

THE CYPRESS CONE

CALIFORNIA NATIVE PLANT SOCIETY
SANTA CRUZ COUNTY CHAPTER



Volume 47, Number 3

cruzcnp.org

Fall 2022

A “Big Year” for Flower Color With Justen Whittall

Chapter General Meeting

Monday October 3, 2022

UCSC Arboretum and Botanic Garden

Sunflower Family Keying Session with

Deanna Giuliano 6:00 pm

General Meeting 7:00 pm

Two hundred and seventy-five days into Justen Whittall’s Big Year for Flower Color, he and his research group have collected over eight hundred plants representing approximately five hundred species. Although the collections range from the Pacific coast to the Sierra Nevada to the Mohave Desert, the majority are from Santa Cruz and Santa Clara counties.

For each collection, the scientists take digital photos in the visible (vis) and ultraviolet (UV) wavelengths allowing them to see flowers from multiple perspectives. Then they capture a UV-vis reflectance curve for each specimen to quantify the color. From these curves they can measure “conspicuousness” to pollinators such as bees and birds. For some samples, they have biochemical profiles telling what pigments are responsible for these colors.

Thus far, they have stumbled across some general patterns such as (1) an abundance of blushing flowers (white to pink), (2) a dearth of yellow flowers in the redwood forest, (3) flowers with sand backgrounds often have high UV absorbance and (4) the diversity of ways to be a “red” flower. Justen is excited to share some preliminary findings from his Big Year for Flower Color with our chapter.



Justen Whittall photographing a titan lily (*Amorphophallus titanum*).



Eriophyllum lanatum (Asteraceae)

An example of visible and ultraviolet images, as a measure “conspicuousness” to pollinators such as bees and birds. Image: Justen Whittall.

Justen Whittall was born and raised in Blossom Valley of south San Jose. Early experiences camping, backpacking and running trails primed him for a career in botany. His master’s research was on the evolutionary history and conservation genetics of the slimy monkeyflowers in the *Mimulus moschatus* alliance (now *Erythranthe moschata*) at Oregon State University, Corvallis. (continued on page 4)

Prez Sez

Linda Brodman

Fall brings time for reflection and gratitude. As I write this, the Autumnal (fall) Equinox is approaching and changes are coming. As nature prepares for winter, I see migratory birds heading off to better places for food and/or breeding. I feel the cooler night air, wind on my face, and notice the parched land and its hunger for rain. As I walk in nature, I observe dried up flower heads, and subtle harvest colors beginning, and the start of a cornucopia of fruits and seeds. But, the most significant change is in daylight.

I’ve been reading Robin Wall Kimmerer’s book, *Braiding Sweetgrass*. In the chapter on Allegiance to Gratitude, she writes about the Thanksgiving Address that is an oration (and lesson itself) to the natural world. “As it goes forward, each element of the ecosystem is named in its turn, along with its function.”

Thanksgiving Address about Plants:

Now we turn toward the vast fields of Plant life. As far as the eye can see, the Plants grow, working many wonders. They sustain many life forms. With our minds gathered together, we give thanks and look forward to seeing Plant life for many generations to come. Now our minds are one.

Exciting news and changes for CNPS this fall. Highlights of a few:

New Executive Director has been hired, and we will hear more from the State CNPS once they officially make the public announcement. (continued on page 2)

Fall Field Trips

Henry Cowell Redwoods State Park

Tuesday October 11, 2022

10:00 am to 2:00 pm

Bring lunch/snacks. Depending on interest, hike could be as long as 4-5 miles. Some steep climbing and sandy areas. Route will be Pipeline Road to Ridge Trail to Observation Deck returning back down to Powdermill Trail to the parking area. **Limit 12 people.**

Head north from Santa Cruz on Graham Hill Road, pass the horse showgrounds, and start looking for the State Park's parking lot on your left. Turn left into driveway.

