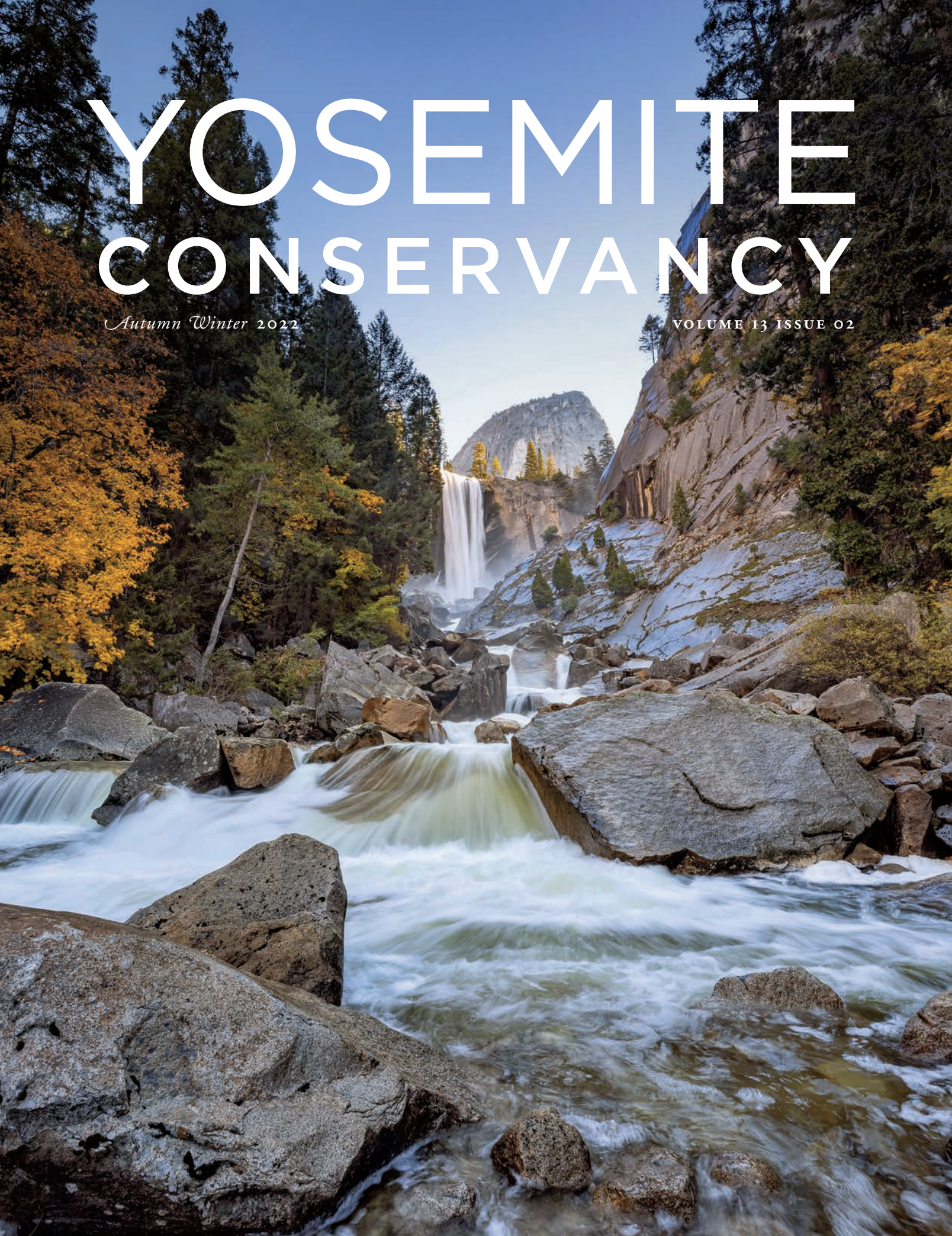


# YOSEMITE CONSERVANCY

*Autumn Winter 2022*

VOLUME 13 ISSUE 02





# Sustaining Yosemite's Splendor



**EVERY TIME I DRIVE** into Yosemite Valley and see the towering granite of Sentinel Rock, I still feel absolute awe and wonder. I have made this journey countless times, yet the rich palette that paints the landscape continues to inspire me — as it has for millions of visitors each year, as well as for the Native people who have called Yosemite home for millennia.

There is a captivating beauty to Yosemite's wildness. It nourishes and sustains the soul.

But how can we sustain and support the park?

With support from partners and donors alike, we can explore alternative modes of transportation and develop strong systems to reduce our impact on the environment. From using the free Bike Share program to committing to traveling without single-use plastic, your support has an impact. As a donor, you play an especially key role in keeping habitats healthy, flora and fauna flourishing, and natural processes intact.

With your support, we can fund projects that assess the health and future of Yosemite's watersheds during drought. This essential research helps to create a plan for a park with less snow and more rain — one that predicts impacts for ecosystems.

As Yosemite faces climate change and other challenges, we are working toward shared sustainability goals alongside the National Park Service to ensure the beauty and splendor of Yosemite will remain for generations to come. We all play a part in protecting Yosemite by minimizing our impact on the landscape, plants, and wildlife.

I am thankful for your continued, generous commitment to ensuring a bright future for this extraordinary park.

*Frank Dean*

Frank Dean  
PRESIDENT & CEO

**COVER** The Merced River thunders down Vernal Falls, past the Mist Trail and dense autumn foliage. To learn more about the future of water in Yosemite, read our story on protecting watersheds on page 16.

PHOTOS: (COVER) © STEPHEN LEONARDI. (LEFT) © CAROLYN BOTELL. (OPPOSITE PAGE, TOP TO BOTTOM) © TOM GAINOR. © YOSEMITE CONSERVANCY/TINA GOEHRING. © ROBB HIRSCH.



