



Antioch University

C E N T E R S &
R E S O U R C E S
R E P O R T

Summer
2022





ENVIRONMENTAL STUDIES CENTERS & RESOURCES REPORT 2022

The Department of Environmental Studies educates visionary, pragmatic leaders in a collaborative, interdisciplinary setting founded on academic excellence and the principles of environmental justice and sustainability.

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The Centers and resources described in this report exemplify the opportunities available to graduate students earning their Masters or PhD degrees in the Environmental Studies Department at Antioch University.

These opportunities allow students to apply their interdisciplinary academic training in tangible, real world experiences. Even during the global pandemic our centers are active - thus allowing our students, faculty and staff to make significant positive contributions to local, regional, and global communities.

We do this work following our University's historic social and environmental justice mission that at this time in history is not only what students are striving for but absolutely what employers are demanding in the professionals they hire. Please contact center directors or students if you have any questions about their work.

Peter Palmiotto, D.F.
Chair, Environmental Studies Department



CENTER FOR CLIMATE PREPAREDNESS AND COMMUNITY RESILIENCE

Mission: Strengthen communities to prepare, respond and recover in the face of climate impacts and other disruptions through collaborative, innovative solutions.

Project partners: NOAA, Island Institute, City of Portland, NorthStar LLC, Town of Vernon, CT River Joint Commission, Conservation Law Foundation, Southwest Region Planning Commission, Council for a Healthier Community, Centers for Disease Control and Prevention, and NH Department of Health and Human Services

How to get involved: You can find information at: <http://www.communityresilience-center.org/>

The CCPCR completed two major projects this past year, with engagement by doctoral, MS, and certificate students:

Centering Equity in Climate Resilience Planning and Action

Team: Abigail Abrash Walton, PhD, PI; Christa Daniels, PhD, Co-PI; Clara Fang, MEM, MS, doctoral fellow; and Jessica Hench, graduate research assistant.

This project was funded through the Collaboration and Coordination in the Resilience Ecosystem 2021 stream, from the Climate Resilience Fund, with support from NOAA and the Doris Duke Charitable Trust.

Climate and Health Resilience Initiative

Team: Abigail Abrash Walton, PhD, PI; Janine Marr, PhD, Project Research Manager; Jason Rhoades, PhD; and Cynthia Nichols, graduate research assistant.

This pilot project builds on prior work completed in 2021: Abrash Walton, Abigail, Janine Marr, Matthew J. Cahillane, and Kathleen Bush. "Building Community Resilience to Disasters: A Review of Interventions to Improve and Measure Public Health Outcomes in the Northeastern United States." Sustainability 13, no. 21 (2021): 11699.

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ANTIOCH SPATIAL ANALYSIS LAB

Through this year's many challenges, ASAL endeavored to continue pursuing exciting GIS projects and supporting our students. Our GIS courses supported remote and in-person students with access to the GIS lab at Antioch University New England. Our second virtual celebration of International GIS Day on 11/17/21 brought Antioch's GIS community together from across the country for a mini-conference and networking event complete with trivia and prizes. Our courses, workshops, and research projects provided students with opportunities to work on real-world GIS projects. Students in the Applied GIS course worked on projects ranging from mapping herpetofauna species distributions for the Orianne Society, in the United States to modeling climate change vulnerability in western Costa Rica. The ASAL team completed a variety of revenue-generating spatial analysis and data management projects for a wide variety of clients. ASAL projects ranged from municipal natural resource inventories to creating web maps and StoryMaps for dragonfly citizen science in Vermont. Additionally, Alec Kaisand became a certified drone pilot and conducted educational operations such as filming the installation of solar panels at Glover's Ledge.



Image of Alec Kaisand taken with the ASAL Drone at Glover's Ledge.

Our priority for 2022 is to continue providing students with real-world GIS opportunities through coursework, workshops, research, and internships. **We will host our annual International GIS Day Celebration on 11/16/22** with both in-person and remote access to bring our community together for a GIS conference and networking opportunity. We are working to diversify our courses and workshop offerings by creating lessons for topics such as GIS mapping with other GIS software, GIS in R, remote sensing, research seminar, and more.

Mission: The Antioch Spatial Analysis Lab (ASAL) brings spatial awareness to the world through real-world student training, spatial analysis, and community mapping.

