



Bristlecone Chapter

Dedicated to the Preservation of California Native Flora

The California Native Plant Society

Bristlecone Chapter Newsletter

Volume 42, No. 1
January–February 2021

Vice President's Message

A warm hello to all. On behalf of our board, I wish all in our community a safe and healthy holiday. Know that you all are in our minds in what may be a challenging season. We've just passed the winter solstice, and so more sunshine will come back soon, with spring flowers not far off. It's true that this year's Zoom meetings, online plant sale, and virtual field trips have been a success. But what has really stood out to me this year is the way a group of people can work together on a common mission—what a great team we have in our board and entire chapter. A huge “thank you” to our outgoing Bristlecone Chapter President, Katie Quinlan. Katie served as our president since 2014, and we are lucky she will continue her role as our native plant propagator. There is hardly a native garden in our area that hasn't been touched by Katie's skill and hard work. Katie, we thank you for your outstanding leadership, organization, knowledge and friendship as our President. A big thank you also to our entire board and committee chairs: Kathleen Nelson, Sue Weis, Stephen Ingram, Maggie Riley, Elaine Chow, and Gaylene Kinsey. As a team we made it through! This year we welcomed three Acting Board Members, all DeDecker Grant recipients and students at the California Botanic Garden, who stepped up to help with ongoing tasks and new ideas: Maria Jesus, Carolyn Mills, and Marty Purdy.

—*Michèle Slaton*

Chapter Elections Results

Election results are in for the upcoming year. It is with great pleasure that we welcome incoming Chapter President, Kelly Bahr. Kelly has served as DeDecker Gardener in Independence since this spring, and brings to our chapter a wealth of knowledge of our native ecosystems and passion for conservation.

We also welcome incoming Conservation Chair, Maria Jesus, and Education Chair, Marty Purdy. Maria is writing her Master's thesis on a flora of the Conglomerate Mesa and Malpais Plateau, and Marty is writing his Master's thesis on the Coyote Flat and Ridge area. Their expertise and passion will have a lasting positive impact for native plants!

—*Michèle Slaton*

New Leadership in our Local Chapter and State Organization

Chapter President



When I was a small girl, my Mom would take me hiking in the desert just outside of our backyard in eastern Nevada. I became a dedicated desert rat, a lover of wildlands and wildlife, and an advocate for the preservation of native plants and animals. My knowledge of native plants is primarily self-taught, through countless hours of hiking and exploring wild places, followed by reading and researching. I gained further experience through my previous occupation as a landscape gardener, and more recently as the gardener for the Mary DeDecker Native Plant Garden.

After earning a B.S. in geology from the University of Oregon, as well as a degree in Geographic Information Systems (GIS), I worked as both a college GIS instructor and a cartographer for the U.S. Forest Service. Later, I began a 10-year career as assistant director, wildlife rehabilitator and education coordinator for Wildcare Eastern Sierra (WES). Direct animal care of injured wildlife was my labor of love at WES, but I also performed clerical duties essential for running a non-profit. I enjoyed educating the public through live animal programs, newspaper articles and living with wildlife counseling.

While new to CNPS, and with still so much to learn, I hope that my varied experiences can benefit the organization and its constituents (the plants!). I am in love with this amazing landscape we live in, full of its unique plants and animals, and feel determined to protect and preserve them in any way possible.

—Kelly Bahr

Chapter Conservation Committee Chair

Greetings! I'm pleased to announce that I will be serving as the new conservation chair for the Bristlecone Chapter. I am currently a graduate student at California Botanic Garden where I am completing a floristic study of the southern Inyo Mountains. I am excited to assist our chapter in conserving the remarkable native plants and habitats found in the Eastern Sierra and northern Mojave Desert. I plan to provide you with the latest plant conservation updates in future newsletters and encourage you to contact me with any plant-related concerns that are important to you. Issues I am currently monitoring include excessive groundwater pumping, mining threats, OHV trespass, recreation overuse, and road maintenance practices. In the meantime, I hope you will enjoy reading about the important conservation work completed this year by California Plant Rescue.

