state.





Conservation Report

CNPS commented on a planned change in the General Plan through a proposed **Paso Basin Land Use Management Area** (**PBLUMA**) **Planting Ordinance.** CNPS objected strongly to the allowance of additional water pumping and the potential dewatering of riparian areas, especially in light of the fact that the groundwater was already being over-drafted. While the current ordinance requires a "water neutral" policy that new well-pumped water must be balanced by a reduction in pumping elsewhere but allows a landowner up to 5 acre-feet per year of additional pumping, the proposed ordinance allows the landowner to pump up to 25 acre-feet per year without compensatory reductions elsewhere. The Draft EIR for the ordinance estimates that between 216-856 acrefeet per year could be extracted from groundwater basin storage during the life of the ordinance, which is planned to sunset in 2045. The proposed ordinance pays no attention to the requirements of the Sustainable Groundwater Management Act (SGMA) that the groundwater basin must reverse the continued decline in storage. That Act starts being implemented in 2040 (NOT a misprint!) and the proposed ordinance termination in 2045 shows no attempt at addressing SGMA issues.

I can happily report that the Planning Commission rejected the proposed ordinance 5-0, but it is still possible that the Board of Supervisors will ignore the Commission. Interestingly, many in the agricultural community also objected to the ordinance, so it is difficult to understand the logic behind the original language crafted by the Board of Supervisors on a 3-2 vote. Small vineyards and rural residents do not have the funds to drill ever-deeper wells, while the large corporate landowners have the resources to drill to the bottom of the basin. Large corporate landowners have reduced incentives for long term conservation when the IRS allows vines to have a depreciation lifetime of 10-20 years, trellis systems of 7-10 years, irrigation systems of 15-20 years and land improvements of 15-20 years.

We have submitted our comments regarding the scope of the Los Padres National Forest Vegetation Management Plan. Our letter focussed strongly on the West Cuesta Ridge area and complemented a letter from the CNPS State Office which spoke to the logic behind back-country fuel breaks versus concentration on the wildland-urban interface and other broad features of the plan.

We are happy to report that PG&E and Eureka Energy Company have placed a Deed of Restriction on the 1,200 acres surrounding the Port San Luis Lighthouse. While ownership remains with PG&E, the yak tit^yu tit^yu yak tiłhini tribe of indigenous Northern Chumash have asked that ownership be returned to the tribe.

David Chipping

IT'S CHAPTER OFFICER ELECTION TIME

Every year in December, the CNPS San Luis Obispo Chapter elects its Officers to serve on the Board of Directors the following year. The Officers consist of President, Vice President, Treasurer, and Recording Secretary. As a CNPS SLO Chapter Member, you have the opportunity to vote for our Officers. This will take place at the start of the December 1, 2022 Zoom General Meeting, so be sure to join at 7PM and let your voice be heard. Statements from the Officer nominees are shown below to help you make your decision; our current Treasurer and Recording Secretary have agreed to continue their duties for another year. During the December 1 meeting, nominations may be taken from the "floor" if you have other candidate suggestions for the four Officer positions. New officers will be installed formally at our February 2023 General Meeting.

President: NO NOMINEE

Vice President: Dena Grossenbacher

I have been a member of CNPS for most of the last 15 years and a professor of botany at Cal Poly in the Biological Sciences Department since 2017. My own research focuses on the ecology and evolution of California wildflowers, and on the impacts of drought and warming on taxa like our local serpentine seep monkeyflowers as well as alpine plants in the high Sierra Nevada. In 2022 I joined the board of the SLO CNPS chapter as the Cal Poly faculty representative, and I have greatly enjoyed participating in meetings, discussing chapter issues, and facilitating student involvement. As Vice President, I would enjoy arranging programs for our general meetings, and would recruit dynamic speakers from a rich pool of contacts locally and from around the state. I also would work closely with our chapter President, assisting with leadership and carrying out duties at their request. In my professional and personal life, I've been looking for meaningful ways to be of service to others and to build community. This position fits perfectly with that goal.

