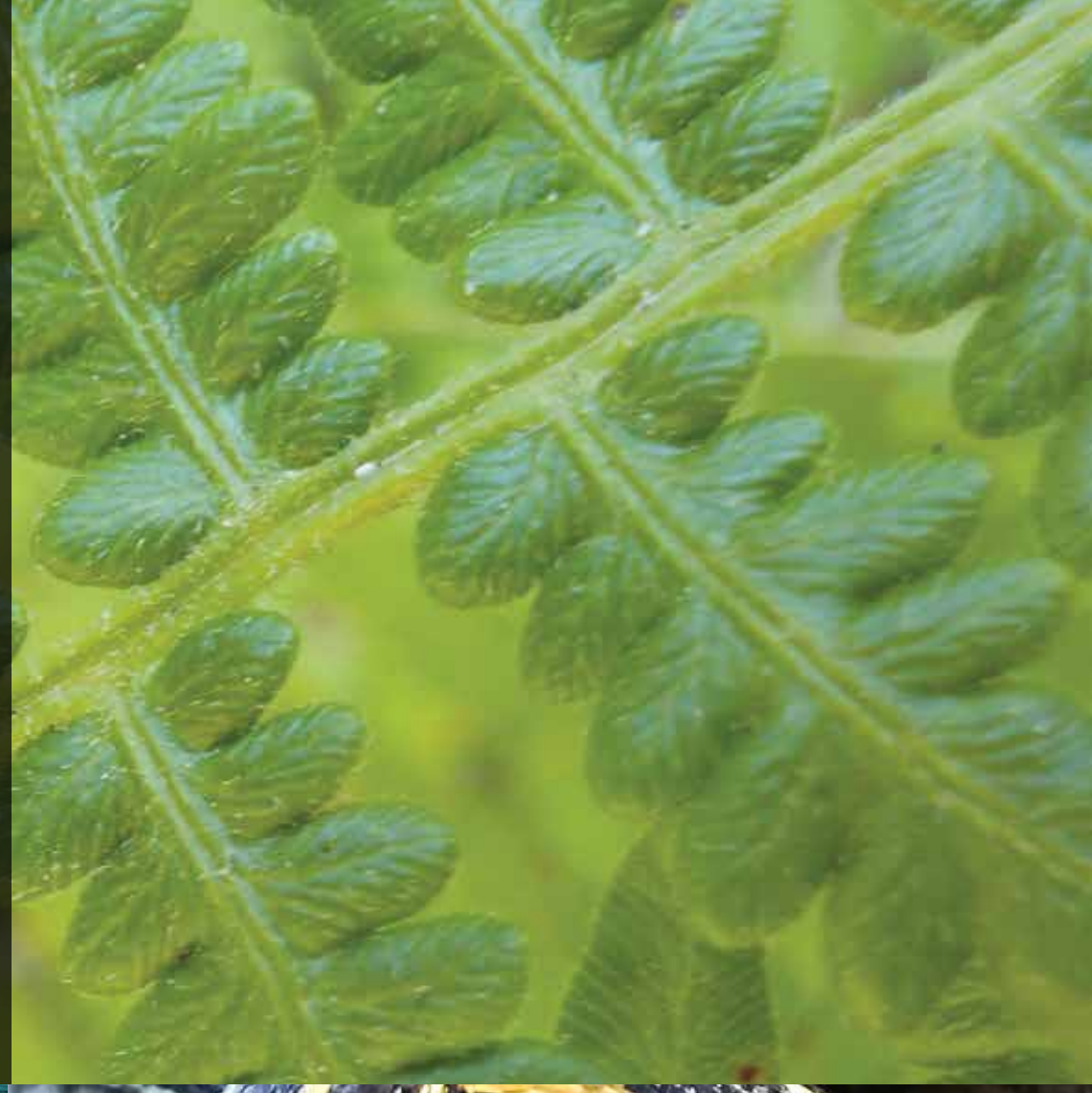
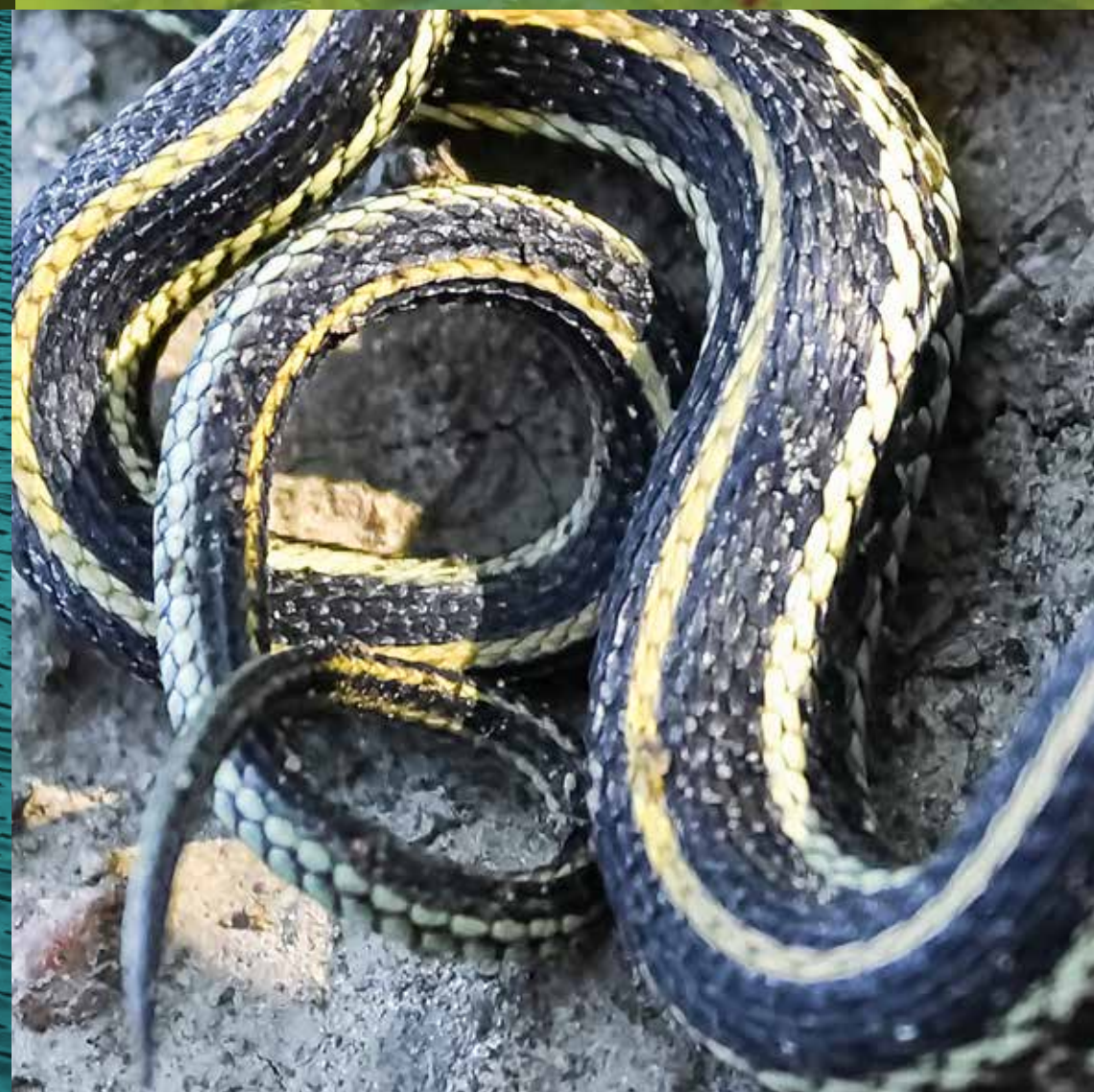
Pepperwood
PRESERVE

