



The

CALYPSO

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NEWSLETTER OF THE DOROTHY KING YOUNG CHAPTER
CALIFORNIA NATIVE PLANT SOCIETY

DKY-State Parks Manchester Dune Field Trip bears seeds for conservation

Peter Baye, DKY's Conservation Chair, reports: The May 2022 dune field trip to Manchester State Park, co-hosted by California State Parks biologist **Terra Fuller**, covered local "hot spots" of native plant diversity in



Castilleja exserta subsp. *latifolia* on *Artemisia pycnocephala*. Photo J. Larke.

older dunes where iceplant (*Carpobrotus*) removal was successfully completed at a large scale. We saw likely indicators of native plant seed dispersal limitations in iceplant removal areas and nearby younger dunes with suitable habitat. Terra is coordinating with DKY field trip participants-turned-volunteers to help targeted spread of limited amounts of seed and seed-bearing capsules of some rare endemic annual dune plants, such as purple owls clover (*Castilleja exserta* subsp. *latifolia*) to reach suitable recently formed new habitat. This will be a small-scale preliminary test of "facilitated dispersal" to overcome local barriers or distances to dispersal between source populations and suitable habitat patches. Some other annual plants will be assisted in "finding" apparently suitable but unoccupied new habitat formed by natural dune succession. All the rich native species diversity we observed at the north end of Manchester Dunes is narrowly associated with a section of very old dunes made of old, weathered dune sand, which are also mostly free of *Ammophila* (marram, European beachgrass). The more extensive, recent, younger marram-stabilized dunes, which used to be bare, migrating dunes before ranchers introduced marram over a century ago, have far fewer native species. That's why it's so important that State Parks (Terra) succeeded at removing the iceplant invasions there. We can't restore young dunes to old dunes, and it takes a long time for the sand to start to form a sandy soil. ☻

Julia Larke was one of the participants on this outing, and she added these notes: **Peter Baye's** field trip on May 21, 2022, was more than just a walk, it was a dune immersion experience. Peter shared how valuable the dune ecosystem is in protecting the coastline and we learned about plants that have adapted to this

older dunes where iceplant (*Carpobrotus*) removal was successfully completed at a large scale. We saw likely indicators of native plant seed dispersal limitations in iceplant removal areas and nearby younger dunes with suitable habitat. Terra is coordinating with DKY field trip participants-turned-volunteers to help targeted spread of limited amounts of seed and seed-bearing capsules of some rare endemic annual dune plants, such as purple owls clover (*Castilleja exserta* subsp. *latifolia*) to reach suitable recently formed new habitat. This will be a small-scale preliminary test of "facilitated dispersal" to overcome local barriers or distances to dispersal between source populations and suitable habitat patches. Some other annual plants will be assisted in "finding" apparently suitable but unoccupied new habitat formed by natural dune succession. All the rich native species diversity we observed at the north end of Manchester Dunes is narrowly associated with a section of very old dunes made of old, weathered dune sand, which are also mostly free of *Ammophila* (marram, European beachgrass).

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Heliotropium curassavicum var. *oculatum*. Photo J. Larke.

unique wind-driven sandy environment. We learned that *Castilleja exserta* ssp. *latifolia*, purple owl's clover, is a locally rare hemiparasitic plant that was growing on its host, *Artemisia pycnocephala*, coastal sagewort. Hemiparasitic plants can synthesize their own sugars through photosynthesis, but they have reduced or non-existent root systems and must acquire their water and mineral nutrients from a host.

In a slough area in the dunes, we all enjoyed seeing a small ground hugging member of the Heliotropiaceae (it was formerly in Boraginaceae, the Borage family) *Heliotropium curassavicum* var. *oculatum*, seaside heliotrope. It has almost turquoise blue-green leaves and diminutive white flowers in cymes. As we were leaving, Peter showed us a fully parasitic plant, *Cuscuta salina*, saltmarsh dodder, with its yellow orange string-like stems lacking chlorophyll and attached to a host plant, *Grindelia stricta* var. *platyphylla*, gumweed, or flat-leaved grindelia. [ed. note: *Cuscuta pacifica* var. *papillata*, Mendocino dodder, a CNPS 1B.2 rare plant, is also in our area.]