A new study estimates that at least 19 plant species have gone extinct in California since the time of European settlement.¹ To safeguard against additional extinctions, California Plant Rescue is advancing an important effort to monitor and seed bank California's rare plants—including many that are endemic to Inyo and Mono County. Duncan Bell, Senior Field Botanist for California Botanic Garden,



Death Valley sandpaper plant (*Petalonyx thurberi* subsp. *gilmanii*). Photo by Duncan Bell.

led several of these collecting efforts and recalls, “This year, we retraced the footsteps of some amazing California botanists and naturalists including Mary DeDecker, Barbara Ertter, French Gilman, and Dean Taylor, to name a few. Some of these rare plant locations had not been re-visited in 40 or 50 years and we never knew what to expect, especially with the possible impacts of global climate change.” Seed collecting teams traveled from the floor of Death Valley National Park, where they located Death Valley sandpaper plant (*Petalonyx thurberi* subsp. *gilmanii*), to the heights of the White Mountains to find Mason’s sky pilot (*Polemonium chartaceum*). Bell says, “Seed banking rare plant species can be very difficult, but thanks to the early work and information shared by these prior botanists,



Mason’s sky pilot (*Polemonium chartaceum*). Photo by Duncan Bell.

we were able to make conservation seed collections of many narrow endemics from the White-Inyo Mountains and Eastern Sierra corridor.” These seeds are currently preserved in long-term storage facilities and are intended to support existing occurrences in

the wild. Visit www.caplantrescue.org to learn more about this effort to conserve California's native flora.

—*Maria Jesus*

¹ Knapp W, Frances A, Noss R, Naczi R, Weakley A, Gann G, Baldwin B, Miller J, McIntyre P, Mishler B, et al. 2020 Aug 28. Vascular plant extinction in the continental United States and Canada. *Conservation Biology*. doi:10.1111/cobi.13621.

Chapter Education Committee Chair



Hello CNPS Bristlecone Chapter members and friends! My name is Martin Purdy (but I go by Marty) and I have recently volunteered to serve as the Chapter's

Education Chair. I am currently enrolled in a master's botany program at California Botanic Garden down in Claremont, CA, and so I live most of the year down here. However, my research is based in the Eastern Sierra where I am working on a flora of Coyote Ridge and Coyote Flat, located just SW of Bishop. Consequently, I count myself lucky to spend a large portion of my summers tromping around this small piece of the Sierra documenting one of nature's most marvelous phenomena—mountain wildflowers! Previously I have lived in Bishop working as an AmeriCorps Environmental Education Coordinator for the Bishop Paiute Tribe and a seasonal botany technician for the Inyo National Forest.

I look forward to applying my experience and interest in environmental education and science communication to engage our members and the larger community with the incredible botanic diversity of the Eastern Sierra region. COVID-19 introduces some obvious challenges, but I hope to connect with you in the new year through some remote programming (look-out for a workshop on iNaturalist this spring!), digital content, and perhaps even some socially distanced botany hikes. If you have any ideas on how our chapter may contribute *educationally* to your community, organization, or a particular event, do not hesitate to reach out to me at education@bristleconecnps.org. Happy trails and holidays!

—*Marty Purdy*

CNPS Interim Executive Director

Vince Scheidt of the San Diego Chapter has temporarily taken on the role of executive director of California Native Plant Society (CNPS). Former executive director Dan Gluesenkamp is no longer with CNPS. The official CNPS news release was posted in November and is available at www.cnps.org/news-releases/leadership-changes-20487

Water Conservation Recap of 2020—Export of water from Mono and Inyo Counties.

As many long-time Bristlecone Chapter members know, the past 50 years since the opening of the second aqueduct have meant ongoing battles between the ownership rights of Los Angeles Department of Water and Power (LADWP) and environmental needs of the Owens River and Mono Lake watersheds. These battles were initiated by citizens represented by the Sierra Club, Owens Valley Committee, Mono Lake Committee and our Bristlecone Chapter of the California Native Plant Society (CNPS). Limits on the export of water by LADWP were achieved mostly through legal action or dispute resolution. The Mono Lake decision was a landmark case for Public Trust values. But despite these successes, conflicts between water rights and environmental values continue.

Water supplied to Long Valley and Little Round Valley Agricultural Leases

In Mono County, LADWP announced in March 2018 that 6,400 acres of agricultural leases in Long Valley and Little Round Valley would no longer receive water, jeopardizing agricultural use and meadow habitat, such as limiting water for the bi-state sage grouse. After requests from California Department of Fish and Wildlife (CDFW) and the Bureau of Land Management, LADWP provided a small amount of water in mid-summer in one irrigation ditch crossing critical sage grouse area. It was too little, too late to green up the vegetation the chicks rely on and the male count dropped by 31 percent the following spring. This action by LAWPD resulted in a lawsuit by Mono County and the Sierra Club. The CDFW joined as an interested party. The lawsuit alleges that the abrupt cessation of water supplied to the leases is in

violation of the California Environmental Quality Act (CEQA). The lawsuit asserts that any assessment



