



Bristlecone Chapter

General Meeting

Wednesday, September 28, 7:00 p.m.
White Mountain Research Center, 3000
E. Line St. Bishop

The noise can be the signal: variability and resistance in high elevation meadow plant communities in the Sierra Nevada

Speaker: Robert Klinger, Ph.D.



Rob Klinger is an ecologist with the US Geological Survey and the statistician for the Western Ecological Research Center. He got his Ph.D. at UC Davis where he worked on plant-animal interactions and tree recruitment in neotropical lowland forests. He currently has a number of ongoing studies on the population dynamics of several endangered species, as well as a long-term, large-scale project examining relationships between fire, climate, non-native plants, and post-fire vegetation dynamics throughout the Mojave Desert. But in this presentation, he is going to be talking about his favorite project, another long-term and large-scale effort looking at different types

Dedicated to the Preservation of California Native Flora

The California Native Plant Society

Bristlecone Chapter Newsletter

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of dynamics in alpine and upper subalpine meadow communities and how plant-animal interactions figure into those dynamics.

Conservation Update

On August 17, 2022, the California Fish and Game Commission voted unanimously to grant the Inyo rock daisy (*Perityle inyoensis*) candidate status under the California Endangered Species Act. For the next year, the state will study the species and its threats to determine whether listing is warranted. The biggest threat to the daisy is mining and recently, K2 Gold announced plans to move forward with the necessary environmental analysis needed for their second phase of mining exploration in areas where plants are known to occur.

—*Maria Jesus*

Appreciating Native Plants Through Art

This past April, Eastern Sierra Land Trust (ESLT) and the California Native Plant Society (CNPS) Bristlecone Chapter teamed up for an art-based lesson about Eastern Sierra native plants for a fourth-grade class from Big Pine Elementary School. ESLT's Outdoor Education Coordinator, Claire Marvet, put the lesson together and the CNPS Bristlecone Chapter provided funds for the art supplies through the Mary DeDecker Botanical Grant. Claire, the fourth-grade class, Michèle Slaton from the CNPS Bristlecone Chapter, and several volunteers, Elaine Chow from the Environmental Department of the Big Pine Paiute Tribe, Carroll Hambleton, Rita Dushane-Jones, and Edie Trimmer, spent the morning outside in an alkali

meadow painting native plants with watercolors and learning more about the plants around them.

—Michèle Slaton



Claire Marvet (Eastern Sierra Land Trust), Michèle Slaton (CNPS- Bristlecone Chapter), Elaine Chow (Environmental Department of the Big Pine Paiute Tribe), Carroll Hambleton, Rita Dushane-Jones, and Edie Trimmer taught an art-based lesson on native plants to a class from Big Pine Elementary School. The kids learned to identify and press native plants near Big Pine, and painted native flowers with watercolor paints.



Top to Bottom: A pacific chorus frog, mating damselflies, and a pseudoscorpion hitching a ride on an ichneumon wasp all while on the corn lily. Photos by Bob Zimmerman.

—Bob Zimmerman

Corn Lilies, a Gathering Place

Flowering plants are more than nectaries. They provide a habitat for other organisms to interact. For example, the corn lily *Veratrum californicum* provides a place for animals to get food, rest, mate, and explore.



An ant interacting with aphids. Photo by Bob Zimmerman.

2022 Plant Sale Recap

Overall, this fall's plant sale went really well. Of course, it couldn't go off without any problems, so it was a bit of a test in people's problem-solving skills. Our webmaster, the only person who could put the

sale link up on the web page, was on vacation in the wilds of Utah with no internet access and minimal cell phone service. Fortunately, she got a signal in between cellular dead zones. Using her cell phone as a Wi-Fi hotspot, she posted the link on our website the night before the sale. Our membership chair thought the sale started Monday, so she also was out of touch on Sunday morning to post the link but was able to send it out by noon. Thank you all for your patience with our foibles.

Since I had so much trouble last year with trying to direct people through the station via a one-way road (in the end I couldn't get the gate unlocked) and assigned pickup times didn't work either; this year I just had people come in and out through the main gate and come in a 4-hour window. This worked great! We never had a rush just a nice steady stream of people coming to pick up their plants. It made the sale feel very relaxed and gave the volunteers time to put things away in the moments of slack customers.

We had more customers this year than in past years and sold 550 more plants than our last highest year. Quite a few people said they like the on-line sale better, so despite that it is a lot more work for me I think we will continue with it. The final tally: 107 customers who bought 1,605 plants! Native gardening is becoming mainstream!