Treasurer: David Krause

I have been Treasurer for many years and I look forward to serving in this position again next year to expand our chapter's activities as a force for education and preservation of California's native plants. For example, the new On-Line Plant Sale has caught the interest of many chapter members and non-members as well. It has been tremendously popular with the on-line portion of our Plant Sale taking orders starting two weeks before the actual sale and orders picked up at the Plant Sale. This forward thinking has helped bolster our chapter income and made California native plants available for home gardens. We will have more on-line sales next year so you will have more opportunities to purchase plants and sales table items. Check our chapter website for plant sale announcements: https://cnpsslo.org

Another thing I look forward to is participating in the newly formed CNPS-SLO CalFlora Group. We formed this group to house Dr. Keil's and other plant surveys from around the county. Our members can join this group and contribute observations to the existing lists or create surveys of their own to add to the site. Here's a link to our local CalFlora surveys: https://cnpsslo.org/resources/finding-plants-in-the-wild. Email me if you would like to join our CalFlora group: dkincmbria@aol.com

I invite you to join me and others helping to geo-reference herbarium specimens from the Cal Poly Hoover Herbarium. This is an interesting process of examining location data from herbarium sheets and assigning latitude/longitude coordinates for where the specimen was collected. This can be done from your home computer! If you are interested, this is a link to the Consortium of California Herbaria: https://www.cch2.org/portal/index.php You can contact Katie Pearson kdpearso@calpoly.edu for more information.

Recording Secretary: Cindy Roessler

As I offer to continue as the chapter's Secretary for a fifth year, collaboration is highest on my mind. The shutdowns associated with Covid have changed the ways organizations work. Some good things have happened with our chapter: on-line plant sales, on-line meetings for the general membership which have allowed us to invite a greater range of speakers, and on-line Board meetings. We are starting up field trips again with a fantastic series of six manzanita hikes over the next year. I am concerned that volunteer participation has declined in our chapter and in many other community organizations. My hope is that by collaborating with other organizations like the Audubon Society, ECOSLO, and The Land Conservancy of SLO County, and keeping an open mind to changes, we can reinvigorate our existing membership, attract new and younger members, and make new connections in our communities. I would like to find ways to offer mentoring opportunities so that more people feel comfortable volunteering with our organization as a Board member, committee chair, field trip leader, and event helper. It's fun, let's do this. In my professional career over 35 years, I've worked as an ecologist managing natural public lands in Florida and California, and served on several Board of Directors for non-profit organizations. You can find out more about me by checking my natural history blog www.dipperanch.blogspot.com or my LinkedIn account. And yes, as Recording Secretary, I promise to continue taking concise minutes at the Board meetings and reminding people of their tasks on the to-do lists.



Chapter Seed Project December Update



The fall plant sale is behind us and with it the seed sales. I extend a big thank you to all who provided seeds. We ended up with more than ninety species to offer to the public. That would not have been possible without the contributions of several of our members. We had a great day with many people stopping by the table to peruse or buy. By my count, we sold more than 250 packets of seeds. Hopefully, that means that a lot of native seeds will be sown into landscapes this fall or spring.

The number of people providing seeds for the sale has gradually increased over the years and I really appreciate that. There are so many plants that I have no legal way of collecting. Wildflower seeds seem to sell the best and I would love to be able to offer more species. There are also some really nice perennials missing from our sales. If you have any of the following growing on your property, perhaps you would think of collecting seeds when the time is right.

Asclepias eriocarpa Lupinus (all species sell well)

Claytonia perfoliata (Miner's lettuce)

Salvia columbariae (Chia Sage)

Bloomeria crocea (Goldenstar)

Ranunculus californicus (Buttercups)

Allium haematochiton (Red scale onion)

Eriophyllum confertiflorum (Golden yarrow)

Calochortus Lasthenia (Goldfields)

Viola pedunculata (Johnny Jump Up) Monardella (Coyote Mint)

Fritillaria biflora (Chocolate Lily)

Brodiaea

Ribes speciosa (Gooseberry) Pholistoma auritum (Fiesta Flower)

Delphinium parryi (Larkspur) Garrya eliptica (Silk Tassel)

To all who purchased seeds, thank you. I hope they grow well for you. As I explained to many at the sale, I have had little success with direct planting. Most of my seeds go into those 72-cell seed starting trays, and some into 4-inch containers. I usually follow the instructions in Dara Emery's <u>Seed Propagation of Native California Plants</u>. I will be starting many of my seeds soon and the refrigerator will soon have some little packets of seeds undergoing their cold stratification. It's a fun time for me. I hope it is for you also.

