A Season of Celebration

Native Plant Week is here!

Vernal Pools | Year-Round Color | Art Contest Winners
As you know, every three years the CNPS Conservation Conference brings our community together to share cutting edge science, discuss challenges, and have a lot of fun. At the 2009 event you may have seen a newborn baby tucked away in my jacket; last month at the 2018 conference you may have seen that same kid cheering as a state senator donated to support CNPS conservation. If so, then you know firsthand how the conference engaged students, benefited scientists, empowered activists, and inspired all of us to work together to make an even bigger difference.

The conference ended with Kim Stanley Robinson speaking of the future, the end of sprawl, and the start of something new. I carried this narrative with me as I headed home afterwards, and all California seemed characters in this story. Traversing LAX’s industrial landscapes I met abundant, giant, parking lots and under-utilized industrial sites, and realized the tremendous opportunity we have to grow good communities in the heart of our economy, rather than out in the peripheral sprawl of jobless suburbs. Driving through downtown LA I was amazed at the infill development, countless residential towers reaching for the sky, and hundreds of art spaces opening in restored historic buildings.

Further north, as my flight rose through the sunset and my eye traced the urban grid of the San Fernando Valley, once a vast agricultural landscape, I felt haunted by the ghosts of sunny farms and buzzy pollinators, now interred beneath asphalt sprawl. Later, as the stars replaced the twilight, we flew over great protected mountains, dark and mysterious in the night, the ideal natural condition of wildlands and greatest metric of our conservation success. The plane leveled over our Central Valley, and I was dismayed to see it now gridded with long lines of monochromatic orange streetlights. Clearly, we are transforming this great land as we have too many others.

It might be too late to save the Valley and other treasures, but then again it might not! While hedge funds and politicians still invest in sprawl development, new urbanism and climate smart planning herald the end of 1980s style sprawl. While Autonomous Vehicles will accelerate exurban sprawl by making commutes more pleasant, they also will make thousands of parking lots obsolete and therefore available for infill development that builds homes near jobs. We face great challenges, but we also have incredible opportunities. The next decade is the fulcrum that can lift the future. Fifty years from now it will be done: population declining, the spasm of expansion finally ended, and what we have saved will be safer and more secure. Our challenge now is to be mindful of threats, aggressive in seizing opportunities, and thankful for the chance to join together with thousands of wonderful friends to ensure this wonderful and ancient land has a place in the future.
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ON THE COVER AND ABOVE: A spring native plant garden with redbud, ceanothus, clarkia, and poppies in full bloom. (Photo: Saxon Holt)
RE-OAK PROJECT moves into distribution, planting mode

The CNPS Re-Oak project continues to make progress. Planting is now underway of the thousands of acorns that CNPS members donated last fall.

“Our volunteers have potted up over 3,000 acorns to give away this fall as seedlings,” reports Betty Young of the Milo Baker Chapter in Sonoma County. “Over 50 collections of acorns have been direct-seeded in ranches, vineyards, and public lands. Some have also gone to Sonoma State University for a common garden study on phenotypic variations in different collections and to UC Berkeley for a research project at Pepperwood preserve on assisted migration.”

The chapter is coordinating a campaign with the Laguna Foundation, the Sonoma County Agricultural Preservation and Open Space District (Ag + Open Space), and both the Napa and Sonoma Resource Conservation Districts to encourage oak planting. Young says workshops for homeowners cover appropriate replanting of oaks and associated plants. Participants receive plant protection supplies and seedlings, thanks to support from Ag + Open Space.

In the wider campaign to Re-Oak California, CNPS initiated an “Adopt-an-Oak” program to distribute acorns to people interested in growing trees, says CNPS Executive Director Dan Gluesenkamp. Through an online form on the CNPS website, community members can sign up to receive acorns for their property.

CNPS has also partnered with school groups and private land owners who have committed to growing thousands of seedlings.

Meanwhile, CNPS Sacramento Valley Chapter volunteers spent many cold and wet hours over the winter at Elderberry Farms Native Plant Nursery, where they sorted, identified, tested, sterilized, and packaged more than 35,000 viable acorns for the restoration effort.

“Collaboration and community involvement has been the driving factor for the success of this project,” Gluesenkamp says. “Our deepest thanks and appreciation goes out to all of the community members, volunteers, and CNPS members who took the time to help.”

Go to cnps.org/acorns to get involved and learn more.

A HUGE GIFT to the future

The Santa Barbara County property once known as Bixby Ranch, subject of CNPS legal action resolved last year, can now be protected forever thanks to Jack and Laura Dangermond, founders of Esri. Their recent $165 million gift allows the Nature Conservancy to acquire an eight-mile stretch of coastline, covering about 24,000 acres of beach, coastal prairies and oak woodlands. Also called Cojo Jalama Ranches, the site south of Vandenberg Air Force Base is mostly undeveloped grazing land supporting 60 rare species.

The Dangermonds hope that others will be inspired to conservation philanthropy by their gift. “We’re willing to expose ourselves to some level of notoriety with the hope that it will inspire others to do what we did,” Jack Dangermond told the Los Angeles Times. “These places are disappearing fast.”

CNPS Conservation Program Director Greg Suba agrees. “For all the excellent work CNPS and others do to preserve California’s flora, the essential starting point is putting acres of land into permanent conservation. That’s what makes this purchase so vital and fundamental to our mission,” he says.

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Photo: CNPS
MOJAVE MOUND CACTUS (*Echinocereus* - multiple species)

With vivid, large flowers, it’s hard to miss the Mojave mound cactus this time of year. Found most commonly in the Eastern Mojave Desert, this beauty “clones” multiple, tightly packed stems from a single root system. Photosynthesis occurs on the stems, which appear as ridges. Notice the new spines, which are red and turn white as they age.

WESTERN AZALEA (*Rhododendron occidentale*)

Occurs in the Northern Sierra Nevada and especially along the North Coast ranges, cascades, and in peninsula ranges as well. Usually in mixed-conifer forest understories… riparian or mesic (moist) environments. Not in Modoc Plateau, desert, or Southcoast ranges. Used in horticulture as beautiful white to pink flowers. Likes acidic soils.

SUGAR BUSH (*Rhus ovata*)

Found in coastal sage scrub chaparral of the southwest and up the central coast region, this native features thick, sugar-scoop-shaped leaves to protect its surface from direct sunlight. The pinkish flowers form dense clusters at the end of stems that turn into sticky, tart fruits.

GOLDFIELD (*Lasthenia californica* and *Lasthenia gracilis*)

Thank Lasthenia for California’s golden springtime carpets. These tiny, but profuse blooms prefer open areas, chaparral, and grasslands habitats. Best places to see goldfields at their finest include the upper Cuyama Valley, Carrizo Plain National Monument, the San Joaquin Valley, Antelope Valley, and other central inner coast ranges.

YERBA SANTA (*Eriodictyon* spp.)

Used by Native Californians for its medicinal qualities, this lovely plant prefers chaparral and woodland habitats. California’s bumblebees love to pollinate its dark blue to light purplish flowers, which bloom late spring to early summer. Like a number of California natives, this plant grows back strong and thick after fire.
The Afterlife of a Coast Live Oak

“...I had a vision of the fallen oak as the centerpiece of a thriving habitat with native plants, a welcoming space for birds and other wildlife.”
On November 1, 2012, I woke up to discover that my majestic coast live oak (*Quercus agrifolia*), a giant, nearly 100-year-old tree, had fallen overnight. Looking out at our backyard, I was reminded of Judith Larner Lowry’s musings, in her book *The Landscaping Ideas of Jays* (University of California Press, 2007), on the importance of coarse woody debris:

*We will not see again the giants of old, who, when they fell, were still taller prone than a tall man standing. Their tenure on the forest floor could be as long as 400 to 500 years. The real consequences of the lack of coarse woody debris of substantial size in our forests won’t be known for generations.*

This memory inspired me to salvage what I could of our beloved oak. I had a vision of the fallen oak as the centerpiece of a thriving habitat with native plants, a welcoming space for birds and other wildlife. I sought an arborist to help cut up portions of the tree that needed to be removed for safety and haul away all the brush. I had heard that the arborist Merlin Schlumberger volunteered time to renest raptors. In Merlin I discovered a kindred spirit who fully supported my idea.

