The Art of Native Plants
One of the joys of working at CNPS is hearing the amazing variety of stories that people share about California’s native plants. People tell us about plants that bring them delight and spark curiosity, that tie them to their ancestors, that sustain life. Like the diversity of California’s flora, these stories generate new meanings and questions in an ever-evolving dialogue about the place we call home.

Our aim in Flora is to share this abundance with you, and there’s no better time than this month’s California Native Plant Week (Apr. 17-24). To capture that spirit of celebration, our spring edition takes you around the state to meet California artists and their work with native plants. Plants have always been fundamental to human creative expression, both as medium and muse. Plants are “ever-interesting, because they are the most observable foundation for pattern and variation,” says Los Angeles-based painter Miles Lewis in our feature story on page 12. For master weaver Tima Lotah Link (Shmuwich Chumash), California’s native plants are a living connection to the land: “When I weave, my skill, patterns and process all come from a life intertwined with native plants,” she says. “I know their seasons, their strengths and weaknesses, their habitats and families, and most of all, I know they welcome my gifts of water, my songs, my digging, pruning, cutting, tugging, cursing, and laughing.”

We hope you’ll find this issue a sensory feast, from the mouthwatering culinary creativity of Abe Sanchez, a founding member of the Chia Café Collective (page 32), to the immersive, science-informed forest paintings of Andie Thrams (page 4). You’ll also find a common thread through all the stories, exemplified by an interview with John Rowden, senior director of bird-friendly communities at the National Audubon Society on page 22: The better we get to know the plants, animals, and people around us, the more we care about them.

Happy California Native Plant Week!
See what’s happening near you at cnps.org/nativeplantweek.

—Liv O’Keeffe, Editor-in-Chief
and Emily Underwood, Publications Editor
The Art of Native Plants
California artists interact with native plants as media, muse, and habitat

Seeing Forests
An immersion in the forested paintings of Andie Thrams

Common Ground
An interview with John Rowden of the Audubon Society

ON THE COVER: Spring Sky, Botanic Garden by Marcia Burtt

ABOVE: Low canyon Dudleya (Dudleya cymosa ssp. pumila)
Photo: Stephen McCabe
Good News for California Conservation

A close call for the DRECP
In February, the US Department of the Interior reversed the Trump Administration’s plans to amend the Desert Renewable Energy Conservation Plan (DRECP), a first-of-its-kind land management effort built on a decade of collaboration between diverse stakeholders.

The DRECP aims to conserve habitat, biodiversity, and cultural resources, while also making room for renewable energy projects in the California desert. The amendment would have stripped conservation designations and other key protections from millions of acres of desert habitat, and dozens of conservation partners worked together in its recent defense.

Now that the amendment has been halted, California and the Bureau of Land Management “can get back to what is important—focusing on smart, informed energy development that doesn’t threaten pristine and undisturbed desert habitat,” says CNPS advocate Isabella Langone: “We’re especially grateful to Sen. Feinstein, Representatives Ruiz, Lowenthal, and Levin, and the Biden administration for their leadership in helping us protect the careful balance between clean energy and biodiversity priorities in the current version of the DRECP.”

Attorney General joins CNPS lawsuit
California Attorney General Xavier Becerra has joined the Center for Biological Diversity and California Native Plant Society in a lawsuit challenging Lake County’s approval of the proposed Guenoc Valley Mixed Use Planned Development Project. The project is located in an area with high fire risk and a history of wildfire as recent as last year’s LNU Lightning Complex Fire. The lawsuit argues that the current Environmental Impact Report fails to adequately analyze and mitigate the increased wildfire risk and other negative environmental impacts of the project. “Lake County residents have borne the brunt of many of the recent wildfires that have ravaged our state,” said Becerra in a February 1 press release. “They deserve to know that the increased wildfire risks resulting from any new development in their area have been properly considered—and mitigated.”

LEFT: Desert dandelion (Malacothrix glabrata), cutleaf Phacelia (Phacelia crenulata var crenulata), and browneyes (Chylismia claviformis) in Joshua Tree National Park. Photo: Hannah Kang

A better way for wildfire

Wildfire is a natural and necessary part of California’s ecosystems, but extreme fire weather is on the rise. In January, Gov. Newsom proposed an unprecedented $1 billion budget to address wildfire. As California’s legislators consider the Governor’s proposal and other legislative solutions, CNPS is advocating with partners across the state for budget allocations for prescribed fire and cultural burning in forests, community safety measures, home hardening, roadside ignition reduction, and conservation. “CNPS is pursuing a mix of solutions, because there is no one-size-fits-all solution to California’s wildfires; what works in forests may not be appropriate in chaparral or oak woodlands,” says conservation director Nick Jensen. CNPS members can help by asking legislators to support a three-part strategy that includes ecologically sound forest management, community safety, and structural hardening and retrofitting, he adds.

Expanding California’s public lands

Another early spring win for California native plant habitat arrived when the US House of Representatives passed a package of bills known as H.R. 803, the Protecting America’s Wilderness and Public Lands Act. If the US Senate approves the act and President Biden signs it into law, the package would include 570,000 acres of new wilderness designations and 684 miles of Wild and Scenic Rivers. It includes three California bills that CNPS supports, which would improve recreational opportunities in the San Gabriel and Santa Monica mountains, create the Condor National Scenic Trail in the Los Padres National Forest, and increase protections for the Carrizo Plain, among other benefits.

No off-roading in Tesla Park, at least for now

In a victory for habitat conservation, a Sacramento County judge ruled in favor of Alameda County’s challenge to an effort by the California State Parks Department to turn Corral Hollow, also known as “Tesla Park” into a recreation area for off-road vehicles. State Parks has been angling to expand an existing off-road park into Tesla Park for nearly 30 years, an effort opposed by groups including Friends of Tesla Park, the Sierra Club, Indigenous advocates, and the CNPS East Bay Chapter. In January, the court decided that the Parks had failed to prepare an adequate environmental impact report (EIR), forcing State Parks to prepare another document and thus temporarily stalling the project.

Instagram Alliance

The CNPS Yerba Buena Chapter has teamed up with San Francisco-based organizations Literacy for Environmental Justice and Wildfires to Wildflowers to educate the public about the importance of native plants, biodiversity, environmental justice, and a climate-resilient future. Recently they’ve been encouraging people to add their comments on the San Francisco Climate Action Plan. The coalition posts every Wednesday on Instagram under the name Bloom Bay Area. Find their posts: @yerba.buena.cnps @wildfires2wildflowers @lej_ecostewards #BloomBayArea

Record Online Plant Sales

This winter saw healthy online plant sales across CNPS chapters. The CNPS-San Diego Chapter, for example, sold nearly 2,400 plants within just a few days. Almost half the orders were placed in the first hour, a similar pattern to the fall plant sale, which sold out in 24 hours, says chapter director Joseph Sochor. The April pick-up for that sale is one of many local spring chapter pick-ups and sales this spring, which can be found at cnps.org/events and the Events column in this magazine on page 42.
Artist Andie Thrams deciphers forests in a changing world

Whether she’s sitting quietly beneath ancient sequoias or in a streamside willow thicket, Andie Thrams becomes part of the conversation of the forest when she paints. The dialogue moves between untamed joy and grief at the changes a careful observer can’t fail to notice.

Over many years spent painting in diverse forests across California, Thrams has become attuned to changes that occur over many time scales. While she sits, a blossom may open, birds flit, leaves rustle. Returning later, she’ll notice that a tree has fallen and is now sprouting mushrooms. Over the years, she’s noticed when the pace of change—be it from drought, development, or extreme wildfire—seems to be outstripping a forest’s ability to renew and recover.
For Thrams, learning about forests is a natural extension of enjoying and observing them. In recent years, she’s started reaching out to forest ecologists and other scientists to help her understand the changes and processes she’s observing: “I ask scientists, ‘What is something you’d like everybody else to know about forests, that you know?’”