Marti Rutherford

LOOKING BACK. WHAT THE OLD DECEMBER NEWSLETTERS TELL US

Looking Back 10 years to December 2012, we were discussing participation in the California Phenology Project. Unfortunately, it seems that nothing was done locally in this regard. We had Nan Sterman as our meeting speaker, who authored gardening books. Susan Grimaud was elected our Most Valuable CNPS Plant Sale Volunteer.

Looking back 15 years to December 2007, we were part of a CNPS 60-day notice of intent to sue the four southern California National Forests on failure to obtain incidental take permits or estimate the extent of impacts to protected species.

Looking back 20 years to December 2002, we were concerned about oak moth infestations, the military being enabled to ignore the Endangered Species Act. and Pismo Beach management of Pismo clarkia habitat. The Powell 2 addition was brought into the State Park system.

Looking back 25 years to December 1997, we helped stop the building of a school inside Nipomo Regional Park, working to get Veldt grass control funding, partaking in the Morros Advisorry Committee, and working on HCP-NCCP issues.

Looking back 30 years to 1992, several weed removal projects were underway for castor bean in Morro Bay State Park and pampas grass in Oso Flaco. We were working with TNC on some issues in the Carrizo Plain.

Looking back 35 years to 1987, discussion was mainly about the plant sale and banquet, with little on conservation.

Looking back 40 years to 1982, There was no December newsletter. Minutes of the Conservation Committee address expansion of the Black Lake Golf Course and replanting *Dudley*a on Cuesta Grade

Pollinator Syndromes

Plants and pollinators have co-evolved physical characteristics that make them more likely to interact successfully. The plants benefit from attracting a particular type of pollinator to its flower, ensuring that its pollen will be carried to another flower of the same species and hopefully resulting in successful reproduction.

The pollinator benefits from its adaptation to a particular flower type by ensuring that it will be able to find and access important food resources - nectar and pollen. Such relationships are considered mutualistic.

Animals, wind, and water can all be vectors for pollen. The flower type, shape, color, odor, nectar, and structure vary by the type of pollinator that visits them. Such characteristics are considered pollination syndromes and can be used to predict the type of pollinator that will aid the flower in successful reproduction. Use the pollinator syndrome table to help you identify the potential pollinators you may associate with different flower types.

Pollinator Syndrome Traits							
Trait	Bats		Bees	Beetles	Birds		
Color	Dull white, green or purple		Bright white, yellow, blue, or UV	Dull white or green	Scarlet, orange, red or white		
Nectar Guides	Absent		Present	Absent	Absent		
Odor	Strong musty; emitted at night		Fresh, mild, pleasant	None to strongly fruity or fetid	None		
Nectar	Abundant; somewhat hidden		Usually present	Sometimes present; not hidden	Ample; deeply hidden		
Pollen	Ample		Limited; often sticky and scented	Ample	Modest		
Flower Shape	Regular; bowl shaped – closed during day		Shallow; have landing platform; tubular	Large bowl-like, Magnolia	Large funnel like; cups, strong perch support		
Trait	Butterflies	Flies		Moths	Wind		
Color	Bright, including red and purple	Pale and dull to dark brown or purple; flecked with translucent patches		Pale and dull red, purple, pink or white	Dull green, brown, or colorless; petals absent or reduced		
Nectar Guides	Present	Absent		Absent	Absent		
Odor	Faint but fresh	Putrid		Strong sweet; emitted at night	None		
Nectar	Ample; deeply hidden	Usually absent		Ample; deeply hidden	None		
Pollen	Limited	Modest in amount		Limited	Abundant; small, smooth, and not sticky		
Flower Shape	Narrow tube with spur; wide landing pad	Shallow; funnel like or complex and trap-like		Regular; tubular without a lip	Regular: small and stigmas exerted		

