


Growing the leaders
of tomorrow with the
environmental challenges
of today



Galbreath Wildlands Preserve –
3,670 acres
Fairfield Osborn Preserve –
450 acres
Los Guillicos Preserve –
40 acres

Center for Environmental Inquiry
Sonoma State University
1801 East Cotati Avenue
Rohnert Park, CA 94928

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Peter Gordon, Center staff

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Environmental Inquiry

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2017 ANNUAL REPORT

CREATING AN ENVIRONMENTALLY READY GENERATION



Dr. Judy Sakaki
President, SSU

"We believe the Center serves as a model for a 21st century education. We want to give our students more than just a degree. We want to give them hands-on experiences working with our community to solve its toughest challenges."



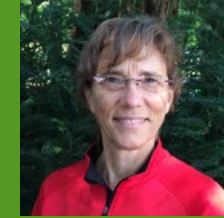
Dr. Lisa Vollendorf
Provost, SSU

"The Center provides unparalleled opportunities for our students to develop skills and knowledge about sustainability and the environment."



Dr. Lynn Stauffer
Dean of Science and
Technology, SSU

"Supporting the Center means our students will grow. The Center brings the resources, information, and logistic support our faculty needs to get students working on pressing environmental issues."



Dr. Claudia Luke
Center Director

Today, we face the biggest environmental challenges in history. Sonoma State is tackling that challenge head on by training a new generation of leaders – leaders who learn their craft by working in their communities on environmental solutions.

This year at the Center, over 900 students investigated real-world environmental challenges – a 22% increase over last year. These experiences were made possible by partnerships between 47 faculty and 52 community partners. And we laid the foundation for future growth with new overnight facilities and community educational programs.

Join us in taking a bold new approach to creating a positive future. With the enthusiastic support of our new president, Judy Sakaki, we are working hard to reach all students on campus.

We couldn't achieve these results without the support of our corporate partners, donors and community. Please consider a donation this year to make a real difference in growing a sustainable future.

The Center's Land Management interns worked with partners on restoration projects across Sonoma County.



ACADEMIC ACHIEVEMENT

Students learn better

2017 Student Engagement

- 1,460 Students outdoors
- 906 Students on projects
- 105 Projects

Geography students studied how remote sensing can be used to estimate the amount of carbon stored in oak woodlands at the Osborn Preserve.

105 Projects The Center collaborates with and supports faculty from schools across campus to get students working on environmental projects.

Water

- Flood warning systems
- Climate characterization
- Water- and land-use planning tools
- Water quality monitoring
- Community perspectives on water
- Antibiotics in waste water
- Erosion and flooding
- Rainwater collection systems

Environmental Technology

- Electricity production from wastewater
- Above- and below-ground environmental sensor networks
- Wildlife image processing
- Drones for measuring landscape changes
- Mobile data harvester
- Environmental data sharing

Environmental Education

- Social robots that teach children
- Elementary school tours and curriculum development

Arts

- Environmental sculpture
- Natural materials art
- Photography

Habitat Restoration

- West county habitat restoration
- Sudden Oak Death transmission
- Invasive animals and plants
- Threats to oak woodlands
- Utility line effects on native plants
- Effects of grazing on native plants and animals
- Habitat quality of protected species

FROM OUR STUDENTS



Rafael Diaz
Engineering Science
Visicon Tech

"The image-processing work helped me land the job. Thank you for teaching and guiding me through the internship."



Ana Torres
Environmental Studies
California Fish and Wildlife

"The program gave me a new perspective on science and helped steer me toward my future career."



Garrett Shipway
Naturalist & Student Land
Steward

"I gained valuable problem solving, management and resource prioritization skills that give me a competitive edge in my career as a marine biologist."



Makayla Freed
Naturalist & Student Land
Steward

"The Center's internship programs have opened more doors for me on a professional and personal level than I had ever thought possible."



Students certified in the Center's Naturalist Training Program led educational tours for over 900 3rd graders.

A TRAINED WORKFORCE

Graduates have desirable real-world skills



Engineering and philosophy students develop automated vehicles that collect environmental data.

2017 Partnerships

- 49 Faculty
- 52 Organizations
- 26 Disciplines



Dr. Farid Farahmand
Professor Engineering Science

"With the Center, we are providing students the opportunity to work on cutting edge technologies."



Dr. Nathan Rank
Professor Biology

"Working with the Center as an educator, I am able to help students learn the things they can't learn in the classroom."

Participating Faculty The Center supports faculty to give their students valuable skills and experience working with partners.