The younger dunes at the southern section of Manchester State Park have almost a monoculture of *Ammophila*, with native species few and far between. The difference between them and the older species-rich dunes to the north is huge, illustrating how very important it is that ongoing restoration take place. **Terra Fuller** shared with us the recent progress in reclaiming dune habitat by removal of ice plant infestations and other non-native invasives. She only has a crew of three volunteer aides, so, Good Job, You Guys! Terra wants to let people know that volunteers are always welcome because there's still plenty of invasive plant removal work available. Contact her at Terra.Fuller@parks.ca.gov to volunteer.



Cuscuta salina on *Grindelia stricta* var. *platyphylla*. Photo J. Larke.

Exploring Conifer Forest and Coastal Scrub at Save the Redwoods League Cape Vizcaino Property



Just in time for the Fourth of July, the firecracker flower delighted Cape Vizcaino hikers. Photo Dave Shpak

Susan Wolbarst sent this report on the Vizcaino field trip: **Rhiannon Korhummel** led a June 26 walk through Save the Redwoods League's Cape Vizcaino property, located just north of Westport. Four hundred acres of Cape Vizcaino is owned by Save the Redwoods League, a non-profit which protects and restores coastal forests in California. Fog that day blotted out what could have been fabulous views of the ocean, but hikers were treated to many special plants and trees on what was billed as "a moderately strenuous 5-mile loop with elevation changes from coast bluffs to the ridge." Two of the trees we saw on the walk have been singled out for their resemblance to animals: the Ganesh Tree—a coast redwood (*Sequoia sempervirens*) with a branch shaped like an elephant's trunk, and the Octopus Tree, with lower branches shaped like octopus' arms—a grand fir (*Abies grandis*). Of the many unusual plants sighted on the walk, none were



Hikers check out the so-called Octopus Tree. Photo Dave Shpak.

more striking than the firecracker flower (*Dichelostemma ida-maia*), in the Amaryllis family. No one on the walk had ever seen one before. They were a timely and beautiful surprise, blooming before the Fourth of July.



President's column:

Huge thanks to everyone who helped make the Wildflower Show a success. We had easily 400 people come through on Saturday, some in large groups. More than 50 people came in on Sunday, and 20 people were at my talk. Thanks to **Susan Wolbarst** for getting the word out and to **Julia Larke** for designing a beautiful poster. People spent a lot of time studying **Katy Pye's** photo display and the books table. The plants and tables looked lovely, and people seemed to really like having the plants arranged by habitat. They still wanted to have the names on them, though! Many thanks to

Kathleen and Lloyd Chasey, Peter Baye, Bob Rutemoeller, and Julia Larke who did a great job collecting

plants. They also did most of the setting up, with **Katy Pye, Susan Wolbarst, Dave Shpak, and Sue Trieb**. And special thanks to everyone who hefted tables and signs and helped out wherever needed. It is always a real pleasure to talk with folks about plants. **Peter Baye** did much of the plant identification and was peppered with questions all Saturday. Sunday morning the Chapter sponsored a wildflower walk at the Point Arena-Stornetta Unit of the California Coastal National Monument with Mendocino Coast Audubon Society co-lead by CalFlora director **Cynthia Powell** and **Julia**. And at the very end, folks who were at my talk stayed and helped the rest of us take down the displays and clean up. It was a pretty packed weekend for all of us! People donated at least \$300, and many bought books and posters.



←**Sara Bandali is the new Barbara Rice CNPS Intern!** Originally from the San Francisco Bay area, she has a BS in environmental science and management from Cal Poly Humboldt. She will work with local chapter volunteers supporting the North Coast vegetation sampling, with a focus on sensitive natural communities. She brings experiences and skills from her previous position assisting with a dendroecology-based research project across Northern California. She begins working with Teresa and others in late August.