Email Andy for information and signup, apwerner44@gmail.com

Maple Falls in Nisene Marks State Park

Saturday November 12, 9:00 am to 3:00 pm

Hike to Maple Falls and enjoy fall colors and creekside flora, and we may get some rain mushrooms. Hike is about 8 miles round trip and 700' of elevation gain. Some agility required, as trail to the falls goes in and out of the creek.

Bring water, layers, sunscreen, hat and a lunch. Meet at George's Picnic area parking, there is a fee. Heavy rain cancels. **Limit 15 people.**

Contact Deanna Giuliano for information and signup, drosegiuliano@yahoo.com (831) 278-2699

Bonny Doon Preserve

Tuesday November 15, 2022, 10:00 am to 2:00 pm

Bring lunch/snacks. Field trip is approximately 4-5 miles, depending on interest. We'll do a loop that skirts the Moon Rocks and heads towards Warren Road, and back to the parking area. **Limit 12 people.**

Meet up at Bonny Doon Fire Station on Martin Road. Take Hwy 1 north from Santa Cruz, Bonny Doon Road up the hill, right on Martin Road. Take Martin Road to the Fire Station and turn left into the dirt parking lot next to the station. From Hwy 9, take Felton Empire Road up to and across Empire Grade Road to Ice Cream Grade Road, and continue to left on Martin Road to Fire Station about 1/2 mile.

Email Andy for information and sign up, apwerner44@gmail.com



See this spectacular big leaf maple (*Acer macrophyllum*) and more fall color on the November 12 Nisene Marks State Park field trip. Photo: Deanna Giuliano

Ferns of Fall Creek

Saturday December 10, 10:00 am to 2:00 pm

Come frolic in the forest of Fall Creek on a fern foray. Join Deanna Giuliano on a fern hunt where we will try to locate most of the fifteen species of ferns that grow in the park. Hike will be a leisurely 3 miles.

Bring water, layers, and a lunch. Meet at the State Park parking lot on Felton Empire Road in Felton. The first ten people to show up get a key to the native ferns of Santa Cruz County! Heavy rain cancels. **Limit 15 people.**

Contact Deanna Giuliano for information signup, drosegiuliano@yahoo.com

Prez Sez *(continued from page 1)*

CNPS State Conference will be hosted in San Jose, October 20-22. The conference is full. Volunteers are still needed and will receive discounts on their registration. Visit this website to sign up and find out information: (www.signupgenius.com/go/10cod4ca5a82ea6fbc52-cnps)

Our Chapter is a White Sage Sponsor for the Conference. Additionally, we offered student scholarships at the State level as well as Chapter scholarships which were awarded to five local students. We also supported local leadership volunteers with stipends.

Pollinator Protection Act: AB-2146 on neonicotinoid pesticides and prohibition on most non-agricultural use. Currently awaiting signature by the Governor.

State Board and Chapter Council have open positions. If interested in getting more involved, contact Lucy Ferneyhough, lferneyhough@gmail.com.

Check out the new CNPS Strategic Plan 2022-2026 located under Accountability at the State CNPS web site.

Grants will be offered by the State to Chapters in financial need for programs and projects that advance the Mission, Vision and Goals of CNPS as specified by the **CNPS Strategic Plan 2022-2026.**

We hope to see you at our public meeting on October 3 where you will hear what is happening locally, as well as at the State Conference on October 20-22. It will be an engaging and festive event, as we come together in an effort to celebrate, protect and restore California's plants—and everything connected to them. "Now our minds are one."

Fall Plant Sale Saturday, October 8

10:00 am to 2:00 pm

UCSC Arboretum and Botanic Garden

Members Only 10:00 to 11:00. Come early for best selection!

The ever-popular Santa Cruz County Chapter Fall Plant Sale will be held at the UCSC Arboretum and Botanic Garden on **Saturday October 8th!** We have a fabulous selection of California natives lined up for this sale, featuring plants from our local area and the central coast region.

Remember, fall is the ideal time to plant California natives. The minute

fall rains arrive, seeds begin to germinate, young plants put down healthy roots, and many mature plants don't wait for spring to set about blooming!