—Katie Quinlan

Welcome to Bristlecone Chapter's Newest Members

CNPS members who have joined our chapter in the last few months are Jennifer of Berkeley; Alex, Julie, and Jaclyn in Bishop; Elle in Frazier Park; Suzanne of Genoa; Kt in Homewood; Carolyn in Menlo Park; Patrick of Reno; Sue in San Diego; and Jovina in Woodland.

Thank you all very much for choosing to join our chapter. We appreciate your support that helps us continue our volunteer activities and other opportunities, such as native plant sales, the DeDecker Grant, and field trips.



Photo by Stephen Fletcher

“The trees had perished so swiftly, and the beetles had spread so rapidly and the summers warmed so quickly, that it seemed nature had no time to figure this out, to keep up with the changes.”

—Suzanne Simard, *Finding the Mother Tree*

Up-Coming Events

(For updated information, visit www.bristleconecnps.org/events)

Sep. 21, Wednesday, 6:00 pm

Chapter Board Meeting

All members are welcome to join. Contact our Secretary, Kathleen Nelson, at secretary@bristleconecnps.org for the Zoom link.

Sep. 28, Wednesday, 7:00 p.m.

Chapter General Meeting

The noise can be the signal: variability and resistance in high elevation meadow plant communities in the Sierra Nevada

Speaker Rob Klinger, USGS

White Mountain Research Center, 3000 E. Line St., Bishop

See page 1 for more details.

Other Events

Up-Coming Events

(For updated information, visit
www.bristleconecnps.org/events)

Sep. 1, Thursday, 5:30 p.m.

CNPS Naturehood Webinar: Lawn Replacements

Replacing existing lawns with native plants is a great way to save water and provide habitat and food for local wildlife. Speakers will dive into the benefits of native plants, offer up lawn replacement suggestions, and leave you with practical tools to help you get started on the process of turning your lawn into a space where native plants thrive. Find recordings of this and past webinars at www.cnps.org/gardening/webinars

Sep. 20, Tuesday, 7:30 p.m. – 9:00 p.m.

Hybrid Meeting: In person and by Zoom Presenter: Dr. Nathan E. Rank, Professor of Biology at Sonoma State University

Biologists across the globe have observed substantial declines in insect populations in recent years, and this has generated widespread concern about the future of this important group of animals and implications of the loss of insects on the health of natural ecosystems and the overall environment. This talk will describe the evidence for insect population declines, a survey of scientific opinion about their importance, methods for documenting insect population fluctuations, and efforts to conserve insects. Dr. Rank will also discuss practices we could implement to promote insect diversity in our local area. Finally, he reviews his research on insect populations in the Sierra Nevada mountains of California and how they have been affected by recent climatic conditions including the California drought. Find the zoom link at <https://milobaker.cnps.org/>

Oct. 6, Thursday, 5:30 p.m.

CNPS Naturehood Webinar: Healthy Soils to Support Native Plants in Drought

Soil health is defined as the continued capacity of soil to function as a vital living ecosystem that sustains plants, animals, and humans. Healthy soil gives us clean air and water, as well as healthy plants. Learn how healthy soil supports a healthy landscape especially during drought.

To register, go to https://cnps.org.zoom.us/webinar/register/WN_i-bKY6pOQ5akJXlcU2CSDg

Up-Coming Events

(For updated information, visit
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Oct. 20 – 22

CNPS 2022 Conference | Rooting Together: Restoring Connections to Plants, Place & People DoubleTree by Hilton Hotel, 2050 Gateway Pl San Jose, CA

Conference presentations will be organized into themed sessions, including a session dedicated to student presentations, a poster session, and lightning talks.

Highlights:

- Inspiring keynote speakers
- Two days of workshops and field trips
- Over 300 presenters on conservation, plant science, horticulture and education
- Special student session
- Art, poetry, music and photographs
- Networking events and associated meeting opportunities

Website: <https://conference.cnps.org/>

**Please send any submissions to us by
October 15, 2022 for the next issue.**

Bristlecone Chapter Directory

President: Kelly Bahr kbahr@cnps.org

Vice President: Michèle Slaton
vicepresident@bristleconecnps.org

Secretary: Kathleen Nelson secretary@bristleconecnps.org

Treasurer: Sue Weis treasurer@bristleconecnps.org

Chapter Council Delegate: Stephen Ingram
stephen@ingramphoto.com

Conservation/Partnerships: Maria Jesus
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Education: Martin Purdy education@bristleconecnps.org