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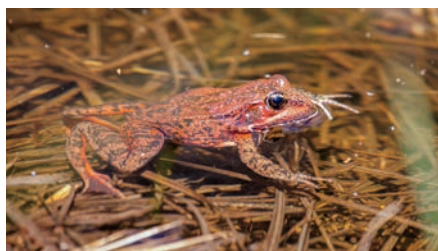
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**YOSEMITE**  
CONSERVANCY

**OUR MISSION** *Yosemite Conservancy inspires people to support projects and programs that preserve Yosemite and enrich the visitor experience for all.*





# *Sustaining* YOSEMITE

*A look behind the scenes at ongoing efforts to engage staff  
and community members — and increasingly, visitors  
— in sustainability initiatives in the park*

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BY ELIZABETH SHERER



“What does it look like in the future,  
and what can we do right now to  
influence that vision of Yosemite?”

**Katie Coit**

DIRECTOR OF RETAIL OPERATIONS





**SINGLE-USE PLASTIC** beverage bottles account for a large portion of the waste generated in Yosemite. They can be seen here packed and stacked at the Mariposa County Landfill.

PHOTOS: © YOSEMITE CONSERVANCY/TINA GOEHRING (PREVIOUS SPREAD) © STEPHEN LEONARDI.



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Some dream of Yosemite their whole lives and only get to visit once. Some return year after year to find solace in glittering rivers, wondrous waterfalls, and sweeping mountain views. Some arrive with no idea of what they are getting into, but leave with a lifelong connection to the world around them and an enduring awe for nature.

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Yosemite makes its mark on all types of visitors. But visitors are also making a mark on the park.

Millions of visitors have a significant cumulative environmental impact each year. Greenhouse gas emissions are generated by their travel to and within the park, electricity and water is consumed at their campsite or lodging, and literal tons of trash are created and left behind at the end of their collective trips. This outsized impact from temporary guests can put a strain on the resources of an otherwise rural community.

Thankfully, the park and its partners are aware of these challenges. We are working toward solutions — simultaneously thinking big and starting small to make visiting Yosemite more sustainable.

Yosemite Conservancy's Director of Retail Operations Katie Coit and her team have made a five-year plan to eliminate single-use plastic packaging in our bookstores and retail products.

"Change is the constant in this place," Coit says. "What does it look like in the future, and what can we do right now to influence that vision of Yosemite? That's where sustainability comes in ... we'll be working to echo that message through what we sell, how it's packaged, and how it's displayed."

To achieve this ambitious goal, Conservancy retail and publishing teams are already working to audit current inventory and identify opportunities to reduce plastic waste.

The team's efforts are well-timed. Just this summer, U.S. Secretary of the Interior Deb Haaland announced

her agency's commitment to phase out single-use plastic products on Department of the Interior-managed lands, including all national parks, by 2032, giving Coit and her colleagues' aspirations some added clout.

*Read more about Katie Coit in our "Meet the Team" profile on page 24.*

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## ELIMINATING SINGLE-USE PROPANE CANISTERS

**Another conservation measure** gave cause for celebration in mid-August, when California Senate Bill 1256 made its way through the state legislature. The cutting-edge bill would have mandated the phase-out of disposable propane cylinders by 2028. While it did not become law, its potential delighted Conservancy Zero Landfill & Sustainability Coordinator Tina Goehring, who was excited to see recognition of this issue at the state level. Single-use propane canisters are classified as hazardous waste; they are costly to collect, store, transport, and recycle — and they often end up in the trash.

Goehring manages the Yosemite branch of the Zero Landfill Initiative (ZLI), an effort to reduce waste in national parks. Launched in 2015 by the National Parks Conservation Association (NPCA) with funding from Subaru of America, it's one of three pilot ZLI programs, with others in Denali and Grand Teton.





**LOCAL SCHOOLCHILDREN** established a composting program as part of the Yosemite Residential Food Waste Diversion Pilot. Kids separate food waste for compost, which is then placed in organic waste dumpsters in several locations around the park. The organic waste is then processed using composting equipment generously donated to Mariposa County by the Zero Landfill Initiative, creating nutrient-rich compost material. PHOTOS: © YOSEMITE CONSERVANCY/TINA GOEHRING



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Thanks, in large part, to Goehring's work with the ZLI, Yosemite is ahead of the curve yet again. The park's concessionaire has already eliminated the sale of single-use propane cylinders in its stores.

"I love sustainability, because I feel like it's humbling," Goehring says. "You're never going to know everything. ... It creates a table where everyone can sit down. We can all learn from each other."

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## COMPOSTING

**The switch to refillable** propane canisters is not the only testament to Goehring's remarkable success implementing the ZLI in Yosemite — she has also continued to expand the park's composting efforts.

"To date, we've placed 10 residential dumpsters and five commercial dumpsters for organic waste collection, and we've enrolled 600 local participants in the Residential Food Waste Diversion Pilot," she says.

Since the composting program's launch in summer 2021, Goehring and her team have collected more than 134 tons of food waste, which Mariposa County can convert to high-quality compost for local farmers and gardeners. In the future, Goehring hopes to make composting available to visitors in Yosemite.

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## POWERFUL PARTNERS

**The ZLI has been** a collaborative effort involving the Conservancy, the National Park Service, National Parks Foundation, NatureBridge, Mariposa County, and Yosemite Hospitality. The project was made possible by a grant from the National Parks Foundation through the generous support of Subaru of America.