To learn more about Dana’s Oak and get helpful arborist tips, see our extended story at [blog.cnps.org](http://blog.cnps.org).
Orange flagging tape indicates where I thought cuts needed to be made and what parts I hoped to keep. Merlin suggested a few modifications that enabled me to safely keep other interesting sections of the tree. He and his colleague also made extraordinary efforts to help rescue my 6-year-old Arctostaphylos manzanita “Dr. Hurd” and Carpenteria californica “Elizabeth” as well as several volunteer madrone (Arbutus menziesii) and toyon (Heteromeles arbutifolia) seedlings that had been buried under the fallen tree.

A surprise discovery in spring 2013: The lowermost trunk must have had some intact cambium (i.e., still attached to the roots) because it began re-sprouting all along its length. I decided to let nature take its course.

In addition to the rescued plants, I added other California natives around and among the fallen oak that I hoped would colonize the carcass. One year after its fall, we could see some regrowth of the living section of the oak.

A year and a half after its fall (April 9, 2014), the Festuca californica (front right) was thriving, and the Vitis californica ‘Roger’s Red’ (middle, behind Festuca) taking root.
After three years (Nov. 2, 2015), the rescued *Arbutus menziesii* seedlings are overtaking the carcass. Other plants are also beginning to fill in.

The *Lonicera hispidula* is beginning to grow up the tree between the huge rocks embedded in the trunk.

The rescued volunteer madrones (upper left) are overtaking the carcass.

Meanwhile, fungi and lichen are colonizing the remains and the *Vitis californica* is beginning to grow up the fungus-colonized trunk.

On the shadier north side of the tree, I planted *Lonicera hispidula*, which is climbing up and around the trunks.

After the oak fell but before it was cut up, I harvested some of the branches to fashion a stand for a bird bath. Sometimes I see multiple species of birds queueing up along branches of the carcass waiting for their turn in the bird bath.

L-R: The woodpeckers love to perch of the ends of the oak branches above the bird bath before they take a dip. The chestnut-backed chickadees show up at the bird bath every summer. Hooded orioles are less frequent visitors, but we sometimes see them here during nesting season (in this case May 2016).
In 1964, the Wilderness Act was signed into law, creating the National Wilderness Preservation System. The original goal of the landmark legislation was to save 100 million acres, but 66 versions later 9.1 million acres received protection. It was undoubtedly a tough compromise for conservationists.

Fast forward more than a half century, however, and that landmark legislation has surpassed its original goal and is considered one of the nation’s greatest conservation achievements. According to the National Park Service, Congress has now designated 106 million acres of federal public lands as “wilderness.”

“They gave up so much at the time,” says Tina Andolina, legislative director for Sen. Ben Allen (D-Santa Monica), “but if you look at every bill since then, we would have lost everything had the people at the table been purists. We protected an amazing amount of public lands because of the compromise they were willing to make.”

The give and take toward steady progress is a lesson Andolina has lived throughout her career, a body of conservation work distinguished by its multifaceted reach. Having worked for non-profits such as the California Wilderness Coalition and the Friends of the Trinity River,
We can do amazing things in California . . . what we do in Sacramento can actually set the tone for the rest of the world.

as an environmental lobbyist, as well as in government, Andolina understands conservation from all angles. Today, she is a key architect of California’s environmental defense, balancing big goals with pragmatism.

In February, CNPS honored Andolina as Legislative Staff Person of the Year for her work with Senator Allen to pass Senate Bill 249. The bill, which CNPS helped introduce, secured important natural resource protection and greater accountability for the state’s Off-Highway Vehicle Recreation Program. It passed unanimously with the Governor’s Office applauding its win-win outcome. Yet like so much in politics, the SB 249 victory came with concessions of its own.

“Every day we make those compromises and move that needle a little bit,” says Andolina. “Sometimes we’re furious we couldn’t move it more, but it allows us to do more next time, preventing us from having to start from scratch.”

Recently, we sat down with Andolina to talk about the path to progress, the changing conservation movement, and the importance of women in politics today. As Senator Allen said of his petite but formidable legislative director at the CNPS Conservation Conference in February, “We need more small, powerful, mighty women.”

Tina, how did you first get involved in the environmental movement?
Growing up, I loved politics. I also had a passion for the environment, but I didn’t realize that I could connect the two until I joined the environmental club at my community college. At that time, our adviser, Joe Medeiros, invited us to join him in fighting the Auburn Dam Project, which was supported heavily by then-Rep. John Doolittle. Joe opened our eyes to how you can use organizing, petition driving, phone calls, and political pressure to do something good for the environment. We raised money at bake sales and bought business clothes at thrift stores, so we could afford to join him in D.C. The dam project was defeated, and that experience showed me that we could really make a difference. I knew then that I wanted to do this for my career.

You started your environmental career in the ’90s. What was that time like and how has it changed today?
The most notable difference is that we had some Republican allies. We didn’t have doors slammed in our face. We did a lot of good and got wilderness bills passed with Republican authors.
There are still Republicans who love and care about the environment, but they are fewer than in the past. What changed?
In the last 20+ years, the Republican Party has been very strategic about focusing on free market absolutes. Rather than working on legislation, the party strategists worked at the roots of academia and at the local level to construct a black and white cultural mindset that all conservation is bad for business. They were very focused and unified. The environmentalists, meanwhile, were fragmented and split into silos. While the Republicans had maybe five core issues of focus, we had 500! By 2006, we saw a complete die-off of environmental bills. As an environmental community in Sacramento, we realized we had to get organized. That was the start of an ad-hoc Green California coalition of NGOs [non-governmental organizations] and policy makers.

You and longtime CNPS lobbyist Vern Goehring were a part of that coalition from the beginning. What have we learned about working together?
We need to set priorities and support each other. Different environmental groups are competing for funding and members, which creates inherent competition and can make it difficult to collaborate. We think in terms of air, water, plants, and sometimes worry that we’ll reduce our effectiveness if we support a broader effort. But it’s not watering down your mission to help your allies. Funders care about coalitions and want to see us working together.

You watch outside the gate of either house, the opposition will go up to each other and ask for help on the spot. They don’t battle over details; they just trust each other. We can learn from that.

What would ideal collaboration look like for the environmental community?
Engage partners and legislators earlier. It’s hard for legislators when our partners come to us in January. Let’s build proactive rather than reactive campaigns where we figure out the structure and the goal ahead of time and communicate that with the legislative offices. We also have an opportunity this year to leverage the state’s Environmental Caucus. Right now, it’s underutilized, but it would be a great forum through which we could hold a summit to establish priorities and avoid unnecessary redundancy and competition. That way we don’t have scenarios in which you have seven different plastic bills being introduced and then none pass because resources are spread so thin.

“We need more small, powerful, mighty women,” said Sen. Ben Allen of his legislative director, Tina Andolina. Pictured here: longtime CNPS Lobbyist Vern Goehring presenting Tina with her award at the recent CNPS Conservation Conference. (Photos courtesy of CNPS)
California is the nation’s leader in environmental conservation. Can you talk a bit about how we’re building California’s “Green Wall” to fortify the state’s environment protections?

After the 2016 election, I had a good 36 hours where I was really depressed. But I have a friend, an amazing organizer, who was sending messages all night, encouraging us not to mope but to do something. That kind of mentality was incredibly empowering. I realized, ‘OK, we’re California, so bring it!’