Views in Long Valley taken in the summer and fall of 2018, a water-less year. Top: Looking across the dry vegetation of the “Lek2” sage grouse habitat. Bottom: A view down a parched Diversion 27 before it turns south. Photos courtesy of Lynn Boulton.

under CEQA must be conducted based on conditions prior to the reduction of water delivery to the agricultural leases. The hearing in Alameda County Superior Court is scheduled for January 21, 2021. Meanwhile, a coalition of tribal, environmental, political and agricultural interests, together acting as Keep Long Valley Green (KLVG), is pursuing strategies to educate California citizens on the issue. On December 28, 2020, CBS This Morning aired a segment presenting the arguments of both LADWP and KLVG. You can view the segment *Climate change sparks new round of water wars, threatens ranchers, wildlife and recreation* at this link: www.cbsnews.com/video/climate-change-sparks-

[new-round-of-water-wars-threatens-ranchers-wildlife-and-recreation/](http://www.cbsnews.com/video/climate-change-sparks-wildlife-and-recreation/)

Water Exports to Los Angeles Under the Long Term Water Agreement

In Inyo County, export of water is governed by the Long Term Water Agreement (LTWA). Despite the LTWA, LADWP, supported by the Standing Committee, adopted a water-pumping plan for the water year 2020-21 that at its maximum is about 20,000 acre-feet more pumped than the 71,000 acre-feet recommended by Inyo County Water Department (ICWD). As of December 2020, LADWP is on track to pump close to that maximum amount in a year of little rain fall. This level of pumping is close to the pumping highs in the 1970s. Overdraft continues to threaten important native plant habitats. In addition, many mitigation projects have not been met, even 30 years after an Environmental Impact Report (EIR) was initiated in 1991.

In May 2021, Bristlecone Chapter members should be prepared to comment before the Standing Committee on the export of Owens Valley water as recommended by LADWP in their annual pumping plan released in April 2021 for the 2021-22 water year. A large public presence via Zoom is needed. Participation of our CNPS State Office would be valuable.

Lynn Boulton, Chair of the Range of Light Sierra Club, and I have been scouting 54 mitigation sites. LADWP contends all but twelve projects are complete. Inyo County Water Department and our review suggest nine to eighteen additional projects have not met mitigation goals. We will propose field trips to some of these sites this summer.

Owens Lake Master Plan

Over the past decade, a master plan for dust control on Owens Lake has been in progress. The lake bed of Owens Lake, defined as a shore line at about 3,600 feet elevation, is managed by the State Land Commission following the Public Trust Doctrine, a legal principle protecting resources within navigable waters for the public. In addition, Great Basin Air Pollution Control Board monitors dust emissions from the lake bed. The two agencies, therefore, have significant say in a final decision on Owens Lake.

The Bristlecone Chapter, has participated in the Master Plan Advisory group for protections of vegetation communities around the perimeter of the

Owens Lake. This resulted in significant protocols to monitor alkaline meadows. On February 4 at 10 a.m., the Owens Valley Master Plan advisory group will meet to hear a well-testing proposal by LADWP. Email Edie Trimmer at edieann@xmission.com if you would like contact information for this meeting.

—Edie Trimmer

Whitebark Pine and Clark's Nutcracker, Mutualism Disrupted by Blister Rust

White pine blister rust (*Cronartium ribicola*) threatens populations of whitebark pine (*Pinus albicaulis*), a keystone species of the subalpine zones in the mountain ranges of western U.S and Canada. The high mortality of whitebark pine due to rust may be challenging particular populations of Clark's nutcracker (*Nucifraga columbiana*), a major seed disperser of multiple pine species. Research Ecologist Chris Ray, Ph.D., and her colleagues report their monitoring data of the pines and birds collected from the national parks of Mount Rainier, North Cascades, Yosemite, and Sequoia and Kings Canyon. See their recently published article as well as her short presentation to the 2020 North American Congress for Conservation Biology at the Bird Pop! website: <https://birdpop.org/pages/blogPost.php?id=57>. Blister rust has not yet been detected in our chapter area (so let's be on the lookout for it).

Mary DeDecker Botanical Grant, Now Accepting Applications

The Bristlecone Chapter of the California Native Plant Society is pleased to request applications for the Mary DeDecker Botanical Grant. This small-grants program is named in memory of a local botanist renowned for her many contributions to the botany and history of the Eastern Sierra Nevada and northern Mojave Desert.