The next issue of CNPS's Flora magazine recognizes DKY members **Teresa Sholars, Renee Pasquinelli, and Peter Baye** as "featured advocates," who are focused on changing the status quo of forest management in Northern California. They are part of the Coalition to Save Jackson, which is as diverse as the landscape itself, from goat-rearing grandmas and 12-year-olds to climate scientists and Pomo Indian elders. Together, they are working to slow the chainsaws at Jackson Demonstration State Forest (JDSF).

Dreaming of Fall Planting and Spring Blooms? Our chapter is gearing up to resume having plant sales this fall. Typically, we do one in Fort Bragg and one in Gualala, a week apart. Most likely this will be a kind of Fall Fair, with a few talks and demonstrations, books as well as plants for sale, and, as always, our local experts to answer questions. The last plant sale was in 2019, so some of you may have accumulated a wish list for when the sales restart. One thing the DKY Board strives to do is provide information, plants, and activities that are relevant to all our membership. Our chapter is long and narrow and covers many habitats and growth zones. As we plan for this next set of plant sales, we would like to focus on truly native plants, but this is not as easy as it seems (setting aside the issue of what is available in nurseries). DKY covers the areas from the Humboldt County line south to south of Stewart's Point, and inland to just west of Philo. We don't have the capacity to grow or maintain our own plants, so our strategy has been to buy from a few reliable nurseries, getting a modest discount as a CNPS Chapter. A few of us drive to Santa Rosa, or wherever the plants are, and bring them back for the sale. Our main goal is to help Chapter members have high quality native plants appropriate for our region to plant in their gardens. The income from this event also supports the Chapter's activities, so it is important that we make it a success financially as well. We need your input to make best use of our volunteer time, assure we have the plants you want, and make sure we don't have a bunch of plants that don't sell. If you have plants you have especially been wanting, please drop me a line (president@dkycnps.org) with your suggestions and we'll see what we can do.

Conservation Update—Peter Baye

Gualala River Watershed Historical Ecology and Climate-Resilient Conservation Vision – DKY participated in the next steps in developing grant proposals for a Gualala River Watershed ecological re-assessment in the most meaningful sense of “long-term”: historical ecology synthesis and analysis supporting a climate-resilient conservation vision. More than ever, the past is key to the future, considering that all imperiled species and ecosystems have survived past mega-droughts, deluges, rapid sea level rise, and arid to wet climate fluctuations throughout post-glacial millennia. Friends of Gualala River and the San Francisco Estuary Institute (SFEI) are developing a scope for the same kind of historical ecology and climate adaptation report for Gualala that the SFEI has developed for the Napa River, Santa Clara Valley, Laguna de Santa Rosa, Sacramento River, and many other California coastal watersheds. Unlike the 2003 Gualala Watershed Council watershed study, which was essentially bankrupt in all aspects of vegetation, plant ecology, conservation, and climate change adaptation, SFEI excels in robust interdisciplinary scientific synthesis including plant conservation, and SFEI is a leader in practical climate change adaptation for updating ecological restoration and management.

CALTRANS projects and activities are in bud and bloom this year. Several will impact, or have already impacted, native plant populations and vegetation along the Mendocino Coast.

CALTRANS District 4 coast lily impacts return to Hwy 1 in Salt Point State Park. On June 30, 2022, DKY Rare Plant Chair (The Sea Ranch) **Amy Ruegg** alerted us to the return of mowing during flowering of the south Salt Point State Park roadside wetland population of coast lilies (*Lilium maritimum*, CNPS list 1B.1). This is the same colony that was mistakenly treated with herbicides in the fall of 2015 (see Calypso, May 2016),



Lilium maritimum.
Photo A. Ruegg.

and also mown. Coordination between CALTRANS District 4 road maintenance crews and environmental managers still needs maintenance itself. DKY, State Parks supervisory ecologist **Brendan O’Neil**, and environmental managers from CALTRANS District 4 will be meeting this summer to develop and, above all, actually implement “best management practices” to make sure that the seasonal timing of mowing or

brush-cutting is a benefit, rather than a negative impact, to coast lily populations.