The sale runs from 10:00 am to 2:00 pm, first hour reserved for CNPS members (all chapters) so *get there early for best selection*. Our last two sales were record sell outs. It is so exciting and rewarding to see such a high demand for native plants!

Featured in this sale are over one hundred species of native plants, many of which are new offerings for our Chapter. Check out the several *Dudleya* species, *Heteromeles* (Toyon), *Romneya* (Matilija Poppy) and *Arctostaphylos* cultivars. We will have a small selection of dormant spring-blooming bulbs packaged and ready for fall planting, as well as many plants in our most popular genera such as *Eriogonum*, *Salvia*, *Diplacus*, *Epilobium*, *Achillea*, *Erigeron*, *Artemisia*, *Grindelia*, and *Frangula*!

Check Chapter website (www.cruzcnps.org) for the availability list the week prior to the sale.

Did we say to get there early?



Notes from the Propagator

Kari Olsen

These two easy care shrubs are attractive to both the human eye and the wildlife living alongside us! Both species will be available at the Fall Plant Sale, Saturday, October 8. Remember to get there early for best selection!

Eriogonum giganteum – St. Catherine's Lace

This fast-growing, large, shrubby buckwheat is endemic to California's Channel Islands but has proven adaptable to mainland conditions. Soft, wooly, silver-grey foliage creates a mounding form that can grow to four or five feet tall, with huge, flat-topped, lacy umbels of tiny, creamy flowers tinged with pink. Flowers emerge in spring through summer, fading over time to a beautiful rusty red.

Evergreen to semi-deciduous in winter depending on

temperatures. Mainland cold hardiness is estimated at 15-20 degrees. Prefers fast draining, gravelly soils but can tolerate garden clay with reasonable drainage. Plant in full sun, minimal to no supplemental water once established.

Like all buckwheats, this species has high habitat value for birds, butterflies (hairstreaks, blues, and sphinx moths), and bees (both native and honeybees). It's deer resistant and a great choice for slope stabilization.



St. Catherine's lace (*Eriogonum giganteum*), an easy care shrub for your garden. Photo: Kari Olsen

Highlights: Easy care, fast growth, long bloom time, low water needs, high habitat value.

Suggestions: Pinch growing tips of foliage on younger plants for denser growth. Leave seedheads for birds to forage before deadheading.

Important to know: Hybridizes with *Eriogonum arborescens* and *Eriogonum fasciculatum*. Know your surrounding vegetation if you are planting in the Urban-Wildland Interface to avoid harming the local wild gene pool. (continued on p. 4)



Twinberry (*Lonicera involucrata*), a member of the honeysuckle family, is a bird habitat hero.

Notes from the Propagator *(continued from page 3)*

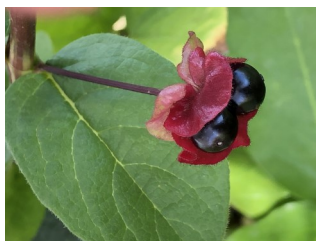
***Lonicera involucrata* – Twinberry**

As a member of the honeysuckle family and genus, it's easy to understand why twinberry is considered a "bird habitat hero!" Local gardening and birding expert Sharon Hull says, "It's a dynamite bird magnet! I notice that my garden hummingbirds are totally nuts about twinberry. At other flowers, they spend only a second or two but at twinberry flowers, they linger much longer."

This large upright-to-sprawling shrub has orange, red, or yellow tubular flowers in summer, surrounded by large reddish bracts. The flowers grow in pairs (hence the name) and are followed by pairs of shiny black berries, enjoyed by birds and small mammals. The plant is winter deciduous.

Twinberry prefers a moister spot in the garden and regular water but it can survive on a water budget. It is an understory plant and prefers part shade, but you can grow it in full sun along the coast. It thrives in full sun at the Natural Bridges State Park demo garden! Heat and cold tolerant, deer resistant, attractive to birds and butterflies (checkerspot, sphinx moth), twinberry is a workhorse in the garden.