Programs: Michèle Slaton vicepresident@bristleconecnps.org

DeDecker Grants: Michèle Slaton grants@bristlecone.org

Field Trips: Sue Weis treasurer@bristleconecnps.org

Bishop Plant Sales: Katie Quinlan
plant_sale@bristleconecnps.org

Publicity: Gaylene Kinzy gkinzyreische@gmail.com

Newsletter: Elaine Chow newsletter@bristleconecnps.org

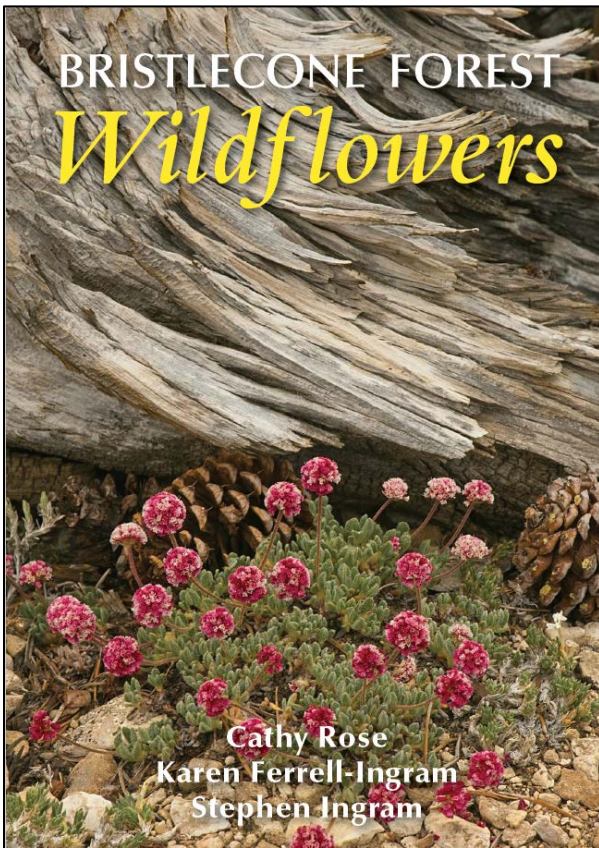
Membership: Elaine Chow membership@bristleconecnps.org

Website: Maggie Riley webmaster@bristleconecnps.org

T-shirt Sales: Katie Quinlan plant_sale@bristleconecnps.org

DeDecker Gardener: Kelly Bahr kbahr@cnps.org

Preview of *Bristlecone Forest Wildflowers*



Cathy Rose
Karen Ferrell-Ingram
Stephen Ingram

CESPITOSE EVENING-PRIMROSE *Oenothera cespitosa* ssp. *crinita*
Evening-Primrose Family – Onagraceae
Oenothera, wine-scented + cespitosa, growing in tufts or clumps + crinita, hairy, for the leaves

SIZE low-growing perennial; **LEAVES** blades lance-shaped to 4" long with equally long stalks; **FLOWERS** 4 white petals 1-2" long; **RANGE** desert mountains east to UT; 7500-11,000'; **LOCATION** Methuselah Trail

Cespitose Evening-primrose grows in dry limestone rock crevices under mountain mahogany and pinyon pines. Usually several plants are found together. The large white flowers attract attention along the Methuselah Trail in a year of good precipitation. In dry years they can be completely absent. A closely related subspecies, *Oenothera cespitosa* ssp. *marginata* is known



from the Discovery Trail and it is the common large primrose seen growing along Highway 168. Both share a tufted, clumped growth habit, and both have densely hairy leaves. Since the flowers are large, it is easy to see the flower parts characteristic of most members of the Evening-primrose Family: four separate petals, eight stamens, and a four-part stigma. The family name refers to the fact that many species bloom in the evening and are pollinated by moths, especially the large and showy sphinx moth.

84 BRISTLECONE FOREST WILDFLOWERS

As you read this newsletter, *Bristlecone Forest Wildflowers* is being printed, and with any luck available at local bookstores and Visitor Centers by the end of September. *Bristlecone Forest Wildflowers* is a field guide to the perennials, grasses, shrubs, and trees of the Ancient Bristlecone Pine Forest we all love so much. This part of the Inyo National Forest, high in the White Mountains, is the habitat for our CNPS chapter's namesake and for a diverse array of other amazing plants.