Some answers have challenged Thrams’s aesthetic sensibilities: “It turns out that a lot of the tangled, thickety stuff that I dearly love to wander through and paint, a lot of that is not a good thing,” she says. Much of that dense brush is the result of human fire suppression in the Sierra Nevada, which has led to a buildup of small trees and brush that contributes to catastrophic wildfires in forested areas. The scientists Thrams has reached out to have told her about the dire impacts on forests of prolonged heat waves and longer droughts from climate change. They also talk about what humans can do to care for forests, like strengthening protections for our public lands and supporting native pollinators.

Our feelings about the beauty and fate of forests are as diverse and complicated as forests themselves. Thrams’s art allows for the complexity of human experience to collide and tangle with all the experiences, sensations, and realities of living, changing forests. As you enter her forested worlds, you might find the forest is calling you, too.
Enjoy the forest

The joy that comes from being in a forest can be a wellspring of artistic inspiration. Biophilia, defined by biologist Edward O. Wilson as “the rich, natural pleasure that comes from being surrounded by living organisms,” courses through Thrams’s work. Thrams, who has taught countless art students, recommends that you disconnect from your devices and other distractions when you go outside to draw or paint: “If you sit quietly and get still and observant, your sense of place expands, and your sense of smallness in the big, wide universe sets in.”
Observe the forest

As you observe a forest over time, you may begin to notice hidden worlds. What animals come and go? How does the sunlight shift throughout the day? What changes occur from season to season, like the appearance of flowers or fruit? Thrams teaches her students to look for many different shades of green, ranging from muted olive to bright sap green. Is a tree trunk really “brown,” or the deep maroon of a peeling manzanita? Try to define the many sounds and smells that you encounter, from different bird songs to breezes scented with bay laurel or pine, she encourages. As this sensory information becomes discernible in a forest, you can use any art form you like to celebrate the life around you.

Learn about the forest

Thrams invites all observations and perceptions of change into her art-making, jotting down bird sightings and allowing leaves to leave impressions on the paper. Sometimes the pain of radically altered landscapes, a feeling known as solastalgia, seeps into her process. She may record her shock in written language, weaving words into her brushstrokes and marks.

Her most recent works reflect her outreach to scientists, incorporating her forest experiences and ecological concepts into an outdoor installation of forest prayer flags rendered in sumi ink, found wildfire charcoal, and tree sap. Originating in Tibet, prayer flags traditionally bless the surrounding landscape or guide the wandering journeyer.
On trips to spots she documented decades before, the pain of radically altered landscapes seeps into her process.
Take action

Thrams’s artwork sparks conversations, including internal dialogues that help her make sense of rapidly changing ecosystems and discussions with others about our relationships to forests in the past, present and future. This spring, the California Native Plant Society is hosting the Forever Forest Art Contest, inviting you to explore and express your connection to California forests. The competition is just the beginning of an ongoing conversation with communities and scientists about what makes a forest healthy and resilient. Until May 17, use any media to share what a forest means, feels and looks like to you and submit your work at cnps.org/forever-forests. CNPS will announce the winners of contest categories on the International Day for Biodiversity on May 22. Submissions will be celebrated in a Forever Forest anthology, putting forward a collective vision for healthier forests in our changing world.

LEFT: Field Study, June Morning, 2019. Ink, watercolor, gouache, gold leaf, and acrylic on paper over wood panel.

ABOVE: Art supplies and projects on the forest floor, Mariposa Grove of Giant Sequoias, Yosemite National Park. Photo: Andie Thrams

All images © Andie Thrams. Used with permission. See more of her work at: www.andiethrams.com.
FEATURED STORY

The **ART** of **NATIVE PLANTS**

California Landscape by William Wendt, 1920; from collection of Los Angeles County Museum of Art (www.lacma.org).
At the Autry Museum of the American West in Los Angeles, visitors are frequently stumped by an exhibit displaying four iconic plants that have come to symbolize California: birds of paradise, eucalyptus trees, orange trees, and oaks. When asked which of these plants are native to the state, “nine times out of ten, people guess wrong,” says Sarah Wilson, the museum’s director of education.

Some visitors select orange trees, originally imported to California by Spanish missionaries. Others choose eucalyptus, native to Australia, which arrived during the Gold Rush era. Surprisingly few people select California’s native oaks, despite their foundational role in the state’s ecology and importance to Native cultures as a staple food source, Wilson says.

The visitors’ inability to pick out the oak reflects a disconnect between many Californians and the landscapes they inhabit, she says. It also speaks to popular mythologies that still linger from the era of Western expansion and boosterism, including the notion that “anything can grow here,” and that Californians enjoy an endless summer without seasons, she adds.

by EMILY UNDERWOOD
Landscape paintings like Bierstadt’s were “really meant to get people shaking in their boots,” and were instrumental in promoting the Westward Expansion movement, says Wilson, who trained as an art historian. But like much of the art that followed, these landscapes also show a view of California that largely left out the Indigenous peoples who had lived there for centuries. “It’s as if there are no inhabitants, and the landscape is just ready for white Americans to develop,” Wilson says.

As a museum dedicated to sharing “comprehensive” stories of the American West, the Autry challenges visitors to reconsider what they think they know about the Golden State. Exhibitions of landscape paintings that follow the sublime, monumental style of 19th century painters like Albert Bierstadt’s *Valley of the Yosemite*, or the fecund hills of the California Impressionists sit side by side with the work of Latinx, Black, Asian-American, and Native American artists grappling with a wide array of cultural, political and environmental issues. A current exhibition on the genocide of Native communities, for example, includes work by Cahuilla artist Gerald Clarke Jr., whose multimedia works include a sculptural “branding iron” that references the history of American Indian slavery in early California.

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ABOVE: Valley of the Yosemite by Albert Bierstadt, 1864, from collection of the Museum of Fine Arts Boston (www.mfa.org)

RIGHT: Basket by master weaver Timarah Lotah Link (Shmuwich Chumash). Photo: Timarah Lotah Link
The Autry’s collection of roughly 14,000 Native Californian baskets, woven by a diverse group of both historical and contemporary artists, powerfully demonstrates that California was not empty wilderness before European settlers arrived, and that Native cultures continue to exist and thrive in the state. The baskets are also among the museum’s most popular exhibits, eliciting the most curiosity and enthusiasm, Wilson says. One common query is “How long does it take to make a basket?” “Our answer is generations,” Wilson says. “The plants that you are using, you have to tend them, and they were tended by your great-grandparents, and your great grandchildren will be tending them.”

In 2016, the museum opened two new galleries and an ethnobotanical teaching garden focused on cultural practices for tending the environment, including an exhibit celebrating the work of master basket weaver and activist Mabel McKay, a member of the Pomo Tribe. (McKay’s son was Marshall McKay, a Northern California Indigenous leader of Pomo-Wintun heritage and the first Indigenous chairman on the Autry Museum’s board, who died this January of COVID-19). McKay, who was born in 1907, organized protests against an Army Corps of Engineer-led project that threatened a sedge habitat where weavers had gathered materials for generations, Wilson says. “Her activism woke people up, and was part of the larger American Indian movement.”

Prior to the 2016 renovation, the Autry’s garden held only one species of California native plant. Now, 72 different species of plant flourish alongside educational displays that invite visitors to learn about the plants’ significance for different tribes throughout the state. At first, many people complained because they were used to museum gardens where roses bloom year-round, whereas the native plants growing in the Autry’s garden go dormant for part of the year, Wilson says. Over time, however, the garden has become a conversation starter that engages visitors as much as the art inside, she says. “People have all kinds of questions: ‘Why should I plant my zip code? Can I just go to Home Depot to buy plants? What if I live in an apartment?’”

Kids, in particular, seem to delight in the garden, Wilson says. As the students familiarize themselves with the plants’ smells, textures, and shapes, they also learn that the story of California native plants is one of people, language, and culture. If there’s one message Wilson hopes they take away from the exhibits and garden, it’s that “you cannot separate the story of native plants in California from the story of native peoples. They are one and the same.”