Funded Projects:

- American Turtle Observatory Hillshade Basemap
- Dragonfly Detectives StoryMap
- LCHIP Conservation Land Data Management
- Walpole Conservation Lands Map Updates
- Mill Hollow Historic Structures Mapping
- Bow, NH Natural Resource Mapping

How to get involved: Register for a GIS course today, or join ASAL for a workshop or webinar. Contact us at gislab@antioch.edu or find us online at on Facebook or at <https://www.antioch.edu/asa>

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GIS SPECIALIST

ANTIOCH
SPATIAL ANALYSIS LAB

GIS ANALYSIS CARTOGRAPHY PRINTING



HORATIO COLONY

Mission: Faculty, administration, and students partner with a prominent community organization to apply Antioch's belief in ecological stewardship and placed-based practices for scholarship, activism, and service-learning.

Upcoming Goals:

- Co-host a 'New Neighbor Hike' with Keene Immigrant and Refugee Partnership (KIRP) & Project Home with Afghanistan refugees.
- Partner with Franklin Elementary School to lead story walks at the preserve.
- Construct additional water bars on the Red Diamond Trail to slow erosion.

Partners: Monadnock Conservancy, Monadnock Place-based Educators, Keene School District, Wantastiquet to Monadnock Trail Coalition

How to get involved: Work as a graduate assistant on place-based education and site maintenance. Conduct coursework and thesis/dissertation research at the preserve. Attend a public program. Enjoy the preserve for recreation and self-care.

We continue as stewards of the 645-acre preserve of diverse upland forests and wetlands in Keene and Swanzey, NH. Established in 1977, the preserve offers a gorgeous haven for nature observation, study, and recreation for the public. Antioch University New England (AUNE) has managed the preserve since 1987. During 2021-2022, we partnered with Keene Parks & Recreation to host a bat ecology program, installed three new water bars on the Red Diamond Trail to halt erosion due to increased use of trails, collaborated with Keene Middle School students to explore the preserve and write poetry about their experience, and mentored a local high school student to research and practice trail maintenance skills as part of his high school learning.



**PAUL BOCKO, PROJECT MANAGER AND
FACULTY, EDUCATION DEPARTMENT**

**SOFIA THORNBLAD, EXECUTIVE DIRECTOR,
HORATIO COLONY MUSEUM AND NATURE PRESERVE**

<https://www.antioch.edu/centers-institutes/horatio-colony-nature-preserve/>
<https://horatiocolonymuseum.org/>



COMMUNITY GARDEN CONNECTIONS

Due to Covid-19, CGC pivoted its programming to offer gardening workshops, activities, and experiences that can be enjoyed from home. We still supported 12 local social service agencies in another year of gardening with raised beds. 150+ Container gardens were donated, along with 450 seed packets, to interested gardeners. Over 1050 pounds of fresh produce was planted, tended, harvested, and then donated to the Keene Community Kitchen from CGC's Westmoreland site. Another 18 pounds of produce were put aside for over 40 soup kits. In preparation for the 2021 season, CGC staff planted 352 flower bulbs in Cheshire County, and 475 cloves of garlic at Westmoreland Garden Project. We're excited to continue and improve our educational programs, take-home container gardening and soup kit initiatives to serve the Antioch community and beyond.

NOT UPDATED Room for PHOTO

DR. JEAN KAYIRA

DR. ELIZABETH MCCANN

STUDENT STAFF MEMBERS: JESS BARNES, RACHEL BRICE, JESS GERRIOR, LEA KABLIK, ERICA KAMERZEL, ALEX LACY, JANESEA PALMER, EMMA ROHLER, ABBY SCHNEIDER, AND ANNA SHUIPIS

Mission: Serves to build our local capacity to grow food and enhance personal and communal well-being among those most impacted by climate change, Covid-19 and other social, economic, and ecological injustices.

Project partners: Cheshire County Conservation District, Keene Community Kitchen, and C&S Grocers

How to get involved: With our current Covid-19 protocol we've had two successful and safe volunteer days last season and we will host more volunteer days in the Spring! Or, join our team! We are hiring co-coordinators and a Westmoreland garden manager for the growing season.

Granted/Funded Projects: Apply for a grant to fund your student research or internship! See the Community Garden Connections Grant page on the AUNE website for a highlight on funded student projects. CGC is funded by a mix of public and private funding sources.



CONSERVATION PSYCHOLOGY INSTITUTE

Mission: To strengthen conservation outcomes by building the capacity of researchers and practitioners to apply conservation psychology theory, concepts and techniques. Our faculty actively advise, teach and mentor graduate students engaged in conservation psychology research and practice.

