

2024 PAEE
CONFERENCE



POCONO ENVIRONMENTAL EDUCATION CENTER

Keynote Speaker - Joe Stahlman

March 18-19

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CONFERENCE SCHEDULE



MONDAY

- 8:00 am Breakfast
- 8:45 am Welcome & PAEE Annual Meeting
- 10:00 am Session 1
- 11:15 am Session 2
- 12:30 pm Lunch
- 1:30 pm Keynote Speaker: Joe Stahlman
- 2:30 pm Break / Exhibitors
- 3:30 pm Session 3
- 5:00 pm Exhibits Open
- 5:30 pm Dinner / Awards
- 7:00 pm Evening Activities

TUESDAY

- 7:15 am A Morning Nurtured by Nature
- 8:00 am Breakfast - Silent Auction
- 8:30 am Session 4
- 9:45 am Session 5
- 11:00 am Session 6
- 12:30 pm Lunch - Speaker Miranda Moore
- 1:30 pm Closing Ceremony - Elizabeth Mills
- 2:30 pm End

EVENING ACTIVITIES

SUNDAY

- 6:30 - 7:30 pm Night Hike
- 7:30 - 10:00 pm BYOB Campfire at Pavillion
- 7:00 - 10:00 pm Games (Yurts)

MONDAY

- 7:00 - 8:00 pm DIY Body Products Workshop
- 7:30 - 9:30 pm S'mores Bar (pavillion)
- 7:30 - 10:00 pm Games (classrooms)
- 7:00 - 10:00 pm Ecozone
- 8:00 - 9:00 pm Student Meet-up (yurts)
- 8:00 - 9:00 pm Past Board Member Meeting



AMERICAN DAIRY
ASSOCIATION NORTH
EAST



**PennState
Extension**



pennsylvania
DEPARTMENT OF CONSERVATION
AND NATURAL RESOURCES



**ALLEGHENY
LAND TRUST**

EVENING ACTIVITIES

SUNDAY

6:30 pm - 7:30 pm



Night Hike

at either Trail for Everyone or
Two Ponds Trail

7:30 pm - 10:00 pm

BYOB Campfire

at the Pavillion



7:00 pm - 10:00 pm



Games

at the yurts

MONDAY

7:00 pm - 8:00 pm

DIY Body Products Workshop

Cost \$5



7:30 pm - 9:30 pm



S'mores Bar

at the Pavillion

7:00 pm - 10:00 pm

Ecozone

open for self-paced exploration



7:00 pm - 10:00 pm



Games

in classrooms

8:00 pm - 9:00 pm

Student Meet-up

at the yurts



8:00 pm - 9:00 pm



Past Board Member Meeting

MONDAY SESSIONS



	Session 1 10:00am - 11:00am	Session 2 11:15am - 12:15pm	Session 3 3:30pm - 5:00pm
Room 1	Making Climate Change Connections	NAAEE Guidelines in Professional Development	Integrating Climate Science (and Hope!) into High School Environmental Education
Room 2	Growing Up Green Schoolyard Trees and MWEEs	Adult Restorative Retreat - Reconnecting with Nature and our Inner Child	Outdoor Learning Spaces to Improve Schoolyards for EE and Stewardship
Room 3	Lessons from the Floating Classroom	Firefly Tourism in PA: "Be Careful What You Wish For"	Intro to the World of Fungi
Yurt 1	Ripple Effect: A Case for Stormwater BMP Education through Programs and Practice	Engaging Diverse Youth in Science Activities and Careers while Developing Identity and Agency	Nature Journaling
Yurt 2	The Benefits of Nature: Improving Student Well-Being by Connecting to the Natural World	Pittsburgh Outdoor Learning Lab: Meaningful Outdoor Experiences	Mindfulness in Middle School: A Case for Connecting Adolescents with Nature

TUESDAY SESSIONS



	Session 4 8:30am - 9:30am	Session 5 9:45am - 10:45am	Session 6 11:00am - 12:30pm
Room 1	Climate Change Adventure Education Project	From Rivers to Resilience: Empowering Underserved Youth Through River Surfing and Paddle Adventures	DEIJA in EE: Tools for Assessing Organizational Progress in Programming
Room 2	Interacting with Healing Aspects of Nature	Hands-on Environmental Studies for a World of 8 Billion	GLOBE Citizen Science Made Easy
Room 3	Science and Social Emotional Learning (in MWEs)	Trauma-Informed Practice for Environmental Educators	Cultivating Togetherness: Harnessing Regional Hubs for Environmental Literacy Advancement in Pennsylvania
Yurt 1	Caring for Creation with PA IPL Youth	Penn State Extension's Future Master Watershed Steward Program (FMWS)	Putting Down Roots: Utilizing Urban School Yards for Nature-Based STEM
Yurt 2	Introducing Dr. Watt R Shedd - Stream Doctor	An Overview of OMS Environmental Day	Lake Erie (Keynote Expansion)
Pavilion			Building Community One Bird Walk at a Time

Room 1

Making Climate Change Connections – Denise Bauer & Nicole Landis

How do you use your knees to measure carbon sequestration? Have you created a bomb to save pollinator populations? Would you like to learn how? WC and CCEEC connected with Panther Valley School District’s 7th and 8th-grade students to make climate change relatable on a local level. 300 students took part in a citizen science project and learned how to implement simple changes to positively impact Mauch Chunk Lake and their local watershed.