The Autry’s native garden and exhibits invites its visitors into a multidimensional exploration of California. In that spirit, Flora interviewed an assortment of California artists who interact with native plants as media, muse, and human habitat.
Timarah Lotah Link

The Autry Museum has worked with many contemporary Native basket weavers from different California tribes to teach visitors about the plants used for baskets and weaving techniques. One is Timarah Lotah Link (Shmuwich Chumash), a master weaver who worked with the Autry to produce the Emmy Award-winning KCET multimedia series *Tending the Wild.*

Says Link of her weaving: “In my language, I am an ’alaleqwel, a maker, and I am much more than just a textile artist. I am a rich tapestry of human connections—to the past, to the present, and to the future—and my role is an active one. When I weave, my skill, patterns and process all come from a life intertwined with native plants. I know their seasons, their strengths and weaknesses, their habitats and families, and most of all, I know they welcome my gifts of water, my songs, my digging, pruning, cutting, tugging, cursing, and laughing.”

When Link examines a work of woven art, she says she looks past the technical skill of the weaver, focusing instead on the personal marks they’ve left on the piece. “I want to know them,” she says. “It’s a bit like studying a chess board: If a row of weaving went wrong, did they adjust hastily? Patiently? Did they count their patterns out perfectly or let them grow organically? Did they take an unexpected turn in their thoughts and let it lead them to an unexpected form or use?”

“In my language, I am an ’alaleqwel, a maker.”

**THIS PAGE, Left to right:** Baskets by master weaver Timarah Lotah Link (Shmuwich Chumash) made from wire rush (*Juncus acutus*), tule (*Schoenoplectus acutus*), and basket rush (*Juncus textilis*). Photos: Timarah Lotah Link

**OPPOSITE PAGE, left:** Native Plants by Miles Lewis (mileslewisstudio.com). Crayon and watercolor on paper, 2020.

**OPPOSITE PAGE, right:** Mural depicting hummingbirds and other native plant pollinators by Hoi Fei Mok (hoifeimok.jimdofree.com)
Miles Lewis

As an artist, plants are “ever-interesting, because they are the most observable foundation for pattern and variation,” says Miles Lewis, a Los Angeles-based painter and environmental educator. Lewis, who grew up hiking in the chaparral foothills of the Santa Monica Mountains, pairs his work as a professional artist and art teacher with environmental activism and education on climate change, energy efficiency, and species conservation.

Recently, Lewis has found a new love in gardening; after researching local native plants through the Theodore Payne Foundation, he started planting wildflowers like matilija poppies and apricot mallow in his backyard garden. He’s also started making art that’s more closely tied to the California landscape, like this self-portrait, in which he leans against a young oak tree in a meadow full of poppies, baby blue eyes, and five-spot.

This spring, Lewis will complete a new mural on the exterior walls of a city council district office in Reseda, Los Angeles that shows how native oaks support California ecosystems and a wide array of animals, birds, mammals, reptiles, and people. To research what the mural should include, Lewis used Calscape.com and asked a biologist friend to recommend what kinds of creatures and plants are companions to oak trees. The mural will be a jumping-off point for educational programs slated to begin in late spring.

Hoi-Fei Mok

For non-binary artist and environmental justice advocate Hoi-Fei Mok, making art is a way to invite public conversation about how to achieve equity in the era of climate change. As the sustainability manager for the City of San Leandro, their task is to listen to communities across San Leandro and ask what’s needed to weather the increasing burden of power outages, wildfire, and extreme temperatures—all of which disproportionately impact communities of color. Mok is currently working on creating “resilience hubs” for the city, leveraging existing community centers like churches to provide services and resources.

Mok, who has a PhD in environmental science, also hopes to enhance resilience through the use of plants: “I think a lot about trees as an important strategy in cities to provide shade, cut carbon and air pollution, and improve mental health.” The mural of a hummingbird and other pollinators hovering over a heart, which Mok painted on the wall in the city’s public works office, is a reminder “about where my work comes from. It’s heart-driven, it’s community-driven. That’s where I need to be centering—when it gets depressing, who am I?”
Last winter, at the beginning of the pandemic, printmaker Tom Killion pulled out a stack of sketches he’d made over a decade ago and selected the drawing he’d use as the basis for his next big project. He’d completed the sketch in 2010, while camping near the Giant Forest in Sequoia National Park with some friends and his young daughter. While the girls played in camp, Killion wandered among the Sequoia groves until he found an appealing trio. “I really loved this one group because it was so balanced,” he says. “And that little baby tree under the big burn scar was just perfect.”

Over decades of drawing native plants and translating those drawings into woodcuts and prints, Killion has developed what he calls “a visual vocabulary” for California’s flora: a few strokes that can evoke a particular species of plant like coyote brush or sticky monkey flower. “In carving a block, I know just what rabbitbrush looks like, or a little lodgepole pine,” he says. The carving often takes months, so Killion, a former historian and teacher, often listens to audio-books as he works. (While carving the sequoias he listened to *The Overstory* by Richard Powers.) He finished the Giant Sequoias print in May 2020, and by September the edition had sold out. The print will be featured on a UK edition of forest ecologist Suzanne Simard’s nonfiction book *Finding the Mother Tree*.

“In carving a block I know just what rabbitbrush looks like, or a little lodgepole pine...”
“I learned to love the beautiful soft shapes of artemisia and sages, and the almost-human limbs of sycamores.”

Marcia Burtt

When Marcia Burtt was studying art in college and grad school, she focused on figure painting. In those days she felt it was “the only way you could paint from life without getting sneered at.” After graduating she put art on hold while raising three children and working as a typesetter and book designer.

Eventually, she signed up for a figure painting course at the local junior college. One day the model didn’t show up. Burtt looked out the window and painted a landscape instead. The professor liked her work so much he organized a small show, and within a week the landscapes sold, launching her career as a painter and teacher. Burtt became a founding member of The Oak Group, a coalition of painters who donate proceeds from their art sales to California land trusts and open space initiatives.

Burtt’s eye for California native plants developed when she moved into the foothills near the Santa Barbara Botanic Garden, where she often paints. “I found out California flora wasn’t about roses and petunias,” Burtt says. “I learned to love the beautiful soft shapes of artemisia and sages, and the almost-human limbs of sycamores.”

She was inspired to start her own native plant garden, first in their one-acre yard and again when she and her husband Dave moved to a ranch near Santa Maria. These days her garden is “a bit feral,” with vegetables growing in cattle troughs and a riot of native plants. There’s also a grove of young oaks that Burtt and her family planted as acorns two years ago after Dave died. “My grandkids call and ask, ‘What does Grandpa’s grove look like?’” Burtt says, “Some of the trees are four feet tall now.”
Although he comes from a long line of traditional Cahuilla basket weavers, multimedia artist Gerald Clarke Jr., doesn’t want to be stereotyped as any particular type of artist, or limited to a certain material. Instead, he makes art out of whatever objects come to hand, be they road signs, on which he’s inscribed phrases in the Cahuilla language, or branding irons inspired by his family’s cattle ranch. “Gumball machines, beer cans, you name it, I’ll use it,” he says. In one sculpture commissioned by the Autry, Clarke built a five-foot diameter basket out of empty beer and soda cans, a comment on the pervasive alcoholism and diabetes in Native communities. “I’ve made a lot of bad art, but the best things I’ve made came from my personal life,” he says.

Native plants often find their way into Clarke’s pieces. “My family knew where plants grew, where to gather. They were botanists, and they used materials in their home to make something beautiful and useful,” he says. One painting, Our Lady of San Jacinto, centers on a blooming yucca plant, which has strong fibers that the Cahuilla use to make cordage and rope, and edible stems and flowers. An oval halo of ceremonial rattles frames the plant in an arrangement that evokes images of the Virgin of Guadalupe. What should people make of the painting’s subtle nod to Spanish Catholicism and the California mission system that enslaved Native people? That’s up to them, says Clarke, who teaches in UC Riverside’s ethnic studies department. He resists summing up his pieces in a tidy statement. At exhibitions, “I like to take off the name tag that says I’m the artist, and listen to what people say,” he says.