Project partners:

Cleveland Metroparks Zoo, Zoo New England, Woodland Park Zoo, AmeriCorps, Christina Wesolek, Phd (AUNE ES Alum)

How to get involved: For more information, to access archived webinars, or to see upcoming webinars head to our website or contact us directly at CONSPSY.AUNE@antioch.edu. Faculty and students interesting in joining the CP Lab, please contact mguckian@antioch.edu

Grant/funded projects: Funding Organization: AmeriCorps Project: “Co-Designing Conservation with (not for) Communities”

CPI completed their first year of funding from the AmeriCorps Vista Program to support the project titled, ‘Co-Designing Conservation with (not for) Communities.’ The project aims to increase the capacity of partnering Zoos to co-design environmental educational programming with residents of the low-income neighborhoods in surrounding areas. Through a co-design process, we have worked with local stakeholders to map education access, identify educational goals, and further engage stakeholders in strategic planning of future programming.

ES Master’s students’ Victoria Threadgill and Joshua Arroyo Torres were co-recipients of the CPI Research Grant award. Victoria received \$500 to support her project, ‘Connect Blue: A Community Series in Keene,’ and Joshua received \$1000 to support his project, ‘Live Free of Plastics - Keene.’

Dr. Abi Abrash Walton received AESS’ William R. Freudenburg Lifetime Achievement Award and Dr. Kayla Cranston received the AZA Outstanding Service Award. Dr. Meaghan Guckian joined the board of Keep Fish Wet, an environmental NGO. Dr. Kathayoon Khalil joined AUNE as Research Faculty.

Abrash Walton, A., Nageotte, N., Heimlich, J. and Threadgill, A.V. (2022). Facilitating behavior change: Introducing the Transtheoretical Model of Behavior Change as a conservation psychology framework and tool for practitioners. Zoo Biology. <https://doi.org/10.1002/zoo.21704>

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[HTTPS://WWW.ANTIOCH.EDU/CENTERS-INSTITUTES/CONSERVATION-PSYCHOLOGY-INSTITUTE/](https://www.antioch.edu/centers-institutes/conservation-psychology-institute/)



GLOVER'S LEDGE



Accomplishments and Goals: In the fall of 2021, we installed a grid-tied 146kW ground-mounted solar array with the help of ReVision Energy. This solar array will provide clean, solar energy for our on-site facility and heighten our environmental studies programs by bringing a hands-on element to our climate focused courses. In conjunction with the solar project mature trees were harvested to encourage sapling and shrub growth for young forest habitat. We also started the construction of a half mile accessible, or barrier free, trail loop around the unique vernal pool complex on the property. This project is ongoing and we are excited for the final result! The property has still served as a space for students to build community and learn about our natural systems. We have hosted 4 events this academic year focused on community building and nature exploration. Over the course of the year we reached 32 students with our events and outreach.

Our goals for next academic year include expanding the barrier free trail, engaging AUNE students and faculty with the raw solar data, and collaborating with local k-12 schools and community organizations to do solar education.

Mission: Glover's Ledge is an outdoor recreation and research site for graduate students, local k-12 students, and community members on 81 acres of forested land. The landscape is stewarded to provide programs that enhance students' learning.

How to get involved: Visit us on social media platforms: facebook.com/gloversledge, [@gloversledgeaune](https://instagram.com/gloversledgeaune) or gloversledge.weebly.com to learn more about events and the property. Contact us directly at gloversledge@antioch.edu

Project partners:

- Monadnock Conservancy
- Revision Energy
- ES Student Alliance

Grant funded projects: Barrier free trail



PETER PALMIOTTO, DIRECTOR OF ANTIOCH FORESTS
KATE WITTE, ENVIRONMENTAL EDUCATION
& OUTREACH COORDINATOR
CONNOR WOJTOWICZ, PROPERTY MANAGER

[GLOVERSLEDGE.WEEBLY.COM](https://gloversledge.weebly.com)



INSTITUTE FOR INTERNATIONAL CONSERVATION

Mission: Through research, projects, initiatives, and education, the Institute for International Conservation (IIC) hopes to utilize global connections and collaboration to help advance international conservation and sustainability.