Room 2

Growing Up Green Schoolyard Trees and MWEEs – Ellen Freedman Schultz & Emma Melvin

Showcase how 5 School District of Philadelphia schools and teacher teams are incorporating their schoolyard tree planting into their "Understanding the Urban Watershed" Curriculum as a MWEE. This project is supported by PA DEP EE Grant and is being led as a continuation of the successful partnership between Fairmount Water Works Interpretive Center, Pennsylvania Horticultural Society and the School District of Philadelphia.

Room 3

Lessons from the Floating Classroom – Ryan Beltz & Danielle Emers

The Floating Classroom STEM Education Program won PAEE's 2023 Outstanding Program Award. Now, after three years of successful programming, we'd love to share what we've learned! This includes the steps we took to build strong partnerships with Aqua Pennsylvania, Montgomery County Parks, and the Academy of Natural Sciences; to the curriculum we developed; and even what our students taught us!

The Floating Classroom is the Perkiomen Watershed Conservancy's on-water education program. The program combines kayaking and hands-on field training with a state-of-the-art floating laboratory housed on a reimagined pontoon boat powered by the sun!

Yurt 1

Ripple Effect: A Case for Stormwater BMP Education through Programs and Practice – Katie Gray

After relocating from a rented office space to a newly purchased house-turned-office in the fall of 2022, the Lackawanna County Conservation District (LCCD) sought to exemplify its commitment to soil and water conservation through the integration of publicly accessible stormwater BMPs at its new location. In the spring of 2023, the LCCD was awarded an Environmental Education General Grant (Level I) by the Department of Environmental Protection to fund its Stormwater BMP Demonstration and Education Area project, a public engagement initiative seeking to integrate diverse educational programming alongside the establishment of a permanent, interactive stormwater BMP display site to provide both short- and long-term stormwater learning opportunities to the public. The timeline for this project spans July 2023 through June 2024, and target primary audiences for project educational programs include high school students from the City of Scranton Environmental Justice (EJ) area, local residents, municipal officials and engineers, and LCCD office visitors. This presentation will showcase the progress of the LCCD’s Stormwater BMP Demonstration and Education Area project to-date, project goals, plans for continuing project impact post-completion, and “Lessons Learned” throughout project implementation.

Yurt 2

The Benefits of Nature: Improving Student Well-Being by Connecting to the Natural World

– Michelle Cugini, Emily Gerber, & Heather Drzal

Longwood Gardens recently introduced a new educator-guided program offered to school groups grades 6-12 – The Benefits of Nature. This program focuses on the ways in which nature can be beneficial to a person’s mental health and well-being. During their time with us in the Gardens, students learn how to apply methods of mindfulness to refocus through breathing exercises, explore how the scents of plants like lavender can help us relax, focus on nature as a tool for inspiration, and use nature journals to guide self-reflection. Not only does this program allow students time to de-stress, but it also helps them to deepen their connection to the natural world. Through this presentation we will explore the steps we have taken to implement this lesson into our programming, the activities students partake in during the hour-long lesson in the Gardens, and the response we have gotten since this program has been offered. We will also explore our Nature of Happiness Scouting program.

Room 1

NAAEE Guidelines in Professional Development – Julie Travaglini

Professional Development of Environmental Educators: Guidelines for Excellence is a set of recommendations about the basic knowledge and abilities educators need to provide high quality environmental education. These guidelines are designed to apply within college/university environmental education programs, to the professional development of educators who work in both formal and nonformal educational settings, to full-time environmental educators, and to those for whom environmental education will be among other responsibilities.

Through the National Project for Excellence in Environmental Education, the North American Association for Environmental Education (NAAEE) is taking the lead in establishing guidelines for the development of coherent and comprehensive environmental education materials and programs. These guidelines draw on our best thinking honed by scholars and practitioners across a variety of fields and settings, including formal and nonformal education, curriculum development, instructional design, early childhood education, and adult education.

Adult Restorative Retreat - Reconnecting with Nature and our Inner Child – Justine O’Gara & Nick Tonetti

When you think of environmental education, what audience comes to mind? Most of us will think of children, whether it’s school-aged students incorporating nature lessons into their curriculum, or preschoolers having their first experience in the forest. Too often adults are left out of this conversation.

This summer the Schuylkill Center had its first “Adult Restorative Retreat.” Aimed at reconnecting adults to a sense of childlike wonder, social mingling, and meaningful experiences in nature, this day included day camp-style ice-breakers, canoeing on the pond, guided outdoor yoga, and more. While the Schuylkill Center offers many educational opportunities for adults and families, this was the first of its kind that was specifically focused on recreation and mindfulness. We wanted to offer the kind of outdoor experiences that you can expect from our summer camp days, but adapted to an adult-only crowd.

Come join us for this workshop to discuss the value of an event like this, how to implement something similar at your unique workplaces, and the lessons that we learned in the process!

Room 2

Firefly Tourism in PA: “Be Careful What You Wish For” – Peggy Butler & Ken Butler

In 2012, a group of international researchers came to Forest County, Pennsylvania in order to study the fireflies in our area. At that time, we didn’t realize there was anything special about our ‘lightning bugs’, let alone more than one kind of firefly. We tell the story about how the fireflies in our own backyard led us to meeting some of the world’s most renowned naturalists and researchers. They were especially interested in the species known as the ‘Synchronous’ firefly, *Photinus carolinus*. Once they identified over 18 species, we started by educating ourselves about fireflies. We learned it was the State Insect of Pennsylvania. So, we just had to have a festival.

