



Bristlecone Chapter

Dedicated to the Preservation of California Native Flora

The California Native Plant Society

Bristlecone Chapter Newsletter

Volume 38, No. 3

May-June 2017

President's Message, May 2017

This lovely, wet winter has given rise to a spring of new growth and hope. The alluvial fans, brushed with what looks like green velvet and the promise of flowers, has given our membership an infusion of new energy. Steve, our new DeDecker gardener, and volunteers, Julie Anne Hopkins, Kathy Duvall, and April Zelak, have put in many hours sprucing up the DeDecker garden for its spring bloom.

In April, the chapter did a lot of outreach with tables at the Banff Film Festival and Earth Day in both Bishop and Lone Pine. We gave workshops for the Master Gardeners and Eastern Sierra Land Trust. We also took students from Round Valley and Owens Valley Schools on field trips to see the desert come alive.

The momentum doesn't stop there. We have some great field trips planned in May and June. So if you haven't had a chance to get out and enjoy the flowers, then make time to do that with a knowledgeable leader.

-- Katie Quinlan

Call to Fill Empty Chairs!

Do you ever think about being more active in the CNPS community? Here's your chance to do something about that. We have openings for the Chairs of Secretary and Hospitality that are awaiting your participation. If you are interested in either position on the Board or want more information, please contact any current board member.

We appreciate your continued support and some great ways to show it are by renewing your membership, opting for a web version of the newsletter instead of the more costly printed version, and becoming a member of the Board.

May General Meeting

Wednesday, May 31, 7 pm, White Mountain Research Center, 3000 E. Line Street, Bishop

Speaker: Meagan Oldfather

Mousetails in warming chambers at 13,000 ft: plants on the move in response to climate?

Alpine plants have been identified as harbingers of the biogeographic impacts of a changing climate. However, in montane systems where population viability may be driven by fine-scale climate conditions, populations at the same elevation range limit may show variable responses to changing conditions, leading to complex range shifts across geographic space. Refining predictions of species range shifts with climate change in these complex landscapes can be achieved by pairing individual-based vital rates (e.g. germination, growth, and survival) and field-measured climate variables, as well as incorporating exposure of individuals to climate variables outside of the historical range of variation and species interactions. My research addresses this with a demographic analysis, a manipulative experiment of summertime temperature and soil moisture, and community monitoring across the entire elevational range of *Ivesia lycopodioides* var. *scandularis* (Rosaceae). Since 2013, I have monitored 16 populations (over 4,000 individuals) of this long-lived alpine plant across its range in the White Mountains, CA (3350 – 4420 m). I ask the following questions: 1. How do vital rates vary across the species range? 2. How do experimental warmer, wetter conditions impact population growth in range edge and center populations? 3. Does community composition shift with experimental warmer, wetter conditions?

Meagan's Bio:

I received my Bachelor of Science in Ecology and Evolutionary Biology from University of California
(Continued on page 2)

(Continued from page 1)

Santa Cruz, and am currently working to complete my Ph.D. at the University of California Berkeley Integrative Biology Department in the lab of Dr. David Ackerly. My research focuses on the complex relationship between topography, microclimate and demography across species ranges, and asks how this relationship shapes the rate and magnitude of range shifts of mountain flora with a changing climate. I am a graduate student researcher with the Institute for the Study of Ecological and Evolutionary Climate Impacts and the Terrestrial Biodiversity Climate Change Collaborative. I am also a dedicated volunteer for the Global Observation Research Initiative in Alpine Environments in California. After finishing my doctoral research, I plan to work on how to best protect, monitor, and manage natural landscapes in the face of a changing climate.

-- Meagan Oldfather



Photos by Meagan Oldfather



Mousetails, *Ivesia lycopodioides* var. *scandularis* (Rosaceae)



Warming Chambers in the White Mountains

Greenhouse Update, May 2017

This winter has been another opportunity to experiment at the propagation center. In December, there was a heavy amount of herbivory on the bitterbrush since the row cover provided such a nice protected environment. So in January, I took off the row cover to see if the plants could handle the harsh weather, after all, they are natives. The little seedlings that survived the heavy pruning did fine under all the snow and melt water. Being able to quickly check traps every day that I am out there has made it easier to keep some control over the rodents. I have trapped 54 and am still counting.

Five of my intrepid potting volunteers and I put in 32 hours seeding the flats and pots so there will be plants for the upcoming plant sales and restoration projects. Our spring sale will be at the Eastern Sierra Land Trust's "Gardenfest" on Saturday, May 9th from 11 am – 2 pm, at 250 N. Fowler in Bishop. The fall sale will be on August 26th at the White Mountain Research Center. If you have a current membership card, then you can start at 8 am. The regular public sale will start at 9 and go to 11 am.