Project partners: Antioch Bird Club, BirdsCaribbean, Gerace Research Centre, Michael Irwin Art

How to get involved:

- Work study opportunities
- Present/attend guest speaker events
- Apply for our grants
- Support fundraiser
- Become a sponsor
- Visit IIC's website
- Contact IIC via iic.ane@antioch.edu

Grant funded projects: Courtney Dragiff, The Bicycle Project, Susanna Mateos, Research/Service Project in Costa Rica

ACCOMPLISHMENTS AND GOALS

Communications:

- IIC's website development
- Outreach through ES Department's Wednesday Weekly
- Social media recovery and updates
- Documenting IIC grantees
- IIC email list system

Fundraiser for IIC's Student Raised Grant:

- Selling coffee, cocoa, and other products
- New coffee ordering system, reconnected with suppliers
- Inaugurating webstore with Beeze Tees
- IIC donation designation option

Grants/Research:

- Student Raised and Tropical Seed Grant Fund awarded to students conducting international research and service: Courtney Dragiff, & Susanna Mateos
- Index Students & Faculty publications on international research
- Supported a student research project in the Bahamas
- Virtual Brown Bag Lunch (BBL) events featuring international research and work, including: David Murillo, Courtney Dragiff, Ayodeji Mario Akeju, and Jacques Kenjio. All events are recorded and published on IIC's website.

Others:

- Developed logos for IIC and the ES Department
- Global Food Pantry in Office
- Donated 10 bags of coffee for Keene Community Kitchen
- Virtual screening of the documentary *The Story of Plastic*

In Progress:

- Artwork fundraiser created by Nate Irwin
- A BBL event with Jude Nuru, ReVision Energy's Director of Community Solar Initiatives for NH, is being organized for Fall 2022
- Expand fundraising
- Host community events
- Social media engagement

MICHAEL AKRESH AND JASON RHOADES, CO-DIRECTORS
JOSHUA ARROYO-TORRES, PROGRAM MANAGER
ALEXIS DE SANTI, NATE IRWIN, PRECIOUS OZOH, STAFF

MONADNOCK ECOLOGICAL RESEARCH AND EDUCATION PROJECT



Accomplishments & Goals: This past year summit stewards reached a total of 1,418 hikers through 261 hours on the mountain and a combined 40 days of stewarding. Additionally, Meet the Mountain Day was held in October as a fun opportunity for students and faculty at Antioch to hike Monadnock with summit stewards and learn about the mountain's ecology, history and stewardship. MERE's goals include continuing to educate through summit stewarding, continuing our Adopt a Crevice Community Program with local schools and continuing grant funded research.

Grant Funded Projects: MERE Summit Stewards are creating and revising technical bulletins and developing information graphics (pictured above) to share MERE's research and educational projects, including student thesis research. Another grant funded project included administering hiker surveys as part of a collaborative pilot project to learn about hiker motivations and perspectives regarding management practices. This project will continue next summer as well.

PETER PALMIOTTO, DIRECTOR
MARIA GIGLIELLO, SUMMIT STEWARD
SAL HERTZ, SUMMIT STEWARD

[HTTPS://MEREPROJECT.WEEBLY.COM/](https://mereproject.weebly.com/) | MERE@ANTIOCH.EDU



Mission: The Monadnock Ecological Research and Education (MERE) Project seeks to promote informed use and foster appreciation of Mount Monadnock through ecological research, monitoring and educational outreach.

Project partners: Monadnock State Park,
The Monadnock Advisory Commission

How to get involved: Whether you are a community member or a graduate student, there are opportunities for you to become involved with the MERE Project. Project coordinator, summit stewards, ecological research projects and volunteering through Monadnock SP are all volunteer roles that can be filled with MERE.