Eleven years later, we have educated an estimated 5000 visitors. We now know what it takes to provide an informative firefly experience that is both fun and educational, while also protecting the fireflies and managing our own interest and well being. We have implemented some practical and sustainable procedures to the PA Firefly Festival that we can share with others who may want to consider a firefly tourism event. We continue to learn more and still find the awe and wonder of the world of fireflies.

Room 3

Engaging Diverse Youth in Science Activities and Careers while Developing Identity and Agency

– Kathryn Metzker

Through hands-on activities, exposure to women in science, and facilitating student reflection and storytelling, the Stroud Center’s HerStory in STREAM project offers girls and queer youth a space to build skills in Science, Technology, Recreation, Engineering, Art, and Mathematics. Specific effort has been made to build space for students of color, acknowledging intersectional discrimination within the field. Presenters will use this project as a replicable example of successful work engaging youth with science and with each other in a safe space. Project goals included building interest and awareness in STREAM careers, understanding of and real-world skill-building in STREAM, and a sense of identity and agency.

Presenters will give examples of how meeting and humanizing women scientists help students gain role models and visions of potential life and career journeys. They will discuss how students explore a breadth of scientific topics for exposure to new topics to find their creativity, passions and voices. Students gain skills in mapping, canoeing, and entomology, but also in communication, collaboration, and finding and solving problems. The presentation will include tips to use the excitement and momentum built during activities as a springboard for students to engage further with their passions after the program has ended.

Yurt 1

Session 2 continued on next page

Pittsburgh Outdoor Learning Lab: Meaningful Outdoor Experiences – Mandy Revak

Over the past 10 years, Outdoor Learning Lab has created over 10,000 meaningful outdoor experiences for youth in the Pittsburgh region. With a focus on connecting Pittsburgh city youth to the outdoors through both recreational and educational activities, Venture Outdoors has partnered with up to 22 schools and out-of-school-time facilities per year to provide year-round opportunities in the outdoors. Since 2021, Venture Outdoors has been working to infuse real-world STEM activities with outdoor recreational activities. For example, Outdoor Learning Lab participants are engaged in lessons on water quality testing while kayaking, conduct a stream study and macroinvertebrate identification during a hike, and/or combine species identification and ecosystem investigations with fishing.

The presentation will discuss the progress and learning from this project, particularly as it relates to working in environmental justice communities and infusing hands-on science with typically recreational outdoor activities. Participants will also have the opportunity to engage in a hands-on activity that is part of the Outdoor Learning Lab lesson library.

Room 1

Integrating Climate Science (and Hope!) into High School Environmental Education

– Ellen Conrad & Nyjah Cephas

In environmental education, climate change can feel like the elephant in the room. It's terrifying and complex—how do you even begin to address the most urgent challenge of our time especially when you are meeting with students in a field trip setting? How do you inspire action and hope while avoiding climate doom? Together, we'll talk about best practices for teaching about climate change (both from research and personal perspectives) and share a few favorite climate activities that we have been using in the Pittsburgh Parks Conservancy's high school programs. By prioritizing climate science and solutions, educators can inspire youth to take action on climate change and cultivate hope for the future.

Room 2

Outdoor Learning Spaces to Improve Schoolyards for EE and Stewardship

– Tara Muenz & Steve Kerlin

With Funding support from the Department of Environmental Protection's Environmental Education Grants, the Stroud Center in collaboration with regional partner school districts sparked an initiative to create outdoor learning spaces on public school campuses. These areas provide benefits to water quality and wildlife habitat as well as meaningful outdoor learning opportunities for teachers and all of their K-12 students. This project also allows communities to engage with the school to learn about the local watershed. In this session, you will hear directly from participating teachers (elementary to high school level) as well as Stroud Center education staff on this collaborative approach at all phases from the design and building, as well as lesson creation. Presenters will share tips on how to get started, funding outlets, design tools, and successful ways of communicating with key staff in the district, as well as examples of their learning spaces to be completed by the end of the 2023-2024 school year.

Room 3

Intro to the World of Fungi – Sara Klingensmith

Searching for mushrooms is like an exciting treasure hunt but taken at a naturalist's pace. Fungi are incredibly diverse with adaptations that challenge the imagination. Learn how to search for fungi, identify common species, and understand their various roles in the ecosystem with a Western Pennsylvania Mushroom Club identifier. By paying attention to this often-misunderstood Kingdom, we can deepen our connection with nature and better understand ecological connections while sharpening our observation skills. Participants will learn about local fungal species while learning how to introduce the field of mycology to nature walks and lessons.

Yurt 2

Mindfulness in Middle School: A Case for Connecting Adolescents with Nature – Christy Gilkey

Contemporary research in environmental education shifts the emphasis from traditional practices to making nature connections with children. This session's focus is to ground the group's shared environmental practices in research aimed to promote connectedness. These new research findings spotlight the benefits of older children spending time in nature. By comparing the environmental experiences of young children to those of adolescents, the group discovers strategies for maximizing the time adolescents spend in nature. A personalized twenty-minute retreat calls each participant to engage in a mindfulness exercise by choosing from a menu of nature-focused activities. This outdoor activity, data and instruments generated during research projects, and standards-based environmental methodologies provide ideas and applications for the field. After welcoming nature in, environmental educators are called to reflect the natural world back to their students in this presentation.

