



Bristlecone Chapter

Dedicated to the Preservation of California Native Flora

The California Native Plant Society

Bristlecone Chapter Newsletter

Volume 45, No. 1

January–February 2024



Thanks for Joining our Annual Holiday Potluck and Presentation

We enjoyed good food, good company, and a great program at our December joint meeting with Eastern Sierra Audubon Society. Blake Engelhardt and Jon Knight, botanists with the U.S. Forest Service, shared flora and fauna highlights from the Inyo National Forest. They also shared a video on the ecology and current plight of the whitebark pine, a high elevation tree familiar to most of our members. Check it out!: <https://www.allaboutbirds.org/news/can-the-clarks-nutcracker-help-its-bff-the-whitebark-pine-recover-from-disaster?>

—Kathleen Nelson

A Range Extension in Inyo County

2023 was a remarkable year for many reasons.

One reason was a range extension recognized in large part due to observations made on iNaturalist. That biological database platform is something I highly

recommend readers to avail themselves of. But that is another subject.

First, a bit of history. Back in 1944, Rupert Barneby collected some *Astragalus* plants along Death Valley Road in the Inyo Mountains east of Big Pine. He subsequently described a new taxon: *Astragalus minthorniae* var. *villosus*. You can still find this plant along that road to this day, although a wetter year improves the odds. Up until this year (2023) it had not been found further north and west of the Death Valley Road. Come June 26 this year I was hiking up a narrow side canyon off the Westgard Pass Road. About a mile or so up this canyon I came across a healthy population of just that aforementioned *Astragalus*. I was not too surprised but unaware it had not been found in the White Mountains before. Jim Morefield, who has been studying the flora of the White Mountains alerted me to this range extension after seeing my iNat observation.

<https://www.inaturalist.org/observations/169664360>

A more scientific piece of evidence for the presence of this taxon at that location is a voucher, a pressed specimen of the plant to be housed in an institutional herbarium. Suitably motivated, we returned to the salient locale to collect specimens. These now reside in the University of Nevada Reno Herbarium.

A 10-mile range extension may not be all that significant but, to some, this was an exciting discovery and worthy of some great days in the field. (I have included some images here to illustrate what this plant looks like.)

Another reason that makes this year remarkable was a second range extension. This extension was also precipitated by an observation on iNaturalist.



A range extension in the White Mountains was recently documented for *Astragalus minthorniae* var. *villosus* traditionally by voucher specimen and non-traditionally (iNaturalist observation). Steve Matson collecting the voucher on June 30, 2023. Photos courtesy of Steve Matson.

<https://www.inaturalist.org/observations/171333084>

In this case the observation of *Phacelia barnebyana* (Barneby’s phacelia) was not made by me but by Chloe and Trevor Van Loon. They made this observation on a limestone ridge just east, and across the road from Grandview Campground. Once again, Jim Morefield, always alert to new taxa in the White Mountains, woke me from my slumber and pitched me on a visit to this location to collect a voucher specimen. So, off we went.

We had good GPS coordinates to aid us in seeking out this plant. However, this plant does not advertise itself in any dramatic fashion. In fact, it was so small and few in number, hiding amongst the pine needles, that finding it proved challenging. Ultimately that challenge was surmounted, the population was found, photographed and vouchered.

The range extension is approximately 40 miles north from known collections in the Inyo Mountains. This species was described in 1943 by John Thomas Howell who named it after Rupert Barneby, the fellow who described the previously-mentioned *Astragalus*.

—Steve Matson

Milkweeds—More than Monarch Butterflies

Milkweed and monarchs are in a coevolutionary relationship central to the survival of both species. Monarchs are pests of milkweed and milkweeds have evolved mechanisms to defend against monarch caterpillars. However, milkweeds have additional concerns. There is a community of at least 11 species of insects that feed on them, comprised of seed eaters, suckers, chewers, miners, and borers. Also, other insects and arthropods take nectar from and rest on the flowers, and some even prey upon the insects that live on milkweed. We see monarch caterpillars, if we are lucky, chewing on our garden milkweed (Fig. 1). There’s also the four-eyed red milkweed beetle (*Tetraopes femoratus*) who’s antennae bisect their eyes (Fig. 2), and the seed-eating nymphs of the large milkweed bug (*Oncopeltus fasciatus*) (Fig. 3), as well as the invasive yellow aphid (*Aphis nerii*), which was introduced into the U.S. on oleander (Fig. 4).