2019 PEPPERWOOD ANNUAL REPORT



ADVANCING THE HEALTH OF CALIFORNIA'S LAND, WATER, AND WILDLIFE



WITH GRATITUDE FOR ALL OF YOU WHO STAND WITH US TO KEEP CALIFORNIA'S WORKING AND WILD LANDS HEALTHY FOR GENERATIONS TO COME

A complete list of 2019 donors is available at www.pepperwoodpreserve.org/donors

FROM OUR PRESIDENT

Dearest Friends,

Ten years ago, I arrived at Pepperwood inspired to build on the vision of Ken Bechtel, the generosity of Herb and Jane Dwight, and the leadership of the California Academy of Sciences to make the world a better place, starting right here at home.

Pepperwood was blessed by the original team already on site: Michael Gillogly, who knew the property inside and out; science education pioneers Steve Barnhart and Margaret Boeger; and cultural visionaries Ben Benson and Greg Damron. When the Dwight Center for Conservation Science opened on our gorgeous 3,200-acre site, Herb and Jane gave us free rein to be creative in expanding the team, building programs, and growing a support base.

Every day since, thanks to your confidence and generosity, we have dug in to tackle Pepperwood's three priorities of ecological research and restoration, nature-based science education, and collaborative conservation action. We've come a long way in these ten years, steadily building our data-collection capabilities, expanding the reach of our educational programs, and now serving an ever-growing family of scientists, students, homeowners, public and private land and water managers, and government agency partners.

With your help, Pepperwood is doing the science. We're running the numbers. We're demonstrating new models for nature-based community resilience. We know that well-managed land provides abundant and pure drinking water, clean air, a home for plants and animals, and a resource for our mental and physical health. Healthy open spaces also provide protection from natural disasters -- fire, floods, and drought -- while absorbing carbon and protecting the earth's atmosphere.

Yet a sustainable world is only possible if we make big changes now. This is not about politics or a question of blame. It's about turning around the environmental degradation that is altering our natural world and, consequently, threatening life on Earth. Humanity helped trigger this domino-like climate crisis one individual action at a time, and now we need to lead the way in showing how we can restore a healthy planetary balance again, one individual action at a time.

Pepperwood is here to meet this challenge. This year, we are completing a five-year strategic plan to leverage our incredible inter-disciplinary team and recent technological advances to better communicate our science and ensure it gets used for climate adaptation, fire resilience, ecosystem restoration, and landscape connectivity solutions. We also share our science and encourage conservation action through educational experiences for everyone in our community, assisted by thriving partnerships with local public schools, Santa Rosa Junior College, Sonoma State University, University of California, resource conservation districts, the Sonoma County Farm Bureau, sister NGOs, local governments, our Native Advisory Council, and many others.