Highlights: Easy care, fast growth, long successive bloom time, high habitat value especially for hummingbirds.



Suggestions: Unpruned, a single shrub can cover a huge amount of territory, easily managed by heavy pruning or cutting it nearly to the ground each year to control size and rejuvenate with fresh spring growth. It's a great focal point or spot in the garden if possible.

For more information on this “bird habitat hero” species, see Surrey Kent’s article in the September/October 2021 issue of the *Albatross* from the Santa Cruz Bird Club, available online.

**T-shirts
coming
soon!**

We hope to make them available in time for the Oct. 8 plant sale. They will be offered for sale at the CNPS conference in San Jose on October 20-22. The art was created by Liza Ferneyhough.



Amah Mutsun Sacred Grounds Threatened by Proposed Quarry

Juristac (Huris-tak) lies at the heart of the ancestral lands of the Amah Mutsun Tribal Band near Gilroy, California. For thousands of years, their Mutsun ancestors lived and held sacred ceremonies at this location in the southern foothills of the Santa Cruz Mountains, above the confluence of the Pajaro and San Benito rivers.

The sacred hills and open valleys at the heart of the Juristac Tribal Cultural Landscape are today bounded by the Sargent Ranch. An investor group based in San Diego purchased the land at a bankruptcy auction and is currently seeking to develop a 403-acre open pit sand and gravel mining operation on the property. The Amah Mutsun Tribal Band vehemently opposes the proposed mining project called Sargent Quarry that would impact 403 acres.

If you are interested and want to know more on this topic, take action, and get involved, visit their website at www.protectjuristac.org

Oct. 3 General Meeting *(continued from page 1)*

Justen completed his Ph.D. at UC Santa Barbara with Dr. Scott Hodges investigating the role of pollinator shifts during the North American columbine (*Aquilegia*) adaptive radiation. After his Comparative Biology Postdoctoral research at UC Davis studying flower color with Drs. Maureen Stanton, Sharon Strauss and Mike Sanderson, he returned to Santa Clara University (his *alma mater*) as a faculty member in the Department of Biology. At SCU, Justen strives to balance teaching plant diversity, evolution and bioinformatics courses with his research interests in California native plants, their evolutionary history, the ecology of flower colors, and conservation and restoration of rare species including the Ben Lomond wallflower (*Erysimum teretifolium*).



Chapter Board Member Ariel Hunter (left) greets a visitor at the CNPS fire ecology display table. The First Friday event was held on September 2 at the Santa Cruz Museum of Natural History. Photo: Kari Olsen

Museum of Natural History Provides Outreach Opportunities

On September 2, Chapter representatives connected with 170 people at the Santa Cruz Museum of Natural History's *First Friday* event exploring fire ecology, preparedness, and recovery. This outreach event was part of an ongoing strategy to prioritize expanding our Chapter's reach to new audiences.

Through our booth, community members learned about local California native plants that are well adapted for fire while exploring CNPS resources, including the *CNPS Fire Recovery Guide* and the *Fire Followers* project.

The event also featured representatives from the Natural History Museum, the Central Coast Prescribed Burn Association, Henry Cowell Redwoods State Park, San Vicente Redwoods, Peninsula Open Space Trust, Friends of Santa Cruz State Parks, San Jose State University's Wildfire Interdisciplinary Research Center, Friends of Juristac, and other local leaders in fire ecology.

Know of a good outreach opportunity for our Chapter? Email us at santacruzcounty@cnps.org with your suggestions!