Milkweed species enhance the beauty of our gardens. Several excellent books and articles may be consulted for understanding their interrelationships with other

species and growing your own garden of milkweeds, including the CNPS and The Xerces Society websites. If one is curious about the coevolution of milkweed and other species, then one would enjoy Anurag Agrawal's book *Monarchs and Milkweed: A Migrating Butterfly, a Poisonous Plant, and Their Remarkable Story of Coevolution* (2017). Or, try milkweed shoots for dinner.



Figure 1. Monarch caterpillar chewing on showy milkweed (*Asclepias speciosa*).



Figure 2. Four-eyed red milkweed beetle (*Tetraopes femoratus*) on narrowleaf milkweed (*Asclepias fascicularis*).



Figure 3. Group of large milkweed bug nymphs (*Oncopeltus fasciatus*) on showy milkweed (*Asclepias speciosa*).



Figure 4. Yellow aphids (*Aphis nerii*) on showy milkweed (*Asclepias speciosa*).

—Bob Zimmerman

Greenhouse Update

I have just finished cleaning the last of the seeds and am now sitting down to plan out the growing season. To do this I look at past years sales results and figure out how many of each plant species I sold. I then look at how many plants I have in the inventory and decide how many more I need. This gives me a ballpark figure to be better prepared before all the randomness that can happen on the day of the sales

(like how last spring's sale was nuts and when the Square payment app threw off the fall sale with the changes they made in their platform).

After I have the plan in place I figure out when I want to try and plant most of the seeds. This tends to be the last week of March. Then I count backwards on the calendar and write in when which seeds need to go into cold stratification or other treatments. For example, dogwood needs 12 weeks of cold stratification so I put it in the refrigerator the first week of January to be ready to plant in the last week of March.

The leaves have finally all fallen off the trees at the station and the tumble mustard is already blooming, so we need to do a cleanup day at the station in January. I will send out a request to my volunteer planters, but if you are not on that list and would like to help, contact me at plant_sale@bristleconecnps.org.

—Katie Quinlan

Welcome New Chapter Members!

We appreciate and thank you all for supporting the Bristlecone Chapter:

Cheryl, Julia, and April in Bishop
Karen in Corona
Thomas in El Portal
Charles in Independence
Katherine in Madera
Kathryn in San Diego
Michael in Sierra Madre

Up-Coming Events

Chapter Events

**Wednesday, January 17, 6:00 pm
Board Meeting (online)**

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

Up-Coming Events

Friday, January 19

Mary DeDecker Grant Deadline

Application requirements at:

<http://bristleconecnps.org/dedecker/grant/DedeckerGrantApplication2024.pdf>

Questions? Contact the DeDecker Botanical Grants Coordinator at grants@bristleconecnps.org

Saturday, January 20, 9:00 am

**CNPS Bristlecone Chapter Plot,
Bishop Community Demonstration Garden in
Bishop City Park, 688 N. Main St.**

Join Sue Weis on the third Saturday of each month, starting at 9:00 am, to work in our plot of native plants. Workdays will be canceled if raining. If you plan to help out, do contact Sue beforehand. sue.weis98@gmail.com

Other Events

Monday, February 12, 7:00 pm–8:30 pm

California Water Culture; an overview of how California's unique waterways have been transformed, how it happened, and what it means
North San Joaquin Valley Chapter WEBINAR with Tina Donnelly

This talk will overview the ties between California's culture and how it revolves around water & its plants and how the relationship has evolved over the past couple hundred years. Can California balance the needs of the citizens, the landscape, and the economy? This question may not be answered in this talk but insights and realistic perspectives will be given and discussed that may help open a productive dialogue.