We are realizing targeted conservation outcomes, not just on our 3,200-acre preserve, but across the North Bay, and California as a whole, in alignment with globally-viable strategies. We are deeply grateful for you, our donors, members, and volunteers who help create these countless successes every day. It is immensely satisfying to collaborate with you in ever more creative ways to do good for the planet – and to realize our visionary founders' dreams.

On behalf of the Pepperwood family, thank you for your continuing generosity and support.

With warmest gratitude,

Lisa Micheli, PhD
President and CEO

PHOTO: GENSAN WRISLEY, TEENNAT STUDENT

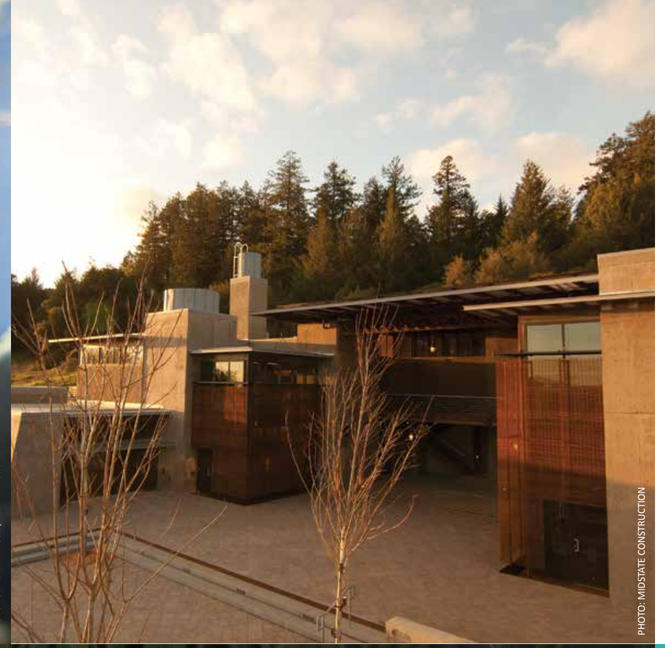
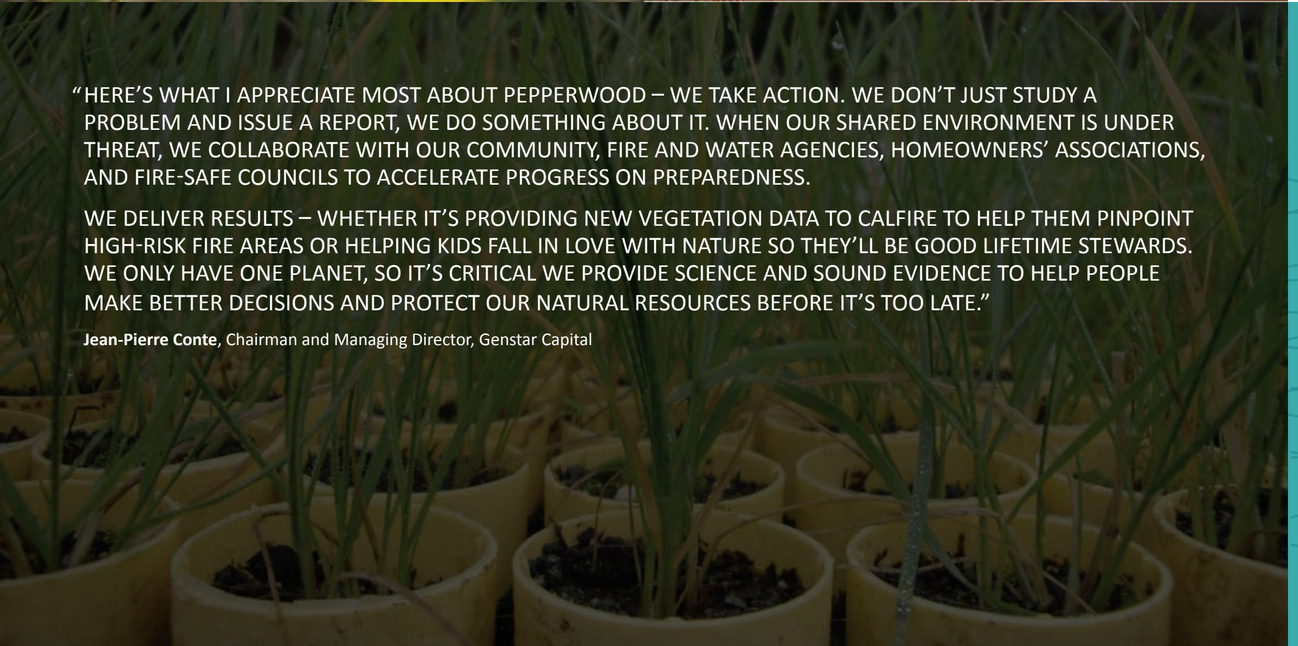


PHOTO: MIDSTATE CONSTRUCTION

WHO WE ARE

Pepperwood is a leader in advancing the health of Northern California's land, water and wildlife. Pepperwood's Dwight Center for Conservation Science produces cutting-edge research, provides comprehensive environmental education for all ages, and serves as a hub for collaborative conservation action. We use our 3,200-acre nature preserve as a living laboratory to engage students, volunteers, scientists, and our diverse community in applied conservation. **Our mission is to advance science-based conservation throughout our region and beyond.**

PHOTO: GERALD AND BUFF CORSI, FOCUS ON NATURE, INC.