Anthropology: Thomas Whitley **Art:** Nathan Haenlein, Mads Lynnerup, Greg Stimac **Biology:** Lisa Bentley, Mike Cohen, Hall Cushman, Nick Geist, Derek Girman, Fran Keller, Melina Kozanitas, Nathan Rank, Tamas Torok **Chemistry:** Mark Perri **Communications:** Emily Acosta Lewis **Engineering**

Science: Farid Farahmand, Gurman Gill **Environmental Studies and Planning:** Jeff Baldwin, Caroline Christian, Jacquelyn Guilford, Heidi Herrmann, Mike Moore, Wendy St. John, Karna Wong **Extended Education:** Alejandra Warden **Geography:** Matt Clark, Michelle Goman **Geology:** Owen Anfinson,

Nicole Myers **History:** Kathleen Noonan **Hutchins Liberal Arts:** Russ Scarola **International Education:** Roberta Hodges **Math & Statistics:** Grace Brown, Martha Shott **Philosophy:** Gillian Parker, John Sullins **Political Science:** Emily Ray **Physics and Astronomy:** Jeremy Qualls, Scott Severson **Psychology:**

Scott Eberle **Sociology:** Wendy Brown **Theatre Arts & Dance:** Scott Horstein **University Studies:** Bruce Peterson **Women & Gender Studies:** Laurel Holmstrom-Keyes **Other Universities:** Ross Meentemeyer, Charles Mitchell, David Rizzo

FROM OUR PARTNERS

Students helped professionals solve the environmental challenges they are facing.

Partnering Organizations The Center helps to maintain long-term partnerships with community partners

AeroTestra, Americorps NCCC, Annadel State Park, Analytical Sciences, Anderson Valley Unified School District, Anderson Valley Land Trust, Animal Control Mendocino County, Bellevue Elementary, Boonville Garden and Elder Home, Brook Haven Elementary, California Department of Fish & Wildlife, California Department of Water Resources, California Lichen Society, City of Rohnert Park, Cloverdale High School, Conservation Corps

North Bay, Crescent Montessori Elementary, D'Argenzio Winery, Daily Acts, Drought Net, Gold Ridge Resource Conservation District, Grant Elementary, Hidden Valley Elementary, Hopland Research Extension Center, Jack London Elementary, James Monroe Elementary, La Tercera Elementary, Madrone Audubon Society, Mark West Elementary, Mendocino County Resource Conservation District, Mill Valley Elementary, Miwok Valley Elementary,

National Resource Conservation Service, Oak Grove Elementary, Occidental Arts & Ecology Center, Outward Bound California, Pacific Gas & Electric Company, Pacific Watershed Associates, Pepperwood Preserve, Pollinator Partnership, Proctor Terrace Elementary, Real Good Designs, Richmond College Prep, Sacramento Municipal Utility District, Social Advocates for Youth, Sonoma County Agricultural Preservation & Open Space District, Sonoma



Keenan Foster
Principal Environmental
Specialist
Sonoma County Water
Agency

"Students are coming out of Sonoma State with a skill set that is above and beyond the skill sets we are seeing coming out of other schools."



Dr. Victoria Wojcik
Research Director
Pollinator Partnership

"We have been able to teach SSU students specialized skills needed to understand the complexities of vegetation management and pollinator response."



Eric Brown
Electric Transmission &
Distribution Manager
Sacramento Municipal
Utility District

"We are thrilled to partner with the Center to train the environmental industry leaders of tomorrow."



A LEARNING COMMUNITY

Communities benefit from participation



Dr. George Lee
Mendocino County
Community Member

"Our high school students are motivated to pursue college by working with SSU students."



Dr. Jake Mackenzie
Mayor
City of Rohnert Park

"We are excited to be working with CEI to increase ties between SSU and the City of Rohnert Park. Collaborations such as this not only benefit students but also can help foster truly collaborative solutions to local environmental challenges."

2017 Community Participants

- 961 K-12 students
- 665 Program participants
- 251 Volunteers
- 125 Workshops and retreats



Plein-air class at the Galbreath Preserve was one of five community classes offered this year by the Center's Curiosity Corps Program.

THANK YOU VOLUNTEERS

Volunteers make an impact



Sean Headrick
Principal
AeroTestra

"Volunteering AeroTestra's expertise and technological capability allows us to engage the curiosity and passion of students as we all work together to shape our future."



Peter Gordon
Mendocino County
Community Member

"We created a valuable citizen-science project that tracks mammal movements with wildlife cameras at the Galbreath Preserve."