The Mammoth plant sales are in a wait-and-see mode. Sherry needs to wait and see what the plants look like when they melt out from all the snow before she can schedule any plant sales, or she may just bring her plants down to the Bishop fall sale. Check the website for updates on the Mammoth sale.

--Katie Quinlan

The DeDecker Garden

To all native plant enthusiasts: did you know there is a thriving, native plant garden to visit at the Eastern California Museum in Independence? It is easy to find by walking just north of the parking lot by the picnic tables.

Bristlecone Chapter members and volunteers established the DeDecker Garden, in September 2001, as a tribute to Mary DeDecker. Mary was a resident of Independence and a self-taught botanist who became an authority on Eastern Sierra and Northern Mohave flora.

The garden offers displays of native plants from habitats such as the Owens Valley alluvial fans and lower montane foothills. Riparian species grow along two creeks, including the easily accessible, Independence Creek. Most plants are labeled along the trails that are also accessible to wheelchairs. Enjoy blooms from March through the early fall months and stunning views of the Sierra Nevada mountain range all year long. This is a nice place for bird watching too.

Pick up a brochure at the museum to learn more about the garden and plants. Bonus: an updated plant list will come out soon.

Several volunteer workdays are planned each year. Please look for them on the Bristlecone chapter calendar at: www.bristleconecnps.org. Happy botanizing this spring.

-- Kathy Duvall

2017 DeDecker Botanical Grant Recipients

The Bristlecone Chapter is very pleased to announce the recipients of this year's DeDecker Botanical Grant. We had many competitive applications. It is through the success of our annual native plant sale and the generous donations of plant enthusiasts that we are able to support these excellent projects:

- Courtney Collins (UC Riverside): How does White Mountain sagebrush expansion influence soil microbial nutrient cycling via shifts in extracellular enzyme production?
- Dylan Neubauer: Herbarium project at Inyo National Forest Supervisor's Office, Bishop –

Working toward integration into the Consortium of California Herbaria

- Katherine Ross (UC Santa Cruz): Physiological sensitivity of eastern Sierra Nevada conifers to climate change
- Sophia Winitzky (Rancho Santa Ana Botanic Garden Claremont Graduate University): A vascular flora of the Adobe Hills and Valley, Mono County, CA

Congratulations and good luck to each of you with your project!



The Adobe Hills Valley where Sophia Winitzky will conduct her Master's thesis work with the assistance of a DeDecker Botanical Grant.
Photo by Sophia Winitzky.

Early Spring Field Trip Reports

March 25-26. Panamint Valley with Mark Bagley. While crowds descended on Anza Borrego and Death Valley was lacking in flower displays, Mark Bagley and his followers had Panamint Valley pretty much to themselves. The weather was not too hot and not too cold; beautiful clouds floated over snow-capped peaks. Participants came from far and wide, Berkeley to South Pasadena, and Mark was a fearless leader, teasing apart tiny floral structures with a pencil point. We explored the creosote bush scrub of various types and its tiny annuals.

(Continued on page 4)

(Continued from page 3)

The southern part of the valley, while lacking fields of flowers, had a pretty fair diversity of annuals, unlike the pretty bare northern portion. We identified a plenitude of combseeds (*Pectocarya* spp.), a cartload of cryptanths (aka popcorn flower, *Cryptantha* spp.), phacelias (*Phacelia* spp.), and six species of goldenbush and rabbitbrush (*Ericameria* spp.). In the southern part of the Panamint Valley, we visited Post Office Springs near Ballarat, with honey mesquite (*Prosopis glandulosa* var. *torreyana*), screw bean mesquite (*P. pubescens*) and alkali marsh. We then went off through Trona toward Ridgecrest where we stopped in the Spangler Hills. Here, the ground was carpeted with common goldfields (*Lasthenia gracilis*) and a good display of other annual wildflowers.

We ended Saturday in Inyokern at the lovely home of Bristlecone Chapter members Susan Moore and Pete Woodman. Susan was a very gracious host (Pete would have been also, but he was working out of town). On Sunday morning, Susan gave us a tour of their cactus garden and we took a short walk to see the flowers in the creosote bush scrub that surrounds their property, including a nice display of blue dicks (*Dichelostemma capitatum*).

