



Bristlecone Chapter

Dedicated to the Preservation of California Native Flora

The California Native Plant Society

Bristlecone Chapter Newsletter

Volume 43, No. 2
March–April 2022

President's Message

It's that time of year in the eastern Sierra when its winter, then spring, then winter, then spring again. As I write this, we're experiencing unseasonably high temperatures up to 75 °F in our chapter area. While I truly hope that March and April bring wet storms, these warm days have been glorious. The unmistakable signs of winter to spring transition are here—at least in the Owens Valley and Inyo Mountains. Desert plants such as bush sunflower, apricot mallow and Mojave aster are greening up in some areas, and the very first wildflowers are blooming.

In the south, the landscape is embellished by vibrant red blossoms of scarlet milkvetch (*Astragalus coccineus*). Wildflower Hot Spots of the Eastern Sierra, describes the forb as the “signature species for the Alabama Hills...it awakens the hills in early spring.” Not only delightful to observe, this native of California, Arizona, and Nevada, is also a host plant for up to 20 varieties of butterflies and moths. Another flower, Anderson's buttercup (*Ranunculus andersonii*), has been observed recently in our area. Emerging just after the snow melt, it graces the sagebrush woodlands in the Great Basin and surrounding regions. The delicate white-to-pink blossoms are a pleasure to happen upon while out hiking early season.



An *Astragalus coccineus* (scarlet milkvetch) in the Alabama Hills. Photo by Dave Kirk.

The Mary Dedecker Native Plant Garden in Independence is lovely any time of the year; always a nice spot to stop for a walk and enjoy some low-elevation indigenous plant life and wildlife. With the warmer weather, I've been spending time in the garden and out hiking. It's a great time for both activities!

Meanwhile, be sure to keep an eye out for news of upcoming field trips!

—Kelly Bahr

General Meeting—ONLINE
Wednesday, March 23, 2023, 7:00 p.m.

Plant diversity on a sky-island in the eastern Sierra Nevada: A flora of Coyote Ridge and Flat, Inyo County, CA by Martin Purdy

Martin Purdy is a MS student in Botany at California Botanic Garden/Claremont Graduate University. He has spent the last two and half years conducting a



An early blooming species in the Eastside, *Ranunculus andersonii*. Photo by Courtney Smith.

floristic inventory of the Coyote Ridge and Coyote Flat region of the Inyo National Forest, just southwest of Bishop, California. This talk will focus on interesting discoveries and results from the approximately 1,400 plant specimens collected for this project, which include new records for the Sierra Nevada range and one new record for the state of California. Prior to graduate school, Martin worked as a field botanist/biologist on the Inyo National Forest, San Clemente Island, and Johnston Atoll and as an AmeriCorps member for the Bishop Paiute Tribe and Shasta-Trinity National Forest.



Martin Purdy at Baker Canyon (top) and *Anelsoni eurycarpa* found in Coyote Ridge (bottom). Photos courtesy of Martin Purdy.



Conservation Updates

Keep Long Valley Green

The lawsuits of Los Angeles Department of Water and Power versus Mono County and the Sierra Club, supported by California Department of Fish and Wildlife, continue. The Keep Long Valley Green Coalition has continued its twice monthly newsletter, *Every Last Drop*. And on World Water Day, March 22, 2022, a short movie, *Without Water*, will be released to the public. For more information, visit <https://keeplongvalleygreen.org/>.

Owens Valley Groundwater Authority and Fish Slough

In early December, the Owens Valley Groundwater Authority approved the final Groundwater Sustainability Plan (GSP) for the Owens Valley watershed except for lands managed by Los Angeles Department of Water and Power (LADWP) under the Long-Term Water Agreement. The GSP covers lands mostly in Inyo County except for the Tri-Valley and Fish Slough sub-basins that are in Mono County. (Tri-Valley includes Chalfant, Hammil Valley and Benton.)

The Owens Valley Groundwater Authority GSP states: “Surface water discharge from Fish Slough into the Owens Valley has declined from approximately 6,500 acre-feet per year for water years 1967–1976 to 3,400 acre-feet per year for water years 2008–2017. While the proportions of groundwater discharging into Fish Slough are currently unknown, a large portion is believed to come from the Tri-Valley area” [Owens Valley Groundwater Basin Final Groundwater Sustainability Plan, 12/9/21, page 11].