“...

My family knew where plants grew, where to gather. They were botanists, and they used materials in their home to make something beautiful and useful.”
North of Joshua Tree, where photographer Kim Stringfellow lives, grows an ancient desert plant called King clone creosote (*Larrea tridentata*). The plant reproduces by forming exact genetic copies of itself, or clones, and these clones grow in unusually even, rather alien-looking rings. Scientists discovered the rings in the 1970s, while doing an aerial survey to address the potential environmental impacts of oil and energy pipelines through the desert. They now believe that the rings are thousands of years old, and that the plants originated in the Lower Colorado region when the last glaciers retreated, roughly 12,000 years ago.

Through narrative, image, and audio, Stringfellow’s deeply researched work, *The Mojave Project* (mojaveproject.org), tells the story of King clone creosote and explores the perception of the desert as an empty “wasteland,” which makes it a target for extraction and exploitation. A longtime activist as well as an artist, Stringfellow creates work that speaks to the politics that infringe on wildlands such as energy development. “People think of the desert as a wasteland, devoid of vegetation, the perfect place to bulldoze,” she says. But in reality, “the desert is fragile. It can be broken, and once it is lost, it is very hard to recover.”
Common Ground

John Rowden on the connections between birds, people, and native plants

by DAVID BRYANT

When we make our communities bird-friendly, John Rowden says, we create societies that are more sustainable, more equitable and more connected to a sense of place. At the core of these efforts are native plants. As senior director of Bird-Friendly Communities at the National Audubon Society, Rowden leads the Plants for Birds initiative, highlighting the fundamental role of native plants in our ecosystems and their promise in our gardens. His inclusive approach to community science, acknowledged in 2013 by the Obama administration, finds common ground between diverse communities that face pressing environmental challenges. Flora spoke with Rowden about his approach to building partnerships in the use of native plants.

ABOVE: A western tanager (Piranga ludoviciana) in blossoms of blue palo verde (Parkinsonia florida). Photo: Ann Kramer

OPPOSITE PAGE: John Rowden. Photo: Rafael Cardenas
The case is clear that native plants support native birds, certainly in the wild and also in our gardens. You lead Audubon’s Plants for Birds initiative, an effort to encourage gardeners to make the shift to native plants on behalf of birds and healthier communities for all. How did this initiative start?

During the strategic planning process for the National Audubon Society in 2015, we identified bird-friendly communities as a priority for the organization. When I became responsible for that strategy, I said we need to put some framework to it, to think about what that concept actually means. We have this incredible network of chapters and centers and state offices and sanctuaries, so I went out to our network and just talked to them, asking what they’re doing that delivers to birds in their community. With that input, I developed objectives to provide food, shelter, safe passage, and places to raise young for the birds that we share our communities with.

Birds delight in the fruits and seeds of native plants in our gardens. Beyond the edible snacks that native plants provide, what are other ways these species can support birds in our gardens?

Plants provide birds with very direct resources, some of which you identified, including seeds, fruit, and nectar. And plants don’t necessarily need to be native to provide those types of resources. The real, foundational connection is with the insects that our native plants support. The vast majority of our terrestrial bird species, regardless of what they eat as adults, feed insects—particularly caterpillars—to their young. By providing food for insects, which in turn provide food for birds, native plants serve as an incredibly important resource for the full lifecycle conservation of bird species, particularly in our communities. Thinking about this from a phenological [seasonal] approach, we want to be deliberate about what we’re planting so that we’re actually providing resources for birds throughout the year, growing plants that offer seeds, fruit, nectar, insects, and shelter through the seasons.

When it comes to supporting birds in our home gardens, do you have particular recommendations? Are there specific densities, ratios or diversities of native plants that a gardener should consider cultivating to provide optimal habitat and resources for birds?

Rather than thinking about planting a particular species or ratio of native plants, we focus on offering that phenological progression (flower nectar, fruits, seeds) that can support birds throughout the year. If you have a lot of complexity and structure in your yard, you’re going to be able to provide more for birds because there are some birds that will want to forage in the ground cover and there are some that will need that more structural type of bush or tree to roost or nest in. There are also practices that gardeners can implement to support birds, such as not keeping a super neat yard. Leaf litter is important, both for birds’ ability to forage and because caterpillar larvae drop into the leaf litter to pupate. If you’re being very tidy about your yard, you can inadvertently compromise the life cycle of those Lepidopterans and ultimately that food source for birds.

What happens to human communities when we save, restore, and care for local biodiversity, from birds to native plants?

When we make our communities greener, using native plants, when we are welcoming to birds, we bring joy into our lives. People have quantified that in a number of ways, from measuring stress levels to mental health. Importantly, we have to always be careful to think about equitable access to these transformations. Here in Los Angeles with the LA River restoration initiative, the project must offer access to entire communities, not just white folks or people with means. Equitable access needs to always be centered in this work. We can’t just be creating...
beautiful and green and welcoming spaces for a portion of the population. We have to do it for everybody.

How did you get your start in the community science field? What personal experiences have inspired your common-ground approach to this form of engagement?

My approach to community science really clicked for me in New Zealand. I was working for the Kiwi Trust, and through public outreach, learned how to engage and meet communities where they are, and help them figure out where they want to go.

So I’m a white male in New Zealand, but I have this American accent, right? I would go out to these rural places and talk to landowners about kiwi conservation. The biggest threat to adult kiwi birds are dogs. My task was to tackle the dilemma of how to get people to keep their dogs inside at night, which is not part of the culture there. To have an American come over and say, “What you need to do is this” was not a successful strategy. I learned to go out and say, “Hey, I’m just here to listen to what is important to you. What matters in your community? I come from the Kiwi Trust, so you know where I’m coming from, but what matters to you?”

By listening and forging that common understanding, I could get to a place where I could ask “Is this bird important to you? How can we create solutions together that will keep you happy, keep your dog happy, and also allow for the birds to prosper.”

How did you apply what you learned when you returned to the United States?

When I came back to the States and was responsible for all the community science programs at the New York City Audubon chapter, I led with a similar approach. I had questions and inquiries that I wanted to solve, such as what was going on with horseshoe crabs, which are the main food source of many shorebirds during migration. I approach with the question, “What’s important to you?” and we can always find common ground if we listen to each other.

I worked with a lot of different communities in New York. I conducted projects with the power boating community, the South Asian religious community, and the deaf and hard of hearing community, among many others. I did a lot of work in the Bronx and you know, they’re like “Oh, here’s a white guy. I don’t know what he wants.” But as soon as I asked “What do you want? What’s important to you?” they’d be like, “Oh, this is a little bit different.”

Why community science? What paradigms can be changed, what opportunities afforded through empowering the public to engage in scientific research and study?

There are big questions and big problems that need to be solved, and there is a finite number of scientists that can go out and collect data and eliminate those questions. In order to get larger data sets, we have to pursue community science where we can get more people involved, more eyes, more brains, more perspectives.

Community science can deliver more and better results. It also can benefit the community members that are participating. I think the best examples of community science projects—and it’s not always easy—are the ones that are co-created. When I was working in the South Bronx to understand how birds were using the Bronx River, I knew that it’s an important waterway in the community, and I knew that it was compromised. So we had community meetings and asked community members, “What are you interested in learning about in relationship to the Bronx River? How do we co-create ways to study the issues you care about and to understand this environment?”

I think that is a really valuable way to approach it. You get so much more buy-in, you get so much more participation. But importantly, you have to follow through. It cannot be an extractive process. It needs to be, “Here’s what we’ve learned here, so then how does that help us collectively refine the kind of questions we’re asking and what are we interested in learning next?”