Yurt 1

Nature Journaling – Jenifer McMurray & Dr. Becky Thomas

Nature journaling is the practice of responding to nature through drawing and writing. This creates a context for powerful EE practice because it provides an inherently flexible structure to both connect participants to nature while also enhancing mindfulness and supporting mental health. The power of nature journaling lies in the flexibility of its definition. Nature journaling spans a diversity of specialties and combines multiple creative practices. Journals can heighten observation skills by encouraging individuals to focus on nature while developing a growth mindset. Additionally, journaling can positively impact mental health and mindfulness while creating a sense of community. These practices are additionally associated with increasing knowledge in academic science learning as well.

Session participants will learn about current research on the benefits of nature journaling as well evidence-based best practices. Participants will experience a short, guided nature-journaling activity outside followed by a facilitated reflection. Nature journaling lesson plans will be provided with suggestions for adaptations to different grade levels. Journals and colored pencils will be provided and participants will be able to take their journals home with them.

A Morning Nurtured by Nature – Tara Muenz

Join Tara Muenz as we greet the day with gratitude, centered in the earth's heart through a qigong moving meditation of gentle stretching and breathwork, awakening our energy to feel alive and well!

This takes place PRIOR TO BREAKFAST on Tuesday at 7:15 am

Room 1

Climate Change Adventure Education Project – Mark Reardon & Mandy Revak

Communtipia and Venture Outdoors are reimagining the connections between adventure education and climate change education. The Climate Change Adventure Education Project is a pilot program designed to provide teachers in grades 7-12 with the confidence to teach about climate change, empower their students, and connect to solutions. Teachers participating in the project experience climate education in a local context by combining classroom learning with climate friendly activities that focus on real-life science and field research. Participants learn how to initiate climate action with their students through meaningful STEM projects and explore the causes and effects of climate change in fun and engaging ways such as:

- Researching water quality while kayaking.
- Measuring soil and forest health during a hike.
- Monitoring air quality while riding a bike.
- Participating in citizen science projects.
- Examining how land use affects ecosystems.

Join us for an overview of the Climate Adventure Education Project, as well as a hands-on activity that demonstrates the connection between adventure education and climate education.

Room 2

Interacting with Healing Aspects of Nature – Beth Jones & Esther Brennen

This workshop seeks to explore opportunities to interact with the healing aspects of nature in the classroom, workspace or easy wander right outside the doors of your setting.

The natural world invites us to discover peace, creativity, connection, and wholeness, and we will explore various avenues to create those connections for participants through tactile and other sensory connections with the natural world. We will explore awareness of the wide variety of populations that encounter these experiences and how to tailor these opportunities to individual needs in order to open wide the door of discovery.

These experiences of sensory touch, smell, sight and taste, accompanied by science and study, will help us explore some very accessible opportunities to deepen healing connections that bring life, peace and wholeness to students and adult participants. Explore the calming effect of fractal patterns, the life lessons found in exploring moss, the gift of immunity from pines or how the touch and smell of soil can literally ground and center us all.

In partnership with the natural world, Beth and Esther have worked with various groups, including special needs, autism and students in need of emotional support services, utilizing nature's tools to provide gentle support, encouragement and even purpose to students.

Session 4 continued on next page

Room 3

Science and Social Emotional Learning (in MWEEs) – Krysta Hougen-Ryall

Teachers on the Estuary is a long-standing professional development (PD) program supported by a partnership amongst the Chesapeake Bay Foundation, Chesapeake Bay National Estuarine Research Reserve Maryland and NOAA Chesapeake Bay Office. For over a decade the program has been supporting elementary to high school classroom teachers and nonformal educators from across the region in identifying local environmental issues and helping students plan investigations which lead to action. In the midst of COVID, while students and teachers were struggling, the program partners incorporated Social-Emotional Learning (SEL) to intentionally carve out time during the 5-day PD for teachers to focus on their own mental health and to practice tools and activities for use with their students.

In this session, attendees will learn how SEL was woven into science learning using the Meaningful Watershed Educational Experience (MWEE) framework. Teachers can use SEL activities to better plan MWEE elements that address student perspectives, communities, and concerns. The same activities can help students make sense of the relationships between the natural world, society, and themselves to better take action that contribute to a stronger, more sustainable, and equitable community. Session attendees will leave with SEL activities appropriate for K-12 students

Yurt 1

Caring for Creation with PA IPL Youth – Katie Ruth and Renika Weimer

Pennsylvania Interfaith Power & Light received funding from Pennsylvania Department of Environmental Protection to deliver environmental education programming that engages with people of faith and conscience with a focus on environmental justice communities. We have worked with community farms, after-school programs, public schools, and houses of worship. We will share lessons learned from our partnership with Juniata Park Academy, a K-8 school in North-Eastern Philadelphia. Through our partnership we have planted trees, hosted a bi-lingual education program, and distributed no-cost rain barrels to families. This work was made possible with support from a local community watershed organization, Tacony Tacony-Frankford Watershed Partnership. Participants will leave with expanded understandings on relationship building, curriculum development, and program delivery.

Yurt 2

Introducing Dr. Watt R Shedd - Stream Doctor – Jennifer Fetter & Brad Kunsman

This session will provide an overview of stream health and the characteristics of a healthy stream that can be observed and measured by any aged learner. But then we will introduce, our new elementary-aged stream health teaching tool, Dr. Watt R Shedd. This engaging storybook is a read-along chapter book written at the 4th-grade level. It includes many hands-on investigations that match the book's storyline. The book is written to provide a Meaningful Watershed Educational Experience by following NOAA's MWEE framework. (a brief explanation of the framework will also be provided). We will demonstrate some of the activities in the book and provide attendees with a copy of our Stream Health Checklist.