"HERE'S WHAT I APPRECIATE MOST ABOUT PEPPERWOOD – WE TAKE ACTION. WE DON'T JUST STUDY A PROBLEM AND ISSUE A REPORT, WE DO SOMETHING ABOUT IT. WHEN OUR SHARED ENVIRONMENT IS UNDER THREAT, WE COLLABORATE WITH OUR COMMUNITY, FIRE AND WATER AGENCIES, HOMEOWNERS' ASSOCIATIONS, AND FIRE-SAFE COUNCILS TO ACCELERATE PROGRESS ON PREPAREDNESS.

WE DELIVER RESULTS – WHETHER IT'S PROVIDING NEW VEGETATION DATA TO CALFIRE TO HELP THEM PINPOINT HIGH-RISK FIRE AREAS OR HELPING KIDS FALL IN LOVE WITH NATURE SO THEY'LL BE GOOD LIFETIME STEWARDS. WE ONLY HAVE ONE PLANET, SO IT'S CRITICAL WE PROVIDE SCIENCE AND SOUND EVIDENCE TO HELP PEOPLE MAKE BETTER DECISIONS AND PROTECT OUR NATURAL RESOURCES BEFORE IT'S TOO LATE."

Jean-Pierre Conte, Chairman and Managing Director, Genstar Capital

HOW WE DO IT

CONSERVATION SCIENCE AND RESEARCH:
Maximize the value of our 3,200 acres as a field site for biodiversity, climate change, and conservation research conducted by our staff scientists and academic partners.

ENVIRONMENTAL EDUCATION:
Provide inquiry-based environmental education to adults and youth, featuring dynamic hands-on citizen science experiences and in-depth natural history workshops.

CONSERVATION IN ACTION:
Restore habitat and watersheds for the 700+ species that call Pepperwood home and assist other communities – Monterey through Mendocino – in taking action to build the health and resilience of Northern California wild lands.

PHOTO: AMY HULSMAN, TEENNAT STUDENT

"PEPPERWOOD IS A COMMUNITY LEADER IN FIRE RESILIENCY AND PROVIDES AN INCREDIBLE "LIVING LABORATORY" TO STUDY BOTH THE IMPACT OF FIRE AND TO DOCUMENT EFFECTIVE FOREST RECOVERY STRATEGIES. THE PRESERVE IS A MODEL FOR DEMONSTRATING HOW TO MANAGE ECOLOGY, WATER, AND WILDLIFE HABITATS TO REDUCE THE THREAT OF WILDFIRE."

Christina Sloop, PhD, Science Institute Lead, California Department of Fish and Wildlife

IN 2018-19 YOU HELPED US GET THE JOB DONE!

700+
species of wildlife and plants protected on Pepperwood's **3,200-acre** nature refuge

575
volunteers and stewards gifting a total of **4,200** volunteer hours, a donation valued at **$117,600**

900
new redwood, oak, and fir trees tagged for monitoring since the 2017 Tubbs Fire, resulting in a total of **6,063** trees tracked on site

65
community outreach presentations reaching **12,000** individuals

861
visits by guest scientists conducting research in Pepperwood's "living laboratory"

104
onsite classes,workshops, retreats, and educational offerings serving **4,200** community members

372,000
images collected via our Wildlife Picture Index array, bringing our image total to **2.25 million** since 2012

70+
government, NGOs, and volunteer organizations relying on Pepperwood's data and technical assistance

350
environmental data streams shared with government agencies and the public

178
TeenNat alumni engaged in ongoing conservation study and career-building activities, contributing **4,700** iNaturalist biodiversity observations since 2013