Tina has lived in California's Central Valley most of her life and has been in the Natural Resources Management field for over ten years

Please register for this meeting at <https://cnps.org.zoom.us/meeting/register/tZYrdeurpjotG9zydgLLOHRvz56vC2Yes7qx>

Up-Coming Events

Saturday, March 2, 9:00 am–3:00 pm
Overview of the Major Changes Incorporated in
Revision 12 of the Jepson eFlora
VIRTUAL WORKSHOP presented by
Bruce G. Baldwin, Dave Keil, Keir Morse, Rob
Preston, and Martin Wojciechowski

Ever wonder why plant names change or why the Jepson eFlora is revised each year? Join Bruce Baldwin, Convening Editor of the Jepson Flora Project, and authors of newly revised treatments that have been included in Revision 12 of the Jepson eFlora to learn more about the recent changes and why they were made. Several authors will talk about the revision(s) they wrote, what the new treatment contains, and how the current treatment differs from the previous understanding of the group. Authors will also share photos and details of newly described species (if applicable) so that we can all be on the lookout for these special plants!

Updates will be provided for the following groups:
Carsonia, Chamaesaracha, Cleomella, Lycium,
Malacothamnus, Oxystylis, Peritoma, Physalis,
Prosopis, Solanum, Streptanthus, and Wislizenia

Course fee: \$50

If you'd like to be enrolled in this workshop, please fill out this Google form.

https://docs.google.com/forms/d/e/1FAIpQLSfgnijjQRZ5pNMfF_zblilGCqYJNsiOtnN5fO5IGdL436DqCA/viewform?usp=sf_link

Please send any submissions to us by
February 15, 2024 for the next issue.

Bristlecone Chapter Directory

President: **OPEN**

Vice President: **OPEN**

Secretary: Kathleen Nelson secretary@bristleconecnps.org

Treasurer: Sue Weis treasurer@bristleconecnps.org

Chapter Council Delegate: Stephen Ingram

stephen@ingramphoto.com

Conservation/Partnerships: **OPEN**

Education: **OPEN**

Programs: **OPEN**

DeDecker Grants: Kathleen Nelson

secretary@bristleconecnps.org

Field Trips: **OPEN**

Bishop Plant Sales: Katie Quinlan

plant_sale@bristleconecnps.org

Publicity: Gaylene Kinzy gkinzyreische@gmail.com

Newsletter: Elaine Chow newsletter@bristleconecnps.org

Membership: Sue Carter

membership@bristleconecnps.org

Website: **OPEN**

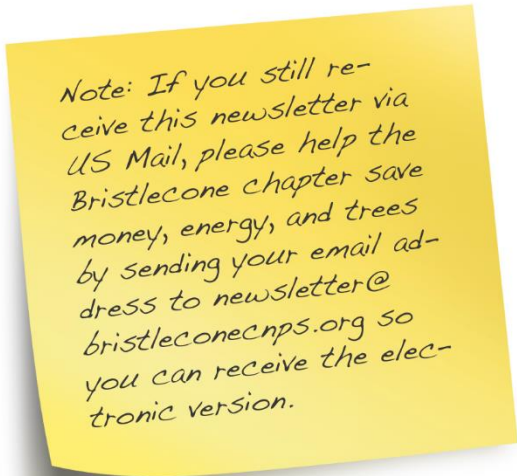
T-shirt Sales: Katie Quinlan

plant_sale@bristleconecnps.org

DeDecker Gardener: Kelly Bahr kbahr@cnps.org

The California Native Plant Society

Bristlecone Chapter
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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 click JOIN/RENEW (at the top-right or select it after clicking the menu button at the top left of the webpage) 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

Gift Contribution: _____ Wherever needed
Specific Area: _____

Membership Category

- __ Student / Fixed Income \$25
- __ Individual \$50
- __ Plant Lover \$120
- __ Supporter \$500
- __ Patron \$1,000
- __ Benefactor \$2,500
- __ Steward \$5,000
- __ Guardian \$10,000
- __ Additional Contribution _____

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