So we started to take a fresh look at how we mobilize our core to be super effective in fighting everything that comes our way. Part of it is logistics, so we can have legislation ready to go when things arise, making our lists, and getting ready. It’s also been fun to get creative and look at where the state of California has control: certain licenses, our California Endangered Species Act, our wild and scenic rivers. Even our opposition here can be moved to the center more than at the national level. I think they recognize that these are California values. We can do amazing things in California, and what we do in Sacramento can actually set the tone for the rest of the world.

Tina, you’re a woman in politics at the height of the #MeToo movement. How are you processing this right now?

One of the more interesting pieces of the discussion is the question of this spectrum of acceptable versus unacceptable behavior. Can members give hugs? At what point do you just need to resign? Where do we say it’s OK and not?

As women, our age and experience seem to determine what we see as OK on that spectrum. Our grandparents may have dealt with a similar dynamic over racism decades ago. A senior member whom I’ve never met hugging me may feel OK because I’m 42 and have been told for 20 years that’s OK, but that hug is a power play and a tool of manipulation. We need to come to terms with what we’ve always accepted and know that we’ve accepted it because we’ve been trained to do so.

What’s your advice for other women, especially those working in the public eye?

First, we can’t let this movement get minimized or vilified as simply ‘political correctness.’ Even some of our allies warn us not to push too hard … that we might alienate people. How many times have we been told that as women?

Even our opposition here can be moved to the center more than at the national level. I think they recognize that these are California values.

I’m heartened by the number of women running for office. All these other women are standing up, and I personally feel duty bound to show up. It’s not easy. Many of us are mothers, too, so the world is already expected of us. We can’t give in to guilt, and we need to recognize that we’re all making a contribution. You don’t have to be in politics or an activist. Even if you work for a bank, you’re giving back in a different way. Imagine if there were no women working in banks and our places of business?

Last, we’ve got to have each other’s backs, and the same holds true for those of us working to protect the environment. We need to prioritize lifting each other up. Let’s support each other in a very conscious way.

Liv O’Keeffe is the director of marketing and communications for CNPS
Protecting Our Desert Lands
Leave the DRECP Alone

BY GREG SUBA

The Desert Renewable Energy Conservation Plan (DRECP), which was finalized in 2016, provided historic conservation gains for public lands in California and provided a precedent-setting blueprint for how to balance renewable energy development with conservation on our nation’s public lands. Local stakeholders, as well as thousands of citizens from throughout California and across the country, provided input over an 8-year process to shape the final plan.

But, on Feb. 2, the Department of the Interior (DOI) issued a notice to re-open the plan, potentially putting at risk more than 6 million acres of vital conservation lands, such as the Silurian Valley, Centennial Flats, and Chuckwalla Bench. These places are home to iconic plant and animal species, including the Joshua Tree, our wildflower superblooms, microphyll woodlands, the Mohave ground squirrel, desert tortoise, and bighorn sheep.

Within a two-week span, the DOI re-opened the DRECP, delayed the publication of a court-ordered environmental review of off-highway vehicle routes in the West Mojave, and cancelled a review of their own proposal to withdraw mining from up to 1.3 million acres of BLM-managed conservation lands. Taken together, these actions by DOI represent a concerted assault to rollback conservation across California’s desert lands.

Taken together, these actions by DOI represent a concerted assault to rollback conservation across California’s desert lands.

This is Not about Renewable Energy

The Trump administration claims they are revisiting the DRECP to explore additional lands for renewable energy development. Yet, within the span of weeks, they’ve created a new tariff on imported solar panels that results in a 30 percent increase to their cost. This attempt to reopen the plan is not about renewable energy. It’s about the administration’s hostility to conservation and to the wishes of the residents of our region.

Take Action!

The California Native Plant Society is asking members to speak up for our desert lands and the unique native flora of these landscapes. We need you to let BLM and desert county supervisors know that Californians want DOI to leave the DRECP alone, that reopening this plan will jeopardize the desert we cherish. It’s important that both the BLM and desert counties know your wishes.

CNPS needs members in Kern, San Bernardino, Riverside, and Inyo Counties to write their local members. Meanwhile, all members statewide should send letters and postcards to the BLM. Go to cnps.org/desert-defense to find talking points, background information, and sample letters. You can also help us distribute our Leave the DRECP Alone postcards by contacting us at cnps@cnps.org to request a package of postcards.

Note: This is a fast-moving issue, and much may have changed by the time this issue hits your mailbox. To see the latest, please make sure you visit cnps.org/desert-defense and follow CNPS on Twitter and Facebook for updates.

Greg Suba is the director of the CNPS Conservation Program
Vernal Pools in Spring

Early spring is the showy season for vernal pools. Seeds that may have spent a year or more waiting for moisture have sprouted into masses of plants. Now these explode into blossom for just a few weeks, enticing pollinators before setting seed themselves.

Spring is the most obvious time to visit vernal pools. “Vernal” means “spring,” after all. Some public reserves offer tours during these months (see list on page 15). But the sites are ecologically important whatever the season, notes Carol Witham, a CNPS Fellow and Sacramento-based expert on vernal pools. Witham and Kate Mawdsley co-wrote the new third edition of the Jepson Prairie Preserve Handbook, available online only through CNPS.

What makes a vernal pool?

A vernal pool is a temporary wetland brought to life in fall or winter when rainwater pools in a low spot with impermeable subsoil, such as hardpan, clay, or volcanics. Dozens of species endemic to vernal pools are found nowhere else.

Vernal pools go through three phases during the year:

- **Wet**, when the water collects and the native aquatic fauna are busy mating and laying eggs. Migratory waterfowl often can be seen at vernal pools during this season.
- **Flowering**, usually just a few weeks in spring when the water begins to evaporate and the plants bloom in vivid rings of color around the ponds.
- **Dry**, which is most of the year, when a vernal pool can look like dead grassland. This period of desiccation is what makes vernal pools unique, as the native species have adapted to reproducing despite the harsh cycle of wet and dry. But even when the pool is dry, other organisms remain active in the habitat, including snakes, insects, pocket gophers, and voles.

California’s Mediterranean climate fosters vernal pools, but today’s experts estimate that 90 percent of the state’s vernal pools have been lost to development or agriculture. The ones still with us have existed for many thousands of years.

BY KATHY MORRISON

Top: Jepson Prairie walk. (Photo: Teri Engbring) Above: Prairie bells (Fritillaria liliacea) at Jepson Prairie (Photo: Raymond Proth) Bottom: Mather Field vernal pools. (Photos courtesy of David Rosen/Sacramento Splash.)
The CNPS staff has several vernal pools projects. These include finalizing a 15-year vegetation classification program, assessing rarity rank for vernal pool types, and expanding outreach on the importance of vernal pool conservation.

Regions With Vernal Pools

The greatest concentration of vernal pools is in the Central Valley, but they also exist in the Coast Ranges, Sierra Valley, Southern California coastal regions, and northwest Baja California (see accompanying story). Most are on private property, says Witham, who has seen many as a consultant on restoration and mitigation. Fortunately, a number of vernal pools in California are open to the public. Jepson Prairie Preserve is among the most accessible. About 35 miles southwest of Sacramento, the 1,556-acre site is administered by the Solano Land Trust.

Vernal pools began to attract public attention in the 1980s, Witham says. The issue then was whether the Clean Water Act covered the pools as wetlands. But the push to preserve sites began in earnest in the 1990s, when four types of fairy shrimp and 11 plants were listed under the Endangered Species Act. The ESA has a much higher standard for environmental effects than the water regulations, she explains. However, some of the recent loss of vernal pool habitat is from conversion of rangeland to hardscape agriculture such as vineyards, Witham says.

A lot of mitigation is happening, she says. “But these sites are 100,000 years old or more. You can’t recreate that in just a few years.” Consequently, mitigation tends to focus on specific things, sometimes just fairy shrimp habitat, Witham explains. “This is why CNPS fights for really pristine landscapes — you can’t replace them.”