Room 1

From Rivers to Resilience: Empowering Underserved Youth Through River Surfing and - Paddle Adventures - Ian Smith

Exposure to the natural world provides an innate sense of mindfulness and engagement that improves our well-being. For underserved youth, particularly those in environmental justice areas of Pennsylvania, limited access and knowledge of the outdoors can undermine this potential. Furthermore, other factors including behavioral issues and differing personality types also play a role in youth finding mindfulness and tapping into the benefits of outdoor education and activities. To foster the benefits of mindful outdoor experiences for underserved youth in Pennsylvania, The Watersmith Guild utilizes the unique sports of standup paddleboarding and river surfing.

The Watersmith Guild's flagship program, First Waves, is the first in the world to harness the power of river waves and standup paddling to provide mindfulness and well-being for underserved youth. The activities provide a highly engaging activity that can be catered towards at-risk youth that require more thrilling experiences for engagement, and also those that live in high-stress home lives who require more peaceful learning environs. In either situation, the program provides a way for youth to get out of their comfort zones and find harmony within themselves through engagement with the natural world.

Room 2

Hands-on Environmental Studies for a World of 8 Billion - Julie Travaglini

World population recently reached a new milestone. The growth of human settlements has impacted our wild spaces and led to fragmented habitats, pollution and overharvesting. In this interactive session, discover hands-on activities exploring the delicate balance between people's environmental footprints and the sustainability of habitats for humans and wildlife. Engage in role-playing simulations, games and group collaboration that explore human-environmental interactions, impacts on fragile ecosystems, as well as possible paths toward sustainability. The presenter will provide guidance on incorporating these activities into your lesson planning for the formal classroom and nonformal site. All presented activities are matched to Pennsylvania's STEELS Standards.

Room 3

Trauma-Informed Practice for Environmental Educators - Dr. Becky Thomas

Adverse Childhood Experiences (ACEs) are common, with anywhere from 45%-67% of children having faced a major trauma that impacts their development. 1/10 children have experienced three or more ACEs, which puts them in a category of especially high risk. ACEs can impact a person's future, leading to a greater likelihood of suffering from mental and physical health conditions, substance use/abuse, and risky behaviors.

Research also suggests that people can adapt and transform, even after traumatic events given the right restorative conditions. Supportive adults can buffer the effects of trauma exposure. Environmental Educators are uniquely positioned to also harness the healing effects of nature.

However, as environmental educators, we don't always know who is in the room. We also don't receive training in trauma-informed practice. Trauma can express itself in the form of big, baffling behaviors that can be difficult to manage in the moment. Furthermore, strategies that work with other kids can be counterproductive and can re-activate trauma in kids from hard places, causing additional harm. This session will review the effects of trauma on brain development and will provide opportunities to role-play practical strategies for empowering, connecting, and correcting that are effective with children from hard places.

Session 5 continued on next page

Yurt 1

Penn State Extension's Future Master Watershed Steward Program (FMWS)

- Brad Kunsman & Jennifer Fetter

The FMWS program is an opportunity for youth to participate in the highly successful Penn State Extension Master Watershed Stewards program. FMWS is led by existing Master Watershed Steward volunteers who have also completed the advanced FMWS training as part of their continuing education requirements. This training includes an overview of working with youth and implementing the FMWS program, completion of the MWEE 101 course hosted online by NOAA, and completion of a DCNR - Pennsylvania State Parks Watershed Education (WE) training. Recognize the program framework and how you can get trained FMWS volunteers to help you implement place-based, hands-on learning about stream health that follow the MWEE framework and end with a student-led service project.

Yurt 2

An Overview of OMS Environmental Day - Brian Holtzhafer & Christie Schlaner

Our presentation will highlight and help other educators with the preparation of an Environmental Learning Day done in nature. At Orefield Middle School in suburban Allentown, we plan a day in a natural setting for all (315) 8th grade students. We get the day sponsored and funded by our Education Foundation, invite presenters from local environmental organizations, and partner with our township for use of a large, natural park. Students explore the stream, learn about local wildlife, and play environmental themed games. Our local Conservation District Educational Specialist helps coordinate guest presenters and align experts with our curriculum. Students move through the park from station to station exploring different environmental topics. Presenters include DCNR Forestry, Local IU Science Curriculum Specialists, Conservation District Educators, local college professors, and our own teachers running stream studies.

Room 1

DEIJA in EE: Tools for Assessing Organizational Progress in Programming

- Sonia Jaiswal & Dr. Becky Thomas

For the two years, PAEE’s DEIJA working group has been collaboratively developing a checklist tool to support member organizations wanting to self-evaluate their work in providing EE programming that is inclusive, culturally responsive, and accessible. In this session, members of the PAEE DEIJA working group will provide an update on the group’s current and past work, introduce the checklist self-evaluation tool, and guide participants through getting familiar with the tool through a “speed dating” activity.

Room 2

GLOBE Citizen Science Made Easy - Michael Griffith & Melissa Acosta

Participants will learn all about the GLOBE Program (Global Learning Objectives to Benefit the Environment). GLOBE is a NASA-sponsored program that is dedicated to citizen science. They have programs that have things for ages 5 all the way up. We will learn about the program and run through the cloud protocol. Participants will leave with resources they can use for free and learn how to get trained in the program.