The buy-in and support of such a diverse group of park partners has allowed the program to expand in unexpected ways, and it is a testament to the community's appetite for going green. After discovering that an estimated 7% of landfill space in Mariposa County was gobbled up by the stretch film used to wrap retail and food service shipments, Goehring enrolled in a plastic-film recycling program in partnership with the county, and she introduced reusable pallet wraps to Yosemite Hospitality stores.

With all this innovation and creativity to reduce human impact in Yosemite, plus bold sustainability measures at the state and federal level, the next question becomes: Can this pervasive enthusiasm for sustainability among locals be shared with Yosemite's visitors?

With your support, Conservancy staff and partners are taking steps to answer this question with a resounding "yes" by making it easier for all visitors to support sustainability in the park during their trip. ■





# A TOAD MAP TO SUCCESS

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PROJECT UPDATE



**A SIERRA NEVADA  
YELLOW-LEGGED FROG**  
sits near the edge of a lake  
in the high country.

PHOTO: © USGS/DEVIN EDMONDS



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**W**alking around the meadows and lakes of Yosemite Valley, you may have heard a new sound: the dulcet tones of the Sierra Nevada red-legged frog. This year, thanks to donor support, researchers have begun the exciting task of reintroducing the species to lower elevations in Yosemite, including the Valley.

“Some reintroductions are going really well; red-legged frog reintroductions are great,” aquatic ecologist Rob Grasso says. So well, in fact, that it seems some red-legged frogs are establishing new homes. While working on a compliance project, Grasso and his team found red-legged frogs in a secondary river channel in a flood plain. Those frogs were monitored and were not found to have tags, which means they weren’t part of the captive breeding. This made it clear that frogs are successfully finding new areas and reproducing — an exciting discovery that bolsters the need for continued study and protection of Yosemite amphibians.

Amphibian research in the park has been supported by Conservancy donors since the 1990s. With that support, groundbreaking research has been done, leading to the successful reintroduction of Sierra Nevada yellow-legged frogs in the high country. Research has provided the framework for several reintroductions that are under way this year, including the red-legged frog, which find their habitat at lower elevation.

Frogs aren’t the only amphibians finding a home in the park. Yosemite toads, a rare endemic species, are in the process of being reintroduced in Yosemite, thanks to donor support.

“Yosemite toad reintroductions are getting started, and that has never been done before,” Grasso says. “With each species reintroduction, we have to ask ourselves: ‘What are we getting right? How do we move forward with other species?’”

In this early stage, researchers are creating a toad map with labeled meadows and trails for offline use — a vital tool for researchers tracking toads and tadpoles in areas with poor connectivity. Summer surveys found toad tadpoles at high elevations — in the hundreds in some locations. At lower elevations, however, toads have struggled to survive drought conditions.

“Drought years aren’t great for amphibians, but the



**A WESTERN POND TURTLE** hatchling found in the Smith Meadow area south of Hetch Hetchy. Researchers are using dogs to detect turtles before starting ground-moving work at Ackerson Meadow. PHOTO: © COURTESY OF NPS/SIDNEY WOODRUFF.

ones we find alive and well are resilient,” Grasso says. This offers some hope for the reintroduction; resilience is an essential tool to survive the extremes of Yosemite.

Reptiles are also being studied, as efforts to detect western pond turtles in Ackerson Meadow begin. Researchers are working with a group of canine sniffer trainers to teach staff members’ dogs to detect the turtles before the major earth-moving stage begins in support of the Ackerson Meadow restoration project. This phase will start when water is low and turtles seek out wetter areas. The hope is that, with solid turtle detection methods in place from trained canine companions, turtles won’t be injured as work gets under way.

While Grasso and his team are pleased with the progress they’ve made thus far, they are continuously exploring innovative ways to build the program to ensure they will meet their long-term restoration goals for the aquatic species. ■





# *Nurtured BY Nature*

How Yosemite offers support  
and training to veterans

BY MEGAN ORPWOOD-RUSSELL





**A MOMENT OF  
SERENITY,** as Bridalveil  
Fall cascades down into the  
verdant Valley. Research shows  
that being immersed in nature  
has a significant positive  
impact on our mental health.

PHOTO: © PERRY KIBLER

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## WHAT DO YOU COME TO YOSEMITE FOR?

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For some, it's to fulfill a lifelong dream of climbing to the top of Half Dome. For others, it is to experience the majesty of Yosemite Falls in spring from the less dizzying terrain of the Valley floor. For many, including veterans, it's an opportunity to decompress and find some peace in the natural world.

Spending time in nature is shown to have a significant positive impact on our mental health, stress levels, short-term memory — even our ability to retain information. That's part of the beauty of Yosemite: It is a place of healing for everyone.

The early lockdowns of the pandemic led to a renewed interest in, and enthusiasm for, exploring state and national parks. As people increasingly ventured outside during a time of uncertainty, they found solace and joy in nature. Getting outside is a great way to rekindle our deep-rooted connection to the natural world.

As John Muir wrote: "Everybody needs beauty as well as bread, places to play in and pray in, where nature may heal and give strength to body and soul."

Yosemite has long been a place for healing. Galen Clark, the first elected "guardian" of Yosemite, originally traveled into the mountains to recuperate from tuberculosis. At 39, he was told he had maybe a year left to live.

"I went to the mountains to take my chances of dying or growing better, which I thought were about even," Clark wrote.

He was likely one of the first non-Native people to see the towering sequoias of Mariposa Grove. He found such solace that he made his home there, learning from local Tribes and establishing a rest station for fellow travelers. After serving in the guardian role for many years, he passed away at age 96.

Yosemite affords space for peaceful reflection and connection, allowing us to see the bigger picture. It is against this backdrop that the donor-supported Yosemite Veterans



Education and Leadership Seminar was designed.