Our goal is to promote research and projects that increase understanding and appreciation of native plants and ecosystems of the Eastern Sierra. Anyone may apply, but we are especially interested in helping graduate and undergraduate college students as well as elementary, middle, and high school pupils and their teachers. The only requirement is that the project include studies within the Bristlecone

Chapter area—generally defined as Inyo and Mono Counties, but including adjacent biogeographic areas of the northern Mojave Desert, Sierra Nevada, or western Great Basin. Subjects appropriate for funding cover a wide range, from basic taxonomic or ecological research to native plant gardens. The committee evaluates applications based on the extent to which the proposed project is specific to our regional flora, fills information gaps, and contributes to public awareness of native flora. We seek well-organized proposals that demonstrate a clear objective and a pathway to achieve success. The program will award grants of up to \$1,000 each. Proposals exceeding \$1,000 may still be considered, contingent on chapter funding and project justification; in such cases, applicants are advised to develop their project acknowledging that only \$1,000 or less may be available, and line-item the budget accordingly.

Criteria and Procedures

Submit written proposals to the Mary DeDecker Grant Committee. Each should contain 1) title, 2) objectives, 3) methods, 4) expected final product, 5) relevance to chapter area (at least part of the project should be conducted in Inyo or Mono Counties), 6) proposed budget, 7) permitting plans for collection and research from relevant land managers, and 8) applicant's resume. Electronic files may be in Word or pdf format, and named following the format: LastNameFirstName_2020application (or _2020letter). Proposals should not exceed three pages in length, excluding resume. Student proposals must include a letter of support from their adviser or teacher. **The deadline to submit complete proposal packages is January 22, 2021.** All applicants will be notified of the committee's decision by early March, 2021.

A progress report explaining how Bristlecone Chapter funds were used is due at the end of the calendar year. Applicants are encouraged to give a talk about their project at a chapter evening meeting and/or to write a brief explanation of their work for the Bristlecone Chapter newsletter.

Send proposals or requests for information to: grants@bristleconecnps.org (electronic submissions are preferred but not required) or Michèle Slaton, Ph.D.
Mary DeDecker Grant Committee Chair
P. O. Box 364
Bishop, CA 93514

You can find more information about the Bristlecone Chapter Grants Program, including this Request for Proposals, at <http://bristleconecnps.org/dedecker/grant/>

A Warm Bristlecone Welcome to New Chapter Members!

With the support of fresh additions to our membership, our chapter continues to grow. We cannot thank you all enough, new and old members alike, for donating to our shared cause and love—conservation and plants native to California, one of the world's biodiversity hotspots. Darla and Denver in Bishop; Barbara and Sophia in Sacramento; John in Arcata; Erin in Arvin; David in Bell Gardens; Brian in Carmel; Deborah in Cedarville; Richard in El Portal; Robert in Los Osos; Neil in Ojai; Susan in Pasadena; and Timothy in Santa Clara, welcome to the Bristlecone Chapter!

Dean William Taylor, 1948–2020

Dean Taylor showed up in 1977 on a tiny street in Big Pine, California and asked the budding biologist John Wehausen (of bighorn sheep fame) if he could share a house with him. Dean had recently completed his Ph.D. in botany at UC Davis. He spent about two years using Big Pine as a base of operations as he travelled about eastern California and Nevada, collecting thousands of plant specimens and doing botanical research.

Working largely as an independent contract botanist, Dean went on to do work all over California, discovering many new species, publishing, speaking at conferences, and mentoring young botany students. His "Flora of Yosemite" is perhaps his most well-known publication.

I first met Dean in Bishop in the mid 1990's during a Jepson workshop. I sat next to Dean on one of those long folding tables in one of the lab/classrooms at the White Mountain Research station on East Line Street. Never a dull moment with Dean, he interjected often with explanations of botanical concepts or historical anecdotes about Eastern Sierra botany. I would continue to run into Dean: during a survey near Tioga Pass, at conferences, or at UC Berkeley over the years. In 2016 I ran into Dean at Crooked Creek in the White

Mountains. He joined a few of us on a trip to Poison Creek as he was working on an updated Flora of the White Mountains.

Work on this new Flora will, unfortunately, have to be continued by others as Dean passed away unexpectedly in November of this year at his home in Aptos, California of a pulmonary embolism. Dean was always interesting to be around, and he will be missed.

—Steve Matson

Calochortus kennedyi
var. *kennedyi*
photographed by Dean
W. Taylor on May 20,
1978 in Deep Springs
Valley in the White
Mountains.