Recommendations in the GSP called for creating a groundwater model with monitoring wells and the goal of verifying the source of groundwater flows into Fish Slough. Water chemistry results, geologic studies and similar declines in groundwater levels of Tri-Valley and Fish Slough point to links between the two sub-basins.

As the final GSP was being submitted to the California Department of Water Resources for approval, the Mono County Board of Supervisors voted four to one to withdraw from the GSP effective in July. This vote was to address concerns by the Tri-Valley Groundwater Management District (TVGMD) that Inyo County had too much influence on groundwater management in Mono County. TVGMD is skeptical of

Zoom Meeting link:

<https://cnps-org.zoom.us/j/86873930575?pwd=Tnk1cFFTTmtxUUEExTkRWCtyalJUQT09>

Meeting ID: 868 7393 0575

Passcode: 802571

One tap mobile

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+12532158782,,86873930575#,,,,*802571# US (Tacoma)

findings of links between Tri-Valley and Fish Slough sub-basins.

TVGMD was established in 1987 to monitor and manage groundwater resources in the Tri-Valley sub-basin. Its members include agricultural interests as well as tribal and household stakeholders. Because California Department of Water Resources has ranked the entire Owens Valley watershed as low priority, TVGMD is not required to develop a GSP. This means that sustainable groundwater management for Fish Slough is in limbo, even though the springs are in decline.

Bristlecone members are familiar with Fish Slough as an Area of Critical Environmental Concern, a unique desert wetland in a watershed that has lost many of its important springs. This Area of Critical Environmental Concern is habitat for six threatened or rare plant species, including one described by Mary DeDecker in 1974. This is the Fish Slough milk vetch (*Astragalus lentiginosus* var. *piscinensis*) endemic to Fish Slough. Other plant species are alkali mariposa lily (*Calochortus excavatus*), alkali cordgrass (*Spartina gracilis*), hot spring fimbriatylis (*Fimbristylis thermalis*), Great Basin centaury (*Centaury exaltatum*), King's ivesia (*Ivesia kingii* var. *kingii*), and silverleaf milk vetch (*Astragalus argophyllus* var. *argophyllus*). Fish Slough is also known for the Owens pupfish and Owens speckled dace.



Sedges, grasses, showy milkweed (*Asclepias speciosa*), yerba mansa (*Anemopsis californica*), and Indian hemp (*Apocynum cannabinum*) grow along the banks of BLM Spring, Fish Slough ACEC, Eastern Sierra, CA. Photo by Stephen Ingram.

Fish Slough needs allies. We need volunteers to attend monthly meetings of the TVGMD to better understand the issues and perspectives of Tri-Valley

residents. These meetings are held via ZOOM or in-person every fourth Wednesday at 6:30 p.m. You can visit the website for more details at <http://tvgmd.org/>. TVGMD intends to develop a GSP, but this process will take several years, and by then it may be too late for the flora and fauna at Fish Slough. Creative solutions are needed and any contacts you have with Tri-Valley residents or Mono County Board of Supervisors could lead to progress and lend further support for the groundwater studies recommended in the Owens Valley Groundwater Authority GSP.

Field information on any of the plant species mentioned here would be very valuable in defending Fish Slough. You can report your findings on iNaturalist via this project (https://www.inaturalist.org/observations/new?project_id=11016) to ensure they get reported to the California Natural Diversity Database. Alternatively, you can contact our conservation committee at conservation@bristleconecnps.org and we can submit observations on your behalf.

(I wish we had Mary DeDecker here!)

Los Angeles Department of Water and Power 2022-2023 Pumping Plan

Los Angeles Department of Water and Power's annual report and pumping plan for the coming water year (April 2022 to March 2023) must be submitted to Inyo County Water Department (ICWD) by April 20. ICWD has ten days to respond with its recommendations for pumping and comments on the annual report. LADWP in turn has ten days to respond to any concerns and to amend the pumping plan in response. The annual report and pumping plan is considered by the Technical Group and then goes before the Standing Committee at a date sometime in May.* LADWP is not required by either the Technical Committee or the Standing Committee to change its pumping plan, but other issues may be debated, and Inyo County and LADWP each have one vote.