Habitat Restoration Activities

Sunday, September 25, 2022

10:00 am to 1:00 pm

Location to be determined. Leader: Linda Brodman

Sunday, October 9, 2022

10:00 am to 2:00 pm

Sycamore Grove. Leader: Lucy Ferneyhough

Sunday, October 23, 2022

10:00 am to 1:00 pm

Location to be determined. Leader: Linda Brodman

Saturday, October 29, 2022

10:00 am to 2:00 pm

Pogonip meadows. Leader: Lucy Ferneyhough

Contact Linda Brodman by phone or email (information below) if you are interested in coming out for the Sept. 25 and Oct. 23 work days, and Lucy Ferneyhough (lferneyhough@gmail.com) for the Oct. 9 and 29 events.

We are a volunteer group working to restore native habitat in the parks and protected lands in Santa Cruz County. Our program provides an opportunity for people to learn about the natural systems that surround them while helping to restore special and wild places. No prior work experience is necessary, just show up at the event.

We welcome individual volunteers from 8 to 80 years, as well as special group projects. Wear comfortable layered clothing, bring something to drink, and lots of enthusiasm! We work rain or shine, but if things get particularly unpleasant, we call it a day. Tools provided; bring gloves.

Please contact Restoration Program Leader Linda Brodman for questions. (831)462-4041, or redwdrn@pacbell.net

Join Deanna on a December 10 fern foray at Fall Creek State Park. Fifteen species of ferns can be found there, including this wood fern (*Dryopteris arguta*).

Photo:
Deanna Giuliano.



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Welcome New Members!

We hope to meet you at our next General Meeting on Monday, October 3. 6:00 keying session, 7:00 meeting. UCSC Arboretum and Botanic Garden. Masks required.

Please note: the Santa Cruz County Chapter will no longer be posting the names of our newest members. The State CNPS organization is in the process of updating policy and privacy rules to comply with new California State mandates. The following clarification was sent out to all chapters in a January revision of the *Data Policies and Details* portion of *Membership Report Policies & FAQ's*:

“...This includes avoiding publishing personally identifiable information, such as listing the first and last names of new members in your newsletter...”

Fall Plant Sale Saturday, October 8
10:00 to 11:00 am CNPS members only
11:00 to 2:00 pm general public welcome

Join the California Native Plant Society!

Your membership includes: *Artemisia* scientific journal filled with articles on all aspects of native plants, *Flora* magazine presenting statewide activities and schedules, and Chapter newsletter *The Cypress Cone*.

Fill out the form below or visit the state CNPS website (www.cnps.org) to join or renew your membership online. State your chapter affiliation as the Santa Cruz County Chapter.

Name: _____

Address: _____

City, State, Zip: _____

Phone: _____

Email: _____

Chapter affiliation: _____

Choose One:

Student/Fixed Income \$25

Individual \$50

Plant Lover \$120 (two members)

Supporter \$500 (two members)

Patron \$1,000 (two members, plus Special Updates)

Benefactor \$2,500 same as above

Steward \$5,000 same as above

Guardian \$10,000 same as above

Please make your check payable to CNPS and send to:
California Native Plant Society, Attn: Membership, 2707 K Street,
Suite 1, Sacramento, CA 95816-5130

Like us on Facebook

Contribute to our group! Search for “Santa Cruz County Chapter - California Native Plant Society.” Ask a question about native plants or post your own photos of native plants in your yard or on your hikes.

Opt for Email

If you would like to receive your newsletter via email only, please contact Ann at annng@calcentral.com or log onto your CNPS account (cnps.org) to make the switch.

CNPS is a 501(c)(3) Non-profit Organization dedicated to the preservation of California native flora

CNPS has thirty-five chapters throughout the state and membership is open to all persons, professional and amateur, with an interest in California's native plants and other activities such as natural history, botany, ecology, conservation, photography, drawing, hiking, and gardening.

Donations are tax-deductible and support locally special projects such as publication of the *County Checklist* and conservation activities that preserve important habitats and rare species in our area. You may earmark gifts for specific areas. Please make donation checks payable to CNPS and send to: Santa Cruz County Chapter CNPS, P.O. Box 1622, Santa Cruz, CA 95061.

Website: www.cruzcnps.org. For inquiries email: santacruzcounty@cnps.org