Wand-stem Wire-Lettuce





The Cardamine californica on the cover is one of the first flowers of the season. Wand-stem wire-lettuce is one of the last flowers, remaining open into November. There are two varieties of this plant, Stephanomeria virgata subsp. pleurocarpa (left), and Stephanomeria virgata subsp. virgata (right). The plants are annuals, generally 'understated' and almost never featured in any of the 'ooooh and aaaah' wildflower picture books. But getting close-up, they are spectacular. The diagnostic feature for defining the subspecies is the state of the outer phyllaries, which are appressed in subsp. pleurocarpa and reflexed in subsp. virgata. (Photos David Chipping)

Ow!... Ow!... Ow!...Two Plants to Pain the Kneeling Photographer

Those of you who have gotten down on your knees to photograph a low-growing plant might have experienced the pain of a spiny plant. In the dune sands around Morro Bay, but also found in sandy soils throughout the county, leather spineflower *Lastarriaea* coriacea has really sharp pointed bracts and flowers with spiky awns. It is a member of the Buckwheat family (photo left).

If you are on the North Coast, and on clay soils, you will encounter *Eryngium armatum* (photo right). The plant has the dastardly gall to grow in areas of Chocolate lily and *Calochortus uniflorus*, both low growing on the coast and just asking the photographer to get down low on the knees. Actually, the plant is reminding you not to squish it, so complaints really aren't justified. It has tiny white flowers that are tucked between the layers of bracts. (Photos David Chipping)





Continued Request for Photographs for the Chapter Photo Collection

Still working through Asteraceae, and here is the December 'ask': Deinandra halliana, Deinandra kelloggii, Deinandra lobii, Eclipta prostrata, Ericameria cuneata var. spathulata, Ericameria nauseosa var. mohavensis, Erigeron karvinskianus, Erigeron petrophilus var. petrophilus, Erigeron sanctarum, Erigeron sumatrensis, Eriophyllum lanatum var. achilleoides

Native Plant Large Scale Wall Graphics for Goodwin Education Center

The Bureau of Land Management has completed the additions to Goodwin Education Center at Carrizo Plain National Monument. Working with funding from The Friends of the Carrizo Plain and working with artist John Iwerks, large mural panels of, from left to right, Goldfields and Owl's Clover, Arroyo Lupine, California Poppy, and Desert Candle are being created.



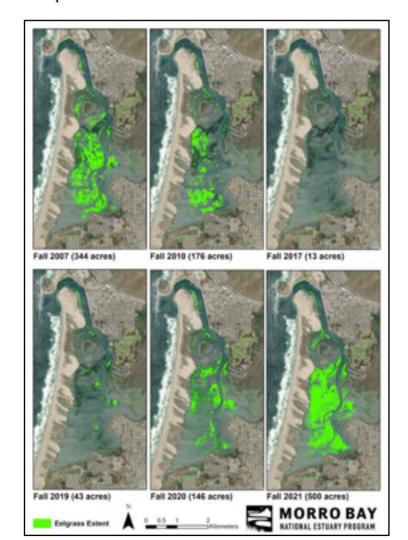


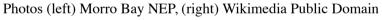




Good News from Morro Bay

The Morro Bay National Estuary Program reports that, after several years of restoration replanting, Eel grass (*Zostera marina*) has made a significant recovery on the mudflats of Morro Bay. Compare the 2017 plant coverage (upper right) with that of 2021 (lower right). The cause for the previous decline is still not well understood. *Zostera* is a flowering plant, but the flower lacks sepals and petals and is concealed in the leaf sheath.



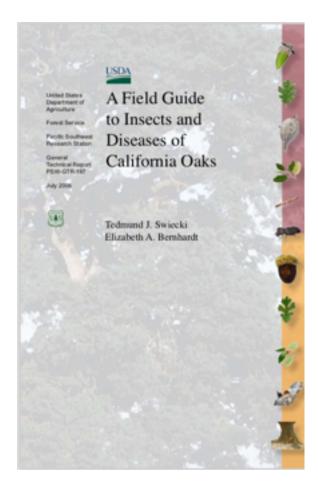




and More on Tiny Critters, This Time... in Oaks.