Up-Coming Events

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

Chapter Events

January 20, Wednesday, 6:00 pm

Bristlecone Chapter Board Meeting

All members are always welcome to join this Zoom meeting. To obtain a link for the meeting, contact Kathleen Nelson (goatheads@aol.com).

Other Events

January 13, Wednesday, 6:00 pm–7:00 pm

Happy Place Book Club: *The Hidden Life of Trees* Eastern Sierra Land Trust Zoom Meeting

In *The Hidden Life of Trees*, author Peter Wohlleben shares his deep love of woods and forests and explains the amazing processes of life, death, and regeneration he has observed in the woodland and the amazing scientific processes behind the wonders of which some of us can be blissfully unaware. Join ESLT's online book club to discuss this *New York Times* best seller. Support our local businesses and order from Spellbinder Books! If you mention you're a part of ESLT's book club you'll receive 10% off. To RSVP and get the Zoom meeting information, contact Gabrielle at gabrielle@eslt.org.

Up-Coming Events

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

January 30, Saturday, 1:00 pm–5:00 pm
Wonders of a dryland moss: *Syntrichia* from genomes to ecosystems

Jepson Herbarium Workshop
(Workshop full: wait-list only)

Take a look at multiple levels of biological organization in one lineage, the desiccation-tolerant moss genus *Syntrichia*. Short presentations on genomics, population genetics, reproductive biology, physiology, systematics, and ecosystem function in the biotic soil crust related to the genus. These will be interspersed with activities and discussion, and will give participants an unusually holistic picture of biology and how seemingly different subdisciplines interact. Literature and other materials for use in the workshop will be mailed to participants ahead of time. No course fee but registration is required through <https://ucjeps.berkeley.edu/workshops/>.

February 3, Wednesday, 7:00 pm–8:00 pm
Fire and Ecosystem Resiliency

Speaker: Pete Warner

CNPS Mt. Lassen Chapter, Virtual Program

A botanist and plant ecologist hailing from Sonoma County, Pete Warner will provide a brief survey of some of the ecological effects of vegetation fires, focusing on recent burns and native plant populations in Sonoma Co. and discuss the complex relationships of factors and effects associated with wildfires and ecological resiliency (e.g., climate, species evolution, land management practices). Visit <https://mountlassen.cnps.org/> to sign up for the Zoom meeting.

February 4, Thursday, 5:30 pm
Naturehood Gardening: Seasonal Aesthetics for the Native Garden

CNPS Virtual Program

Your garden can both look beautiful and provide habitat year-round. Join in on the virtual program to learn from gardeners across California. Find the page to register for this event at www.cnps.org/events and then check your email for your unique link to join the webinar. Contact: David, dbryant@cnps.org

Up-Coming Events

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

February 13, Saturday, 1:00 pm–5:00 pm
Fiddleheads! Become fern fluent

Jepson Herbarium Workshop

(Workshop full: wait-list only)

This introductory course will be on the ferns of the world, focusing on species that can be observed in the wild in California. Learn the basics of fern morphology, ecology, and evolution. The course ends with a virtual tour of the major groups of ferns and their representatives here in California. The goal: turn all course participants into skilled fern-observers: when next you see a fern you'll understand what it is, what it does, how it does it, and where it came from, evolutionarily-speaking. Go to <https://ucjeps.berkeley.edu/workshops/> to register for this workshop.

**Please send any submissions to us by
February 15, 2020 for the next issue.**

Bristlecone Chapter Directory

President: Kelly Bahr kbahr@cnps.org

Vice President: Michèle Slaton
vicepresident@bristleconecnps.org

Secretary: Kathleen Nelson goatheads@aol.com

Treasurer: Sue Weis treasurer@bristleconecnps.org

Chapter Council Delegate: Stephen Ingram
stephen@ingramphoto.com

Conservation/Partnerships: Maria Jesus
conservation@bristleconecnps.org

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: Stephen Ingram stephen@ingramphoto.com

DeDecker Gardener: Kelly Bahr

Historian: **OPEN**

Mammoth Plant Sales: **OPEN**

Hospitality: **OPEN**

We need volunteers to help keep our chapter going and growing. Please contact any one of us to find out how you can volunteer as a committee chair or other ways to be a more active member.

The California Native Plant Society

Bristlecone Chapter
P.O. Box 364
Bishop, CA 93515-0364
RETURN SERVICE REQUESTED

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

<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	_____

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

Membership Type: New Member
 Renewal