“The physical, mental, and spiritual health that comes from outdoor activity in parks can become part and parcel of an energetic, productive, and confident outlook on life,” says Steve Shackelton, the seminar’s program director with University of California, Merced. “That, then, becomes the foundation for success.”

The seminar provides an opportunity to help veterans understand what benefits are available to them to transfer the skills they developed in uniform to civilian life. The park is playing a unique role in helping to teach veterans to continue to serve, albeit in a different way. The seminar is composed of talks and workshops facilitated by veterans and experts over a period of four days, during which participants stay in Yosemite and can find rejuvenation in the park.

One advisor, a former Navy SEAL Team 7 member, reflects: “It’s interesting to sit around a campfire in the evening and talk through issues. People became present

and slowed down, as we all do in nature — we fall into a different rhythm — and we found ourselves able to communicate with greater depth. Soldiers deal in environments of consequence. When you leave that, it can be unstimulating to get back to, perhaps, a more ‘normal’ work environment. A park with new terrain, animals, changing weather — which all come with consequences — has the power to enrich and nurture those who visit, without applying any of the same stressors as conflict.”

Thanks to funding from UC, Merced and support from Yosemite Conservancy donors, the seminar is available at no cost to veterans who wish to attend.

After a hectic life in the military, Major General Anthony Jackson was not keen to return to working a regular day job. Instead, he applied his enthusiasm for the great outdoors to managing the state parks system in California. Jackson is part of the advisory committee for the veterans seminar, supporting development of the annual curriculum.

“Every veteran needs healing — and it isn’t just them,” he says. “Getting back to nature is relaxing and healing.”

Following a 36-year career serving in the Marine Corps, Jackson’s shift to civilian life leading California’s state parks was, in many ways, a natural transition.

“Life in the military entails constant education, as people rise through their careers, and I thought it was a good idea to get parks to follow a similar system,” he says.

“Being part of a military culture gives you a different perspective,” reflects Dr. Juan Sánchez Muñoz, a former Marine, current chancellor of UC Merced, and a member of the Conservancy’s board of trustees. “There is a camaraderie and an implicit understanding that you know, and that you get it. There’s an immediate credibility and authenticity when something is made by veterans for veterans.”

Those who attend the seminar are furnished with resources, networks, and community — all vital tools to find new ways to serve. In many ways, the skills learned through military service lend themselves well to service in both state and national parks. Helping veterans to access information on how to move into those careers enriches both our parks and the veterans who choose to continue serving.

As a long-time supporter of the Conservancy, Ken Pitzer of the Pitzer Family Foundation is proud to support



**ATTENDEES** of the Yosemite Veterans Education and Leadership Seminar gather at Mariposa Grove to learn about careers in the Park Service.

PHOTO: © STEVE SHACKELTON.



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“Yosemite is a therapeutic environment for those who come there. Nature, beauty, verdure. It is wondrous and magnificent, and it endures. This beauty has the power to sustain veterans and act as a reminder of why they chose to serve.”

**Dr. Juan Sánchez Muñoz**  
FORMER MARINE & CURRENT  
CHANCELLOR OF UC MERCED

the veterans seminar. His late aunt Ann was married to naval aviator Fred Bromley, and the support for the seminar is in his memory.

“It’s a nice mix of different areas — from career development, to resilience and mental health, while sharing experiences of military careers,” Pitzer says. “It’s a meaningful program. We are happy to support this and hope it can be scaled up as time passes.”

For those who attend, the experience is memorable, offering a reconnection to the camaraderie found in military life.

“I didn’t know California had a whole veterans support network outside of the V.A.,” says Sabrina, a member of the National Guard who attended the seminar last year. “I find it so healing in Yosemite. Everyone has stresses in their daily life. But when you get to Yosemite, the scale and beauty is so vast that you can put your worries into perspective. I am amazed there isn’t a waitlist 100 people long to participate.” ■

A collection of books and a woven basket are displayed on a rustic wooden surface. The books include "Legends of the Yosemite Miwok", "We Are the Land: A History of Native California", "THE WAY WE LIVED: CALIFORNIA INDIAN STORIES, SONGS & REMINISCENCES", "VOICES OF THE PEOPLE: THE TRADITIONALLY ASSOCIATED TRIBES OF YOSEMITE NATIONAL PARK", and "A is for Acorn: A California Indian ABC". A woven basket is also visible. Pine needles and a pine cone are scattered around the books.

## Explore Yosemite

FIND STORIES from Yosemite’s first stewards at [shop.yosemite.org](https://shop.yosemite.org).

Conservancy donors receive a **20% discount** with code **HOLIDAY2022\***

\*Code valid through Jan. 31, 2023; online purchases only.







# WATER, WATER, EVERYWHERE

PROTECTING YOSEMITE'S WATERSHEDS

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BY MEGAN ORPWOOD-RUSSELL





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Yosemite would not exist without water. From the jagged peaks of Cathedral Rocks to the smooth curve of Half Dome, this is a land carved by slow-moving glaciers. The iconic valleys and cliffs; polished granite slopes, lakes, and moraines; and dynamic waterfalls can all be attributed to ancient ice.

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California has a Mediterranean climate, receiving the most precipitation in the winter. That precipitation comes as rain at lower elevations and snow at higher elevations. In Yosemite, which reaches the dizzying heights of just over 13,000 feet at Mt. Lyell, the snow amasses to become snowpack. In general, precipitation at 6,000 feet and higher falls as snow from October through April, and as temperatures warm and winter storms subside, that snow melts and becomes the fast-moving lifeblood of the park, sustaining every aspect of the ecosystem. Due to climate change, the water cycle is undergoing change before our eyes.