What reservations do some people have about community science? How have you overcome these initial barriers?

We’ve been very deliberate about our language around community science. When I started, “citizen science” was the way we referred to it, and both of those words can be challenging for people. Citizen, obviously, in the current and recent political climate has a charged meaning to some, justifiably. And with regard to science, people have told me and continue to say, “I’m not a scientist. I don’t know science.” People are not included in potentially either of those words. I think community science is more welcoming and doesn’t have that potentially negative connotation. But science still can be intimidating. Sadly, science education isn’t necessarily prioritized in this country as much as it should be. We have to dismantle
When we make our communities greener, using native plants, when we are welcoming to birds, we bring joy into our lives.

those barriers to entry that people perceive and work to demystify the misconceptions. You can do that through building trust, listening, and asking questions like, “What matters to you? What don’t you understand? What kind of questions are you interested in?” In breaking down those barriers and perceptions, you can show that science is “cool.” You know, “Let’s go to the beach and count some terns.” What’s not to love about that?

The Central Park incident, where a white woman wrongfully called the police on Black birdwatcher Chris Cooper, ignited an international conversation on the prejudices that Black, Indigenous and people of color experience outdoors. How do these issues unfold and affect community science initiatives? How do you work towards bridging the gap between participation in the natural sciences and diverse representation?

There are a lot of historical inequities and ways that marginalized communities have borne the brunt of environmental degradation and challenges. When I started working in the South Bronx with local high school students, the eBird map around New York had a billion observations in Central Park. There were barely any in the South Bronx. I showed the group of high school students the map and said, “What does that say to you?” And they’re like, “There are no birds around.” I said, “That’s not what it means. It means that no one’s asked you.”

It was empowering for them to say, “Okay, we’re gonna go look at some birds, put these observations into eBird, and see how impactful that is—just in this group, we’re going to double the number of observations of birds in the South Bronx.” Community science can empower members of communities that have been historically marginalized, that have not been prioritized, that have had environmental pollution or industry placed there, to gauge and understand these impacts, and identify solutions. It can actually lead to change in those communities.

How do you answer people who say “I’m here for the birds, not the politics”?

George Floyd’s murder was a moment of reckoning for Audubon, and we have stepped out very strongly in support of Black Lives Matter. We do get a lot of pushback, with demands for us to “Stay in your lane, you’re bird people, why are you doing this?”

Around the insurrection in January we came out with a statement that references the fact that if we don’t
have peaceful transfer of power, we can’t, from a policy perspective, function as a society. You cannot divorce environmental progress from social progress. We can’t operate where there are certain portions of the population that aren’t represented or that don’t feel included. Equity, broadly speaking, has to be centered in the work we do because we all need to be working on these challenges, because they are so big and so intractable, and they affect every community.

Audubon is an organization that has existed since 1905, and for much of its history has been overwhelmingly white. That can’t continue, because we’re just not going to be able to understand or address the challenges that we face if we’re not including everyone in actually trying to achieve solutions. The reason that I have such an amazing team is that nobody that comes from my background. Everyone comes from very different backgrounds, and so we can all think about things differently, bring different perspectives, bring different ideas and create solutions together.

So, I just push back if people say, “Why are you focused on politics and not on birds?” The answer is we can’t focus on birds if we don’t have everyone feeling like they have a stake in this. And it may not be birds that they have the stake in—it may be pollutants in their community, or equitable access to green space. In all cases, there is common ground and a way to co-create together. But everyone needs to have a role and a place at the table.

“You cannot divorce environmental progress from social progress. We can’t operate where there are certain portions of the population that aren’t represented or that don’t feel included.”
MAKE ROOM FOR Gorgeous

Plant California Friendly® and native plants instead of grass. For tips and rebates visit bewaterwise.com.
Cathy Capone started her native garden 25 years ago, around the same time that she joined a local environmental nonprofit called the Tule River Parkway Association (TRPA). The association works to preserve and restore the Tule River, and Cathy—a CNPS board member—soon discovered that its efforts were stifled by a lack of commercially available, local native plants. In 2001, she began to propagate and grow her own, experimenting with what works in Porterville’s summer-dry, low-rainfall climate. Cathy now has a nursery at her home, where she grows plants for TRPA and other residential gardens.

When Cathy started her garden, she realized that she had to adapt to a much different climate than what she was used to on the North Coast, where she grew up. “It made no sense to try to create a piece of Northern California in the southern Central Valley,” she says. At first, she grew plants that created the lush landscape she longed for, but soon realized that these plants could not tolerate the arid climate and scant rainfall and switched to more drought-tolerant plants like chaparral yucca (*Hesperoyucca whipplei*).

**Favorite way to spend time in the garden**

Cathy spends much more time in the garden weeding, trimming, and monitoring her plants’ water needs than she does reclining in her lounge swing. She enjoys weeding and pruning and feels centered when working with plants.
Cathy’s Favorite Plants

Blue elderberry *(Sambucus nigra subsp. caerulea)* quickly grows into a flowering tree up to 25 feet tall, and has berries nearly year-round.

Redbud *(Cercis occidentalis)* branches fill with magenta flowers before the leaves emerge, becoming a bustle of bee and butterfly activity as soon as the flowers open.

Chaparral yucca *(Hesperoyucca whipplei)* is a striking year-round feature of the dry area of Cathy’s garden. Its blue-gray, blade-like leaves provide a visual anchor both in the sunshine and by moonlight.

Tips from Cathy

- Start with easy-to-grow natives as the framework for your garden. (Try CalScape’s advanced search filter for “Very Easy” plants.)
- Make sure to designate hydrozones, or clusters of plants with similar water needs. Stick with plants that are adapted to the zones you create. If you’re going to install irrigation, do so before you plant.
- Look up plant information on CalScape.org and talk to experienced gardeners of natives in your local area.

“It made no sense to try to create a piece of Northern California in the southern Central Valley.”
Dudleya poaching is a serious threat to wild Dudleya populations in California. Officials estimate that hundreds of thousands of Dudleya have been removed from habitats in California, the vast majority of which are exported and sold internationally. Now, California legislators are considering the first bill in the history of the California legislature to focus exclusively on plants. On January 11, freshman Assemblymember Chris Ward (D-San Diego) introduced Assembly Bill 223, sponsored by CNPS, that would make it illegal to harvest Dudleya from land in California without a permit or landowner permission.

Dudleya includes 68 named species, subspecies, and varieties, 42 of which are native to California. Ten are listed as threatened or endangered by the state and/or federal governments and 29 are included in the CNPS Rare Plant Inventory. Mature Dudleya can be decades old, and black market operations sell these specimens for as much as $1,000 each. A portion of the plants for sale are common species, such as bluff lettuce (Dudleya farinosa) but some recent poaching operations have targeted extremely rare species. In 2020, for example, posts on social media suggested that shipments of candleholder dudleya (Dudleya candelabrum), a species restricted to San Miguel, Santa Rosa, and Santa Cruz Islands off the coast of Ventura County, were destined for sale overseas.

Searches of online marketplaces including Etsy and eBay reveal large, mature, possibly-poached plants of numerous rare species for sale, including munchkin dudleya (Dudleya gnomoides), which is known from a single population. The harvest of rare and imperiled species such as these could place them at risk of extinction. The issue has gained international media coverage, including a new documentary, Plant Heist, which debuted at the South by Southwest festival in March.

Assemblymember Ward’s bill establishes stiff penalties for Dudleya poaching, with fines of $5,000 per plant for first offenders. The bill follows similar legislation in recent years that has criminalized the harvest for sale of animal ivory, shark fins, and abalone. The necessity of the bills point to a broader problem: the threats living species face when they become trendy or highly desirable in the commercial market. CNPS is carefully monitoring recent reports of mass-harvesting of white sage (Salvia apiana) in Southern California. Although white sage is important to many Native American tribes for its ceremonial use, commercial demand for the plant has spiked in recent years. Last year, regional park officials caught poachers with 400 pounds of white sage harvested from Etiwanda Preserve in San Bernardino County. In the future, CNPS and partners will be working to secure protections for other plants through legislation.