CALTRANS District 1 “Gualala Shoulders” project (CEQA Initial Study October 2021) is a shoulder-widening plan (mitigated negative declaration) for two segments of Highway 1 (post miles 6.4-6.8, 9.2-9.5). It has not completed all public permit processes yet. The Initial Study (IS) reports 4 coast lily (*Lilium maritimum*) plants detected by 2019 surveys in the project area. It proposes mitigation by plant salvage and replanting of coast lilies in “adjacent suitable habitat. Harlequin lotus, *Hosackia gracilis* (CNPS 4.2) and fringed corn-lily, *Veratrum fimbriatum* (CNPS 4.3); total 4 plants, are within the impact footprint of the project. The IS proposes “off-site compensatory mitigation options” for credits at the Mendocino Coast Mitigation Bank, which has not yet been developed or approved. The IS also proposes “off-site preservation and planting with restoration or enhancement” for Bishop pine forest and Pacific reedgrass (wetlands) at the Mill Bend Conservation Project (RCLC). No substantive revegetation plans were included in the IS but were proposed for future preparation (deferred mitigation).

CALTRANS District 1 “Rockport Culverts Project” (CEQA Initial Study, January 2022) would replace or



Mitellastra caulescens.
Photo S. Matson

rehabilitate five culverts, which drain roadside ditch flows, and would affect wetland and riparian vegetation, invasive plants, and sensitive plant species, including leafy-stemmed Mitrewort (*Mitellastra caulescens*), a CNPS rank 4.2 species (Malo Pass Creek at Hwy 1, north of Irish Beach, is its southernmost distribution point).

The CALTRANS District 1 “Rockport to Leggett CAPM pavement preservation” project between post miles 87.90 – 105.60 is a safety improvement project including guardrail upgrades, turnout paving, and shoulder improvements. Its coastal zone segments are in review for Coastal Development Permit by Mendocino County. It proposes protective fencing as a general mitigation measure for sensitive plants, but so far, it has no supporting survey or environmental assessment information.

There is no new information on the status of the CALTRANS-sponsored, private corporation (RES) managed Mendocino Coast Mitigation Bank (advance mitigation) revised project description or authorization. No new public notice has been circulated, and no response to DKY comments has been found.

Thistle Conundrum and Butterflies --Katy Pye

I love native thistles. As an intermittent “weed warrior,” however, my relationship with non-native thistles has, by nature, been adversarial. Yes, insects use them for nectar and pollen, some birds use thistle down for nests. But this is also true for many native plant species crowded out by these rogue plants. One “slow the spread” tactic I’ve used when weeding a mature invasive thistle patch several times over a season is to deadhead spent flowers, thus leaving a food resource while reducing viable seed.



Phyciodes mylitta. Photo K. Pye

So here’s the rub. One of my favorite butterflies —Mylitta Crescent (*Phyciodes mylitta*) — depends on thistles as its reproductive host plant (as does the Painted Lady, *Vanessa cardui*,

butterfly). Common in the west, including our coast and inland areas, Mylitta Crescent are small (1 1/8 - 1 1/2 inches, 3 - 3.8 cm), versatile butterflies found from sea level to 8,000 feet. They prefer open fields and meadows, parks, stream banks, roadsides, vacant lots, fencerows, and wooded areas. Here on the north coast, I most often see them May through September, dancing across sunlit forest patches and open grasslands. Adults fly March - October in the southern state, April - September here and north, accomplishing 3-5 broods during a long season. Territorial males scout the grasses searching for females. The darker females leave egg masses to develop on the undersides of thistle leaves. Pupae cling to stems. Their favorite thistles are native *Cirsium*: (Cobweb-*C. occidentale*, Clustered-*C. brevistylum*, Douglas-*C. douglasii*, and Brownie-*C. quercetorum*). Non-native Bull thistle (*Cirsium vulgare*),



Cirsium occidentale. Photo K. Pye.

Milk thistle (*Silybum marianum*) and European thistles, such as *Cardus pycnocephalus* (Italian thistle) are also used.