The USDA's Field Guide to Insects and Diseases of California Oaks informs us that it is not just the macrofauna that is dependent on oaks, but also a host of insects, lichens, fungi, and more... It is a free download. (http://oaks.cnr.berkeley.edu/wp-content/uploads/2019/02/Field-Guide-to-Insects-and-Diseases.pdf)

The following insects are dependent on acorns, so if Dana Reserve takes out vast numbers of oaks, it removes the houses for all these little guys. You have to admit that the Filbert Weevil is kinda' cute.



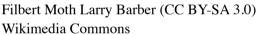




Filbert Weevil Ryan Kaldari Wikimedia Commons

Live Oak Mite Gall Wasp Wikimedia Commons







Wasp exit holes in fallen galls from Valley Oak, Camp Roberts. David Chipping

Lichen of the Month: Physcia phaea Black-eyed Rosette Lichen



The Lichen of the Month is *Physcia phaea* syn *Physcia callosa*, a Rosette Lichen from Valencia Peak in Montana de Oro State Park.

It is found on rocky outcrops along the coast. The genus name refers to the inflated or sausage-like structures and contains 73 species.

Photo D. Chipping



and continuing the not-a-plant theme, we have the Earthstar fungus (*Geastrum floriforme*) that seems to be trying very hard to look like a flower. This specimen was found in Los Osos Oaks Reserve and has a central spore-filled puffball surrounded by an outward peeling layer that opens to expose the puffball.

Photo D. Chipping

Plant Sale Thanks

First, I'd like to thank all of the volunteers who stepped in to make the Fall Native Plant Sale a success. They were Abigail Salisbury, Annie Zell, Bill Shearer, Bill Waycott, Bob Hotaling, Cindy Roessler, David Chipping, David Krause, Dirk Walters, Erin Grady, Heather Hiramatsu, John Chesnut, John Doyle, John Nowak, Judi Young, Judy Johnson-Williams, June Krystoff-Jones, Kristen Nelson, Lauren Brown, Linda Chipping, Mardi Niles, Mark Brunschwiler, Marlin Harms, Marti Rutherford, Melissa Mooney, Suzette Girouard, Teresa Larson, and Zach Tanner.

Second, thank you to all of our members and supporters of the chapter who purchased plants, books, seeds and clothing. We are always in need of (and truly like socializing with) folks who have a passion for plants and improving our environment. Next year, we are planning a Spring Plant Sale on Saturday April 1, 2023. In the meantime, put down some plants and seeds during the wet months, and join our chapter on field trips and other educational events.

All the best throughout the holidays!

John Doyle

CNPS Annual Banquet will be held in March

The Chapter Board of Directors decided a combination indoor/outdoor event would be the best option for the 2023 San Luis Obispo Chapter Annual banquet. We are still working on finalizing the date and venue/location and plan on a daytime event with a potluck brunch, CNPS-provided beverages, and a speaker or other plant-related experience. We are considering a location that would allow members could go on a morning hike nearby before the meal if desired. We will include a chapter business update and awards presentation in the banquet program. We have been missing in-person gatherings and are looking forward to getting together to share good food and company in March.

We expect we will need volunteers on the day of the event to help with set-up and break-down. Potluck items will be suggested based on last name initial as we have done the past. Additional details will be provided in future newsletters and emails. Feel free to contact Lauren Brown at 805-570-7993 (call or text) or lbrown805@charter.net (email) if you have any questions or comments.

Lauren Brown

Invasive Species Report- Kikuyugrass Cenchrus clandestinus

Cenchrus clandestinus is in the Poaceae (grass) family. Poa is derived from Ancient Greek: πόα for fodder. The genus Cenchrus is from Ancient Greek μέγχρος (kénkhros, "millet"). The term Kikuyu is derived from the Swahili form of the word Gĩkũyũ. Gĩkũyũ is derived from the word mũkũyũ which means sycamore fig tree. The Kikuyu people are the largest ethnic group in Kenya. Kikuyugrass is a rhizomatous grass with matted roots and herbaceous habit. The leaves are green, flattened or upwardly folded along the midrib. Rooted nodes send up bunches of grass blades. It is tough, growing to 20 inches tall, with an extensive network of coarse creeping stolons, rhizomes and flower heads. It



(Photos David Chipping)

rapidly forms dense mats which suppresses other plants. It can climb over other plants, shading them out. It produces herbicidal toxins that kill competing plants. It reproduces by seed, but most reproduction is by rhizomes and stolons. *Cenchrus clandestinus* is native to low elevation tropical Kenya, and was introduced as an erosion-controlling ground cover. It is present mainly on the coast from Mendocino to Mexico.