We then drove up to Short Canyon, in the southern Sierra just west of Inyokern, where there was a nice flower show going on. The sandy area below the trailhead was very diverse with highly scented indigo bush (*Psorothamnus arborescens* var. *minutifolius*) and hole-in-the-sand-plant (*Nicolletia occidentalis*). Along the trail we saw an abundance of annuals, including California poppies (*Eschscholzia californica*), Fremont pincushion (*Chaenactis fremontii*), more popcorn flowers, *Phacelia*, desert dandelion (*Malacothrix glabrata*), cream cups (*Platystemon californicus*), and some lupine (*Lupinus* spp.). Further up the trail, there were Joshua trees (*Yucca brevifolia*) and beargrass (*Nolina parryi*), and we got up to the first oaks and pines (*Quercus chrysolepis*, *Pinus monophylla* and *P. sabiniana*). Although the beargrass was not flowering, the dense rosettes of sharp leaves were impressive. After a final challenge from the everlasting tribe, we were hurried out of the canyon by the afternoon winds. Great trip!

-- Mark Bagley et al.



Identifying goldfields near Ridgecrest.



Floral display in Short Canyon.
Photos by Sue Weiss.

April 8. Division Creek, Sawmill Pass with Steve Matson.

It was a dark and stormy night...the night before; hardly auspicious for a field trip with over an inch of rain in Big Pine. But skies cleared and the winds abated (somewhat) so that nine of us met south of Aberdeen at the Division Creek Powerhouse Road. We drove to the Sawmill Pass Trailhead and headed up the trail. It has been a bit cooler than normal in the Owens Valley this season so the plants were not at their peak. We were still graced with some *Lupinus magnificus*, *Ephedra nevadensis* and *viridus*, *Artemesia tridentata*, *Tetradymia axillaris*, *Layia glandulosa*, *Eriophyllum pringlei*, *Gilia brecciarum*, *Linanthus dichotomous*, *Mentzelia albicaulis*, *Salvia dorrii*, *Ceanothus vestitus*, *Stephanomeria parryi* and *pauciflora*, *Atriplex* species, *Astragalus casei*, and the thing that created the most buzz was *Tricardia watsonii*. Some might quibble that many of these taxa were not in bloom, but astute observers were not dismayed and found solace in identifying with only vegetative characters present.

We made it past the largest, dry gully and up onto the volcanic substrates before stopping for lunch a bit beyond the John Muir Wilderness sign. A few snowflakes flecked our faces as we ambled back to the parking lot. A pleasant day notwithstanding cooler temperatures, some wind at times, and the threat of snow. "Come back in two weeks," said leader Steve Matson. The Owens Valley was only just waking up after a cold and wet winter.

-- Steve Matson

Never dismay at the absence of a super bloom... always something to see! Former NPS ranger Paul Slaton spots a rare bear poppy (*Arctomecon merriami*) in late April 2017 in Death Valley and hikes off to search for more...



Photo by Michèle Slaton.

Up-Coming Events

Bristlecone Board meeting.

Wednesday, May 24, 6 pm. Conference Room, Forest Service Building, 351 Pacu Lane, Bishop. All members welcome.

Bristlecone General Meeting.

Wednesday, May 31, 7 pm. White Mountain Research Center, 3000 E. Line Street, Bishop

Bristlecone CNPS Field Trips (for updated information, visit www.bristleconechnps.org/events)

May 20, Saturday. Ainslee Spring and Round Fire Burn. Leader: Jerry Zatorski.

At 5500' elevation, Ainslee Spring sits against the Wheeler Crest at the top of the alluvial fan. In the past the spring area was host to many Sierra plants, but in February 2015 all that changed as the Round Fire rapidly consumed everything in its path. Today the spring and associated wetland still shines bright green amid the devastated landscape around it. Due to the dense sagebrush that covered much of the landscape prior to the fire, this area has been spared much of the disturbances from ranching, suburbanization and heavy ORV use in past years, and as a result, there are relatively few exotic weeds. Despite the meager rains in spring of 2015, the spring flowers were big and bold. We will begin at the dirt loop road (Alison Ln. in Google maps) on the west side of Paradise and hike along the Ainslee Spring road making stops as the flora dictates. We will also visit a Bitterbrush planting implemented by BLM in October of 2016 and view the extent of the fire scarring on the alluvial fan. There will be about 3-4 miles of moderate hiking at a botanist's pace. Participants should bring lunch, snacks and plenty of fluids. Dress for the weather conditions: hat, sunscreen, hiking shoes... We will meet at 8:00 AM at the dirt loop road, which is 0.5 mile up Lower Rock Creek Rd/Old Sherwin Grade where it crosses Rock Creek and the trail head (old Paradise Resort) or 0.3 mile down from the Paradise Fire House. For more information, contact Jerry at jerryzat@gmail.com.