The CNPS staff has several vernal pools projects. Vegetation ecologist Jennifer Buck-Diaz says these include finalizing a 15-year vegetation classification program, assessing rarity rank for vernal pool types, and expanding outreach on the importance of vernal pool conservation.

“Vernal pools are wetland jewels embedded in our California landscapes,” says Buck-Diaz.
Preservation and protection:

Baja Vernal Pools

BY KATHY MORRISON PHOTOS BY JIM RILEY

Jim Riley is not trying to save the planet. He just wants to preserve one unique corner of the world.

“These little microhabitats, they’re just curiosities,” says Riley, who founded Jardín Botánico San Quintín (San Quintín Botanic Garden) on a Baja California mesa about 72 miles south of Ensenada, Mexico. The mesa’s vernal pools especially intrigue Riley. In his recently published guidebook, Vernal Pools and Their Plants, Riley describes them as “a ballet of birth, life and death by a complex, competing cast of unique players, players often found nowhere else on earth.”

Northwest Baja, at the southern end of the California Floristic Province, is home to the only vernal pools in Mexico. These temporary wetlands come alive after rainfall, but the spring flowering doesn’t offer the showcase that the Central Valley sites do. “They’re spectacularly uncharismatic most of the year, even in full bloom,” Riley says.

The key collection of these vernal pools, the Medina Complex, is protected in a 114-acre reserve owned and managed by the JBSQ. In an area heavily used for agriculture and cattle grazing, it is the sole complex on Baja’s Mesa de Colonet that has never been plowed. The reserve has dozens of vernal pools and significant populations

Places to See

Vernal Pools in the Spring

Fort Ord National Monument, Monterey County. The Bureau of Land Management public lands on the former Army base include about 45 vernal pools. The endangered Contra Costa goldfields (Lasthenia conjugens) has been found at four of the pools. The national monument is open daily from 1/2 hour before sunrise to 1/2 hour after sunset. For directions and a trail map: www.blm.gov/visit/fort-ord-national-monument

Jepson Prairie Nature Preserve, Solano County. Docents conduct “Wildflowers & Water Critters Walks” at 10 a.m. every Saturday and Sunday from March through Mother’s Day. Registration is not required; donations are encouraged. Self-guided tours are permitted at other times, with more limited accessibility. Information: solanolandtrust.org

Mather Regional Park, Sacramento County. This county park on the former Mather Air Force Base site east of Sacramento includes vernal pools. The nonprofit education group Splash conducts public vernal pool walks in the spring: Critter Walks on some March Sundays and Flower Walks on selected April Sundays. Registration is required. The Splash Center is at 4426 Excelsior Road, Mather. Information: www.sacsplash.org

Rancho Seco Howard Ranch Trail, southeastern Sacramento County. The seven-mile round-trip trail is part of the Rancho Seco Recreational Area on Sacramento Municipal Utility District (SMUD) land. It offers views of vernal pool grasslands as well as riparian and marsh habitat. No dogs allowed on trail. Entrance open 7 a.m. to 6 p.m. April through October; 7 a.m. to 3:30 p.m. the rest of the year. $12 parking per vehicle. Information: www.smud.org/en/Giving-Back-to-Community/Visit-Our-Recreational-Areas/Rancho Seco

Santa Rosa Plateau Ecological Preserve, Murrieta, Riverside County. The 9,000-acre preserve includes a number of habitats including vernal pools. The vernal pools are on a mesa in the southwest corner of the preserve. Trails open daily for hikes sunrise to sunset. Visitors can view the largest vernal pool via a boardwalk. Walking fee is $4 cash for adults, $3 for children. Visitor center open 9 a.m. to 5 p.m. Tuesday through Sunday. No dogs permitted on the Eco Reserve trails. Information: www.rivcoparks.org/education/santa-rosa-plateau

Vina Plains Preserve, Tehama County. The Nature Conservancy manages this 4,600-acre preserve 13 miles north of Chico. The vernal pools here are underlain by volcanic rock hardpan. The preserve is on a working ranch and public access is limited; call (530) 527-4261 for information, tour signups and directions. The Mount Lassen Chapter of CNPS also sometimes offers spring walking tours; check the chapter website for an updated calendar.
of endemic plants. One of these, the Colonet tarplant (Centromadia perennis), is found only in Colonet Mesa; three are listed in the United States as endangered.

The lure of Baja vernal pools
Reid Moran, curator of botany at the San Diego Natural History Museum in 1957-82, was an early expert on northwest Baja’s flora, Riley says. More recently, Matt Guilliams, botanist at the Santa Barbara Botanic Garden, has led the research in the region.

Riley’s background is business, not botany. “My story’s kinda interesting,” he says. An avid backpacker, he had long sought a deeper level of engagement with the environment. While surfing Trestles, at San Onofre State Beach, he became aware of non-native plants encroaching on the watershed. He founded a habitat restoration nonprofit and staffed it himself for a few years.

But Riley says he eventually soured on short-term restoration because of the intensity of the invasive-plant seedbank. Looking southward, he thought he could be productive in Baja California, where at first he worked in biodiversity at Reserva Natural Valle de Tranquilo. Jorge Montiel Molina, a graduate student in Ensenada, told him, “Jim, you should get involved in vernal pools, they’re really cool.”

But it wasn’t until Guilliams took him to see some vernal pools in the active season that Riley became intrigued by these microhabitats with fantastic endemic species. “He called it a playground of the imagination,” Riley recalls.

Montiel came to northwest Baja after earning his biology degree in Mexico City. He fell in love with the coastal culture and soon also with vernal pools. His master’s thesis explored the distribution of nine species of Baja vernal pools flora and their relationship to the soil properties. He cites Guilliams and JBSQ science adviser Sula Vanderplank both as important mentors.

Montiel is now a doctoral candidate at University of California, Merced, a campus next to a prime complex of vernal pools. Doctorates are rare in Mexico, he says, but he realized he would need one to be a leader in his field. “I want to be the first expert in vernal pools in Mexico.” His focus is microbial communities in the pools, work expected to benefit knowledge and survival of the unique habitats on both sides of the border.

“We have aquatic plants becoming terrestrial, and you have terrestrial plants becoming aquatic. How is this?” he notes. And rainfall is intermittent, meaning the pools’ water level can drop and then rise again even as plants are growing. “So my hypothesis is some of these microbes might be helping plants in vernal pools to overcome constant floodings, and also helping the plants to overcome dry conditions.”

Co-founder of Jardín Botánico San Quintín is Jorge Simancas, a conservationist, who also translated Riley’s guidebook. Also on staff are Vanderplank, biologist Susan Alfaro (another translator on the guidebook) and botanical biologist Josué Campos.

Treasures of northwest Baja
As in California, a tiny percentage of vernal pools survive in Baja. The stretch of remaining pools runs from Mesa de Jesús María, which is east of Tijuana, through the Valle de Guadalupe near Ensenada to Colonet Mesa, and

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Centromadia perennis, far left, is found only on Colonet Mesa. Centromadia parryi subsp. australis, left, has a range into Southern California.

Pogogyne mexicana is endemic to Valle de las Palmas.
finally to Charca Mesa Trece. Most of these are at risk of development or from non-native species moving in where agricultural activity has receded. The habitats in Valle de Guadalupe, Mexico’s “Napa Valley,” are under particular pressure from the growth of the wine industry, Riley says.

The Medina Complex on Colonet Mesa is the jewel among the northwest Baja pools and where Riley has focused his work, creating the Reserva Natural de Charcas Vernales in 2017. The mesa overlooks the Pacific Ocean, a dramatic setting shown to great advantage in JBSQ’s 3-minute video on the reserve. Charcas Vernales Baja California can be viewed on vimeo.com. The film shows the pools at different times of year, with closeups of rare plants in bloom, such as spreading navarretia (*Navarretia fossalis*), a 1B.1-ranked plant in California.

