

SONOMA
STATE
UNIVERSITY

CENTER FOR
ENVIRONMENTAL
INQUIRY



@SSUCEI

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Director

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2021

Education into Action

Around the planet, people are working to reduce **climate change** impacts on ecosystems and to prosper despite its extreme effects. The Center is making these kinds of projects possible right now here in the **North Bay**.

These pages show how we turn **education into action** by targeting key issues facing our communities and mobilizing faculty and students to help find solutions.

Our programs **are funded by donors and grants**. With your help, we can target even more issues, reach wider, more diverse communities and graduate more students with the skills and experience to take on these challenges.

Let's get environmentally ready.



Claudia Luke

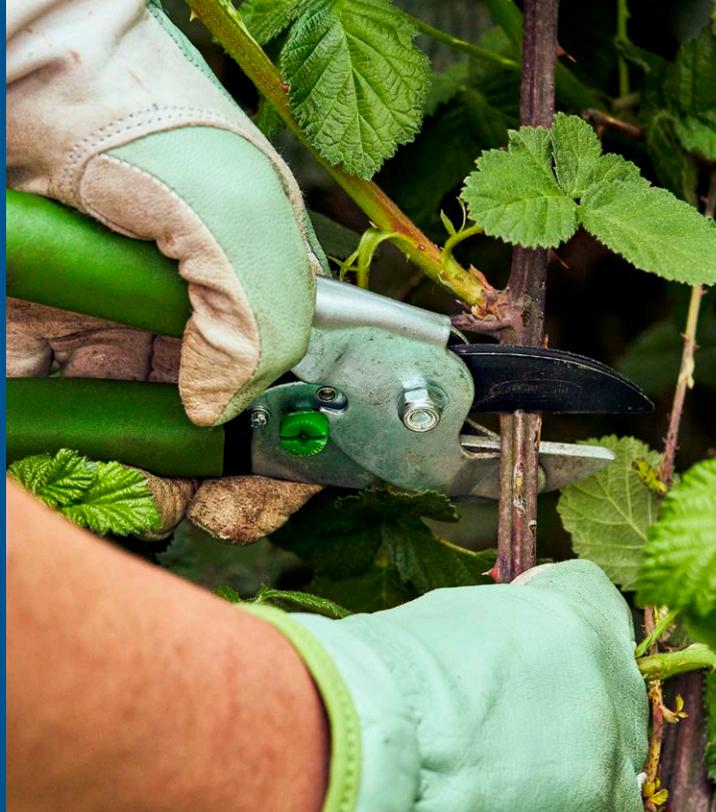
Claudia Luke, Director

What We Do

The Center for Environmental Inquiry mobilizes faculty, students and community to solve environmental challenges of the North Bay. Our staff create connections between academia and community to teach critical skills and spark new ideas on issues that matter.

We bring together:

- Students & Faculty to work on high priority projects as they build skills that are valuable to employers.
- Businesses & Agencies to partner on solving pressing environmental issues.
- Community Members to learn and work together to make meaningful contributions



Sharing Knowledge

Since time immemorial, Coast Miwok and Southern Pomo have used traditional ecological knowledge to sustain the productivity of Sonoma County ecosystems. Unfortunately, lands where the tribes have been denied access no longer benefit from these practices.

The Federated Indians of Graton Rancheria (FIGR) and the Center are working together to promote environmental stewardship and resume traditional practices that revitalize stressed ecosystems.

A new \$2.8 million FIGR Learning Center at SSU's Osborn Preserve will provide a forum for open communication on best practices.