While AB-223 focuses on Dudleya, the bill helps to highlight how consumer demand can lead to overharvesting, setting plants on a path toward extinction. But stemming the illegal harvest of species is only one part of the solution. An even more important and challenging part of the equation may be to quell demand for poached plants and animals.

For Dudleya, the solution seems superficially easy. Why not just grow the plants in bulk and make them available on the international market? Would that assuage the desire to own large, mature specimens from the wild? Maybe not, but if a conscientious nursery-grown supply coincides with a public education campaign and this legislation, real progress is possible. AB-223 is an important first step that places plants, for the first time, on the same playing field as animals that are being poached in California. This alone is a huge win, and CNPS thanks Assemblymember Ward for making it happen.

**New Protections for Dudleya?**

by NICK JENSEN

illustrations by DAVID BRYANT
Who is Your Mascot?

Every CNPS chapter has a Dudleya mascot: meet yours!

1. Bluff lettuce
*Dudleya farinosa*
- Chapters: Milo Baker, North Coast, Santa Cruz County, Yerba Buena

2. Santa Clara Valley liveforever
*Dudleya abramsii ssp. setchellii*
- Santa Clara Valley Chapter

3. Diablo Range Dudleya
*Dudleya cymosa ssp. paniculata*
- Chapters: East Bay, North San Joaquin

4. Mouse-gray Dudleya
*Dudleya abramsii ssp. murina*
- San Luis Obispo Chapter

5. Gnome Dudleya
*Dudleya gnoma*
- Channel Islands Chapter

6. Marcescent Dudleya
*Dudleya cymosa ssp. marcescens*
- Los Angeles/Santa Monica Mountains Chapter

7. San Gabriel Mountains Dudleya
*Dudleya densiflora*
- San Gabriel Mountains Chapter

8. Fingertips
*Dudleya edulis*
- Orange County Chapter

9. Island green Dudleya
*Dudleya virens ssp. insularis*
- South Coast Chapter

10. Giant chalk Dudleya
*Dudleya brittonii*
- Baja Chapter

11. Chalk Dudleya
*Dudleya pulverulenta*
- San Diego Chapter

12. San Bernardino Mountains Dudleya
*Dudleya abramsii ssp. affinis*
- Riverside/San Bernardino Chapter

13. Chalk Dudleya
*Dudleya arizonica*
- Mojave Desert Chapter

14. Lanceleaf Dudleya
*Dudleya lanceolata*
- Kern County Chapter

15. Limestone Dudleya
*Dudleya abramsii ssp. calicola*
- Alta Peak Chapter

16. Cooper’s Dyssodia
*Dudleya saxosa*
- Bristlecone Chapter

17. Canyon liveforever
*Dudleya cymosa ssp. cymosa*
- Chapters: El Dorado, Mount Lassen, Napa Valley, Redbud, Sacramento Valley, Sanhedrin, Sequoia, Sierra Foothills, Tahoe, Willis L. Jepson
I was a foodie before it was cool to be a foodie,” jokes Abe Sanchez, rattling off a long list of mouth-watering recipes for California’s native plants. Among them: Fried chicken breaded with flour from the beans of honey mesquite (*Prosopis glandulosa*), a spiny, yellow-flowered shrub that shrouds oases and desert washes in Southern California, and a delicious cream soup made from fresh-picked spring nettles, sautéed with shallots and blended with coconut milk. Yum.

Sanchez is a founding member of the Chia Café Collective, an organization dedicated to the revitalization of California’s Indigenous food that published the 2010 cookbook, *Cooking the Native Way*. His interest in food started with a passion for Native basketry, which got him thinking about the edible native plants that people collect, store, and cook in baskets. Soon his interest had blossomed into a full-fledged obsession with gathering, cultivating, and cooking native plants.

Unlike industrial California crops like almonds, these foods grow without any assistance from irrigation, fertilizer, or the other tools of industrial-scale agriculture. Sanchez encourages people to grow their own native plants for food in their gardens, or even in pots on an apartment porch. “The way the world is going now, we have to start looking into sustainable food sources,” he says.

Sanchez wants the world to know that just because a food is healthy, or good for the environment, doesn’t mean it can’t also be delicious. He channels much of his considerable (likely superfood-fueled) energy into revitalizing native plant-based foods in Native communities. At the moment, for example, he and other members of the Chia Collective are consulting with North San Diego County Indian Health Services to help bring traditional foods back for health purposes, like combating diabetes.

Key to the enjoyment of native plants is a little knowledge of how to cook them, Sanchez says. Many spring greens like purslane, dock, and nettle have a slight bitterness to them, for example, but this can be boiled out to make them more palatable. “For greens, you want to get them when they’re nice and young and tender,” he says. “Dock comes up right now in the springtime, and that’s a really good tasty leaf. Lamb’s-quarters is a wild edible that is non-native, but can be made into a pickled food like a sauerkraut.” [Note: Always get permission before gathering native plants not on your property and never eat a plant you aren’t sure about.]
Despite its popularity on health food store shelves, many people don’t know how to prepare chia seeds, another important Indigenous food, Sanchez says. Although store-bought chia (Salvia hispanica) is cultivated and sourced from Mexico, Guatemala and South America, the seeds of native chia (Salvia columbariae) are almost identical in flavor and nutrition. Like many seeds, chia tastes better when lightly roasted. He recommends toasting the seeds quickly in a dry skillet. “Watch it closely because the seeds will pop like popcorn,” he says. Once the seeds are slightly browned, Sanchez will sometimes grind them into flour. (It’s important to refrigerate and use roasted chia soon, because it goes rancid faster than when seeds are whole, he adds.)

For people looking for flavorful native plants that can be easily grown in pots, Sanchez recommends purple-flowered California brodiaea (Brodiaea californica), for example, which has bulbs with a strong onion flavor, winter purslane (Claytonia perfoliata), amaranth (Amaranthus sp.), and dock (Rumex sp.). Cleveland sage (Salvia clevelandii) is another easy-to-grow plant that can thrive in a pot, and yields fragrant leaves and flowers that can be used as a tea or herb. Cactus is another nutritional food source, if you’re willing to handle the spines.

Last year marked the 10-year anniversary of the publication of Cooking the Native Way, and the loss of two beloved original members of the Chia Café Collective, Tongva elder Barbara Drake and Daniel McCarthy. Sanchez is now thinking about the Collective’s future, which has continued to engage in robust educational outreach. “I have some young Native people in mind who I am going to reach out to, and start training,” he says. California still lags behind other regions in its embrace of Indigenous food compared to regions like the Southwest, he says. But the work of the Chia Café Collective and other groups is changing that. “This is just the beginning” of California’s Native food revitalization, Sanchez says.

Just because a food is healthy, or good for the environment, doesn’t mean it can’t also be delicious.
Fire-Resistant Landscaping

Cassy Aoyagi is the president of FormLA® Landscaping, a Los Angeles-based, LEED-certified landscape design company that has added nearly 1.5 million square feet of native plant habitat to Los Angeles. She serves on the board of the U.S. Green Building Council’s thought-leading LA Chapter (USGBC-LA). Several of Aoyagi’s projects include firewise demonstration gardens. For Flora, she agreed to show us around her own garden in the Tujunga foothills, sharing the features that protect it from wildfire, as well as a few that could still use improvement.

by CASSY AOYAGI

Our home base is a little nook adjacent to chaparral, in the city limits of Los Angeles. My husband grew up wandering these mountains and probably knows every trail by heart. He made me love it, even more than the beach where I was raised.