Agricultural fields still border the east and south sides of the reserve. “They ran out of water,” Riley says, explaining why Medina was never plowed. The fences installed around the 114-acre reserve keep out grazing cattle. Native flora at the complex also include San Diego button-celery (*Eryngium aristulatum* var. *parishii*), California Orcutt grass (*Orcuttia californica*), and annual hairgrass (*Deschampsia danthonioides*). Rescued agaves were planted at the reserve site. Non-native crystalline iceplant is targeted for removal.

Other pools not in the reserve but on the mesa are in the midst of grazing land. Charca Rancho is the only Baja vernal pool in which a majority of the upland plants surrounding it are native species. JBSQ has a lease and is trying to buy the site, Riley says. He believes strongly that conservationists should focus more on conservation and less on study. “Instead of a rush to document, there should be a rush to save it,” he says.

Growing and thriving

The Jardín Botánico San Quintín is an Asociación Civil, the equivalent of a nonprofit organization in the U.S. It is funded by the founders and a few of their friends, Riley explains. The garden showcases more than 100 native northwest Baja plant species, most of maritime succulent scrub habitat. The flora range from dune sun cup (*Eulobus crassifolius*) to Anthony’s liveforever (*Dudleya anthonyi*). A café also is on site. Anyone is welcome to visit and explore the habitats, even on land not owned by JBSQ, Riley says. “No one minds. Most of the land is fallow.” Visitors might have to watch out for cattle, he notes.

In his guidebook on the Baja vernal pools, Riley quotes Guilliams in what may be the best explanation for saving these microhabitats:

“Vernal pools do not contribute to millions of acres of undisturbed open space, they are not ecologically dominant, and perhaps they are not charismatic like a butterfly or whale. Nevertheless, each endemic species in vernal pools represents one particular solution to life on the planet — a solution that has allowed against all odds flowering plants to survive millions of years of possible extinction events. Each of these lineages is absolutely precious and irreplaceable.”
The California flora is vast and offers myriad choices, making it fun and easy to establish year-round color. The first step is to assess your site’s climate, soil, sunlight, and space. Next, you can mix and match plants that will thrive in those conditions.

Two important things to remember:

1. Flowering times may vary slightly from year to year, depending on the weather, and often cross more than one season.
2. Foliage, bark, fruit, and seed also add color. Integrate their dramatic shades into your design and your expectations.

The big payoff: A year-round display of flowering and fruiting natives attracts and supports songbirds, hummingbirds, butterflies, bees, and other welcome wildlife, enhancing your outdoor experience and boosting pollination.

For more ideas and inspiration, plus details on the plants listed here, I recommend *California Native Plants for the Garden*, by Carol Bornstein, David Fross and Bart O’Brien (Cachuma Press, 2005), available at [store.cnps.org](http://store.cnps.org). You can also visit [Calscape.org](http://Calscape.org) to search for native plants in your area by flower color and blooming season.

**Featured expert:**

Lili Singer  
of the Theodore Payne Foundation for Wild Flowers & Native Plants

What’s your advice for creating year-round color in my California native garden?

Lili Singer is a horticulturist, educator and writer. She is director of special projects and adult education at the Theodore Payne Foundation for Wild Flowers & Native Plants in Sun Valley, CA.

**What’s your advice for creating year-round color in my California native garden?**

The California flora is vast and offers myriad choices, making it fun and easy to establish year-round color. The first step is to assess your site’s climate, soil, sunlight, and space. Next, you can mix and match plants that will thrive in those conditions.

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**Other Great Sources of Color!**

- Leaves
- Bark
- Fruit
- Seeds

Go to [blog.cnps.org](http://blog.cnps.org) for a complete list of Lili’s recommendations!
IN THE GARDEN

FLORAL STARS BY SEASON

FALL

California fuchsia, (Epilobium) - Tough subshrubs and perennials with vivid red or orange (or occasionally white or pink) flowers and silver, gray or green leaves. Good choice for slopes and sun-drenched gardens. Flowers are the most important food source for hummingbirds in late summer and fall.

More ideas: Coyote brush (Baccharis), monkey flower (Diplacus), coyote mint (Monardella), California goldenrod (Solidago californica).

WINTER

Manzanita (Arctostaphylos) - Popular shrubs and groundcovers with legendary red bark and small, nodding white-to-pink blossoms followed by showy red-tinged fruit. Hummingbirds depend on the winter blooms. Some manzanitas start flowering in late autumn; others in winter or early spring. Plant more than one species or cultivar for a long season of color.

More ideas: Barberry (Berberis), coast silk-tassel (Garrya elliptica), Baja birdbush (Ornithostaphylos oppositifolia), currant and gooseberry (Ribes), lemonade berry (Rhus integrifolia), and sugar bush (Rhus ovata).

SPRING

California lilac (Ceanothus) - Fast-growing shrubs and groundcovers with handsome foliage and clusters of small, honey-scented flowers in virtually every shade of blue or sometimes white. Some species and cultivars flower earlier than others; plant more than one for color from late winter into spring. Very popular with bees and butterflies.

More ideas: Common yarrow (Achillea millefolium), purple three awn (Aristida purpurea), western columbine (Aquilegia formosa), western redbud (Cercis occidentalis), monkey flower (Diplacus), flannel bush (Fremontodendron), iris (Iris), alum root and coral bells (Heuchera), lupine (Lupinus), penstemon (Penstemon), matilija poppy (Romneya), sage (Salvia), plus native bulbs and annual spring wildflowers.

SUMMER

Buckwheat (Eriogonum) - A large, diverse genus with varied forms and ornamental foliage that ranges from bright green to olive to silvery white. Tight clusters of white, pink, red, or yellow blossoms open late spring through summer, and then fade to shades of rust, brown and black. Attractive year-round and sure to attract insects and other pollinators.

Also: Desert willow (Chilopsis linearis), brittle bush (Encelia farinosa), sacred datura (Datura wrightii), golden yarrow (Eriophyllum confertiflorum), gum plant (Grindelia), toyon (Heteromeles arbutifolia), chuparosa (Justicia californica), ‘Silver Carpet’ California aster (Lessingia flaginifolia ‘Silver Carpet’), alkali sacaton (Sporobolus airoides).

REPEAT BLOOMERS

Consider these flamboyant long-flowering beauties: Indian mallow (Abutilon palmeri), fairy-duster (Calliandra), bush poppy (Dendromecon), coast sunflower (Encelia californica), seaside daisy (Erigeron), bush snapdragon (Gambelia), tree mallow (Lavatera), bladderpod (Peritoma arborea), apricot mallow (Sphaeralcea ambiguca), blue witch (Solanum), woolly blue curls (Trichostema lanatum), lilac verbena (Verbena lilacina).

Don’t rush to deadhead!

Leave spent inflorescences to dry on the plants. They add sculptural accents and provide seed for birds and other critters.
When Jeff Silva and his wife purchased their California bungalow house in 2010, he had no gardening experience. Yet he knew he wanted to try something different and creative that would attract wildlife to the garden. He wanted to bring home the sights and smells from the California trails he hiked, as well as conserve water.

After sheet mulching the lawns in the front and back, Jeff began experimenting with California native plants. He researched native plants in books and online, and visited local native gardens to get ideas. He gained inspiration from hikes all over the state, including the Channel Islands. Jeff also took trips to various native botanical gardens, and found the Regional Parks Botanic Garden in Berkeley particularly inspirational.

Through the years the garden has evolved, with some plants lost, each a lesson learned. But Jeff has found it to be an incredibly rewarding experience. He has enjoyed opening his garden four years in a row for the Going Native Garden Tour, put on by the CNPS Santa Clara Valley Chapter, and he takes the most pleasure in seeing happy garden visitors, both human and animal.
Jeff’s favorite California native plants

- **Manzanitas** (*Arctostaphylos*) for their bark, winter blooms, and evergreen leaves.
- **Buckwheats** (*Eriogonum*) because of their attractive foliage, long-lasting blooms, and ability to attract pollinators.
- **Cleveland sage** (*Salvia clevelandii*) for its amazing scent and impressive spring floral display.