While no fan of invasive thistles, I’ve expanded my appreciation for the role many thistles play in our ecosystems. I’ve dubbed my new hiking hobby of searching out Mylitta evidence, “Thistle sneak peeking.”

Find out more about Mylitta crescents and other butterflies and moths of North America at the link below. Join and upload your images for identification:

<https://www.butterfliesandmoths.org/species/Phyciodes-mylitta> To see images of egg clusters, caterpillars, and chrysalis:

https://www.wildutah.us/html/butterflies_moths/nymphalidae/h_b_phyciodes_mylitta_immature.html

Calflora list of thistle species in Mendocino County: <https://www.calflora.org/entry/psearch.html?namesoup=Cirsium&countylist=MEN&plantcomm=any&format=photos&orderby=taxon>

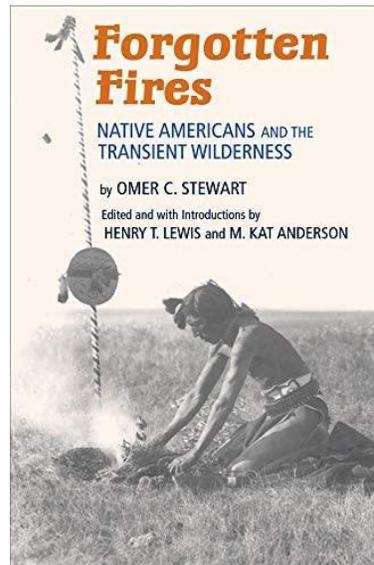
Remember Calscape plant pages now identify whether the plant is used as a reproductive host by bees, butterflies, moths, and otherwise by birds.



Julia Larke’s Summer Book Pick:

Forgotten Fires: Native Americans and the Transient Wilderness

by Omer C. Stewart, University of Oklahoma Press, 2002. Book available at <https://www.mendolibrary.org/> and as ebook on Audible. Edited and with introductory essays by Henry T. Lewis and M. Kat Anderson, *Forgotten fires*, presents Omer Stewart’s original 1950s research and significant insights that were considered maverick at the time because they promoted the



concept that fire is not a destructive force on the land and that indigenous burning practices are a legitimate and important disturbance factor. His research shows that “the North American landscape has been regularly shaped and renewed for thousands of years by the land and fire management practices of North American Indians.”

Botanical Gems—Peter Baye
***Malus fusca* (Raf.) C. K. Schneid.**
PACIFIC CRABAPPLE, OREGON CRABAPPLE



The wind-sheared, salt-spray blasted prostrate thicket of Pacific crabapple (*Malus fusca*) mantles the headland above the surf at the south side of Moat Creek mouth, mixed with poison-oak. In bloom, May 2022. Photo P. Baye

One of the recurrent themes for the botanical gems in DKY territory is related to relict species – plant populations left behind from past climates, vegetation types, and sea levels. Many of the isolated populations at or near their southern limits of distribution may take on unusual forms, occur in unusual habitats, or both. One of the most unusual examples I have found hiding in plain sight is the unique coastal Pacific crabapple “grove” – actually a thigh-high prostrate thicket – that covers almost an acre of salt spray wind-blasted coastal bluffs above the surf on the south side of Moat Creek, just south of Point Arena. It is almost unrecognizable as Pacific crabapple unless fruits or flowers are present.

Pacific crabapple (*Malus fusca*) is our only native apple. In its main coastal range, from the northern North Coast (Humboldt and Del Norte counties) through the Pacific Northwest to Alaska, it is typically a moderate-sized tree found in moist riparian woodlands or around wetlands (swamps), including the shores above



Flowers of Pacific crabapple. Photo P. Baye.