Our garden is our solace, joy, and laboratory. Yet it terrifies those trained to see Los Angeles’ authentic foliage, like our oak trees and desert globemallow (*Sphaeralcea ambiguа*), as dangerous. I don’t blame anyone for misconceptions. For decades, we’ve witnessed non-native hillside grasses like pampas and fountain grasses succumb to fire without understanding our role in placing them in danger’s way. We’ve been mandated to clear “brush” without understanding that the non-native grasses we buy at the nursery become this brush, increasing wildfire danger when they travel to wildspaces where they easily burn.

We’ve heard that native plants “need fire” to propagate, as if this need inspires them to create fire. I do hope to dispel these myths.

To fearlessly love a garden like mine, it helps to understand a few things upfront. Wildfires are spread by embers that fly on the wind, looking for dry fuel. Palm trees and invasive grasses provide it, as do our homes, which are the most combustible and hottest-burning fuel on the landscape. Native foliage, on the other hand? When supported by smart irrigation, that’s hydrated, not the problem some may fear. As for needing fire…native plants do like it, infrequently and as long as things don’t get too hot.

Let’s wander. It’s easier to explain the features of the garden that keep us safe and where the true dangers lie one step at a time.

Every imaginable chaparral shrub wraps our property. We host no combustible, invasive foliage here! Our hedgeline serves up an ever-evolving visual feast of our favorite blooms, fragrances, tweets, and berries. Sunny yellow California flannelbush (*Fremontodendron californi-
cum) kicks off the show in spring, followed by California lilac (Ceanothus ‘Frosty Blue’), Nevin’s barberry (Mahonia nevini), and Catalina cherry (Prunus ilicifolia ssp. lyonii). The show never stops.

When appropriately irrigated, this beauty can help intercept flying embers, the most likely source of home ignition. That’s actually a good thing, because hydrated materials don’t readily burn. The tall shrubs’ innate ability to hold hydration in dry summer heat protects us and them. Structurally pruned, biodiverse shrubbery like this also fights disease and infestation that might transform a single-species hedge into tinder.

An expansive native meadow sits inside the hedgeline. In spring, it fills with showy milkweed (Asclepias fascicularis) that fascinates our son, and California poppies (Eschscholzia californica) grown from seeds he scattered as a toddler. In one corner, the meadow slopes toward a deep swale that collects runoff from our slopes and a neighboring hardscape.

The swale and meadow play defense as we enjoy playtime, supporting the garden’s hydration, and offering firefighters safe, distanced space where they can defend our property. The dappled shade of a coast live oak (Quercus agrifolia) and western hackberry (Celtis sinensis) fills with birdsong and keeps the area cool.

Many people see danger in tree canopies. Palms and cypress might combust, however, fire scientists have trained us to value effective tree selection and placement as critical fire mitigation strategies. Thick trunks and branches won’t easily ignite. The oak’s dense canopy resists penetration by flying embers. Even the hackberry’s airy canopy can delay ember travels. Each year, we prune back branches that extend toward the structure of the
The hedgeline in Aoyagi’s garden, featuring an assortment of well-hydrated native shrubs including California lilac (Ceanothus ‘Frosty Blue’).

home, in accordance with the defensible space principles that experts advise.

As we evolve our garden, we expand both the canopy and its distance from structures. A young ironwood (Lyonothamnus floribundus) now sits where an Italian stone pine succumbed to structural weakness near the ceanothus. We planted a California sycamore (Platanus racemosa) when we lost a towering eucalyptus. A baby valley oak (Quercus lobata) grows in the hackberry’s shade, ready to succeed it, while a rare Engelmann oak (Quercus engelmannii) sips from the swale.

Beneath the current canopy, we find more protection for our home and hearts. The menagerie of mid-sized, mostly medicinal foliage hides a retaining wall. Here, many species of native, sun-loving artemisia, buckwheat, sage, and mallow intersect with the alumroot, meadow rue, swordfern, and western columbine, which inhabit deep shade. Any embers tempted to roll toward our home will encounter this defensive shift in elevation and a protective barrier of healthy, hydrated beauty.

Nearer our home, low-growing foliage tickles our ankles. It also tickles us to know that the healthy, hydrated native plants will inhibit and even smother rolling embers. We hear the crunch of gravel beneath our feet. While expanses of gravel present too great an opportunity for embers to move freely, our small gravel patios form a useful defensible space for flammable furnishings and other creature comforts. Permeable concrete patios host lounge chairs and meet our sliding glass doors.

Any embers tempted to roll toward our home will encounter this defensive shift in elevation and a protective barrier of healthy, hydrated beauty.

Should firefighters need to fight a home ignition point, they have this additional defensible space.

Behaviors are important too, and some of ours are respectable. We placed hydrated foliage between the neighbor’s wood fence and our home. We chose furnishings with no cushions, no umbrellas, often the most flammable items in a garden. We need no gas-powered equipment for maintenance, so we are free of related sparks and fuels. We consistently take protective actions like relocating or removing foliage that fails, structurally pruning shrubs, and raking debris from gravel.

Now that we’ve discussed our defenses, from the ember-intercepting tree canopy and hydrated hedges to our proactive choices that lead to smart behavior, let’s tour the greatest dangers on our property: our creature comforts, our behaviors, our beloved windows and wood.

Day-to-day, we behave imperfectly. Our son brings his toys in, but we leave a rope swing hanging from the oak. We keep tools with wooden handles lined up against the garage—negligent!

We hesitate most when it comes to addressing our greatest dangers. Our wood siding and window frames will easily burn if embers collect and build heat against them. Heat could melt the expanses of single pane windows, inviting embers inside. Replacing these features would require rebuilding entirely, leaving nothing of our historic structure. We did replace the roof with Class A materials—but only when it began to leak. As a society, better building materials and design practices must play an important role in “hardening” our properties to wildfire.

Now that you have the full picture—our garden, our home, our behavior—perhaps you see that the danger is me, is us. Human activities hold responsibility for 95 percent of wildfire ignitions. Our choices, from where and how to develop, build and plant to whether or not we put our toys away when we are done with them, determines the availability of combustible fuel. Authentic nature, effectively maintained and supported, mitigates the danger we create for ourselves. The sooner we realize that, the safer we’ll be.
Spring Into Action

Spring is the perfect time to get organized and tackle those life tasks you’ve been avoiding. As you begin your spring cleaning, there’s one more item you can check off your to-do list: creating a free estate plan to support your future — and the future of the native plants that make California so special.

CNPS has partnered with FreeWill to offer our members a free resource to protect the ones they love. In just 20 minutes, you can create a will or trust with our online tool.

If you want to make an impact on California’s native plants and their habitats without paying a cent today, you can create an optional legacy gift to CNPS in your plans. Creating your will and defining a charitable plan helps your loved ones understand your wishes, and continues your legacy by giving to the causes you care about.

Get started at FreeWill.com/CNPS

Questions? Contact Christine Pieper at legacy@cnps.org or (916) 738-7622
I recently became an aunt to twins! I’m imagining all the fun I’ll have with my new family members, introducing them to nature through many of the activities I’ve shared with you. I also can’t wait to read stories to them. One of those stories will be Waa’aka’: The Bird Who Fell in Love with the Sun, by Cindi Alvitre with illustrations by Carly Lake. In their book, Alvitre and Lake share a Tongva creation story from Southern California. We learn about Waa’aka’, a beautiful bird who loves Tamet, the sun, so much that she wants to fly high in the sky with him. The book follows the journey of creation of plants, birds, and Earth—I highly recommend it!

Many thanks to Cindi and Carly for collaborating on this Kids’ Corner! Purchase a copy of Waa’aka’: The Bird Who Fell in Love with the Sun, at heydaybooks.com.
A Poppy’s Journey in a Month

MATERIALS:
✓ Paper
✓ Drawing supplies
✓ Magnifying glass, camera (optional)

We are going to find a California poppy and watch how the plant changes over four weeks. Visit the same poppy or group of poppies each week and follow the prompts below. If you can’t find a poppy, look for another wildflower in your yard or close to home, with the help of an adult. Make observations on your paper or nature journal about what looks, feels, and smells different.

