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BRINGING SCIENCE TO LIFE Pepperwood is a leader in forging solutions to advance the health of Northern California’s land, water and wildlife. The Dwight Center for Conservation Science produces cutting-edge research, provides comprehensive environmental education for all ages, and facilitates an innovative community science initiative. We use our 3,200-acre preserve as a living laboratory to engage our community. Come join us!

NATURE DISCOVERY FOR ALL AGES With the vital support of our donors, Pepperwood makes environmental education affordable, accessible, and a whole lot of fun!

For a complete listing of classes, hikes and events, and to register online, VISIT US AT PEPPERWOODPRESERVE.ORG

Demonstrating resilience
What does resilience really mean?

RESILIENCE is about COMMUNITY

With a changing climate, land stewardship is more important than ever. There is a shift in the conservation model away from preserving wilderness by removing all human contact from the land, to one informed by an indigenous awareness of the inseparable connection between nature and people.

Letter from the President

Dear Friends,

As we step into a new decade at Pepperwood, we are taking stock of the incredible resilience of the life and landscapes of Northern California. The preserve’s vistas are vibrantly green this time of year, and emerging blooms adorn every slope. Regeneration is everywhere, and as a measure of resilience this is an encouraging sight! But here at Pepperwood, where our preserve has now burned twice in two years, we’re reflecting on our increasingly critical role as innovators.

I will not downplay the scale of the task before us – the future of the planet is in all of our hands like never before. The world is experiencing increased occurrence and intensity of natural disasters, warming temperatures, and changing weather patterns. This is generated by a warming trend just shy of 2° Fahrenheit. If we do not change course, this warming is projected to triple by the century’s end, rendering this the decade to launch game-changing solutions that reverse our emissions trajectory.

As we bore witness to Australia’s bushfire crisis, our hearts go out to kindred spirits worldwide that are affected by wildfires. Our stories share a common thread despite geographical distance, and they highlight an important concept: our climate resilience challenge is part of a much bigger global trend.

Global trends call for global solutions – achieved through networking our local and regional actions. Pepperwood is dedicated to creating resilience on a local scale through actions that can ripple outward to a global scale. At Pepperwood we embrace the opportunity for innovation, we share our knowledge and best practices, and we collaborate with other agencies and organizations to coordinate our on-the-ground efforts. We don’t and can’t do it alone, because, more than anything, resilience is about our community.

Pepperwood’s commitment to you is to unite our community around the actions that are proven to foster resilience in our North Bay region. Let us stand together to protect the incredible quality of life we enjoy, for our kids and our grandkids and our grandkids’ grandkids, as we move through this era of unprecedented environmental change.

We can’t do it without you. Please join us.

Sincerely,

Lisa Micheli, PhD | Pepperwood President & CEO
Embracing the climate challenge on a local scale

Around the world, people are confronted by the compound threats of a warming climate, water scarcity, population growth, mass extinctions, and more frequent and intense natural disasters. On the face of it, these threats are overwhelming and leave us wondering if there's anything anyone can do to make a difference. We hear again and again from our community that spending time at Pepperwood provides a source of hope for the future. And why? Because at Pepperwood, it’s not about what one person can do, it’s about what we can do together, right here in our own backyards.

Here, in the heart of one of the most biologically diverse landscapes in the world, we address the issues that are critical to our community and the planet. At Pepperwood, we bring our community into the fold by sharing nature-based solutions to support healthy people, land, water, and wildlife.

Through robust local and regional collaborations, we help bring to scale the lessons we learn in our own backyard—a 3,200-acre “living laboratory” where we apply the outcomes of our scientific research to our land stewardship. All of the lessons learned and best practices we use and refine are shared with our beloved community. From educating youth and their families, to protecting plants and wildlife, to advising state and local officials, to working with our neighbors to foster resilience in the face of recurrent wildfires, Pepperwood is safeguarding the health, beauty, and economy of our region. So, yes, there's hope. Despite the immense challenges before us, this decade will be full of opportunities to innovate, collaborate, and extend the frontiers of knowledge together!

“This decade presents humanity with perhaps our greatest challenge ever: to turn the cycle of climate change around to preserve our planet. Fortunately, across the globe, the capacity of communities to help meet this challenge is now greater than ever before.”

— LISA MICHELI
Pepperwood President and CEO

Building a knowledge base for wildfire resilience

After the Tubbs Fire, Pepperwood hosted and attended multiple community workshops aimed at identifying our community’s needs for addressing wildfire hazards such as fuel accumulation and defensible space. What came to light in these listening sessions was that most available tools for determining area-specific wildfire hazards are designed for use by staff at public agencies with advanced geographic information systems (GIS) software, and expertise — tools not accessible to the general public. With 85% of Sonoma County’s forest privately held in 17,000 different hands, we clearly needed a more accessible way to communicate the location and magnitude of wildfire fuel hazards.

To meet this need, Pepperwood developed a concept for an online “Forest Resilience Toolkit,” with an accessible user interface, no advanced mapping skills needed. The goal is to help landowners plan fuels reduction work on their properties by providing free high-quality data products, such as high-resolution datasets that show which areas have the highest fuel loads. We are delighted to have been awarded a Better Together grant from PG&E to pilot the toolkit in Sonoma County. We expect the initial website to be ready for testing in August 2020.