Up-Coming Events

NOTE CHANGE IN DATE!

May 24, Wednesday.

May 25, Thursday. Volcanic Tableland. Leader: Ann Howald.

Meet at 9:30 am at the pullout near the intersection of Gorge Road and Old Sherwin Grade Road (west side of Hwy 395). We'll make several stops along Gorge Road to see mainly spring annuals. There was a spectacular bloom here in 2016, and 2017 may be similar. One thing we'll look for is colonies of *Phacelia saxicola*, which is known from only 7 collections in CA. We'll be walking over uneven ground for 1-2 miles, and should wrap up by early afternoon. For more info, contact Ann at (707) 721-6120 or annhowald@vom.com.

June 10, Saturday. Whippoorwill Flat. Leader: Michèle Slaton.

We will visit the pinyon-juniper woodlands of the Whippoorwill Flat area in the Inyo Mts. After driving up the Death Valley Road out of Big Pine, and out on the Saline Valley Rd. ca. 12 mi., we will hike in the vicinity of 7500 ft., exploring the Whippoorwill Flat Research Natural Area. We should see a variety of annual and perennial wildflowers, including phlox (*Phlox stansburyi*), blazing-star (*Mentzelia* sp.), bitter-root (*Lewisia rediviva*), buckwheats (*Eriogonum* sp.), and rockcress (*Boechera* sp.). Our prize will be re-discovery of the juniper and dense mistletoe hybrid, *Phoradendron juniperinum* x *bolleanum* ssp. *densum*, which was visited by Mary DeDecker ca. every five years 1968-1995, and so will be our opportunity to carry on the trend of long-term monitoring (see Wiens, D. & M. DeDecker. 1972. Rare natural hybridization in *Phoradendron* (Viscaceae). *Madroño* 21:395-402). Delbert Wiens (expert of mistletoes; author of Viscaceae treatments, and Mary's son-in-law) is planning to join us! We will meet at 9am at the parking lot at the junction of Hwy 395 and Hwy 168 in Big Pine, and carpool to the extent possible to the field trip area. Bring everything you need for a full day in the field. Please contact Michèle Slaton (760-258-1464 or mslaton02@gmail.com) with questions.

Up-Coming Events

June 17, Saturday. Conglomerate Mesa. Leader: Jerry Zatorski.

Nestled in the southern Inyo Mountains, Conglomerate Mesa is the second most southern peak in the Inyo Mts., and has the most southern pinyon/juniper woodlands in the range. Unlike the basalt covered Malpais Mesa to the south or the granitic pluton of Cerro Gordo to the north, Conglomerate Mesa is composed of older Permian sedimentary rock. This part of the Inyo Mts. has great potential to hold numerous botanical treasures as much of the Inyo Mts. have not been explored botanically especially away from established roads. We will begin at the northeast side of the mesa and hike and botanize our way up to the summit and mesa flat above 7000'. There will be about 7-10 miles of moderate to challenging hiking at a botanist pace which should take us a full day, eight hours or so. Participants should bring lunch, ample snacks and plenty of fluids as this is a dry hike. Dress for the weather conditions: hat, sunscreen, hiking shoes, appropriate clothes. Bring field guides, hand lens, binoculars, topo maps, and a willingness to hike and explore. We will meet at 7:00 AM at the intersection of SR 190 and Saline Valley Rd. Alt. Route (34.5 mi E of US 395 near Lone Pine or 17 mi. E of SR 190 x SR 136), we then have a 1 hr. drive to the beginning of the hike. 4WD vehicles with clearance are required because the dirt roads can always be unpredictable. For more information, contact Jerry at jerryzat@gmail.com.

July 8, Saturday. Bodie Hills. Leader: Ann Howald.

This will be a driving loop trip going in on the Masonic Road and returning on the Aurora Canyon Road. Meet at 9 am at the Bridgeport Forest Service Office on Highway 395, a few miles south of Bridgeport. On the Masonic Road we'll be stopping to look at pinyon-juniper woodland, seasonal wetlands, aspen groves, and montane sagebrush scrub. Easy walking. An all-day trip. High clearance vehicles needed. Road conditions after a snowy winter could cause rescheduling of this trip so check with Ann the week before: (707) 721-6120 or annhowald@vom.com.