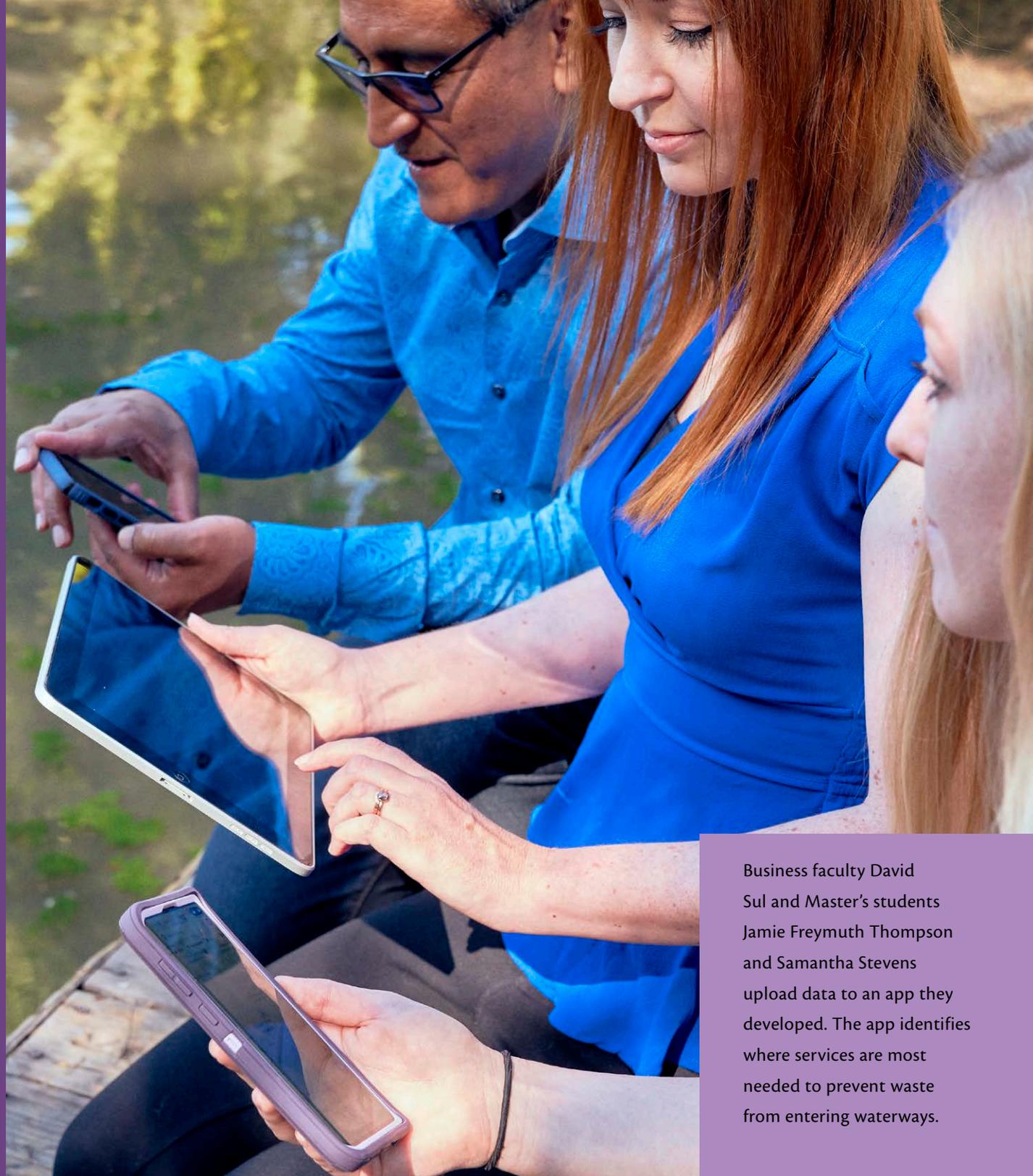
FIGR Tribal Chairman Greg Sarris and Center Director Claudia Luke discuss plans for the new FIGR Learning Center, scheduled for completion in Fall 2022. SSU respectfully acknowledges FIGR as the original inhabitants and land stewards of Osborn Preserve lands.

Finding Solutions

Homelessness is increasing across California due to fire, flood and financial crises. As more displaced people seek shelter along creeks and rivers, water quality declines if services are not made available.

With funding from Sonoma Water and donor Alexander Leff, the Center launched Rising Waters, a unique collaboration that convened decision-makers from across sectors to identify studies needed to solve this complex water issue.

Three faculty–student teams researched priority questions and presented results to community leaders, who are using the information to forge solutions.