100%
of contributed funds directly supported Pepperwood programs

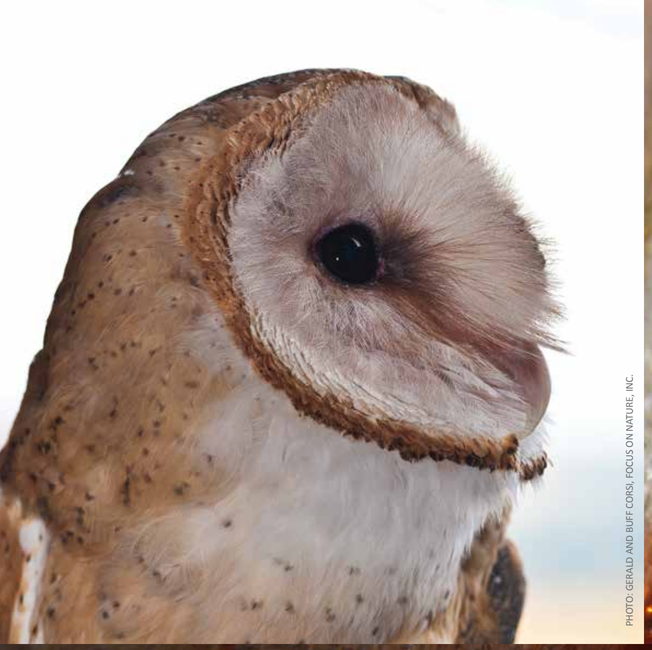
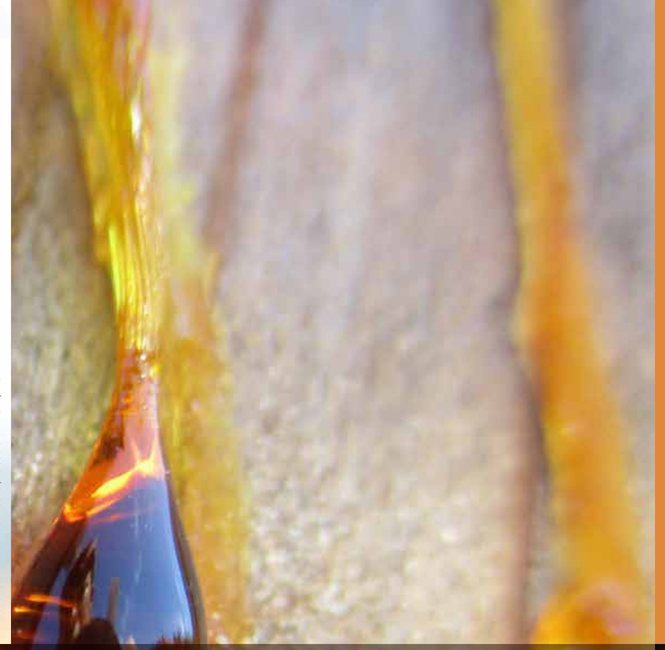


PHOTO: GERALD AND BUFF CORSI, FOCUS ON NATURE, INC.



“PEPPERWOOD SERVES AS AN INVALUABLE SCIENCE COLLABORATOR FOR BUREAU OF LAND MANAGEMENT IN THE MAYACAMAS TO BERRYESSA BLUE RIDGE LANDSCAPE. THEIR QUANTITATIVE AND MODELING EXPERTISE INFORMS OUR DECISIONS ABOUT MANAGING WILDLIFE AND KEEPING PUBLIC LANDSCAPES HEALTHY AND PRODUCTIVE FOR MULTIPLE-USES.”

Jim Weigand, PhD
California State Ecologist,
Bureau of Land Management

“PEPPERWOOD IS A LEADER IN BRINGING RESEARCH AND TECHNOLOGY TO BEAR ON IMPROVING OUR EARLY WARNING SYSTEMS IN SONOMA COUNTY. THEY WERE KEY TO GETTING THE ALERTWILDFIRE CAMERA NETWORK IN PLACE IN THE NORTH BAY AND HAVE BEEN IMPORTANT COLLABORATORS IN ESTABLISHING OUR EARLY FLOOD WARNING SYSTEM.”

Grant Davis
General Manager, Sonoma Water

PHOTO: ALLEN CARO, TEENNAT STUDENT

2018-19 HIGHLIGHTS SCIENCE

By collecting an unprecedented fire science data set for this region, Pepperwood is improving the knowledge base needed by CalFire and first responders, policy makers, land managers, and homeowners to reduce fire risks and pursue long-term strategies for climate-resilient forests.

In the course of restoring our Sentinel Site, we have improved how we track climate and ecosystem health over time -- with hundreds of monitoring stations now back in place to systematically measure weather, soil moisture, stream flow, and the diversity and vitality of local plant and animal populations.

By creating a blueprint for habitat connectivity and corridors through the Mayacamas and Berryessa Mountains, we are empowering local land trusts, county park and open space districts, and Federal land and water managers to leverage climate and wildlife data to keep our Coast Range region wildlife-friendly for years to come.

“

PHOTO: DAISY PALACIOS, TEENNAT STUDENT.

PHOTO: JESSE ROBINSON, STAFF

"MY STUDENTS WERE ABLE TO GET OUT INTO NATURE AND LEARN TO APPRECIATE IT. THESE ARE CHILDREN WHO WOULD NORMALLY NOT HAVE THIS EXPERIENCE, AND THEY BECOME ENTHUSIASTIC PROPONENTS OF THE NATURAL WORLD THROUGH THIS PROGRAM."

2nd grade teacher, Healdsburg Charter School

"THIS INTERNSHIP REKINDLED CHILDHOOD CURIOSITIES ABOUT NATURE, FOR WHICH I AM VERY GRATEFUL. THIS WAS A LIFE CHANGING PROGRAM."