freshwater to brackish estuaries. South of Humboldt County, where 50 Calflora records are known, presumably natural (not cultivated) isolated records, it occurs in peculiar disjunct localities: one in Napa, (2016) in an oak woodland valley; one (2018) in Modoc County, found in a burned area on the face of a rocky volcanic bluff; and a scattering on the Mendocino coast, most discovered by DKY botanists **Peter Warner** and **Teresa Sholars**. The Mendocino localities include Manchester State Park, in riparian thickets near Davis Pond, and a lowland coastal terrace area near the campgrounds. Several Pacific crabapple localities occur near Caspar, aligned along Jug Handle Creek. The Calflora records don't include the Mendocino Flora (Smith and Wheeler 1992) 1908 locality reported “between Fort Bragg and Bald Hill.” Jepson's *Silva of California* (1908) gives its range as Sonoma to Alaska, consistent with a 2012 Calflora record from Lake Sonoma (Dry Creek/Warm Springs Valley in Jepson's era), and possibly other lost locations.



Flower buds of Pacific crabapple. Photo P. Baye.

The Moat Creek headland bluff population appears to be one or more clonal (root-sprouting or stump-sprouting) colonies merged together, sheared to a low, matted thicket by high winds and salt spray. Like old redwoods at Stump Beach (Salt Point State Park) and Cook's Beach (Gualala), which stump-sprout and form prostrate mat growth forms, the Pacific crabapple growth form is shaped by a coastline that migrated into a pre-existing, ancient grove that was formerly more inland.

The foliage of the Moat Creek headland crabapple colony is green to bronze-purple, like the poison oak that it is mixed with, and easily mistaken for. The thicket flowers each year, in the sheltered interior of the canopy, under the cover of dead twigs at the top of the canopy. The white flowers appear in clusters of 8 or 9, in an umbel-like inflorescence, like cherry or plum blossoms.

The immature fruits near full size develop by July. They are small, about 10—15 mm long, and slightly oblong, elongated rather than near-spherical or broader than long, like Eurasian apples. They are green to purplish in summer, and ripen to yellowish to purplish hues by fall, if they aren't eaten by wildlife first. The Moat Creek population does fruit abundantly despite the extraordinarily harsh environment. The high fruit and seed fertility also indicates that the colony is composed of more than one outcrossing (cross-pollinating) genetic individual.

The bizarre, exposed Moat Creek coastal bluff location, and huge spread of the headland population, suggests that the Pacific crabapple colony established when sea level was lower, and the location was a more interior Mat Creek riparian setting, farther from the surf. Another possibility is suggested by the location of a substantial shell midden on the opposite side of Moat Creek, indicating very long occupation by Central Pomo people, either as a summer coastal camp, or (when the location was inland from the shore, at lower sea levels millennia ago) a past village. Pacific crabapples were traditionally valued as a dried, tart fruit (less tart when dried, softened, and preserved) by Pacific northwest tribes. Could the crabapple grove next to a midden be a cryptic legacy of ancient cultivation? One additional clue is the anomalous extensive bluff-top mesa colony of spreading dogbane (*Apocynum androsaemifolium*) on the same headland mesa. Spreading dogbane was an important high-value textile (fiber) plant, and it rarely occurs on the immediate coast—except the Mendocino Coast, where it grows near Jughandle Creek (another **Sholars** find) and Albion River mouth. These locations were all settings of early Central Pomo fishing or coastal shellfish harvest camps.

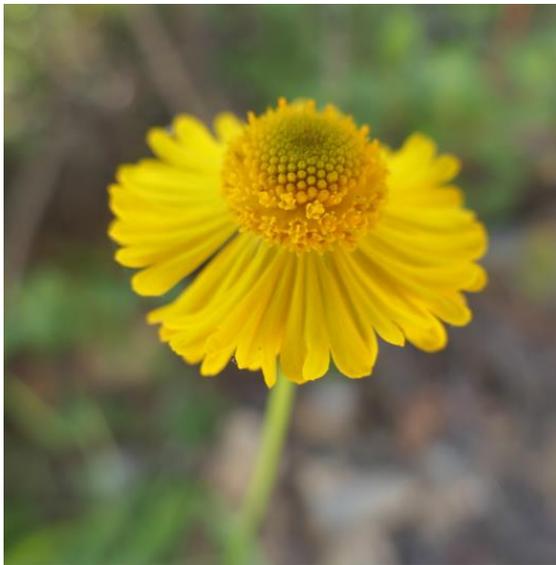
Pacific crabapple is grown in the Pacific Northwest as a native ornamental tree, and it can develop old large, muscular trunks in favorable moist (or seasonally wet) sites. If it can survive in the extreme harsh wind-blasted environment in a krummholz (alpine treeline) form, it can probably thrive in cultivation here in sheltered domestic landscapes, too.