Contact: mere@antioch.edu

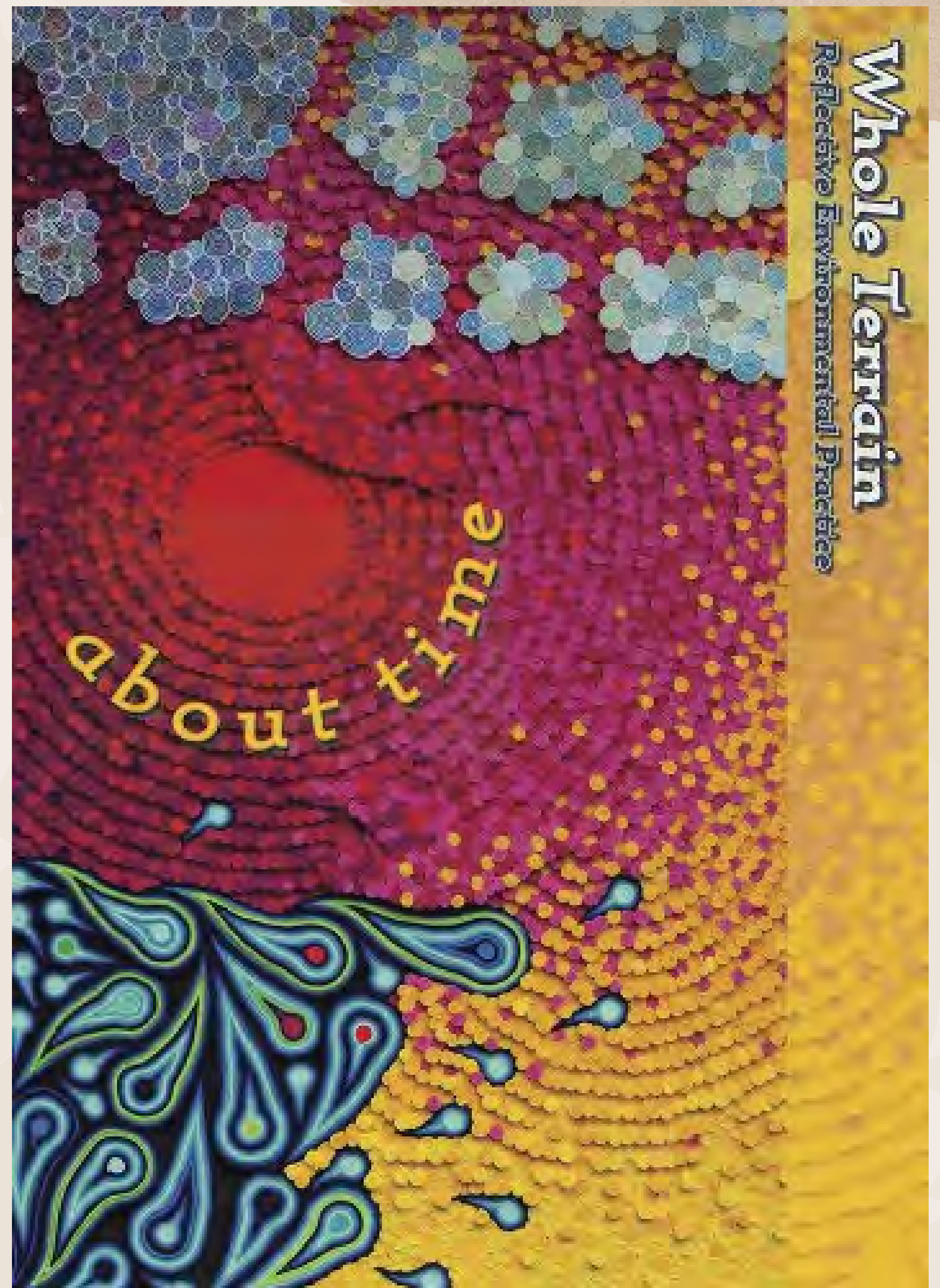


WHOLE TERRAIN: JOURNAL OF REFLECTIVE ENVIRONMENTAL PRACTICE

Mission: Whole Terrain is dedicated to those who've chosen the environment as their professional base, cultivating reflective thought and mindful awareness to help find balance between humanity and the earth.

How to get involved: Work Study positions and/or internships available: co-editor assistantship (print volume); outreach and operations; web content associate. Volunteers are welcome.

Accomplishments and Goals: Whole Terrain's 24th volume on the theme of 'About Time' is now available for purchase online at Bookstore.org, Amazon and elsewhere. This volume includes essays by Kathleen Dean Moore, John Hanson Mitchell, Leath Tonino, Samantha Harvey, John Bates, Amy E. Boyd, Randall Amster, Rebecca L. Vidra, Jeremy Elliott, David Solomon, and Kimberly Langmaid, poems by Sean Prentiss, Liz N. Clift - 13 Letters to Crater Lake and Heidi Watts, and visual essays by Davis Te Selle, Xander Griffith, Sheri Vandermolen and Johanna Spaeder. Over the coming year, we will begin working with Green Writers Press on a 'Best Of' anthology featuring signature work from our 24 previous volumes.



wholeterrain.com

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