2018 TeenNat participant

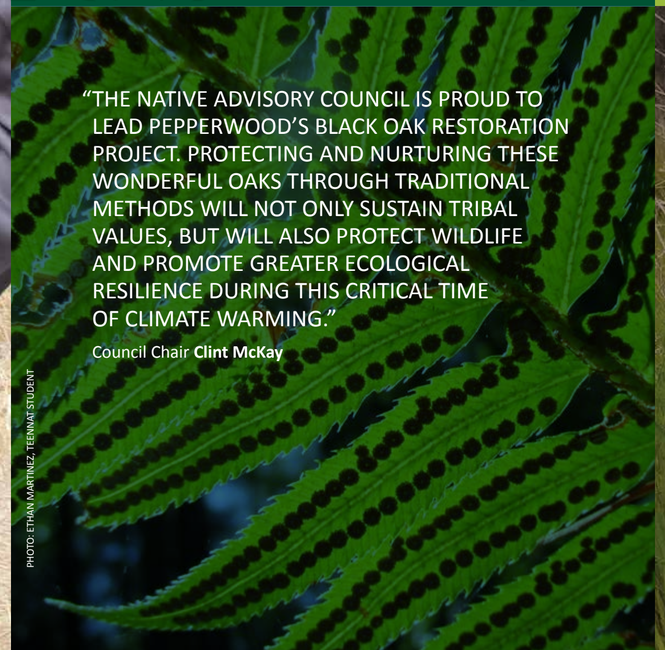


PHOTO: ETHAN MARTINEZ, TEENNAT STUDENT

"THE NATIVE ADVISORY COUNCIL IS PROUD TO LEAD PEPPERWOOD'S BLACK OAK RESTORATION PROJECT. PROTECTING AND NURTURING THESE WONDERFUL OAKS THROUGH TRADITIONAL METHODS WILL NOT ONLY SUSTAIN TRIBAL VALUES, BUT WILL ALSO PROTECT WILDLIFE AND PROMOTE GREATER ECOLOGICAL RESILIENCE DURING THIS CRITICAL TIME OF CLIMATE WARMING."

Council Chair **Clint McKay**

2018-19 HIGHLIGHTS EDUCATION AND OUTREACH

1,500
PEOPLE OF ALL AGES connected directly with nature via 40 workshops, teacher trainings, family outings, and lectures spanning natural history, art, and science.

25
LOCAL TEENS took a deep dive into the world of citizen science via our nationally-recognized five-week summer TeenNat internship.

900+
CHILDREN, 2nd through 5th grade, learned to identify native plants and animals via Students Conducting Environmental Inquiry (SCENIQ) field trips designed to spark a passion for nature conservation.

20
SELECT UNDERGRADUATE SCIENTISTS from across the country joined the California Academy of Sciences at Pepperwood to explore linkages between genetics and conservation via the launch of a new National Science Foundation summer science institute.

575
PEPPERWOOD VOLUNTEERS and Stewards provided critical hands-on assistance with land stewardship, field research, and education and conservation events for the community.

"IT'S FANTASTIC TO HAVE A SCIENTIFIC RESOURCE LIKE PEPPERWOOD IN NORTHERN CALIFORNIA. THEIR ABILITY TO OFFER ACCURATE, HIGH RESOLUTION DATA AND A COMPREHENSIVE APPROACH TO VEGETATION MANAGEMENT IN THE WILDLAND-URBAN INTERFACE IS KEY TO HELPING US REMOVE WILDFIRE HAZARDS IN THE COUNTY."

James Williams, Fire Marshal, Fire Prevention, Sonoma County

2018-19 HIGHLIGHTS CONSERVATION IN ACTION

- The California Department of Fish and Wildlife awarded Pepperwood a competitive grant to conduct and evaluate post-fire restoration of the preserve's 3,200 acres of Russian River headwaters to provide a science-guided model applicable throughout northern California.
- Our Native Advisory Council launched a Black Oak restoration project at Pepperwood to bring traditional ecological knowledge to bear on the resilience of this ecologically and culturally critical resource.
- The Terrestrial Biodiversity and Climate Change Collaborative (TBC3) with UC Berkeley celebrated its ten-year anniversary and brought together at Pepperwood 30 experts and scientists – the vanguard of climate and fire research in California – to identify how to fill knowledge gaps about the growing threats of wildfire in a warming climate.
- Pepperwood leveraged new airborne forest data sets to create a much-improved map of hazardous fuels in Sonoma County as a resource for land managers and residents working to reduce wildfire risk across our region.
- The Mayacamas to Berryessa Landscape Connectivity Network founded and facilitated by Pepperwood identified a set of habitat corridors for climate adaptation.
- Pepperwood advanced the restoration of 900 acres of local native grasslands through model conservation grazing and prescribed burning programs designed to enhance native grass communities and improve soil health.
- Pepperwood facilitated ReBuild North Bay's Environment and Sustainability Advisory Council and collaborated on its Taking Action to Reduce Wildfire Hazards initiative for Sonoma, Napa, Lake, and Mendocino counties.

2018-19 HIGHLIGHTS BUILDING CAPACITY

- Pepperwood launched a focused $1.5 million Rising from the Ashes campaign, which, together with our insurance settlement, allows us to re-build three mission-critical facilities lost in the 2017 fires. The new facilities, to be completed by winter 2020, will model next-generation ignition-resistance, low-toxicity, energy efficiency, and sustainable construction solutions.
- Through support from the National Science Foundation, Pepperwood outlined a five-year strategic plan for field station operations, defining specific tactics through 2024 to grow our role leading climate change research, education, and collaboration and informing effective conservation action in California and beyond.