For water year 2021-2022, LADWP proposed pumping within a range of 64,600 to 78,980 acre-feet. ICWD recommended annual pumping of 59,377 acre-feet. This is in addition to the annual run-off that enters the Owens River. Last water year had estimated run-off at 50–60% of normal so deliveries to Los Angeles via the Los Angeles aquaduct was below normal.

At the end of December 2021, LADWP reported 50,289 acre-feet pumped. If there is not a substantial increase of pumping over the remaining three months of the water year (January through March), LADWP will pump close to the minimum amount proposed in its 2021-2022 pumping plan.

Drought is on everyone's mind. Several stories in the Los Angeles Times have addressed sustained drought and conflicts over water in California and the West. With citizen participation by the Eastern Sierra and Los Angeles residents, perhaps the mindset of LADWP can be influenced. Bristlecone members can closely follow the April and May meetings of the Technical Group and Standing Committee. The Bristlecone Conservation Committee will be submitting comment letters to the Technical Group and Standing Committee. Our hope is to sway policy makers of both Inyo County and Los Angeles for sustainable conservation of Eastern Sierra water resources. Expertise and ideas by Bristlecone members are welcome and, in fact, indispensable. Contact Maria Jesus or Edie Trimmer for more information.

—Edie Trimmer

* The Inyo/LA Technical Group is comprised of Inyo and LA technical staff and receives direction from the Standing Committee which is comprised of Inyo and LA policy makers. The Inyo County Water Department is governed by the Inyo County Board of Supervisors and has close ties to the Standing Committee, Technical Group, and Water Commission.

Field Notes

There once was a big plant family, Liliaceae—the Lily family. Within the last 20 years it has been split up into a number of smaller families. One of these is the Brodiaea family—Themidaceae. These plants all grow from a corm, an underground structure, and they do NOT smell like an onion. Those plants that do smell like onion have their own closely related family—Alliaceae. I know this is a lot of taxonomy right up front. Bear with me.

Within Themidaceae are many plant genera, such as *Bloomeria*, *Brodiaea* and *Triteleia*. Here we are focusing on the genus *Muilla*, which, as you might notice, is "allium" written backwards. *Allium* is the genus of true onions from which the name *Muilla* was derived. *Allium* and *Muilla* have a superficial

resemblance but are not now in the same plant family. What makes *Muilla* a great genus is that there are only three species. Only one of these, *Muilla coronata*, is found in relative abundance within the boundaries of the Bristlecone chapter. Relative abundance is tricky because these plants often do not show up in drier years, and when they do, they are small and easily overlooked. Additionally, they appear to be choice food for certain herbivores. *Muilla maritima* is much more widespread in more westerly and southerly parts of California. *Muilla transmontana* likes drier sites, such as around Reno, the Bodie Hills, and parts of the Mojave.

The earliest record of *Muilla coronata* is an 1888 Charles Parry collection from near Lancaster. Things were a bit muddled for a while until Jim Shevock redescribed the taxon in 1984 (Aliso v10; 4). The



Muilla coronata (top) and its distinguishing feature, anthers atop broad filaments forming a crown around the pistil (bottom). Photos by Steve Matson.

northern most collection is from near Benton. I saw it for the first time in Round Valley in 2008. I have since found it sporadically around Big Pine following wetter winters. We hope to find it flowering near Big Pine this March. The distinguishing feature, and a clue to its name "coronata" is how the anthers sit on filaments that are big and broad, forming a crown around the pistil.

—Steve Matson

Maturango Museum 2022 Wildflower Exhibit

After a two-year hiatus due to the COVID19 pandemic, the Maturango Museum is hosting the 2022 Wildflower Exhibit Friday, April 1 through Sunday, April 3, 2022. With wildflower collection permits in hand, local volunteers gather wildflowers from the Indian Wells Valley and adjoining watershed canyons. The wildflowers will be on display in the Coso Gallery at the Maturango Museum at 100 E. Las Flores Ave., Ridgecrest, California.

As well as the wildflower display, the Maturango Museum has scheduled two speakers to give presentations during the Wildflower Exhibit weekend.