Clockwise: Volunteers hosted dignitaries, built a new campground, led elementary school tours, and controlled invasive species.



2017 Volunteers Thank you to our volunteers who made Center programs a success.

Galbreath Preserve: Andy Balestracci, Lisa Bauer, Alice Bonner, Ric Bonner, Pam Callaghan, Johanna Cummings, Lori Dudzik, Nancy Armstrong-Frost, Curtis Frost, Peter Gordon, Jill Hannum, Bob Keiffer, Doug Labat, George Lee, Kit Lee,

Debby Mefferd, Linda Naves, Xavier Neher, Mark Rawlins, Lisa Walsh, Tina Walter

Osborn Preserve: John Branscome, Diane Fritz, Kara Haley, Janet Henker, Michael Knappman, Bruce Linscott, Luke

Linton, Elias Lopez, John Lynch, Laurie Marshall, Jessica McCready, Nicole McGloin, Becky Olsen, Jessica Rodriguez, Garrett Shipway, David Stark, Virginia Hotz-Steenhoven, Jon D. Steenhoven, Claire Sugihara, Kate Symonds, Ana

Torres, Stream Tuss, Valerie Vallentyne, Danielle Wagoner, Mike Weihman, Ryan Williamson, Megan Wilson

Campus: Juli Brode, Annemarie Brown, Vic Liptak, Tania Montes

THANK YOU DONORS

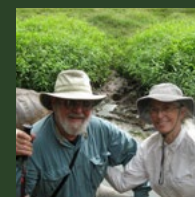
Donors invest in the next generation of leaders

Touring the proposed field station site at the Galbreath Preserve: Center Director Claudia Luke with donor, Bob Johnson, and SSU President Judy Sakaki



Dr. Bob Johnson
Donor

"I support the Center to raise student awareness of their connections with the land, sea, and air, and give them the skills to care for such irreparable resources."



Marthe Norwick
Donor
Founding member
of the Steve Norwick
Memorial Fund

"Steve Norwick was dedicated to environmental education and preparing students for careers in water resources management. The Norwick family is proud to provide research scholarships to Sonoma State students in his memory."



2017 Donors Thank you to our donors for funding Center programs!

**Legacy or planned gift or endowment*

Visionaries \$500,000 & above

Fred & Jean Galbreath*, Bob & Sue Johnson*, Marthe & Stephen Norwick*, William & Joan Roth

Benefactors \$20,000 - \$499,999

Pacific Gas & Electric Company, Ana Roth, Jessica Roth, Maggie Roth, Georgette Skellenger*, Daphne Smith*, Terri & David Yost

Pioneers \$5,000 - \$19,999

Jim & Linda Kuhns, Dan & Robbie Rhodes, Jean Schulz

Explorers \$1,000 - \$4,999

Mike & Paula Aja, Thomas H. Birdsall, Joe & Judy Brumbaugh, Patricia F. Clothier, Community Foundation Sonoma County, Bill Imada, Nancy Galbreath Johnson, Gerbrand Kroon, Jake & Barbara Mackenzie, Milo Mitchel, Susan Norwick Horrocks & Keith Horrocks, Lynn & John Schiek, Jacques & Barbara Schlumberger, John Sheehy & Laurie Szujewska, Catherine Tornabene, David Walls & Lucia Gattone, Warren Watkins, Chuck & Cathy Williamson

Guides \$25 - \$999

Nathan L. Adams, Harold & Christine Alderman, David Ammerman, Leonard Anable, Susan Barnes, Philip Beard, Yael & Paul Bernier, John & Brenda Blom, Alice Bonner, John Branscome, Jon & Vina Breyfogle, Ruth Burke, California Rare Fruit Growers Inc. - Redwood Empire Chapter, Sahara Chaldean, Michelle & Kim Covington, Robert & Jan DeWitt, Nirmal & Gwen Dhesi, Nancy Dougherty, Scott Eberle, Jean Falbo, Yvette Fallandy, Norman & Beverly Sue Feldman, Dorothy Freidel, Paul & Dorothea Geiger, Paula Hammett & Bruce Hope, Ronald Hayes & Jo Ann Puglisi, Bryant & Diane Hichwa, Vin & Margot Hoagland, Judith Hunt,