## WATCHING WATER

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**Beginning in the Yosemite** high country as precipitation, both the Tuolumne and the Merced rivers flow out of the Sierra and into the Central Valley. From there, they support species and landscapes all the way to the Pacific Ocean. The water you see cascading over Yosemite Falls and thundering into the river will find itself among the fruits and vegetables of the Central Valley, which in turn, will travel around the world.

Once water falls on the landscape in Yosemite, it, too, travels to different places: It can be stored in the snowpack, infiltrate groundwater systems, or fill aquifers — such as the one in Yosemite Valley that provides drinking water for the main area of the park.

“There’s water moving across the whole landscape, both on the surface and unseen underground,” says park hydrologist Cat Fong. “It’s expressed



**EACH YEAR**, as the season shifts from winter to spring, Yosemite’s snow melts and fills the Valley once more with the sound of rushing water as it shoots over the towering granite. Waterfalls revive; the rivers refill, and the season awakens ecosystems.

PHOTOS: (PREVIOUS SPREAD & ABOVE)  
© GRETCHEN ROECKER





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as springs, or it comes up underneath meadows, which often exist due to the strong supply of groundwater.”

With donor support, Fong is developing an inventory of Yosemite’s springs to determine how resilient the various groundwater systems may be and how that will affect the ecosystems that depend on them, including meadows and streams. The park has conservation strategies for water: While the Valley is well supplied, Wawona and Tuolumne aren’t.

“From the streams, in the case of Tuolumne, it’s the Dana Fork and the Lyell Fork; for the Merced, it’s the South Fork we have to keep an eye on,” Fong says. “During droughts, we monitor those streams closely, because their levels trigger water conservation measures that kick in if the stream gets too low.”

## SHAPED BY WATER

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**The lush meadows** of the Valley and the snow and ice of the high country are critical for the survival of countless ecosystems, but as winters become warmer and summers become drier, what does this mean for the future of the landscape? Can Yosemite continue to sustain itself?

To understand the future of water in the park, we look high up at remaining glaciers and snowfields. Park geologist Greg Stock knows more about them than most; he has been studying Yosemite’s ice for 20 years.

“We see less and less glacier contribution in years of meager snowpack and a warm summer,” Stock says. “In late summer, the glaciers provide more than half the water in Tuolumne Meadows. Fast forward 10–15 years, and those glaciers will likely be gone.”

Yosemite’s glaciers have been studied for almost as long as there have been European-Americans in the area; John Muir and Galen Clark measured the snow back in the 1860s. Glaciers form when fallen snow accumulates so much weight that the lowest layers transform into ice. Gently — and very slowly — they begin to move downhill.

As a direct result of drought, glaciers are disappearing rapidly. In fact, Yosemite only has one living glacier left: Maclure. In 2012, researchers found that Lyell glacier was no longer moving, and therefore, was no longer technically a glacier.



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Stock is assessing the remaining ice fields and glaciers. Many snowfields are gone from the landscape — perhaps the first time in history that certain areas have not been covered with ice and snow. Stock's team will be studying Mt. Florence this year, installing probes to measure the discharge of water. Learning how much water comes from the snowfields is essential for understanding the implications of their absence.

“[Snow lines] will probably increase hundreds to thousands of feet, depending on the amount of warming,” Fong says. “We have atmospheric

river events that provide a lot of the precipitation we receive throughout the entire year, but during droughts, those are sporadic and harder to predict.”

For example, this past year, Yosemite saw record precipitation October–January, but it was followed by an extremely dry spring, precluding a solid snowpack.

“We’re expecting more atmospheric rivers, because with warmer temperatures, there’s more moisture and energy in the air, which increases the possibility of greater floods,” Fong adds.

## THE WEIGHT OF WATER

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**Flooding in Yosemite Valley** is common. As the snowpack begins to melt in spring, water levels rise, spilling over the banks of the Merced and flooding the surrounding meadows. Many habitats even depend on periodic flooding to scour flora, and ecosystems are remarkably robust in restoring after floods. Meadows act like sponges, holding onto water and ensuring the ground is less susceptible to surface runoff.

In early 1997, an atmospheric river descended on Yosemite Valley, dropping more than 20 inches of precipitation in a few days, causing the Merced to burst its banks and flood the Valley. The river reached a depth of 13 feet at Happy Isles, swelling to more than 23 feet by the time it reached Pohono Bridge.

The storm was unusual in that the air was unseasonably warm, so precipitation fell as rain instead of snow at higher elevations. This led to what is known as a “rain on snow” event, which caused the deep snow to melt and fill the waterways. With the sheer weight of water that moved across the landscape, many cliffs in Yosemite became waterfalls. The storm stranded more than 2,000 visitors and park staff, and damaged vital infrastructure including highways and sewers.

“We haven’t put much effort into preparing for a 1,000-year flood,” Stock says. “But the probability of those are changing. In the near future, those could become 100- or 50-year events. Everybody needs to do more on this front. In some ways, the ’97 flood was a wakeup call that helped Yosemite prepare for future storms.”

Yosemite had to assess risk of similar floods and future-proof the park as best they could, which meant elevating roads, fortifying bridges, and establishing robust evacuation systems based around forecasts. Since 1997, forecasting has become more



**FLOODING IN COOKS MEADOW** in April 2018. A major rainstorm prompted Yosemite to close the Valley to visitation. The Merced River crested at 13.73 feet (4 feet over flood stage), and park roads and meadows were submerged.

PHOTO: © COURTESY OF NPS.





precise and can predict not only weather events, but also projected runoff.

“Forecasts are good,” Stock notes. “They tend to understand well what the [river] peak will be. We have good maps and models that can tell us what the height at the bridge will be. Yosemite has been preemptively evacuated a couple of times.”