Up-Coming Events

July 15, Saturday. Glass Mountain Peak and Sawmill Meadow. Leader: Julie Anne Hopkins.

We will explore the eastern flank and summit plateau of this obscure volcanic peak following a vague hiking trail near Sawmill Meadow. Starting in lodgepole and Jeffrey pine woodland, we'll quickly ascend a deep pumice valley passing things like *Penstemon newberryi*, *Monardella odoratissima*, and *Eriogonum lobbii*. We'll lunch on the wide summit plateau accompanied by dwarfed *Pinus albicaulis*, *Penstemon speciosus*, *Astragalus monoensis*, and *Raillardella argentea*. Stupendous 360-degree views of the Mono Basin, Adobe Valley, Long Valley, Sierra and White Mountain crests will be unavoidable. Logistical details TBA.

August 12, Saturday. White Mountains-Sagehen Flat. Leader: Courtney Collins.

Join us in plant identification with a focus on plants from the GLORIA survey list. Meet at Crooked Creek research station at 9 am and we will do a short hike up to Sagehen Flat. Bring comfortable shoes and water. Pack lunches will be available at Crooked Creek station. Please be prepared for high altitude conditions (3258 m, 10698 ft).

August 19, Saturday. Glass Meadow. Leaders: Julie Anne Hopkins, Sue Weis.

Glass Creek Meadow is a beautiful spot about 1.5 to 2 miles west of Obsidian Dome. We should see lovely summer meadow flowers, a few Mono Lake lupines in sandy open spots among the pines, and some riparian flowers along Glass Creek, including Lewis' monkeyflower. The hike is sandy and uphill. Meet at the parking area next to 395 at 9:00 am and we will carpool from there. Bring lunch, water, hat, sunscreen and insect repellent.

Up-Coming Events

October 7, Saturday. Klondike Lake. Leader: Steve Matson.

This is not a spectacular flower show trip. Late season shrubs and a few special plants like *Chloropyron maritimum*, *Cleomella plocasperma*, *Ericameria albida*, *Pyrrocoma racemosa*, and *Stutzia covillei* will be seen in all their understated glory. We will walk about a half mile out and back near the west shore of Klondike Lake. The low alkaline habitat with a shallow water table presents an important component to the suite of plant habitats in the Owens Valley. Meet at 9 AM at the junction of 395 and 168 in Big Pine, or at the Klondike lake turnoff a mile or so north of Big Pine. Contact Steve Matson for more information at phone: 775-843-0389 or email: ssmat@sbcglobal.net.

Other Local Events

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

GardenFest

Saturday, May 6, 11am-2pm.
Eastern Sierra Land Trust, 250 N. Fowler St., Bishop.
Learn from Master Gardeners, swap gardening tips and stories, share seeds, and purchase plants from local nurseries and organizations. Pizza and refreshments available. Save the date and celebrate the growing season with us! The Bristlecone Chapter will be at the GardenFest with some native plants available for purchase - get a head start on your garden!

Please send your articles or information to us by June 15, 2017.

Bristlecone Chapter Directory

President: Katie Quinlan 760-873-8023

Vice President: Michèle Slaton 760-938-3258

Secretary: OPEN

Treasurer: Sue Weis 760-873-3485

Chapter Council Rep: Stephen Ingram 760-937-9918

Conservation/Partnerships: Julie Anne Hopkins
831-566-6012

Programs: Michèle Slaton 760-938-3258

DeDecker Grants: Michèle Slaton 760-938-3258

Field Trips: Sue Weis 760-873-3485

Historian: Kathy Duvall 760-387-2122

Bishop Plant Sales: Katie Quinlan 760-873-8023

Mammoth Plant Sales: Sherry Taylor 760-934-2338

Publicity: Karen Ferrell-Ingram 760-937-0620

Newsletter: Elaine Chow

Membership: Gaylene Kinsey

Website: webmaster@bristleconecnps.org

Book Sales: Sue Weis 760-873-3485

T-shirt Sales: Scott Hetzler 760-873-8392

DeDecker Garden: Richard Potashin 760-263-5022

Hospitality: OPEN

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 click on the JOIN/renew button at the top of the page, or mail in 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:

CNPS Membership Coordinator
2707 K Street, Suite 1
Sacramento, CA 95816

Gift Contribution: _____ Wherever needed
Specific Area: _____

Membership Category

— Student / Limited Income	\$25
— Individual	\$45
— Family	\$75
— Plant Lover	\$100
— Patron	\$300
— Benefactor	\$600
— Mariposa Lily	\$1500
— Additional Contribution	_____