**About the Garden**

**Size**

1,500 square feet

**Design and Installation**

Jeff initially had help from a landscape designer, but the current configuration is primarily his vision. While a contractor helped with the hardscaping, Jeff enjoyed the planting.

**Style inspiration**

The front yard has a rock garden feel that was heavily influenced by vegetation Jeff saw off trails in Half Moon Bay, Montara, and the San Bruno Mountains. It includes many coastal bluff and sage scrub plants, along with a small Channel Islands section. The backyard has a California bungalow feel with a shady section of woodland plants, and a sunnier area comprising mainly chaparral plants. Fruit trees are intermixed with natives such as manzanitas, ceanothus, flowering currants, grasses, and more.

**Go-to native plant nurseries**

CalFlora, Watershed Nursery, Oaktown Nursery, and Yerba Buena Nursery.

**Irrigation**

Jeff uses a combination of a drip system and hand-watering as needed during the dry months.

**Wildlife spotted**

Birds, bees, squirrels, and various insects.

**Favorite element**

All the plants embedded in the front yard rock wall, especially the *Dudleya* and *Lewisia*. Jeff also enjoys the shady retreat in the back yard.

**Biggest challenge**

The tendency to overplant and try to include the showiest of plants, regardless of mature size.

**Advice**

When conceptualizing a garden, really take into consideration the mature size of plants to avoid needlessly having to remove plants in the future.
With ever-growing uncertainty about federal funding support for research, new and experienced scientists alike have had to explore novel and creative possibilities to gain financial support. At times like this, CNPS Chapter Scholarships can help fill an important need for local students and researchers. Not only do these scholarships provide concrete financial assistance, they also create valuable long-term opportunities for recipients and the CNPS community as a whole.

**EXPERTISE** Students that receive chapter scholarships are immediately welcomed into an active and engaged community of botanists. Students can learn from that knowledge base and benefit from experienced chapter volunteers who can assist with field work, species identifications, or greenhouse experiments.

**CAREERS** Chapters connect scholarship recipients with local land managers and conservation staff, creating relationships that improve the students’ chance of project funding, long-term support, or even future employment. Students are able to demonstrate their skill and interest while garnering input from people currently engaged in land management. This partnership helps ensure a student’s findings are use in environmental analysis and can springboard students into internships, collaborations, or careers.

**COMMUNITY** Chapter scholarships bring universities, community colleges, and CNPS together. These next-generation members (and volunteers!) establish enduring relationships that benefit the entire community. Newly-engaged scientists help increase attendance at monthly programs, field trips, and volunteer work parties not just through their own presence but by inspiring others to engage with CNPS chapters. Our chapter scholarship recipients are wonderful role models for elementary and secondary education students aspiring to learn more about native plant science, conservation, and gardening. For example, after the establishment of the North Coast Chapter scholarship, student attendance at monthly programs nearly quadrupled. The students that attend these meetings bring an engaging presence and aptitude for learning that is contagious.

**Who Can Apply?**
Currently, at least 12 different CNPS Chapter Scholarships are offered throughout the state and cover a range of goals, including: research of native plants, plant community conservation, plant ecology, plant community restoration, plant systematics, and other research-related botanical studies of native plants. Although most scholarships go to graduate students, our hope for the future is that chapters encourage high school students or community members to apply for projects like horticulture studies or garden projects. As an example, a recent DeDecker award was granted for the installation of a native plant garden at Big Pine High School in Inyo County, honoring Alice Piper, a Native American who successfully worked to gain entry for Paiute Tribe members to public schools.

From our perspective, there is no greater satisfaction than seeing students develop project ideas and then gain the support to bring them to fruition.

### Featured Student Scholarship Recipients

<table>
<thead>
<tr>
<th>Name</th>
<th>Chapter</th>
<th>Research</th>
<th>Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jean-Paul E. Ponte, CNPS North Coast Chapter</td>
<td>Pollinators of the Siskiyou iris (\textit{Iris bracteata})</td>
<td>“The North Coast Chapter CNPS Student Scholarship provided an opportunity to study something that I am truly passionate about. Without this financial support, my research would have been less successful or not even feasible! The support was priceless.”</td>
<td></td>
</tr>
<tr>
<td>Rachael L. Olliff Yang, CNPS East Bay Chapter</td>
<td>Phenology shifts with climate change</td>
<td>“These scholarships helped me purchase temperature recording ibuttons and fencing to exclude cattle from my research plots. This infrastructure was critical for my research and allowed me to get started quickly in the first year of my Ph.D.”</td>
<td></td>
</tr>
<tr>
<td>Sophia Winitsky, CNPS San Gabriel Mountains/Bristlecone Chapter</td>
<td>Floristic inventory of the Adobe Valley and surrounding hills in Mono County, CA.</td>
<td>“Due to the grants available through CNPS, I was able to maximize my time in the field, leading to an overall more robust understanding of the flora and granting me the opportunity to find plants that would have remained dormant in other, drier years.”</td>
<td></td>
</tr>
</tbody>
</table>
These next-generation members (and volunteers!) establish enduring relationships that benefit the entire community.

Did You Know?
The California Native Plant Society also offers a number of student research grants statewide. Application deadline is Oct. 31 each year. To learn more, please go to [www.cnps.org/cnps/education/grants.php](http://www.cnps.org/cnps/education/grants.php).

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**CNPS Chapter Scholarships At-a-Glance**

Go to cnps.org/scholarships for more details and information.

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Amount / Range</th>
<th>Focus</th>
<th>Applications typically due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alta Peak</td>
<td>Project Grants</td>
<td>$250-500</td>
<td>Native plant education, conservation or restoration</td>
</tr>
<tr>
<td>Bristlecone</td>
<td>Mary DeDecker Grant</td>
<td>up to $1000</td>
<td>Relevant to the native plants of the northern Mojave Desert, Sierra Nevada, and Great Basin portions of eastern California</td>
</tr>
<tr>
<td>East Bay</td>
<td>Scholarship Fund</td>
<td>up to $1000</td>
<td>For students at East Bay colleges and universities for the study of California Native plants</td>
</tr>
<tr>
<td>Milo Baker</td>
<td>Merit Scholarship</td>
<td>$500-1000</td>
<td>Research relating to native plant conservation, restoration, or other native plant studies</td>
</tr>
<tr>
<td>Marin</td>
<td>Ken Howard Scholarship Award</td>
<td>up to $1500</td>
<td>Research on plant systematics, plant ecology, plant physiology, plant community restoration</td>
</tr>
<tr>
<td>North Coast</td>
<td>Research Scholarship</td>
<td>up to $1500</td>
<td>Encourages learning about native plants in Humboldt, Trinity, Siskiyou and Del Norte counties</td>
</tr>
<tr>
<td>Orange County</td>
<td>Grants</td>
<td>$150-1000</td>
<td>Multiple grants for field research, native horticulture, and K-12</td>
</tr>
<tr>
<td>San Luis Obispo</td>
<td>Malcolm McLeod Scholarship Fund</td>
<td>up to $1500</td>
<td>Encourages the study of botany by providing financial support to outstanding students in our region</td>
</tr>
<tr>
<td>Shasta</td>
<td>Scholarships</td>
<td>up to $2000</td>
<td>Local area students entering 4-year college with a natural science major</td>
</tr>
<tr>
<td>San Gabriel Mountains</td>
<td>Grants Program</td>
<td>Up to $1000</td>
<td>Students and others with research projects furthering the conservation of Southern California flora</td>
</tr>
<tr>
<td>Santa Clara Valley</td>
<td>Student Research Grant</td>
<td>up to $1500</td>
<td>Topics related to native plant and native habitat conservation in the San Francisco Bay Area</td>
</tr>
<tr>
<td>Willis Linn Jepson</td>
<td>College Scholarship</td>
<td></td>
<td>For college students who reside in Solano County</td>
</tr>
</tbody>
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Meagan Oldfather, CNPS Marin County Chapter

**Research:** Ecological and evolutionary mechanisms that shape current and future species range limits.

“The CNPS scholarship supports the effort of analyzing the spatial and temporal trends in alpine plane communities observed in the GLORIA Great Basin dataset, as well as gives me the opportunity to spread the word about the need for volunteer botanists for GLORIA Great Basin.”