Room 3

Cultivating Togetherness: Harnessing Regional Hubs for Environmental Literacy Advancement in Pennsylvania - Rebecca Schaufele & Alexandra Konsur-Grushinski

Participants will learn how the PA Environmental Literacy Network embodies the spirit of togetherness in many ways. Attendees will learn about the PA Environmental Literacy Network’s regional hub structure and how we are using the hubs to grow our efforts together. We will explain how a local and regional approach through the Hub structure has helped us to grow our network and forge authentic and sustainable partnerships that will help us fulfill the work in our mission and vision. Examples of togetherness will be showcased from each of the 6 Environmental Literacy Network regional hubs. Participants will then be asked to help to further inform the process as we grow existing and new partnerships to advance the Environmental Literacy Network statewide.

Yurt 1

Putting Down Roots: Utilizing Urban School Yards for Nature-Based STEM

- Jill Shashaty & Suzanne Safran

Leading “field trips” on urban school grounds, rather than on our suburban 30-acre nature preserve, is a pandemic-era pivot our EE center made that has had real staying power. In this decision to lead outdoor nature-based STEM programs on schoolyards across the region, we discovered how helping students and teachers reconnect to the landscapes and ecosystems their schools inhabit is an approach with great learning opportunities and sound pedagogical grounding. In this session, Riverbend’s education staff shares what we learned about place-based pedagogy, culturally-relevant teaching, and nature exploration in unexpected places, and why and how we plan to continue “field-trips” in schoolyards as a core element of our programming in the future. This session will feature tips for making a schoolyard field trip a success and ideas for identifying phenomena for nature study when schoolyards appear to lack green space. Riverbend educators will also lead participants through a sample lesson.

Yurt 2

Lake Erie (Keynote Expansion) - Dr. Stahlman & Melissa Troutman

As a follow-up to his keynote discussion, Dr. Stahlman and filmmaker Melissa Troutman host a workshop using Troutman’s recent documentary, *Lake Erie, Our Kin*, as a springboard to discuss ways of incorporating main points from Dr. Stahlman’s talk with practical and accessible elements of the Arts, science, and culture into Environmental Education.

Pavillion

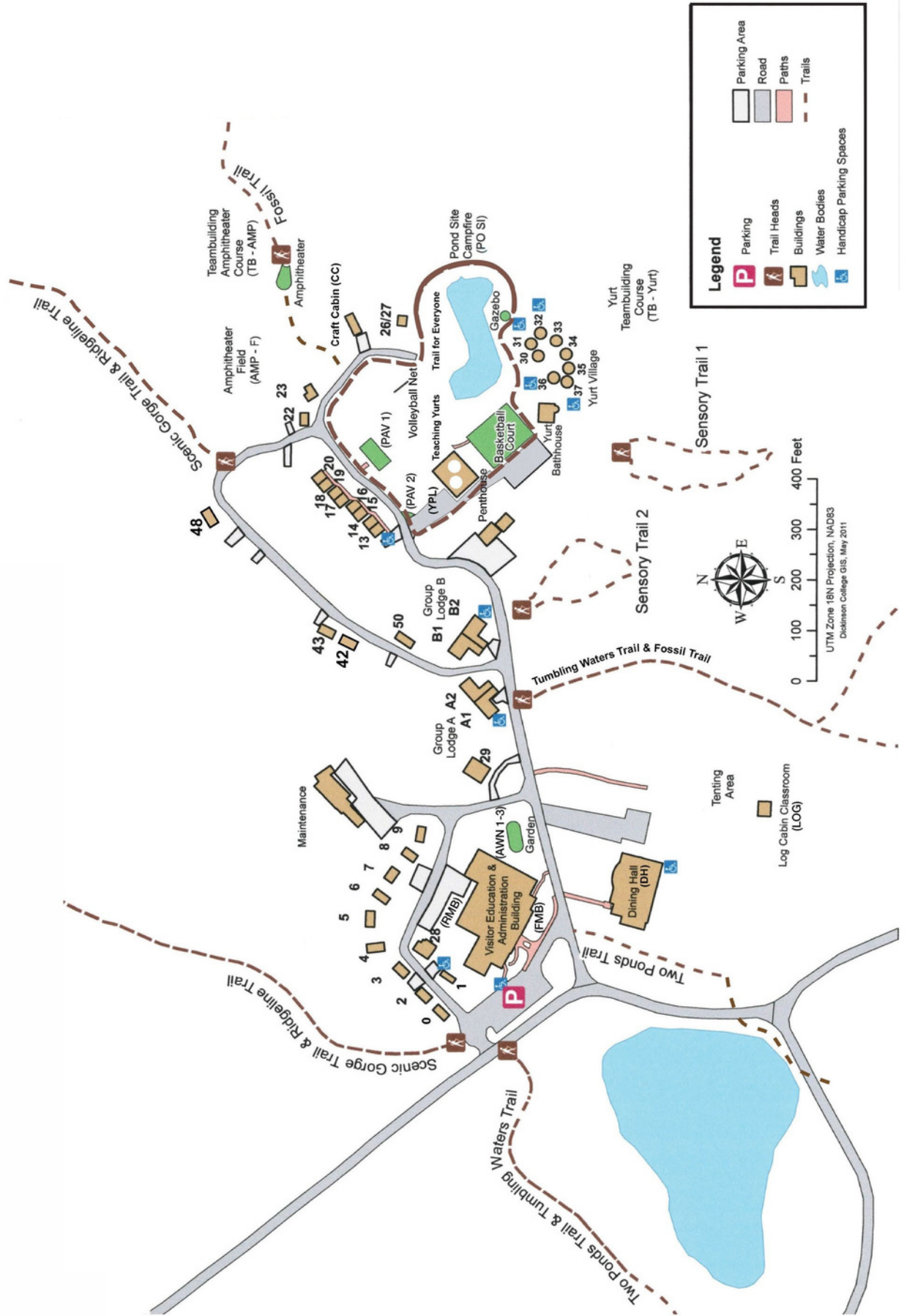
Building Community One Bird Walk at a Time - Doug Wentzel