Donors Ben and Ruth Hammett stepped up to support Stock’s disappearing ice project.

“When the water shortage hit, we were delighted to be able to take part in making it possible for [Stock] to do key research in snowpack, taking the guesswork out of predicting future summer water availability,” Ben says. “Predictability was the key ingredient that attracted us. Ever since the Intergovernmental Panel on Climate

Change started compiling data on climate change in the new millennium, rigorous scientific predictability has become our main passion.”

While it is challenging to imagine Yosemite with less snow and ice — and consequently, less water — it’s important to recognize how well prepared the park is to adapt and adjust as the climate changes. Thanks, in part, to support from Conservancy donors, Yosemite has a robust staff of hydrologists researching the effects of the changing climate and developing strategies to manage a Valley that floods more frequently.

“We understand the importance of figuring out where Yosemite’s water is coming from,” Stock says. “Yosemite Conservancy is great at supporting those efforts.” ■



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## PROJECT UPDATE

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# Getting Around, Greener

**T**he Yosemite Bike Share program, a much-loved collaboration between the Conservancy and the National Park Service, was introduced in 2018. It was proposed, in part, as a solution to address congestion and improve traffic flow during the park's busiest months. And it has an additional benefit: the potential to help clear the air of the pollution that accumulates in the often-crowded Valley.

While smoke from wildfires is known to dramatically worsen Yosemite's air quality, certain areas of the park experience elevated levels of particulate matter and ground-level ozone regardless of fire activity. Some of that pollution is from local vehicle traffic and could be remedied by fewer cars on the roads.

With this in mind, the park purchased a fleet of bicycles, which offer an emission-free way to navigate the Valley. Since the pilot, the Bike Share team — with the help of donors and participant feedback — has made some major improvements to the program. They've upgraded the Yosemite Bike Share mobile app; relocated bike pickup and



**THE FREE YOSEMITE BIKES** are usually available between June and October. We recommend downloading the Yosemite Bike Share app in advance of your next trip to the park, so you can easily unlock a bike and pedal on your way.

PHOTO: © YOSEMITE CONSERVANCY/RYAN KELLY



drop-off locations for improved visibility, cell service, and convenience; added custom bike racks; and increased the number of available bikes.

This year, the program is once again made possible thanks to the generosity of Peet's Coffee, the Yosemite Bike Share's primary sponsor, which has helped fund the program since its inception.

"Our team at Peet's loves Yosemite," says Robyn Quintal, the company's senior director of customer development and operations. "We've all sat in traffic in Yosemite, so we were inspired by the idea of an easy, free alternative to getting around the Valley by car. Sustainability has always been a core value for us, going back to the 1960s, when our founder, Alfred Peet, was known for riding his bike everywhere. The Bike Share really resonates with us. We've loved watching it grow and expand in the park."

Other donors, such as Rod Hoadley, have made important contributions to the program. Through his company, Peak Racks, he developed and donated custom-made racks to store the bikes between rides.

"To me, [biking] is the absolute best way to get around Yosemite. Not only is it efficient, but it's also fun — you see so much more of the park! I want everyone to ride bikes, and I want it to be easy," says Hoadley, who also attests that biking around Yosemite Valley is a majestic and thrilling experience. With 12 miles of paved paths to explore, it can indeed be awe-inspiring to ride beside towering granite.

The free bikes are available for up to two hours per trip and offer an appealing alternative to driving in traffic — and finding a parking space — especially for short trips or quick errands.

But the overall cycling experience in Yosemite can still be improved, particularly on the west side of the Valley, where cyclists must brave busy roadways, dodging pedestrians, cars, and buses. Ironically, this can be more challenging on a day with very little traffic, when vehicles speed by at 35 miles per hour and cyclists hug the narrow shoulder as they pedal past Valley View.

Acknowledging this current challenge — and opportunity — the National Park Service is taking preliminary steps to plan for a bike-friendly future. With support from Conservancy donors, the park has embarked on a 2022 bike transportation study, with the goal of considering possible improvements to bike and pedestrian infrastructure in high-traffic areas.

The advantages of a bike-friendly Yosemite are not limited to humans. There are ecological benefits, too. In the long term, this project has the potential to protect Valley habitat from trampling. By expanding or connecting trails or paved pathways — and designing infrastructure that is better suited to both pedestrians and cyclists — visitors will be less inclined to ride or walk across sensitive vegetation.

Thanks to donor support, the park and the Conservancy are working to recognize cycling — an environmentally friendly, safe, and growing mode of transportation — as an integral part of addressing the air pollution and traffic congestion, creating space for even more visitors to successfully cycle around busy Yosemite Valley. ■



## *Navigating Yosemite Car-Free*

For those with accessibility challenges that preclude cycling, or anyone with limited experience biking on busy roads, there are alternative transit options that can help you navigate to and within the park in a more sustainable way.

With the free Yosemite Valley shuttle system; the Tuolumne Meadows hikers bus operated by Yosemite Hospitality; and the fee-based Yosemite Area Regional Transportation System (a Merced-based public transit service known locally as YARTS), which services Wawona/Mariposa Grove, Crane Flat, Hodgdon Meadow, and elsewhere; you can access most of the park's must-see destinations via public transportation in the high season. Learn more on [NPS.gov/yose](https://www.nps.gov/yose).

If you're traveling from the San Francisco Bay Area or Los Angeles, you can take an Amtrak train to Fresno or Merced, then transfer to a YARTS bus to get to Yosemite Valley. While it's a bigger time commitment than driving a personal vehicle, it's a relatively low-cost option.

PHOTO: © COURTESY OF NPS/AL GOLUB.