Kikuyugrass may be removed in small amounts by hand pulling. Effective chemical treatments include grass-specific herbicides such as clethodim or fluazifop—which is most effective on young plants. Non-selective agents such as glyphosate, triclopyr and imazapyr are also effective.

Mark Skinner



CNPS Field Trips for December 2022 and January 2023

December 3rd, 2022, Saturday, 10:00 am, Fall Bike Outing in Adelaida, CA. Join us for a view of Fall colors along beautiful rolling hills, rural canyons, and oak woodlands. This will be a loop ride of about 2 hours with a distance of about 10 miles on a paved road. There are moderate hills along the way. Elevation gain is about 750 ft. Bring your bike, helmet, other appropriate gear, and water/snacks. Bring a lunch for a picnic after the ride. Meet at Justin Vineyards parking lot, 11680 Chimney Rock Road, Paso Robles (35.654924, -120.900850). Contact David 805-459-9007 or Bill 805-459-2103 for questions or information. Rain or threat of rain cancels.

December 11th, 2022, Sunday, 9:00 am, Manzanita Field Trip #2, Ontario Ridge, near Avila Beach, CA. Meet at the start of the Bob Jones Trail, off of Ontario Road, located between Avila Beach Dr. and San Luis Bay Dr. (35.186581, -120.702040). The hike is a total of 4 miles out and back, with a 600 ft. elevation gain (with a few steep sections). Our destination is the top of Ontario Ridge where we will see the rare endemic manzanita Arctostaphylos pilosula, as well as spectacular views of the Pacific Ocean. In this area, A. pilosula occurs on the Pismo Sandstone formation in the coastal hills from Avila Beach to Arroyo Grande, as well as two other locations in the county. Bring adequate water, snacks, and dress in layers for the weather; a hat and sturdy shoes are advised. Contact: Bill, 805-459-2103 for questions or information. Rain or threat of rain cancels.

January 8th, 2023, Sunday, 9:00 am, Manzanita Field Trip #3, West Cuesta Ridge, San Luis Obispo, CA. Meet at the start of the paved road (TV Tower Road) off Hwy US 101, at the top of Cuesta Grade, heading west (35.347018, -120.630359). This outing is a combination car and hike field trip. At the start, we will consolidate into fewer cars, then proceed toward the Botanical Special Interest Area, with stops along the way. At the Special Interest parking area, for those who want to continue on-foot, there will be hike through the forest. We will see one manzanita species on this outing, the local endemic Bishop manzanita (A. obispoensis), and walk through the unique ridge-top vegetation adapted to serpentinite derived soils: the Sargent Cypress and Coulter pine forest, Quercus durata and other chaparral species etc., as well as see the rare San Luis Obispo sedge, 1B-2 ranking, (Carex obispoensis). Bring adequate water and snacks, and dress in layers for the weather; a hat and sturdy shoes are advised. Contact: Bill, 805-459-2103 for questions or information. Rain or threat of rain cancels.

January 14th, 2023, Saturday, 10:00 am, Mushroom Walk, Cambria, CA. We will look for mushrooms growing in the Monterey pine forests of Cambria while enjoying the beauty of the Fiscalini Ranch Preserve. The hike will be easy, about a 2-3 hour stroll through the woods. Meet at the corner of Tipton Street and Warren Road in Cambria at 10:00 AM. How to get there: Travel north on Hwy 1 to Cambria. At the first stoplight, turn left onto Ardath Drive. Follow Ardath and turn right onto Tipton Street. Continue to the intersection with Warren Road (2 blocks) and find a parking place (35.551073, -121.089615). Bring adequate water, snacks, and dress in layers for the weather; a hat and sturdy shoes are advised. The use of field guides is encouraged. Be prepared for poison oak. For additional information, email, text, or call David (dkincmbria@aol.com), 805-459-9007. Lack of sufficient rain leading up to this outing may cancel this field trip, while the threat of heavy rain cancels.