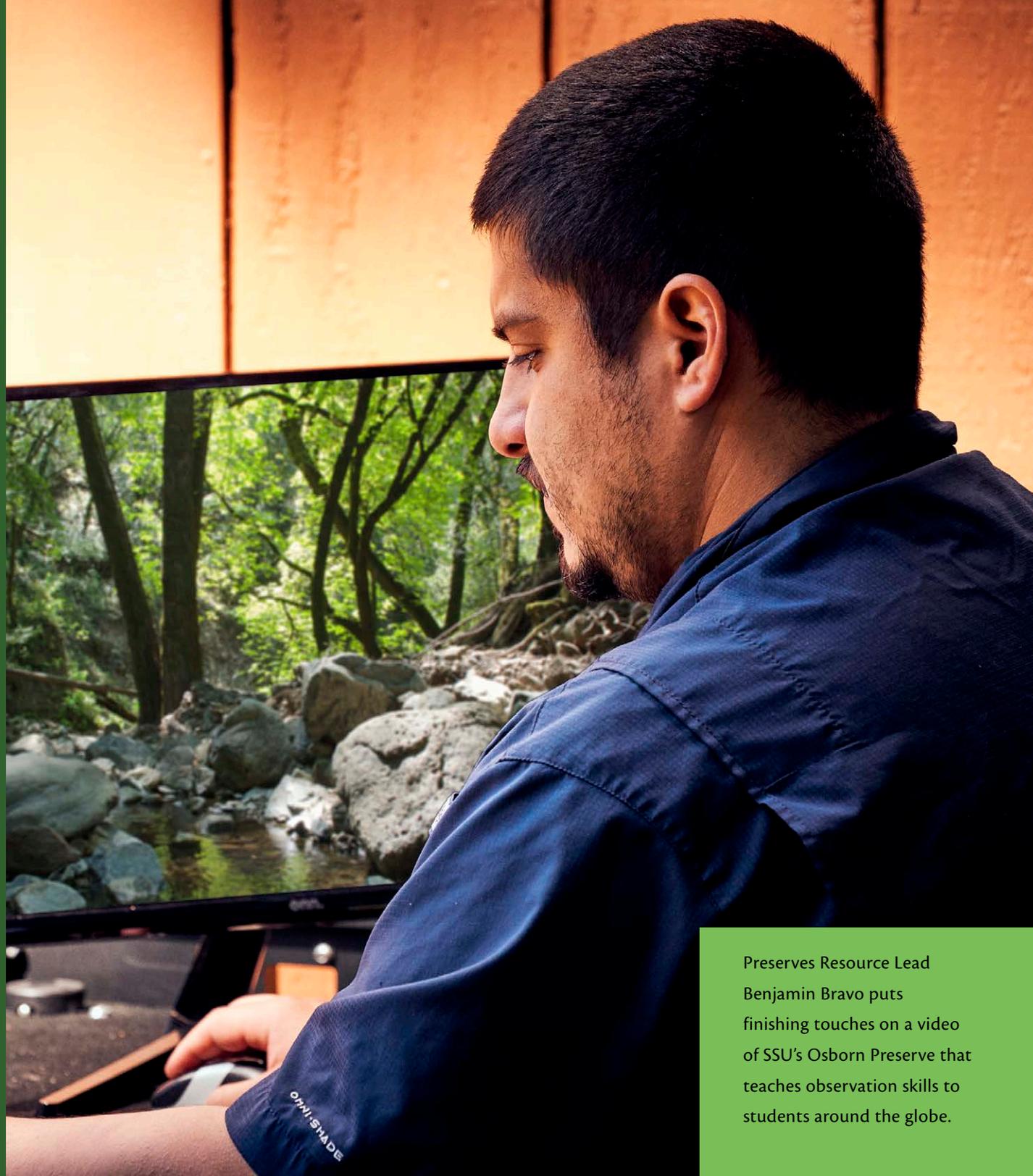
Business faculty David Sul and Master's students Jamie Freymuth Thompson and Samantha Stevens upload data to an app they developed. The app identifies where services are most needed to prevent waste from entering waterways.

Connecting to Place

If our planet isn't healthy, we can't be healthy. How can we deepen our understanding of our reliance on earth's ecosystems?

With funding from the National Science Foundation, the Center is leading The Virtual Field, an international coalition of 50 field stations and marine labs that creates virtual field experiences in ecosystems around the world (thevirtualfield.org).

This year, over 1,000 students and faculty from 150 universities explored 40 terrestrial, freshwater and marine ecosystems that support them.



Preserves Resource Lead Benjamin Bravo puts finishing touches on a video of SSU's Osborn Preserve that teaches observation skills to students around the globe.

Restoring Ecosystems

Climate change is making riparian habitat restoration more important than ever. When invasive species overrun streamside habitats, they displace natives that rely on shade and moisture to survive heat and drought.

Sonoma Water and donors fund the Center to train students and community to control invasive species in riparian areas.

Each year, 30 students graduate from our programs with the knowledge and skills to restore biodiversity and make native species resilient in the face of climate change.



Students Emily Ledford and Savanna Thomas plant native species along Copeland Creek. Students grew the plants in their Plant Propagation course.

2021 Projects

Projects, lands and people
turning education into action.

Faculty & Partners

cei.sonoma.edu/about/partners

Volunteers

cei.sonoma.edu/about/supporters

For more details on projects:

cei.sonoma.edu/projects/search

1,224 Students

305 Faculty

399 Organizations

3,359 Community Members

72 Departments

4,160 Galbreath, Osborn and Los
Guillicos Preserves (acres)

Fire 4

Understanding and reducing fire risk in natural systems

Researchers: Bentley, Clark, Ford, Gilinsky, Meentemeyer,
Newton, Rank, Sen, Canavati de la Torre

Water 12

Improving water quality, conservation and storage capacity

Researchers: Anfinson, Bravo, Burke, Fernandez, Gilinsky, Guilford, Glas,
Hart, Luke, Peña-Andrade, Shaw, Shott, Sul, Thompson, Woltemade