## MEET THE TEAM: KATIE COIT

**ABOVE:** Katie with her daughter at Yosemite Creek after a holiday storm on December 26, 2021.

**RIGHT:** Katie and her family grinning at Tenaya Lake on a summer day.

PHOTOS: © COURTESY OF KATIE COIT.

**OUR DIRECTOR OF RETAIL OPERATIONS** studied anthropology in college, came to Yosemite as an archivist, and now manages multiple Conservancy bookstores and helps run an award-winning publishing operation. As her unique trajectory might suggest, there is much more to Katie Coit's job than postcards and plushies. We interviewed her for a peek into her forward-thinking strategy and opportunities for innovation, as she leads our retail operation into the future.



### **If I had to explain my job to a stranger, I'd say ...**

I oversee the retail operations for Yosemite Conservancy in the park and am also part of our in-house publishing team. Every day is very different and comes with a wide variety of tasks — it's problem-solving at every turn.

There are so many layers of operating in remote areas of the park that require not only keeping the infrastructure and technology running to support retail sales, but also supporting a team that's scattered all over the region. On top of that, we also publish books. There's a very small team that makes all that run.

### **Internally, colleagues come to me for ...**

Support when retail software crashes in the middle of a busy summer day, the latest sales and merchandise statistics, welcoming new retail employees to their first seasonal position in Yosemite National Park, offering feedback on a new publication's cover design and type font, troubleshooting issues with our web store, a shared bag of chips, or a mid-day dip in the Merced River.

### **My connection to Yosemite comes from ...**

I traveled to national parks often with my family as a kid. After college, I was offered an internship to work in the archives for the National Park Service at Yosemite and thought that would be a great way to spend three months over the winter. I just fell in love with the place.

### **My favorite part of my job is ...**

The creativity involved. Retail wasn't my background, so I'm quite surprised what a creative process it is to develop the products and publications we carry in the store. It's a fun intersection of art and information, and I enjoy bringing it to life and sharing it with visitors in the park.



“We want visitors to know how they are supporting Yosemite Conservancy and how Yosemite Conservancy is supporting the future.”

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### **I'm excited about how the Conservancy is evolving its use of retail and sustainability in these ways ...**

Commerce can feel antithetical to some of the goals we have as a conservation organization. Aligning our retail and publishing operations with our core organizational values is an important step to take. I am excited to use our retail spaces to help illustrate all that Yosemite Conservancy does. From the items we stock, to how they are packaged and displayed, we want the visitor experience to go beyond just buying a gift. We want visitors to know how they are supporting Yosemite Conservancy and how Yosemite Conservancy is supporting the future. ■



## 2022 HIGHLIGHTS

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# YOU MAKE A *Difference*

**YOSEMITE CONSERVANCY FUNDED** a banner number of projects this year, and the results have been tangible, meaningful, and fascinating. This is vital work to address visible effects of our changing climate, to reveal stories that capture Yosemite's diverse history, and to creatively serve the millions of visitors looking to refresh and rejuvenate, all of which has made for a busy year here in the park.

Conservancy donor funds have supported trail rehabilitation along the Mist Trail, a new Yosemite science coordinator to strategically prioritize research in the park, renowned speakers provoking conversations at Parsons Lodge, and art classes featuring the work and inspiration of Chiura Obata.

So far this year, your support has helped our National Park Service partners ...



... improve trailheads at both **TENAYA LAKE, AND MURPHY CREEK**. In 2022, through a partnership with the Federal Highway Lands Program, great strides were made in improving trailheads, organizing parking, providing adequate restroom facilities, and linking a pedestrian trail all the way around the lake. Visitors to Tenaya Lake will now be able to follow a beautiful hiking trail around the lake's shore. This last piece of the loop connection at Murphy Creek will be completed in 2023 by the park's trail crews, along with revegetation and restoration of important lakeside habitat.



... study **GREAT GRAY OWLS**. Yosemite provides key habitat for these rare birds at the southern extent of their range. In 2022, the park tagged five owls with GPS tracking devices to understand how park operations can enhance the meadows and forested areas the owls use for nesting and foraging.

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PHOTOS: (GREAT GRAY OWL) © ROBB HIRSCH. (TENAYA LAKE MURPHY CREEK TRAIL) © COURTESY OF NPS. (WILDLINK) © COURTESY OF NATUREBRIDGE. (GIANT SEQUOIAS) © COURTESY OF NPS.



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“As I enter Yosemite, I don’t know what to expect. My mind is situated on thousands of things. Within a few days here, I finally feel whole and present. It’s everyone’s first time really seeing my smile. I appreciate life and the amazing opportunity of being here.”

**Modesta**  
WILDLINK PARTICIPANT



... support **MORE THAN 40 WILDLINK PARTICIPANTS** from four different schools, enabling them to venture into the wilderness and spend nights under the stars with NPS Wilderness rangers and NatureBridge educators. For most, this was their first time visiting Yosemite, hiking into wilderness, sleeping outdoors and on the ground, and being away from family members.



... learn **WHY GIANT SEQUOIAS ARE DYING** from drought, fire, and insect attacks across their range. Eighty-five trees are being studied in the Merced and Mariposa groves and at Giant Forest in Sequoia & Kings Canyon National Park. Researchers are collecting water samples to track where trees are accessing moisture, observing canopy foliage and beetle populations, and measuring sap flow, all of which indicate how trees are responding to stress during dry conditions and prescribed fire events.







# How to Pack for Adventure – and the Planet!

*Each issue of the magazine will include Junior Ranger pages: special content intended for school-age kids.*

**As Junior Rangers,** we promise to protect, preserve, and respect nature. Our promise begins at home with the first step of any Junior Ranger adventure: planning and preparing with sustainability in mind. Even if it's a short walk to the local park or a long trip to a national park, having a Junior Ranger backpack packed responsibly for adventure is always a good idea.