"PEPPERWOOD IS GETTING OUT IN FRONT OF LAND USE AND FIRE ISSUES AND DRIVING LAND MANAGEMENT POLICY BASED ON SCIENCE AND NOT POLITICAL WHIM. THEY COLLABORATE CLOSELY WITH STATE AND COUNTY AGENCIES AS WELL AS WITH LOCAL LANDOWNERS AND ARE AMONG A HANDFUL OF PLAYERS WHO ARE ACTUALLY GETTING SOMETHING DONE!"

Edward Wallis
Wallis Family Estate Winery and
Diamond Mountain Fire Safe Council

PHOTO: GERALD AND BUFF CORSI, FOCUS ON NATURE, INC.

WAYS TO MAKE A DIFFERENCE

STAY CONNECTED
www.pepperwoodpreserve.org
@PepperwoodCA
@pepperwoodpreserveca
/PepperwoodCA

BECOME A MEMBER
Become part of our dynamic environmentally-focused member community. All members enjoy access to exclusive hikes and behind-the-scenes member events, as well as early registration and discounts on Pepperwood community education offerings.

LEARN
Deepen your connection to nature by signing up for classes, lectures, hikes, retreats, and family weekends to explore the preserve. Make new friends, take a wildflower walk, participate in art and photography workshops, and learn about cultural traditions such as animal tracking and Native American basket-weaving.

VOLUNTEER
Opportunities to get involved include our monthly Volunteer Workdays, field research for our Citizen Science projects, helping out with community events, and becoming a trained California Naturalist or Pepperwood Steward.

TAKE ACTION
Speak out, stand up, contact your legislators, and defend funding to fight climate change and protect our land, water, and wildlife. It's time to push for science-based solutions now, while there's still time to make a difference.

LEAVE A LEGACY
Make a lasting gift through your will or living trust and protect Pepperwood's stunning natural preserve and California's wild lands throughcutting-edge science,innovative education programs, and solutions-based collaborations.

LEADERSHIP

BOARD

Herbert Dwight, Chairman
Co-Founder,
Pepperwood Foundation

Jane Dwight, Secretary
Co-Founder,
Pepperwood Foundation

Paul Downey, Treasurer
Investment Banking Consultant

Shannon Bennett, PhD, Director
Chief of Science,
California Academy of Sciences

Dr. Frank Chong, Director
President and Superintendent,
Santa Rosa Junior College

Jean-Pierre L. Conte, Director
Chairman and Managing Director,
Genstar Capital

Rob Das, Director
Co-Founder, Splunk

Bill Dwight, Director
Founder and CEO, FamZoo.com

Kate Ecker, Director
Consultant to Social Enterprises

Lisa Micheli, PhD
President and CEO*
Pepperwood Foundation

Roger Nelson, Director
President, Midstate Construction

Sheba Person-Whitley, Director
Executive Director, Sonoma County
Economic Development Board