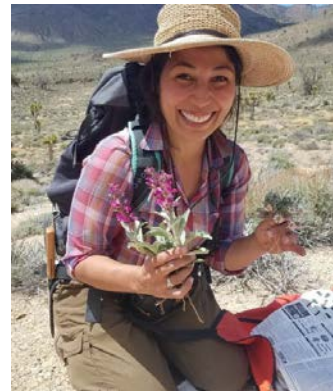


On Friday, April 1, at 7:00 p.m., Glenn Harris, a retired BLM Natural Resource Specialist will give a presentation on "Vegetation Changes since the Last Ice Age." Glenn Harris is familiar with the desert area having worked in the region for over 45 years, 39 of them for BLM. He is a docent with the Maturango

Museum educating children and public groups on topics such as geology, earthquakes, volcanoes and insects. He has collected wildflowers as well as identified specimens for the annual Wildflower Exhibit. This presentation will be offered via Zoom. The link will be posted on the museum's website—<https://maturango.org/>.

Maria Jesus will give her presentation, "A Flora of the Southern Inyo Mountains: Field Guide Edition" on

Saturday, April 2 at 3:00 p.m. Maria will share the results of her research documenting the flora of the southern Inyo Mountains in Inyo County, CA. Here, Joshua trees, emblematic of the Mojave Desert, give way to Pinyon and Juniper woodlands which are characteristic of the Great Basin Desert. This unique transition zone is home to many endemic and rare plants, including the Inyo rock daisy (*Perityle inyoensis*) and the Badger Flat threadplant (*Nemacladus inyoensis*). Maria will introduce you to these special Inyo Mountain plants, along with many widespread Mojave Desert plants, and provide field tips on how and when to find them. Maria Jesus is a conservation botanist at California Botanic Garden where she earned her master's degree studying the



flora of the southern Inyo Mountains. She is passionate about sharing botanical knowledge and conserving native plants and their habitats. This presentation will also be offered via Zoom. The link will be posted on the museum's website—<https://maturango.org/>.

—Elaine Wiley

Spring Native Plant Gardening

As I write this article it is 68 degrees outside, my daffodils and wild garlic are blooming along my south facing wall and I am having to check my notes from last year to keep myself from starting my vegetables too early. I have thoroughly enjoyed this warm, dry January but am hoping that the possibility of a snowstorm next week comes true.

If you are like me and this unseasonably warm weather has you itching to get going in your garden, the California Native Plant society has some great resources in their gardening section on the webpage: <https://www.cnps.org/gardening/webinars>. The topics range from seeding natives, to gardening with/for dogs, how to prune natives, and planting aromatic plants. They also have some tours of gardens, although they are from the west side of the mountains so some of the information doesn't apply to us.

If an in-person event is more your thing, the Eastern Sierra Land Trust (ESLT) will be holding a Pollinator Garden Workshop on April 9th from 10:00 a.m. – 12:30 p.m. I will be discussing good plants for your garden, Roberta Lagomarsini from Master Gardeners will be talking about designing gardens that are more fire resistant, Pete Pumphrey will talk about gardening for the birds, and Julie Fontaine will cover healthy soil. The location has not been finalized so check back on the ESLT website as the date gets closer.

The spring plant sale will be held in conjunction with the Land Trust's "Gardenfest". The tentative date for that will be Saturday May 7th, location and time to be announced. This will be an in-person event unless a new variant of COVID-19 pops up.

Take time now to watch some videos and get inspired, figure out where you want to plant some more natives, and be ready when the plants are.

—Katie Quinlan

Field Trip Leaders and a Coordinator Needed

Following CDC COVID guidelines for outdoor activities, we are scheduling field trips for 2022. Anyone can lead or co-lead a field trip. It involves choosing an area that the leader is familiar with or is just interested in visiting. A field trip may be a visit to the site of a project of conservation interest, a rare plant treasure hunt, or a hike among wildflowers. The interested person may request someone to act as a co-leader.

The position of field trip coordinator is open and we would love to find someone who is enthusiastic about this important part of Bristlecone Chapter's activities.

The Field Trip Coordinator is responsible to provide educational and enjoyable explorations of Eastern Sierra native plant habitats for CNPS members and the general public.

Duties include recruiting field trip leaders, setting up the field trip calendar, getting permits as required and notifying agencies of field trip plans, and getting information to the newsletter editor and publicity person so they can notify CNPS members and the public of our field trips.