## Stay Curious!

Wonder what wild animals eat? Stay curious! Observe wildlife from a safe distance, and look for clues in your surroundings – you can even take notes in a nature journal! Which flowers attract which pollinators? Who looks for food from oak trees in the fall? By keeping our food to ourselves and picking up litter off the ground to safely dispose of responsibly by recycling or placing it in a trash can, we can help protect and preserve wildlife and their habitats in Yosemite and at home – and help Keep Wildlife Wild.



# 10 Essentials

Making a list of necessities is a great way to preserve the parks and wild spaces Junior Rangers help protect. By planning ahead, we can do our best to reduce the amount of waste we create, so we can better enjoy our public lands.

Sunscreen



Hat



Map



Reusable Water Bottle



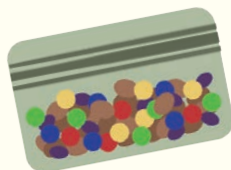
Flashlight



Whistle



Trail Mix



Empty Bag for Litter



First-Aid Kit



Draw your own essential!

## DIY Trail Mix

Circle what you would add to your dream trail mix.



MIX  
1 scoop  
from each  
category

Cereal



Granola

Dried Fruit



Dates

Salty Snack



Pretzels

Bonus Snack



Chocolate



O's



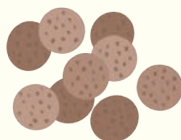
Raisins



Nuts



Mini Marshmallows



Puffs



Apple Chips



Popcorn



Pumpkin Seeds

## Feed Your Curiosity

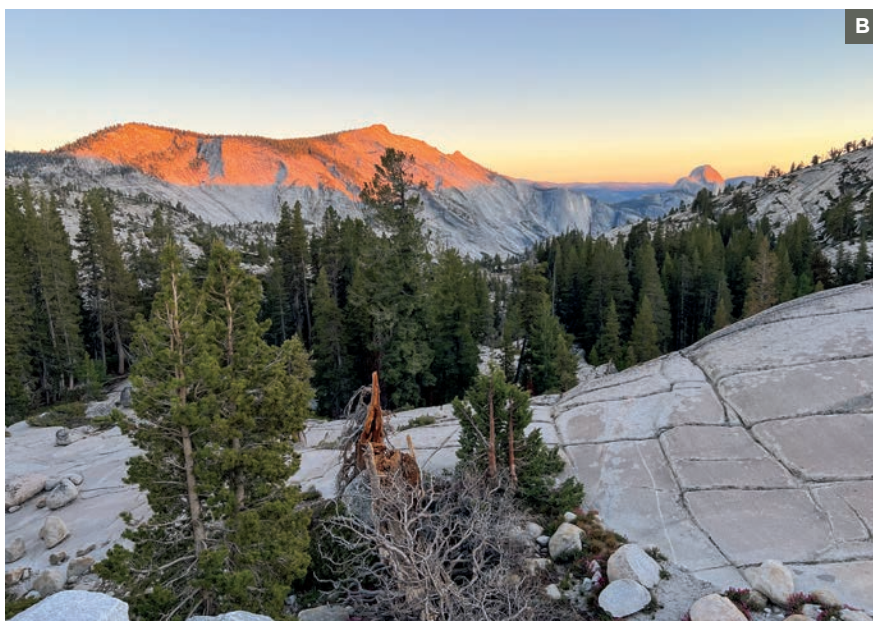
Find the official  
Yosemite Junior  
Ranger products at  
[shop.yosemite.org](http://shop.yosemite.org).





# YOSEMITE THROUGH YOUR LENS

Park fans share their  
photos of Yosemite.



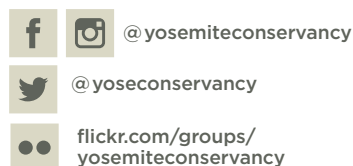
**A** A Gloomy Approach to  
the Top of Nevada Falls  
© JACKSON ABHAU

**B** Alpine Glow From  
Olmsted Point  
© FRITZI DROSTEN

**C** Bobcat in Meadow  
© KARL LUFT

**D** Milky Way at Lower  
Ottoway Lake  
© DAVID BECKETT

Thanks for sharing  
your shots, Yosemite  
fans! To see more  
photos of the park, and  
share your own, follow  
us on social media:





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# Ways to Give

There are many ways you and your organization can support the meaningful work of Yosemite Conservancy. We look forward to exploring these philanthropic opportunities with you.

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For a full list of our 2022 grants, visit  
[yosemite.org/our-impact](http://yosemite.org/our-impact).



# A CENTURY *of Legacies*

**SINCE YOSEMITE CONSERVANCY** was founded in 1923, thousands of people have been moved to make a bequest and make a difference in Yosemite. If you have visited Yosemite and enjoyed its trails and vistas, or participated in educational programs, you have benefited from their generosity. Wildlife protections and scientific research you might not have seen in person have also been funded, thanks to our legacy donors.

You can join these individuals and provide for Yosemite's next century by including Yosemite Conservancy as a beneficiary of your will, trust, or retirement account. When you make this type of gift, you ensure the park remains protected and accessible. Your gift helps preserve the park and enrich visitor experiences into the future, and in the meantime, it entitles you to membership in our Legacy Society.

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To learn more about how to create your legacy for Yosemite, contact Catelyn Spencer at [cspencer@yosemite.org](mailto:cspencer@yosemite.org) or **415.891.1039**.



YOSEMITE  
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[yosemite.org/legacy](http://yosemite.org/legacy)