STAFF

Operations, Communications and Development

Stephanie Beard,
Communications Specialist

Kelly Kohrs, *Program Associate*

Cassandra Liu, *Finance and Operations Manager**

Sloane Shinn, *Community Engagement*

Margie Shurgot,
*Director of Advancement**

Research and Preserve Management

Sonja Barringer, *Facilities Assistant*

Tosha Comendant,
*Conservation Science Manager**

Ryan Ferrell, *Research Technician*

Devyn Friedfel,
Natural Resource Specialist

Michael Gillogly, *Preserve Manager**

Morgan Gray, *Conservation Analyst*

Michelle Halbur, *Preserve Ecologist*

Steven Hammerich, *Wildlife Specialist*

Education

Nicole Barden,
Bilingual Environmental Educator

Margaret Boeger, *Education Director**

Holland Gistelli, *Education Specialist*

Jesse Robinson,
Environmental Educator

Cultural Resources

Ben Benson,
Cultural Resources Coordinator

Clint McKay, *Cultural Consultant*

*Indicates membership in Executive Committee leadership team

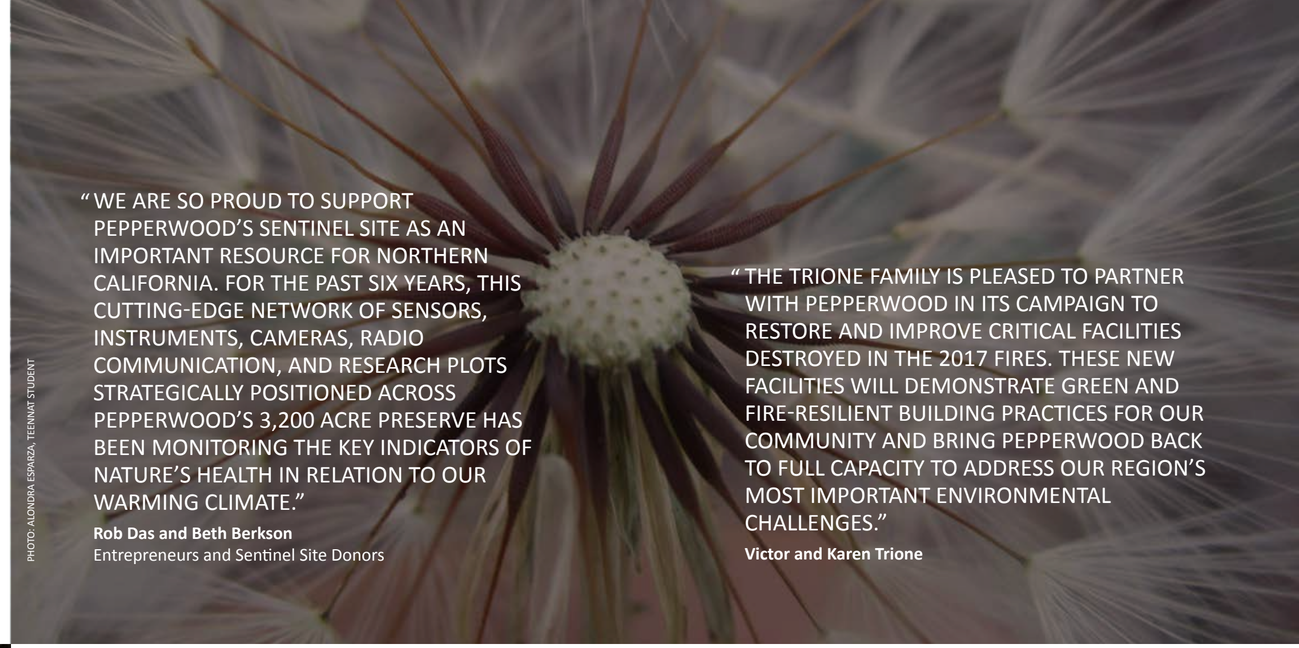


PHOTO: ALONDRA ESPARZA, TEENNAT STUDENT

"WE ARE SO PROUD TO SUPPORT PEPPERWOOD'S SENTINEL SITE AS AN IMPORTANT RESOURCE FOR NORTHERN CALIFORNIA. FOR THE PAST SIX YEARS, THIS CUTTING-EDGE NETWORK OF SENSORS, INSTRUMENTS, CAMERAS, RADIO COMMUNICATION, AND RESEARCH PLOTS STRATEGICALLY POSITIONED ACROSS PEPPERWOOD'S 3,200 ACRE PRESERVE HAS BEEN MONITORING THE KEY INDICATORS OF NATURE'S HEALTH IN RELATION TO OUR WARMING CLIMATE."

Rob Das and Beth Berkson
Entrepreneurs and Sentinel Site Donors

"THE TRIONE FAMILY IS PLEASED TO PARTNER WITH PEPPERWOOD IN ITS CAMPAIGN TO RESTORE AND IMPROVE CRITICAL FACILITIES DESTROYED IN THE 2017 FIRES. THESE NEW FACILITIES WILL DEMONSTRATE GREEN AND FIRE-RESILIENT BUILDING PRACTICES FOR OUR COMMUNITY AND BRING PEPPERWOOD BACK TO FULL CAPACITY TO ADDRESS OUR REGION'S MOST IMPORTANT ENVIRONMENTAL CHALLENGES."

Victor and Karen Trione

"AS WE CELEBRATE THE 10-YEAR ANNIVERSARY OF TBC3, WE APPRECIATE THE VALUE OF THE LONG-TERM COLLABORATION BETWEEN THE UNIVERSITY OF CALIFORNIA AND PEPPERWOOD. PEPPERWOOD OFFERS EXTRAORDINARY OPPORTUNITIES FOR BASIC AND APPLIED SCIENCE AND FOR WORKING TOGETHER TO ENSURE THAT RESEARCH GETS USED BY DECISION-MAKERS THROUGHOUT THE STATE, PARTICULARLY AS WE ADDRESS THE 21ST CENTURY CHALLENGES OF DROUGHTS, FIRES, AND A CHANGING CLIMATE."

David Ackerly
Dean, College of Natural Resources,
University of California Berkeley

FINANCIALS

REVENUE $2,758,325

- Individual Gifts and Membership 42%
- Foundation/Corporate Grants 27%
- Special Events 10%
- Unrealized Gains on Investments 8%
- Earned Income 5%
- In-Kind Goods and Services 4%
- Government Grants 2%
- Other Income 2%

EXPENSE $2,958,048

- Programs 80%
- Administration 11%
- Development 9%

100% of gifts directly benefit Pepperwood programs
Total cost to raise $1 = $0.10
Pepperwood's 2019 audited financial statement is available at **www.pepperwoodpreserve.org/financials**

Pepperwood PRESERVE

2130 Pepperwood Preserve Road
Santa Rosa, California 95404

PHOTO OF FERN ON COVER BY JULIA DI'CICCO, TEENNAT STUDENT

"THINK OF PEPPERWOOD AS THE RUDDER THAT STEERS OUR REGION'S CONSERVATION INVESTMENTS, ENSURING OUR CITIES AND AGENCIES CAN MAKE THE BEST POSSIBLE DECISIONS BASED ON INFORMED SCIENCE."

James Gore, 4th District Supervisor, Sonoma County, and
Second Vice President, California State Association of Counties

PHOTO: GERALD AND BUFF CORSI, FOCUS ON NATURE, INC.