Future 2023 manzanita field trip schedule:

- February 12th, 9:00 am
- April 9th, 9:00 am
- June 11th, 9:00 am
- August 13th, 9:00 am



Arctostaphylos pilosula (left) and Arctostaphylos obispoensis (right) Chapter Photo Collection



Horticulture Now

Welcome to Horticulture Now, a new column featuring articles about California native plants in the garden setting. Some of these articles are newly written and others will have been previously published. Some months the column may feature a guest author. This month's article features *Frangula californica* (the Coffeeberry). Hope you enjoy it.





Gardening with California Natives

This month's article features the handsome shrub *Frangula californica* [formally known as *Rhamnus californica*] (commonly known as: Coffeeberry, California coffeeberry and California buckthorn). It is found within the family Rhamnaceae, commonly known as the buckthorn family. There are six (6) subspecies recognized in California, as noted on Calflora's website (calflora.org). *Frangula californica* ranges from southwestern Oregon, to Baja California (state) in Mexico, and eastward to southwestern New Mexico, thus occurring in numerous habitats within its large range.

Here on the Central Coast, especially in Los Osos, Coffeeberry (*Frangula californica* subsp. *californica*) grows in the Southern Coastal Scrub region. In the Elfin Forest, it can be found growing alongside *Eriogonoum fasciculatum* (California Buckwheat), *Arctostaphylos morroensis* (Morro Manzanita), *Morella californica* (Pacific Wax Myrtle), *Ribes speciosum* (Fuchsia Flowered Gooseberry), *Quercus agrifolia* (Coast Live Oak), *Salvia mellifera* (Black Sage) and *Toxicodendron diversilobum* (Poison Oak).

Native Americans of our area ate the fruit fresh or dried it for the off season. The leaves were used to treat dermatitis (such as caused by poison oak), and the bark was made into a tea and used as a laxative. The seeds were also used to make a drink, brewed like coffee; thus, the common name, coffeeberry.

Frangula californica grows in many forms, from shrub to small tree, depending on soil type, rainfall, wind and sun exposure. Coffeeberry prefers semi-shade areas on northern slopes and is frequently found close to or under Coast Live Oaks. It also grows on dry southern slopes alongside Black Sage (*Salvia mellifera*) and California Buckwheat (*Eriogonoum fasciculatum*).

In a garden setting its dark green leaves create a lush appearance. The new growth has a red color to the stem turning to brown with age. The flowers are small, yellow in color and attract pollinating insects such as beetles, butterflies and native bees. As the fruit develops, it changes from a green color to a dark coffee brown. These fruits provide food for small mammals such as Opossum (*Didelphis virginiana*) and Big-eared Woodrat (*Neotoma macrotis*) as well as ground birds like California Quail, California Towhee, American Robin and California Thrasher, who like to forage.

Coffeeberry is adaptable to many different soil types. However, it prefers well-draining soil. It is considered drought resistant once established, but young plants require supplemental moisture (beyond seasonal rainfall) to get started. It has few pest problems, but new growth is a favorite for deer and rabbits.

Coffeeberry and its cultivars are available at a garden center where native plants are sold. These cultivars have been selected for various attributes. One example would be *Frangula (Rhamnus) californica* 'Eve Case', which is smaller and more compact with denser foliage and larger berries. It makes a great foundation plant and also can handle pruning. It is not particularly messy but the fruit will stain concrete walkways.

In conclusion, Coffeeberry is a wonderful addition to any garden, native or not, and it receives the honor of 'plant of the month'.

Hoping for rain. Best Wishes and Happy Gardening, John Nowak and Suzette Girouard.

A New Face Joins the CNPS SLO Board

Join us in giving a warm welcome to Zach Tanner who will now lead the Education Committee along with Susi Bernstein. With a background as both a landscape architect and native plant garden designer, Zach is committed to helping the 'uninitiated' appreciate the benefits and beauty of natives in their natural habitat, as well as in gardens and parks. He enjoys working with the public, and we can already see that he'll be an enthusiastic and effective messenger for the CNPS mission.