If you are interested in either leading a field trip or volunteering to be the Field Trip Coordinator, please contact Sue Weis at (760) 937-2595 or email sue@bristleconecnps.org.

—Sue Weis

Outdoor Programs Still Need Docents

Inyo County Office of Education and Eastern Sierra Watershed Project need your help! Docent instructors are needed for a variety of outdoor education programs for 2nd to 7th graders from March through May of 2022. These are volunteer positions, but docents are offered an \$85/day teaching stipend, free training, and free transportation to field sites from Bishop. For exact dates, more details/resources, and to sign up directly for programs visit the following website: <https://sites.google.com/icsos.us/eswp/docents>. Contact Inyo County Outdoor Education and Science Specialist Maggie Riley at mriley@inyocoe.org or (760) 873-3262 x2131 for more information or with any questions.

—Maggie Riley

Up-Coming Events (For updated information, visit www.bristleconecnps.org/events)
Chapter Events
Saturday, March 5, 9:00 a.m. Field Trip at Baker Creek (above Big Pine) Leader: Steve Matson Meet at the junction of Hwy 168 and 395 in Big Pine, at the Kiosk Parking area. We will head up into part of Inyo National Forest and find all that is blooming and much more. At the top of the list will be <i>Muilla coronata</i> . A lot of plants were germinating in that region in January. Contact: Steve ssmat@sbcglobal.net
CNPS requests that people who are unvaccinated or particularly vulnerable to COVID wear a mask and do not carpool.

Up-Coming Events

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

Wednesday, March 16, 6:00 p.m.

Board Meeting via Zoom

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

Wednesday, Mar 23, 7:00 p.m.

General Meeting via Zoom

Plant diversity on a sky-island in the eastern Sierra Nevada: A flora of Coyote Ridge and Flat, Inyo County, CA. Speaker: Martin Purdy
See details on page 1.

Other Events

Tuesday, March 8, 1:00–4:00 p.m.

Rare Plant Treasure Hunt and Vegetation Sampling Training, CNPS Online by Zoom

Amy Patten and Jennifer Buck-Diaz are instructors of this free webinar open to any participants who are interested in building skills in collecting rare plant or vegetation data. This is an introductory webinar in conducting Rare Plant Treasure Hunts and in vegetation sampling. They will discuss applications of Rare Plant Treasure Hunt surveys and of fine-scale vegetation sampling, classification, and mapping. Registration at <https://www.cnps.org/education/workshops>

Wednesday–Thursday, March 9–10

CEQA Impact Assessment, CNPS

Online by Zoom

This workshop, instructed by David Magney and Isabella Langone, will provide basic guidance on what is required to be included in a biological assessment pursuant to CEQA, how to read the documents, and how to submit critical, scientifically-based comments.

Fees: \$50 Students/Fixed Income, \$100 or 150 General (pay what you can). Register at <https://www.cnps.org/education/workshops>

Up-Coming Events

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

Friday–Sunday, April 1–3

Maturango Museum Wildflower Exhibit 100 E. Las Flores Ave, Ridgecrest, CA

For more details, see page 5 and visit <https://maturango.org/>.

Saturday, April 9, 10:00 a.m. –1:00 p.m.

Pollinator Garden Workshop, Eastern Sierra Land Trust

Bishop Community Demonstration Garden in Bishop City Park, 688 N. Main St.

Learn how to design a garden using native plants at ESLT's free Pollinator Garden Workshop from 10:00 a.m.–1:00 p.m. Check out details of speakers focusing on topics, such as planting with natives, fire-safe landscaping, and canning 101 at https://www.eslt.org/event/eslt_deep_roots_pollinator_garden_workshop/. Contact Claire at claire@eslt.org to RSVP.

**Please send any submissions to us by
April 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
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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

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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

Historian: **OPEN**

Mammoth Plant Sales: **OPEN**

Hospitality: **OPEN**

The California Native Plant Society

Bristlecone Chapter
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Note: If you still receive this newsletter via US Mail, please help the Bristlecone chapter save money, energy, and trees by sending your email address to newsletter@bristleconecnps.org so you can receive the electronic version.

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: _____

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	_____

Membership Type: ___ New Member
___ Renewal

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