Margot Valerie Buchbinder, CNPS Santa Clara Valley Chapter

**Research:** Physical and ecological impacts of active revegetation on a salt marsh restoration site

“This scholarship has been invaluable to the success of my research, not only as a financial resource to pursue my research and graduate studies, but as a means to disseminating my research. I greatly enjoyed sharing my research at a CNPS Santa Clara Valley Chapter Meeting, and I look forward to more opportunities to continue to interact with the CNPS community.”

Joy England, CNPS Bristlecone Chapter

**Research:** Documenting the vascular plant flora of the Upper Rock Creek watershed

“The funding I received from the Mary DeDecker scholarship helped provide field supplies and equipment, in addition to travel costs for the 600-mile round trip back and forth from Claremont to Rock Creek, including cross-country backpacking.”
Tucked away at the northern tip of the Sierra Nevada, the Feather River watershed is a land of varied habitats. Although it is primarily in the Sierra Nevada, portions of the watershed also drain the southern Cascades from Lassen Volcanic National Park and a portion of the Great Basin Floristic Province from Sierra Valley. The relatively mild climate of the area interacts with high topographic and geologic complexity to give this watershed some of the highest ecological diversity of any Sierra Nevada watershed. In this transitional region — rich with botanical diversity — lies the Feather Falls Scenic Area.

Although the 410-foot Feather Falls is the main attraction, the Feather Falls Scenic Area also boasts a diverse and unique northern Sierra Nevada flora. Many of the native plants in the scenic area are near the northern edge of their geographic ranges. Several narrowly endemic plant taxa found solely in the Feather River watershed can also be found here. A good representation of the unique flora and landscapes of this scenic area can be seen from the challenging, but rewarding, Feather Falls Trail.
Along the Trail

The Feather Falls Trail is a 9-mile loop that passes through several habitats to and from the falls. From the trailhead, the upper trail initially traverses slopes covered in mature mixed conifer forest with exceptionally large California nutmegs (*Torreya californica*) and Pacific madrones (*Arbutus menziesii*). Dry, brushy slopes on south-facing exposures along the upper trail are dominated by sticky white leaf manzanita (*Arctostaphylos viscida* subsp. *viscida*) and also contain the rare True’s manzanita (*Arctostaphylos mewukka* subsp. *truei*; CRPR 1.4.2). Beautiful displays of Mosquin’s clarkia (*Clarkia mosquinii*; CRPR 1B.2), endemic to the Feather River watershed, red ribbons (*Clarkia concinna*), and sticky monkeyflower (*Diplacus grandiflorus*) are also common on dry slopes along the trail.

The airy falls overlook provides dramatic views of Feather Falls and the unique vegetation communities clinging to the sheer canyon slopes. If you choose to extend your hike upstream of the falls, you may be able to find patches of fern-leaved monkeyflower (*Erythranthe filicifolia*; CRPR 1B.2), another Feather River watershed endemic, growing in mossy ephemeral seeps over exposed granite.

Returning from the falls, the lower trail passes through the cool, mesic drainage of Frey Creek where you can glimpse the cascading creek between large canyon live oaks (*Quercus chrysolepis*) and Douglas-fir (*Pseudotsuga menziesii*). Sierra bluegrass (*Poa sierrae*; CRPR 1B.3) can be found on shady slopes at several points along the lower trail. Also keep an eye out for several flat granite boulders with Native American grinding mortars, symbols of the rich cultural heritage of this area.

The Mount Lassen Chapter of the California Native Plant Society leads hikes on the Feather Falls trail in some years, and a flora of the trail was published by the late Vern Oswald (The Chico State Herbarium). The hike can be enjoyable any time of year outside the hottest part of the summer, but try to go in late spring if you want to catch the peak wildflower display.

Tim Hanson is a botanist in Chico who enjoys exploring the wild places of northern California and sharing California native plants on Instagram @the.wilds.and.woods.

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1. California Rare Plant Rank

Bryophyte beauty on display. Pictured here: Wallace’s spikemoss (*Selaginella wallacei*).
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- Zayante Sandhills Conservation Bank

Many others contributed to the conference and helped make it a success. To see our full conference recap and acknowledgements, please visit blog.cnps.org

#CNPS2018  CONFERENCE.CNPS.ORG
At CNPS, we like to think of the native plant movement as one guided by both head and heart. Our mission is one driven by science, education, environmental protection, and horticultural expertise. Yet it’s also powered by inspiration and beauty, which makes artists an important part of our community.

From Gary Snyder and Tom Killion to emerging artists like Tina Curiel of Coyote Brush Studios (featured in our last issue of Flora), artists play a vital role in reaching new audiences and creating a platform for discussion. That’s why we make art a prominent part of the CNPS Conservation Conference. Every three years, we invite artists, photographers, musicians, and poets to share their work celebrating California Native plants.

This year, our art and photography contests included 176 pieces from more than 60 artists and photographers. Panels of judges scored the work in photo and art competitions. We also debuted a botanical tattoo contest, giving people a chance to tell the meaningful, personal stories behind their body art. We’re pleased to share this year’s winning pieces. Thanks to all who participated!

Elizabeth Kubey joined CNPS in 2017 as a primary organizer of the CNPS 2018 Conservation Conference. She graduated from UC Berkeley with a bachelor’s in Society and Environment and a minor in Art Practice. Before CNPS, Elizabeth worked as an outdoor science instructor in the Sierra Nevada, where she led interactive science lessons and environmental art exercises among native plants. Elizabeth advances environmental causes through art and public programming.
FIRST PLACE AND CONFERENCE CHOICE

Burned Manzanita
Marie Brennan, artist and preservationist
mariebrennanart.com

“I’m deeply honored by this. Getting prize money is a fantastic opportunity to help out some folks whose native plant work I particularly love, like @_native_hummingbird, my daily Instagram inspiration, and the California Oaks Coalition, whose work to protect the oak woodlands is more important than ever. Thank you to everyone who put energy into the conference and of course to the amazing, wise, resilient plants themselves!” – Marie Brennan

SECOND PLACE
Matjila Poppy Seedpod
Olga Ryabtsova
olgaryabtsova.com

HONORABLE MENTION

Fremontia with Yellow Warbler
Estelle DeRidder

Acorn Sprouts
Maria Cecilia Freeman
mcf-art.com

Asclepias fascicularis with Danaus plexippus
Estelle DeRidder

From Cotyledons to True Leaves
Susan Jackson

Upper Bidwell Wildflowers
Erin Hunter
eehunter.com
FIRST PLACE
Fly on a Phleum | Michael Uhler

“I am overwhelmed and so pleased that I am not the only one moved to tears when I see these images. I feel so lucky to be in the company of persons who value what is most important to me. After being a part of your/our conservation conference I am convinced that I am doing the right thing with my limited time on our earth.” - Michael Uhler

SECOND PLACE
Tellima grandiflora | Steve Matson

THIRD PLACE
and Facebook People’s Choice
California Poppy Bud
Judy Kramer

HONORABLE MENTION
Pointing to the Stars
Angelo Di Fusco
Conference Choice

Imprints and Spines
Michael Uhler

Collomia tracyi
Steve Matson

Annie’s Native Garden
Jeb Mckay Bjerke

Dangerous Beauty
Patricia Palavecino

Yosemite Crevice Garden
Michael Uhler

Love of Nature
Coleen Uchida-Tamny
Kristina, can you tell us about what prompted you to make a mid-career change and pursue botany?