Air & Climate 2

Addressing local climate change with new technologies

Researchers: Cohen, Ehrmantraut, Halle

Biodiversity 33

Preserving ecosystem health and biodiversity with new sensing techniques

Researchers: Balestraci, Bravo, Clark, Feldman, Frangioso, Fritz, Girman,
Hudson, Kipling, Loffland, Lopez, Olsen, Meentemeyer, Moniz, Peterson, Rank,
Rizzo, Serpa, Shott, St. John, Thiele, Trowbridge, Watt, Winger, Wojcik, Zahnle

Environmental Awareness 6

Building environmental connections in innovative ways

Researchers: Brown, Halle, Hongisto, Jones, Kassis, Levitsky, Medina, Winger

Impact 2021

In 2020, the Center boosted support to solve regional challenges.

Solution-Oriented Research

Partnered with such organizations as Sonoma Water, Russian River Watershed Association, North Bay Water Quality Control Board, City of Santa Rosa, City of Rohnert Park, West County Health Center

Student Environmental Readiness

Expanded programs to include students at 150 universities around the world

Community Environmental Readiness

Doubled skill-building workshops on regional challenges

Ecosystem Management

Established demonstration sites showing ways to enhance ecosystem processes

Action 2022

In 2022, the Center will increase academic engagement on key challenges facing the North Bay.

100% of Center program funding comes from donations and grants

Learning Center

Open new Federated Indians of Graton Rancheria Learning Center to host discussions targeting innovative solutions

Environmentally Ready Solutions

Increase faculty–student research on emerging fire and water issues

Climate Resilience

Focus campus resources on community collaborations that enhance resilience in the face of climate change

Dig into Nature

Grow community engagement in workshops and launch a climate pledge that will teach you how to make a difference

Donors

Thank you for investing in environmental readiness for all

Visionaries (Lifetime)

\$100,000 & above

The Federated Indians of Graton Rancheria

Fred & Jean Galbreath

Robert & Sue Johnson

Joan & William Roth

Daphne W. Smith

Benefactors

\$20,000–\$99,000

Alexander Leff

Carol Cole Mitchel & Clark Mitchel

Pioneers

\$5,000–\$19,999

St. Francis Winery & Vineyards

Explorers

\$1,000–\$4,999

Mike & Paula Aja

Michelle & Robert Friend

Susan Norwick Horrocks & Keith Horrocks

Howard Liebman

Richard & Johanna Luke

Milo C. Mitchel

Cathy & Chuck Williamson

Terri & David Yost

Guides

\$25–\$999

Anonymous

Paul Bouchard

John Branscome

Annemarie & Matt Brown

Ruth Burke

Tom Cavers & Sol Garay

Susan & Stanley Cohen

Nancy & Dale Dougherty

Footloose Forays

Judith Ochs Giampaoli & Mark Giampaoli

Robert Girling

Paula Hammett & Robert Hope, III

Diane & Bryant Hichwa

Michael Knappman

Susan & William Krawetz

Mr. Edward Culberson & Ms. Elizabeth E. Lotz

Claudia Luke

Sandy Mailliard

Rachel & Tim Parker

Sarah Reid

Robbie Johnson Rhodes & Dan Rhodes

Eri Sawairi

Monique Semp & William Zavora

John Sheehy & Laura Szujewska

Mamoru Shimokochi & Anne Reeves

Gayle & Edward Stephens

Hugh Stevenson & Diane Paleczny-Stevenson

Brian J. Talbot

Kirsten & Steve Tellez

Janis & Warren Watkins

Ella Wong

Legacy & Endowed Gifts

Anonymous

Fred & Jean Galbreath

Marthe Norwick

Georgette Skellenger

Daphne W. Smith

Fred and Jean Galbreath's great grandson

Kevin Yost was taken from us this year.

His parents, Terri and David Yost, and grandfather, Bob Johnson, dedicated a site to Kevin at the preserve which held a special place in his heart.

Donations can be made in his name.



Revenue

- 33% SSU/CSU Funding
- 42% Corporate Partners & Agencies
- 12% Individual Donations
- 13% Endowments

Total: \$896,653

Expenditures

- 82% Programs
- 10% Communications
- 5% Operations
- 3% Lands & Facilities

Total: \$758,584

Staff

Andy Balestracci, Galbreath Logistics Lead

Benjamin Bravo, Preserves Resource Lead

Suzanne DeCoursey, Education Manager

Chris Halle, PhD, Project Development Lead

Claudia Luke, PhD, Director

Margot Rawlins, Galbreath Program Coordinator

Anne Reeves, Brand Strategist

Kerry Winger, Outreach & Communications Lead

Julie Wittmann, Community Naturalist Coordinator

Turning Education into Action

All program funding comes from your contributions