PROMPTS:
Week 1: Go outside in your neighborhood, local park, or favorite hiking trail and find a poppy, or any plant that catches your eye. Take notes or photos of the exact spot so you know where to go each week. Note what time of day you visited.

Week 2: Do you notice any changes from the last time you saw it? Try drawing the plant from a different view (from above, below, far away, and up close) and record any changes you see.

Week 3: Record any changes on or around the plant. Has it grown? Do you see any flower buds? Any seeds forming? Carefully draw your plant once more with a different drawing material this time.

Week 4: Draw your plant one more time with another material, color it, and record the changes using your close observation skills. Flip back to your other pages and see how the plant compares to Week 1.

TIPS from Carly Lake:
• Visit your plant at different times of day and weather to see if they affect it at all.
• Slow down when you draw, moving your eyes from the plant to your page and back often. This way you can enjoy the process and notice lots of details!

Storytime

Stories passed on through generations helps us feel connected to our past and culture. Cindi’s story features Tongva words that share Tongva culture with younger generations and Californians that call Tovaangar, or Los Angeles, home.

Think about your own family and where they came from. What kind of stories do you know about your family? What stories does your family tell? If you read the book, what similarities can you find?

Let’s write our own stories! You can be as creative as you’d like. Here are some ideas. Write a story about:

• The life of a poppy
• A plant you’ve seen in your observations
• Plant and animal friends
• A nature hike
Future-Minded

by CHRISTINE PIEPER

As a child, LynneDee Althouse wanted to grow up and “drive around in a pickup truck and help people know what to do with their land.” She made that dream come true—at least the second part. Her consulting firm, Althouse and Meade, has conducted resource surveys and conservation planning on over 120,000 acres throughout Southern California. LynneDee is a botanist, soil scientist, educator, SLO chapter volunteer, and a member of the CNPS Legacy Circle.

LynneDee, what sparked your interest in native plants?

I grew up in Mt. Baldy in the San Gabriel Mountains, climbing trees and falling into creeks. My great-grandfather built a ranch there, and my great-grandmother had quite a garden, including native plants. Her mariposa lilies on rocky slopes and columbine flowers by the stream fascinated me the most.

I went to Cal Poly and studied biology—plant ecology and range management. In the summers I worked for BLM (Bureau of Land Management) in Wyoming. This was sage-grouse habitat, and the rangelands were being managed for their botanical resources. I would document the flowering periods of native plants so that ranchers could graze at the right time.

Back in San Luis Obispo, I remember seeing this strange plant and wondering, “What is that?” It was a San Luis mariposa lily (*Calochortus obispoensis*). And then I asked, “Why does it grow here, in this serpentine habitat?” I started to make connections between plants and their habitats, like wetland seeps and rock outcrops.

You have worn so many hats in the native plant community—as a biologist, as an educator, and as a CNPS volunteer. What’s the impact you want to have on native plant conservation?

I was the first woman on San Luis Obispo County’s list of qualified consulting biologists, helping landowners with the balancing act between development and conservation. My firm has grown to 30 people, and we take on big projects. I wanted to raise the bar for the consulting industry to create projects that will have a net conservation benefit, and I’m very proud of what we’ve done. We’ve shown that it’s possible to design a solar farm that protects vernal pools by direct avoidance and open space management. We helped create a conservation bank that protected thousands of acres of endemic plants. It can take a lot of arm-wrestling to bring everyone along. Most of us in CNPS are advocating for net-benefit projects. We need to educate each other. And to listen!

I want to teach people, from city dwellers to ranch owners, about the value of open space and the habitats we protect.

Photos courtesy of LynnDee Althouse
I want to teach people, from city dwellers to ranch owners, about the value of open space and the habitats we protect.

**What would you tell someone about why you first decided to donate to CNPS, and why you’ve now decided to make protecting native plants part of your estate plans?**

Premier botanist Dr. David Keil and CNPS members Dave and Linda Chipping are my heroes. At one point in my career, I took a lot of flak for a solar farm project that I consulted on. I explained my ideas, and Dave listened. We moved the array field to avoid the most precious plants. Dave stood up for my work in a supervisor’s hearing. He inspired me to make my first donation to CNPS. In the end, the landowner donated the unneeded acres to the state. Done right, development can give us the money to do more conservation.

Native plants are what makes California special. They are worth taking care of, and we need to educate people about them. CNPS offers training in mapping and surveying, rare plants and vegetation science. I’m a huge advocate for those trainings, and I want that to be part of my legacy. CNPS is inspiring everyone from the native plant gardener to the big philanthropist to conserve our natural resources.
Upcoming Events
April 1–June 27, 2021

Jump into spring with fun online activities for California Native Plant Week and ongoing virtual webinars on native plant topics. Brighten your garden with several chapter plant sales, and stay up to date through our social media channels, website, and newsletters. For event registration, visit cnps.org/events.

FEATURED EVENT

April 17–24 California Native Plant Week

In 2010, the California State Legislature designated the third week of April as California Native Plant Week. This year we encourage you to Grow Care Everywhere. Check our social media for live chats, educational materials, and photo fun.

Online Spring Plant Sales
CNPS chapters are offering online sales, shopping by appointment, and/or curbside pick-up. Visit chapter websites for details.

April 7–14: Channel Islands Chapter
April 9–12: Sacramento Valley Chapter
April 11–16: Napa Valley Chapter
April 14–21: Marin Chapter
April 26–29: Redbud Chapter
April 21–1: Willis Jepson Chapter
May 1–2: North Coast Chapter
May 10–14: Bristlecone Chapter

APRIL

Apr 7
Living with Bumble Bees
North Coast Chapter
Buzz into this talk to hear from John Whittlesey, nurseryman, garden designer, and author. John has a decade of experience designing and installing climate appropriate gardens with the purpose of attracting more bumble bees and wildlife into the garden.

Apr 7
Native Plant Pollinators
Sacramento Valley Chapter
Join landscape architect Juanita Salisbury to learn about pollinator relationships with California native plants and how to attract more to your garden. She will share experience from leading several public California native pollinator gardens in Palo Alto.

Apr 8
Vernal Pools of the Santa Rosa Plain
Laguna de Santa Rosa Foundation
Dive into the unique biology of vernal pools and learn about local conservation efforts. Panelists will
highlight the endemic pollinators, native flora, and the endangered California tiger salamander.

Apr 15
**Plant for Birds: Using Native California Plants to Create Habitat at Home**
Orange County Chapter
Scot Pipkin will highlight the vital roles native plants play in providing our local birds with food, shelter, and nesting materials. Learn how design elements can also attract birds to your garden.

Apr 16–18
**18th Annual Native Plant Garden Tour**
Theodore Payne Foundation
This year’s interactive, at-home experience of California native plant gardens and landscapes will expand from spring-only into an entire year of transformation. Become immersed in the urban ecosystem with virtual walks and talks, interviews, and expert panels.

Apr 20
**Coastal Dune Restoration: When is Removal of Invasives Simply not Enough?**
Milo Baker Chapter
Hear from Lorraine Parsons, who has worked on several large restoration projects as the vegetation wetlands ecologist at Point Reyes National Seashore.

[JUNE]

**JUNE**

June 22
**Botanizing Nevada and Placer Counties**
Milo Baker Chapter
Shane Hanofee of the Redbud Chapter has explored just about every habitat and ecotype that exists in his home area. Join him for a virtual journey through fascinating plant communities, from the valley floor to the east side of the Sierra.

Purple mouse ears (Diplacus douglassi). Photo: Shane Hanofee

*Riparian Wildlife Preserve for Sale*

Boots-on-the-ground stewards needed to share in the ownership, upkeep and protection of **Smiling Owl Wildlife Preserve**, a 45-acre Conservation Easement near Nevada City, CA.

“For the right people, this land is a gorgeous paradise, a study in ecology and a spiritual Sanctuary.”

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“For the right people, this land is a gorgeous paradise, a study in ecology and a spiritual Sanctuary.”

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