This small 136-page book was written by Cathy Rose, Karen Ferrell-Ingram, and me. The format and design are similar to our collaborative title, *Rock Creek Wildflowers*, published by CNPS in 2015. The book includes descriptions, plant lore, species ranges, and photos of 95 species found on the trails of the Schulman and Patriarch Groves. *Bristlecone Forest Wildflowers* also covers the common roadside plants between these two groves, from 9800 to 11,000 feet elevation.

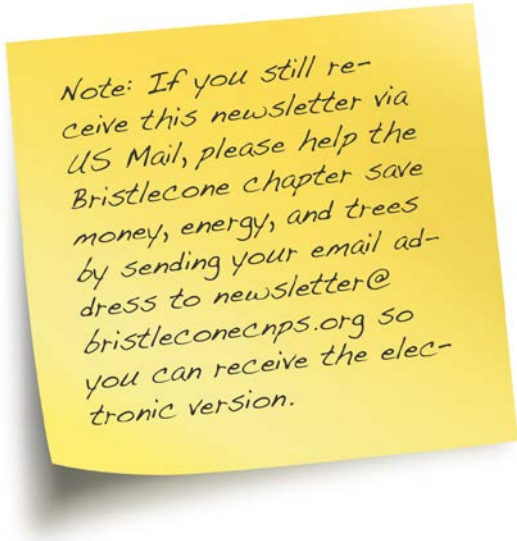
Our "BFW Project" has been over two years in the making—two very dry years with a relatively poor showing of flowers in the Schulman Grove. We spent a lot of time walking the trails looking for new species, and I went out on my own numerous times trying to find good specimens to photograph in flower. During the summer of 2020, we observed no grasses in flower anywhere around the Schulman Grove. They had all flowered prolifically, however, during the banner year of 2019. In 2021, I saw only two flowers all season from one specimen of *Penstemon scapoides*, Westgard penstemon, despite it being a fairly common species along the Methuselah Trail. But this year, with more snow during December 2021 and in the spring, this and other penstemons flowered abundantly.

One elusive species, *Oenothera cespitosa* ssp. *crinita*, the cespitose evening-primrose, was observed only in the lower elevation of the Methuselah Trail on limestone, where it flowers during a short window in mid-June. On several occasions, I found a few small, struggling plants in bud, and even provided them with some of my drinking water to coax them along. Returning a few days later, I would find the buds had been eaten by rodents, or discover one withered flower had closed the previous day. Fortunately, 2022 was good for evening-primroses too, and multitudes flowered.

Despite the difficulty of observing and photographing certain plants for our book in 2020 and 2021, we had enough time this summer to capture photos of the rest of our target species for *Bristlecone Forest Wildflowers*. We hope you enjoy it.

—Stephen Ingram

The California Native Plant Society
 Bristlecone Chapter
 P.O. Box 364
 Bishop, CA 93515-0364
RETURN SERVICE REQUESTED



Membership

The California Native Plant Society is an organization of laypersons and professionals united by an interest in the plants of California. It is open to all. The society, working through its local chapters, seeks to increase the understanding of California's native flora and to preserve this rich resource for future generations.

To join or renew online: Go to www.cnps.org and select JOIN/RENEW (at the top of the webpage or select it after clicking the menu button) or mail the form below:

Name: _____
Address: _____
City: _____ **State:** _____
Zip Code: _____ **Phone:** _____
Email: _____
 I wish to be affiliated with the Bristlecone Chapter: _____
 Other: _____

Membership Type: ___ New Member
 ___ Renewal

Mail To / Make Payable To:
 California Native Plant Society, Attn: Membership
 2707 K Street, Suite 1
 Sacramento, CA 95816

Membership Category

<input type="checkbox"/> Student / Fixed Income	\$25
<input type="checkbox"/> Individual	\$50
<input type="checkbox"/> Plant Lover	\$120
<input type="checkbox"/> Supporter	\$500
<input type="checkbox"/> Patron	\$1,000
<input type="checkbox"/> Benefactor	\$2,500
<input type="checkbox"/> Steward	\$5,000
<input type="checkbox"/> Guardian	\$10,000
<input type="checkbox"/> Additional Contribution	_____

Gift Contribution: _____ Wherever needed
 Specific Area: _____

Go Perennial! To become a monthly sustaining (perennial) member, join or renew online at www.cnps.org/perennial