2022 Conservation Conference

Students sponsored by SLO chapter from left to right: Rachel Friesen, Annie Zell, Emma Fryer, Erin Grady. Our chapter also contributed \$2,000 to the CNPS State fund, and that helped Michael Mulroy, Annie Meeder, and Nora Bales attend also.

THE GOOD PEOPLE WHO MAKE THE CHAPTER 'HAPPEN' AND HOW TO FIND THEM

President

Melissa Mooney mjmoon@charter.net

Vice President

Kristen Nelson

kmnelson.nativeplants@gmail

.com

Secretary

Cindy Roessler skantics@gmail.com

Corresponding Secretary

Cindy Roessler skantics@gmail.com

Treasurer

David Krause (805) 459-9007 dkincmbria@aol.com Chapter Council Rep.

Melissa Mooney mjmoon@charter.net

Chapter Wholesale Contact

Linda Chipping (805) 528-0914 lindachipping@yahoo.com

Conservation

David Chipping (805) 528-0914 dchippin@calpoly.edu

Education

Zach Tanner ztanner@gmail.com

Susi Bernstein susi.slo.cnps@gmail.com

Horticulture & Plant Sales

John Doyle (805) 748-7190 doyle5515@sbcglobal.net Field Trips

Bill Waycott (805) 459-2103 bill.waycott@gmail.com

Retail Sales Manager

OPEN

YOUR NAME HERE?

Historian

Dirk R. Walters (805) 543-7051 drwalters@charter.net

Invasive Plants Control

Mark Skinner

mskinner@coastalrcd.org

Membership

LynneDee Althouse
LynneDee@althouseandm
eade.com

Rare Plant Coordinator

Kristen Nelson

kmnelson.nativeplants@gmail.com

Legislation

David Chipping (805)

528-0914

dchippin@calpoly.edu

Newsletter Editor

David Chipping (805)

528-0914

dchippin@calpoly.edu

Photography

Photo Curator David Chipping (805)

528-0914

dchippin@calpoly.edu

Web Site Coordinator

David Krause (805) 459-9007 dkincmbria@aol.com

Hospitality

Lauren Brown: (805)

570-7993

lbrown805@charter.net

Chapter Publications

Matt Ritter

mritter@calpoly.edu

Cal Poly Faculty Representative

Dena Grossenbacher denagros@gmail.com

Cal Poly Student Representative

Erin Grady

elgrady@calpoly.edu

WE ALWAYS NEED PEOPLE TO HELP OUT. OUR MISSION IS VITAL AND OUR FLORA IS AT RISK.

Protecting California's Native Flora since 1965

The California Native Plant Society is a statewide non-profit organization of amateurs and professionals with a common interest in California's plants. The mission of the Society is to increase understanding and appreciation of California's native plants and to preserve them in their natural habitat through scientific activities, education and conservation. Membership is open to all. Membership includes the journal, *Artemisia*; the quarterly *Flora*, which gives statewide news and announcements of the activities and conservation issues, and the chapter newsletter, *Obispoensis*.



San Luis Obispo Chapter of the California Native Plant Society P.O. Box 784 San Luis Obispo, CA 93406



Print, Clip & Mail

Join Today!

- □ Student / Limited Income \$25
- □ Individual \$50
- □ Plant Lover \$120
- □ Supporter \$500
- □ Patron \$1,000□ Benefactor \$2,500

I wish to affiliate with the San Luis Obispo Chapter

Inquiries:

Phone: (916) 447-2677 Fax: (916) 447-2727 (State)

e-mail: cnps@cnps.org (State)

Websites:

Websites: www.cnps.org (State) & www.cnpsslo.org (Local)

Name	□ New □ Renewal □ Gift				
Address					
City					
State	Zip Code				
Telephone					
E-mail* NEEDED FOR NEWSLETTER Please make your check payable to CNPS and mail to: attn Membership, California Native Plant Society, 2707 K Street, Suite 1, Sacramento, CA 95816-5130					

Sacramento, CA 95816-5130						
Name		GIFT MEMBERSHIP RECIPIENT				
						
Address						
City						
State	Zip Code					
Do you want CNPS to send gift as giftor □ Yes □ No	recipient a postcard id	dentifying you				