I was working in corporate insurance in downtown San Francisco. I had not finished my degree in botany, and got sidetracked into a different career. I remembered thinking, ‘I really needed to get back to my heart,’ which is the study of plants. Just by chance there happened to be a talk by then-CNPS Rare Plant Botanist Rick York about the rare plants of Marin County at the Marin Chapter. I met two women there: Wilma Follette and Phyllis Faber, just wonderful, wonderful women who mentored me in botany. I became involved in the Marin Chapter and never missed a meeting after that, and eventually decided to go back to school. The friendships and the support I felt as a young botanist were really critical to my professional development, and I’ve always been extremely grateful for that.

What inspires you to support CNPS after all these years?

California is truly a special place for biodiversity, and we have the ultimate responsibility to maintain this biodiversity in the face of human population growth and climate change. This is what the 10,000 members of CNPS do. Every day they are out there studying, directing restoration projects, volunteering in groups who remove invasive species, documenting plant populations, and describing new species. It’s a group of people who care passionately about the natural beauty of California.

Why did you decide to become a CNPS Legacy Circle member?

I credit CNPS in guiding me in becoming a botanist! I’m a planned giver because I have a life insurance policy. (My house will go to my children; they’re going to be fine.) And why not? Why wouldn’t I give part of my estate to an organization in which I believe so strongly?

How would you communicate the importance of the CNPS mission to someone unfamiliar with plant conservation?

I would initially ask them what they like about California. People usually say things like, “the beauty.” In Chico, it’s “the trees.” It’s not just the crepe myrtles that make people say, “Oh, I love trees,” it’s the majestic oaks that define our town, that give us that high canopy and this feeling of being in a special place. So, I would ask, what do you see when you go to the natural environment? Don’t you want to conserve that?
Upcoming Events | APRIL - JUNE 2018

California Native Plant Week is April 14 - 22! CNPS chapters have a full schedule of garden tours, wildflower shows, plant sales, and field trips to make this spring our best yet. Go to cnps.org/events to see them all.

CNPS Chapter Plant Sales and Wildflower Shows

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr 7</td>
<td>Sacramento Valley Chapter Plant Sale and Gardening Clinic</td>
<td>sacvalleycnps.org</td>
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<tr>
<td>Apr 11-14</td>
<td>Shasta Chapter Plant Sale</td>
<td>shastacnps.org</td>
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<tr>
<td>Apr 14-15</td>
<td>Napa Valley Chapter Plant Sale</td>
<td>napavalleycnps.org</td>
</tr>
<tr>
<td>Apr 14-16</td>
<td>California Wildflower Show Rancho Santa Ana Botanic Garden</td>
<td>rsabg.org</td>
</tr>
<tr>
<td>Apr 20-22</td>
<td>57th Annual Wildflower Show Monterey Bay Chapter</td>
<td><a href="https://montereybay.cnps.org">https://montereybay.cnps.org</a></td>
</tr>
<tr>
<td>May 4-6</td>
<td>Spring Wildflower Show and Plant Sale North Coast Chapter - Arcata</td>
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<tr>
<td>May 5</td>
<td>Willis Linn Jepson Chapter Plant Sale - Benicia</td>
<td><a href="https://jepson.cnps.org/events">https://jepson.cnps.org/events</a></td>
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Native Plant Garden Tours

Inspiring tours hosted by CNPS chapters and partners

<table>
<thead>
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<th>Date</th>
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<tr>
<td>Apr 7</td>
<td>South Coast Chapter Tour Palos Verdes</td>
<td>sccnps.org</td>
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<tr>
<td>Apr 7</td>
<td>Orange County Chapter Tour</td>
<td>occnps.org/gardentour</td>
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<tr>
<td>Apr 7-8</td>
<td>Going Native Garden Tour Santa Clara Valley Chapter</td>
<td>gngt.org</td>
</tr>
<tr>
<td>Apr 14</td>
<td>Gardens Gone Native Tour Sacramento Valley Chapter</td>
<td>sacvalleycnps.org</td>
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<tr>
<td>Apr 14-15</td>
<td>Garden Native Tour San Diego Chapter</td>
<td>gardennative.org</td>
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<tr>
<td>Apr 15-16</td>
<td>Theodore Payne Native Plant Garden Tour - LA County</td>
<td>nativeplantgardentour.org</td>
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<tr>
<td>May 5</td>
<td>Eco-Friendly Garden Tour Milo Baker Chapter - Santa Rosa</td>
<td>savingwaterpartnership.org/eco-friendly-garden-tour/</td>
</tr>
<tr>
<td>May 6</td>
<td>Bringing Back the Natives Tour East Bay</td>
<td>bringingbackthenatives.net</td>
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Get Involved!

CNPS chapters hold regular monthly meetings, field trips, and restoration work days throughout California. Look up your local chapter and see what’s happening at www.cnps.org/chapters.
UPCOMING EVENTS

Field Trips, Workshops, and More!

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<tr>
<td>Apr 8</td>
<td>Fire Recovery in Action - Join the Milo Baker Chapter at Sugarloaf Ridge to visit recent burn areas and see “fire follower” flowers.</td>
<td><a href="https://milobaker.cnps.org/">https://milobaker.cnps.org/</a></td>
</tr>
<tr>
<td>Apr 16-18</td>
<td>Vernal Pool Plant Taxonomy - CNPS Plant Science Training Program - Davis Area</td>
<td>cnps.org/workshops</td>
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<tr>
<td>May 1-3</td>
<td>Vegetation Rapid Assessment/ Relevé - CNPS Plant Science Training Program - San Luis Obispo area</td>
<td>cnps.org/workshops</td>
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<tr>
<td>May 5-6</td>
<td>Sequoia Moss Walk and Microscope Day - Join the CNPS Bryophyte and Alta Peak Chapters for a two-day intro to mosses and liverworts</td>
<td><a href="https://bryophyte.cnps.org">https://bryophyte.cnps.org</a></td>
</tr>
<tr>
<td>May 9-11</td>
<td>Wetland Delineation - Jepson Herbarium</td>
<td>ucjeps.berkeley.edu/workshops/</td>
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<tr>
<td>May 13</td>
<td>Vernal Pools Natural Preserve - &quot;Complejo Medina&quot;</td>
<td>Baja Chapter</td>
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<tr>
<td>May 19</td>
<td>Bryophytes of the San Gabriels - Paul Wilson on bryophyte basics from Buckhorn Camp down the Burkhart Trail (at 7000 feet)</td>
<td><a href="https://bryophyte.cnps.org">https://bryophyte.cnps.org</a></td>
</tr>
<tr>
<td>Jun 5-6</td>
<td>Intro to Plant Identification - CNPS Plant Science Training Program - Big Bear</td>
<td>cnps.org/workshops</td>
</tr>
<tr>
<td>Jun 9</td>
<td>Audubon Canyon Ranch Walk - See one of CA’s unique coastal ecosystems.</td>
<td><a href="https://milobaker.cnps.org/">https://milobaker.cnps.org/</a></td>
</tr>
<tr>
<td>Jun 23</td>
<td>Brew Wild Beer Festival - Rancho Santa Ana Botanic Garden</td>
<td>rsabg.org</td>
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The Gottlieb Native Garden, a flourishing ecosystem created by Dan and Susan Gottlieb

The Gottliebs are proud supporters of California Native Plant Society.

Complejo Medina in Colonet, Baja CA (Photo: Josué Campos)
THE SCIENCE OF WHERE FOR CONSERVATION

Connect land, people, and biodiversity to help build Sustainable Communities.
ArcGIS can aid in your conservation mission.

esri.com/conservation
Special thanks to Jennifer Jewell of the Cultivating Place podcast for hosting the Native Plant Story Booth at the CNPS 2018 Conservation Conference.

Tune in during Native Plant Week (April 14-22) to hear friends and colleagues share their native plant stories at cultivatingplace.com