The immature fruits (pomes) of Pacific crabapple are reddish where they are sunlit, green in shade. July 2022. Photo P. Bave.



Sunflower Family Species Brighten Foggy Days—Nancy Morin



Helenium bolanderii. Photo J. M. Mills

is from 2021. **Amy Ruegg** has confirmed populations at The Sea Ranch and Salt Point. She saw “at least 2-3 plants in the meadow behind TSR Chapel and several plants blooming beautifully on Spring Meadow hill across from the North end of TSR airstrip.” *Helenium bolanderii* has long ray corollas, 12 to 37 mm long, and the disk corollas are 5 lobed. The peduncle (stalk the flower head is on) is densely hairy. *Helenium puberulum* is widespread in western and central California, but with few reports from our area. It has tiny ray corollas 3.5—10 mm long, and the disk corollas are 4-lobed.

Patches of species in the Sunflower Family, Asteraceae, brighten the foggy hillsides in coastal Mendocino and northern Sonoma in the summer. *Helenium* has about 32 species worldwide, all in the western hemisphere, with 18 in North America north of Mexico, five of them native in California. We have two species in our area, *H. bolanderii* and *H. puberulum*. *Helenium bigelovii* is similar to *bolanderii* and some of our plants have been incorrectly identified as this, but it doesn't occur on the north coast. Its stems are not as hairy.

Helenium bolanderii had been documented from Coos County, Oregon, south to Salt Point, with the southernmost collections mostly historic: a 1936 collection from “Coast Road near Gualala River,” M. Hektner reported it from The Sea Ranch in 1977, and another report from Salt Point



Helenium puberulum. Photo J. Doyen

**DOROTHY KING YOUNG CHAPTER
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Helenium bolanderi along the road to the Point Arena Lighthouse. Photo N. Morin.

Back Issues of Fremontia:
Mary Rhyne's son, Weaver, has asked if any DKY member would like Mary's 1990—2015 issues of Fremontia. Please let him know.
caldreamweaver@gmail.com

**MEMBERSHIP APPLICATION
DOROTHY KING YOUNG CHAPTER**

Membership in the California Native Plant Society is open to all.

The task and mission of the Society is to increase awareness, understanding, and appreciation of California native plants. The challenge is to preserve their natural habitat through scientific, educational, and conservation activities. Membership includes subscriptions to *Fremontia*, *Flora* and the chapter newsletter, *The Calypso*.

Name _____
Address _____
City _____ Zip _____
Tel. _____ E-mail _____

Please choose the chapter you wish to join; CNPS will make the assignment if none is specified by applicant.

I wish to affiliate with the DKY Chapter _____ or, other chapter _____

MEMBERSHIP CATEGORY

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

Make check to: **California Native Plant Society** & mail to: Bob Rutemoeller, Membership Committee
DKY Chapter, CNPS
PO Box 577
Gualala, CA 95445

Next Board Meeting: information, please contact Nancy Morin at president@dkycnps.org. All members are welcome to attend Board meetings.

Calypso newsletter: please send items to editor@dkycnps.org. If you choose to receive the emailed pdf version of the newsletter, contact Bob Rutemoeller at 884-4426 or brutem@mcn.org. View issues of Calypso at www.dkycnps.org.

Corrections to the May June 2022 issue: The photo of *Wyethia angustifolia* by Julia Larke, p. 8, was taken at the Point Arena-Stornetta Unit of the California Coastal National Monument. Mary Heibel pointed out that the mouth of the Garcia River briefly closed to the sea in 2019 (Habitat Restoration, p. 4).



Helenium bolanderi. Photo A. Ruegg.