With this project we are empowering our community to use the Forest Resilience Toolkit and expanding our science-based approach to other California counties. We are so grateful for the incredible community of practitioners joining hands to help meet our forest resilience challenge, including our partners at the Sonoma County Forest Conservation Working Group, and Rebuild North Bay’s Taking Action on Forest Resilience team and the Environment and Sustainability Advisory Committee. We will be engaging user groups and posting updates about the tool on the Pepperwood website, so stay tuned!

“The question we’re asking now is how can our North Bay communities mitigate fire hazards on the one hand, while protecting ecosystem health on the other?”

— TOSHA COMENDANT
Pepperwood Conservation Science Manager
After the Tubbs Fire in 2017, Pepperwood took actions to increase our community’s preparedness for future wildfires. We recognized that it was essential that we collaborate with other agencies and organizations to coordinate our efforts and create networked local and regional initiatives. This paid off two years later with the arrival of the Kincade Fire.

With our University of Nevada colleagues, developers of the ALERTWildfire camera monitoring system, Pepperwood piloted the first two fire cameras in the North Bay network. Somewhat like fire watchtowers, these cameras are situated strategically throughout wildland areas and are equipped with panoramic viewing capacity and night vision to provide 24-hour monitoring. There are now 38 cameras in the North Bay region, all online and accessible to the public through the ALERTWildfire North Bay website. This camera network improves situational awareness allowing for more accurate response and resource coordination during an event. During the Kincade Fire in October 2019, first responders were able to rely on our fire cameras for real-time perimeter data, improving their response accuracy and efficiency in allocating resources.

We also collaborate with CAL FIRE to develop and implement strategies for creating defensible space and maintaining access routes to facilitate fire suppression efforts in the event of a fire. Thanks to our preserve management team’s close coordination with CAL FIRE and our incredible volunteers, we preemptively established defensible space around buildings and improved emergency road access well before the Kincade Fire ignited. During Kincade, first responders spent four days on site cutting fire lines. They reported that our grassland management practices made it easier to fight the fire. Our comprehensive land stewardship facilitated first responders’ ability to strategically leverage wildland areas to gain control of wildfires before they entered urban areas. Pepperwood is proud to serve as a safeguard for our community and continue to work with CAL FIRE to reduce our fuel load.
This is what resilience looks like

Land stewardship is integral to a healthy landscape. Our community has helped to support the health and resilience of our shared landscape by installing erosion controls and planting native species throughout disturbed areas.

One of the benefits of being twice burned in two years is that we have witnessed firsthand the unwavering tenacity and strength of our community in response to adversity. Since the Kincade Fire alone, hundreds of volunteers have dedicated thousands of combined hours to help heal this land from the impacts of the fire and firefighting demonstrating that resilience is about community.

“Pepperwood’s commitment to you is to unite our community around the actions that are proven to foster resilience in our North Bay region.”

— LISA MICHELL Pepperwood President and CEO

Environmental educators serving the whole student

When students visit us for a field trip to explore the frogs, flowers, and fields of Pepperwood, they come to us with varying degrees of experience with the natural world. As environmental educators, it’s our job not only to meet our visitors where they are in their life experiences, but to ensure that their needs, such as comfort and safety, are met.

Social-Emotional Learning (SEL) is how children and adults learn to understand and manage emotions, set goals, show empathy for others, establish positive relationships, and make responsible decisions. SEL also refers to a strategy that pulls from evidence that teaching to the whole child sets the tone for successful interaction — whether it’s a lesson in the classroom, a hike on a field trip, or simply a day-to-day activity. Being in nature and employing SEL practices with children can improve relationship skills and help children promote positive social relationships, as well as provide heightened self-awareness and self-management.

Attending to a person’s social and emotional needs is particularly important after traumatic events such as the wildfires our community has faced in the past two years, which have dramatically changed the look and feel of Sonoma County. Restorative Practices are a specific method for helping children deal with traumatic events through mindful experiences that build community, helping students deal with trauma. There are many leaders in our community educating principals, teachers, and others about how to engage students through these practices.

As the fiscal sponsor of the Sonoma Environmental Education Collaborative (SEEC), Pepperwood and the Laguna de Santa Rosa Foundation hosted two full days of professional development for 40 environmental educators representing ten local non-profit organizations, thanks to a grant from the Community Foundation of Sonoma County. These two days were filled with information about the best ways to connect to our local children, creating safe and nurturing environments for them to learn about science and the natural world through SEL techniques and Restorative Practices.

“In Sonoma County, there are students grappling with the trauma of two back-to-back megafires. It is very valuable to be able to identify how trauma manifests in student behavior, and learn what tools are available to manage this behavior.”

— MARGARET BOEGER
Pepperwood Education Director
So many reasons to be a member!

When you become a Pepperwood member, you protect our land, water and wildlife. You inspire future scientists, and help lead the way on the latest fire research. All that and more . . . because everything we do is powered by members like you.

Helping to care for the environment is just one reason to become a member. Here are a few more:

**EXCLUSIVE HIKES** You’ll get to explore some of the most beautiful and least traveled areas of the preserve.

**SPECIAL EVENTS** Go behind the scenes and get the inside scoop from expert staff and scientists.

**DISCOUNTS and EARLY REGISTRATION** Don’t miss out! Members can sign up first . . . at the discount price!

**GIVE THE GIFT OF MEMBERSHIP** Know someone who treasures our beautiful California landscapes and wants to protect them? Of course you do! Celebrate your family and friends with a gift membership.

Be part of the solution
GO TO PEPPERWOODPRESERVE.ORG AND JOIN TODAY. Visit our website and find the membership level that’s right for you.

Pepperwood