Since 1997 Shaver’s Creek Environmental Center has offered a Spring and Fall series of Wednesday morning bird walks called “Migration Morning.” For 12 Wednesdays a year we bring together an eclectic group of people interested in going for a short walk and observing birds in our landscape. Migration Morning provides a forum to connect people to nature and to each other. Each walk encourages lifelong learning through citizen science and simple actions to help conserve birds and bird habitat. In addition to program participants, the walks also provide professional development opportunities for the environmental center staff and students to learn about birds and conducting public workshops.

This workshop will address how we tackle the loss of bird biodiversity through a recurring program for the public. We’ll cover the logistics and programmatic intent that can be applied to birds or other natural history topics. In addition, we’ll share resources, materials and techniques to help you learn about the birds in your backyard, schoolyard or park.



Campus Map





Dr. Joe Stahlman is the Director of Seneca Nation's Tribal Historic Preservation Office. Recently, he transitioned from the director of Seneca-Iroquois National Museum-Onöhsagwë:de' Culture Center to his new role. Joe is a scholar and researcher of Tuscarora descent. He has over 30 years of research experience working with First Peoples and allies. His research focuses on culture and history, as well as ongoing socio-economic and health & wellness-related endeavors with Native communities. He takes an active role in addressing the spaces Native peoples occupy in North American museums, arts, archaeology, cultural resource management, and scholarship. Joe regularly talks about the need to promote equity, equality, and justice among all peoples in North American society through a number of reconciliatory processes that are inclusive for all and empower people to express agency through creative and intellectual endeavors.

Dr. Stahlman discusses the importance of incorporating holistic knowledge into the role of environmental protection. He stresses the need to move beyond accepted definitions of what constitutes environmentalism. In his exploration of safeguarding natural resources, Dr. Stahlman blends concepts of indigenous knowledge and ideas like love in his conversation. Indigenous Peoples' passion and observance extends beyond knowing and loving the Earth. He explains the spiritual connection to the Earth is embedded in a pragmatic relationship with the world around them, and not static like the widely accepted Rousseauian view of Indigenous Peoples in Nature. He concludes his talk with how environmental educators can incorporate their own worldviews and ideas of love into their work.



Tara Muenz
Stroud Water Research Center

Tara is an aquatic ecologist in the department of education at the Stroud Water Research Center and serves as the assistant director of education. She coordinates their programming, while working worldwide on specialized projects that promote watershed stewardship. Recent projects include the creation of macroinvertebrates.org, administration of the international macroinvertebrate monitoring program called the Leaf Pack Network, supporting indigenous nations to restore their tribal watersheds, and enhancing schoolyards through the implementation of outdoor learning spaces. Tara is particularly interested in how we experience more ‘pauses with the planet’ to deepen our relationship with the natural world, creating more love, peace and harmony within all life and ourselves.

Presenting:

- Preconference Workshop: Pause with the Planet, Outdoor Learning Spaces to Improve Schoolyards for Outdoor Environmental Education and Stewardship

Ellen Conrad
Pittsburgh Parks Conservancy

Ellen Conrad has always been passionate about sustainability issues but found her niche in youth climate action and education. Her background is a smattering of environmental nonprofits, including the Environmental Charter School and Green Building Alliance. Throughout each experience, climate education and action were a thread connecting them all. In her role as a Naturalist Educator with the Pittsburgh Parks Conservancy (PPC), she draws on her various experiences to lead outdoor 8-12th grade school programs, a high school summer internship called Young Naturalists, and sustainability-based professional development with high school educators. Outside of the Pittsburgh Parks Conservancy, Ellen serves on the board of Reimagined Recycling, a localized plastic recycling nonprofit, and Communitopia, a Pittsburgh-based climate education organization. Ellen loves being outdoors—whether that’s hiking, camping, or biking—and is slowly turning her yard into a buffet for birds. She enjoys trying new restaurants, thrifting, and slowly completing home improvement projects.

Presenting:

- Integrating Climate Science (and Hope!) into High School Environmental Education



Katie Gray

Lackawanna County Conservation District

Katie Gray is the Watershed Specialist for the Lackawanna County Conservation District. Born and raised in Warren, PA, Katie's childhood in the lush Allegheny National Forest and the environmental ethic instilled in her by her parents, grandfather, and Steve Irwin (aka The Crocodile Hunter) inspired her to pursue a career in conservation. She earned a dual Bachelor of Arts degree in Environmental Studies and Writing from the University of Pittsburgh at Bradford in 2016 and spent three years in the work force before pursuing graduate study and earning her Master of Science degree in Marine and Environmental Biology from Nicholls State University in 2021. Prior to beginning her tenure with the Conservation District, Katie held seasonal positions with the USDA Forest Service, US Fish and Wildlife Service, the Student Conservation Association/AmeriCorps, Indiana University of Pennsylvania, and West Virginia University that afforded her diverse work experience with many habitats and species, though much of her work has focused on herpetofauna and pollinators. Katie enjoys coffee, listening to music, hiking, always learning more about our wild world, and educating others on how they can do their part to protect our planet.