Sharon & Al Janulaw, Richard Karas, Judith L. Koehler, Lucy Kortum, Bill & Sue Krawetz, Laguna de Santa Rosa Foundation, Betty LeDonne, George & Kit Lee, Stephen Lewis, Butch & Vivien Lindley, Lynn Lozier, Ann Brody & Gary Marker, William McMillan, Kristi & Brian McWilliams, Frances & Glenn Minervini-Zick, Cynthia Morrow, Cazeauyes Nordstrum, Rebecca Olsen, Laura B. Owens, Hugh & Diane Paleczny-Stevenson, Bruce & Cynthia Peterson, Charles Quibell, Raymond Rapp, Margot & Mark Rawlins, Bruce Reinik, Mike & Sue Riley, Jo-Ann Smith, William Sterling, Joe & Eileen Tenn, Raye Lynn Thomas, Susan Warner, Janice L. Wilson

Center Staff



Dr. Claudia Luke
Director
WATERS Lead



Dr. Chris Halle
Nature!Tech Lead



Suzanne DeCoursey
Education Manager



Anne Reeves
Director of
Communications



Margot Rawlins
Galbreath Preserve
Program Coordinator



Kerry Wininger
Osborn Preserve
Program Coordinator

Student Employees

Terris Becker, Sebastian Carranza, Makayla Freed, Caitlin Harvey, Manuel Hernandez, Brian Meyer, Kyle Peel, Jacob Probst, Garrett Shipway, Ryan Yu

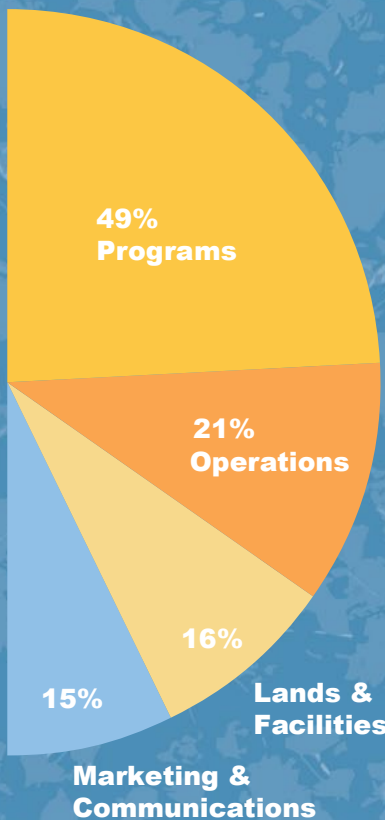
SSU Advisory Committee

Julie Barnes, Annemarie Brown, Caroline Christian, Michelle Covington, Christopher Dinno, Ben Ford, Paula Hammett, Bob Johnson, Will McCauley, Kristi McWilliams, Adrian Praetzellis, Nathan Rank, Robbie Rhodes, Lynn Stauffer, Terri Yost

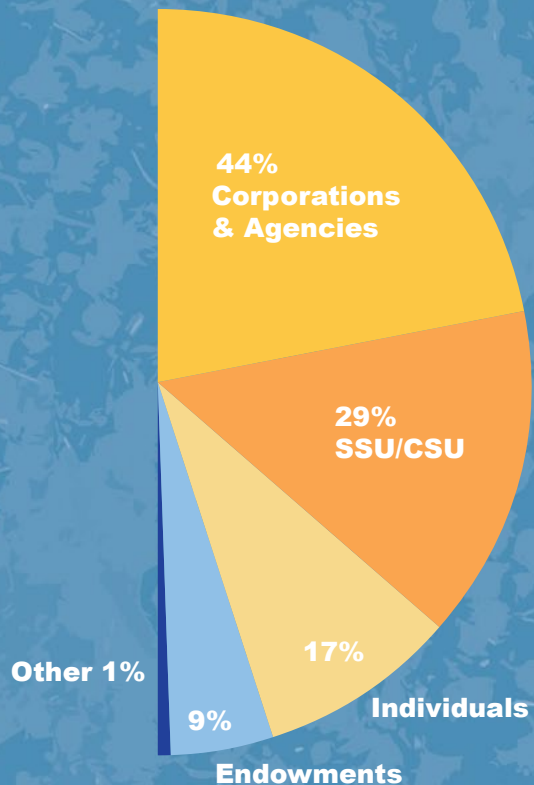
Curiosity Corps Ed Program

Alice Bonner, Johanna Cummings, Jill Hannum, Laurie Marshall, Jessica McCready, Virginia Hotz-Steenhoven, Jon D. Steenhoven

EXPENDITURE \$570K



REVENUE \$700K



CENTER AT A GLANCE

Sixty-one percent of Center revenues are from donors and partner grants and contracts. These funds go directly toward the support of programs, lands and facilities.

2017 Summary

- 1,840 Students
- 47 Faculty
- 52 Partners
- 26 Disciplines
- 619 Community members