Presenting:

Ripple Effect: A Case for Stormwater BMP Education Through Programming and Practice



Ellen Freedman Schultz

Fairmount Water Works

Since 2004, Ellen Freedman Schultz has developed and managed environmental education programs related to water quality, watershed management, and the history of Philadelphia's municipal water system for the Fairmount Water Works Interpretive Center. She currently leads their watershed curriculum project "Understanding the Urban Watershed" (Grades 4 through 9th) in partnership with the School District of Philadelphia. Since 2015, she has served as Co-chair of Education for Sustainability Committee of the School District of Philadelphia's GreenFutures Plan for Sustainability and is currently a member of the Alliance for Watershed Education Steering Committee and the PA Environmental Literacy Steering Committee.

Presenting:

- Growing Up Green: Schoolyard Trees and MWEES



Julie Travaglini Allegheny Land Trust

Julie Travaglini is the Senior Director of Education and Curriculum for Allegheny Land Trust. In her role, she creates hands-on, stem and place based lessons for children and adults alike as well as providing state accredited professional development. Working in the field for almost 18 years, she regularly travels the country speaking on the importance of environmental education. She is a community leader, serving as the President Elect for the Pennsylvania Association of Environmental Educators as well as serving on the Board of the Western PA Mushroom Club and Beverly's Birthdays. She recently self published a children's book called Super Skills of Backyard Bugs, which is available on Amazon.

Presenting:

- NAAEE Guidelines for Excellence in Professional Development
- Hands-on Environmental Studies for a World of 8 Billion

Mandy Revak Venture Outdoors

Mandy Revak has been the Youth Program Manager at Venture Outdoors since January 2022. Annually, she oversees more than 600 youth outdoor education trips and more than 9000 participant experiences through Outdoor Learning Lab, Venture Outdoors Summer Camps, and custom youth programming. Before joining Venture Outdoors, she coordinated middle school and high school programs at the Pittsburgh Zoo & PPG Aquarium for more than 17 years. Mandy holds a BA in Animal Behavior from Bucknell University and a MA from Miami University in the Global Field Program.

Presenting:

- Pittsburgh Outdoor Learning Lab: Meaningful Outdoor Experiences
- Climate Change Adventure Education Project



Emma Melvin School District of Philadelphia

Emma Melvin has worked in the green infrastructure field since 2006, installing GSI, educating communities, schools and municipalities on these systems and how they protect and improve their community. Emma worked with organizations such as UVM Sea Grant, Pennsylvania Horticultural Society, and American Littoral Society. She currently oversees the GSI maintenance on 47 School District of Philadelphia school campuses.

Presenting:

- Growing Up Green: Schoolyard Trees and MWEES



Ian Smith
The Watersmith Guild

Ian Smith is an entrepreneur, standup paddleboard athlete, guide, and instructor from Pittsburgh, Pennsylvania. In 2011, he founded SurfSUP Adventures, the first whitewater paddleboarding outfitter in the Eastern US. In 2014, Ian founded First Waves, an award-winning program that uses standup paddling, the art of filmmaking, and digital media as a catalyst to inspire conservation and mentorship for underserved youth. Most recently, Ian founded the Watersmith Guild, a non-profit that enhances watersheds and communities through arts and adventure. The organization received the prestigious Governor’s Award for Environmental Excellence in 2023.

Since 2011, Ian has designed and executed standup paddleboarding and conservation programs for the Department of Conservation of Natural Resources, Envision Blind Sports, the City of Pittsburgh, Big Brothers Big Sisters, the YMCA, and many more. He is a master instructor trainer with the Professional Standup Paddleboarding Association (one of just 4 worldwide). In addition to his work as an instructor and guide, Ian is a standup paddleboard athlete and content producer. He is currently a team athlete and ambassador for NRS and Werner Paddles. His photos, videos, and articles have appeared on PBS, World Channel, the Standup Journal, SUP the Mag, The American Whitewater Journal, The Paddler, Boarders Mag, Pittsburgh Magazine, and more.

Presenting:

From Rivers to Resilience: Empowering Underserved Youth Through River Surfing and Paddle Adventures



Christy Gilkey
Diocese of Greensburg

Christy Gilkey is a middle school science instructor who has taught preschool through eighth grade students for over twenty years. She earned an elementary education degree from the University of Pittsburgh at Johnstown and a master’s degree in educational leadership from Carlow University. More recently, she acquired middle school science credentials and completed thirty-six credits toward a doctorate of education in curriculum and instruction from Indiana University of Pennsylvania. As an elementary education instructor, she initiated an environmental education program and has incorporated outdoor field experiences into the middle school life science curriculum in her current position. She prioritizes the spiritual, mental, physical, and academic growth of her students. This is her first time presenting at the Pennsylvania Association for Environmental Educators’ Conference.

Presenting:

Mindfulness in Middle School: A Case for Connecting Adolescents with Nature

Danielle Emers
Perkiomen Watershed Conservancy

Danielle joined the PWC staff in 2022 facilitating the Floating Classroom summer academies. She has a degree in Biology from Bloomsburg University and a Master's in curriculum and instruction from Villanova. She has been serving the Perkiomen Valley as a science educator since 1999 and currently teaches 7th grade life science at Perkiomen Valley Middle School West. She is a MWEE Facilitator, Muhlenberg Woods Supervisor, and sponsors the Green Team where she passes on her passion for promoting environmental stewardship to her students! When she isn't planting natives on the school campus or organizing events, you can find her hiking or kayaking in Green Lane, playing guitar, throwing pottery, gardening, or walking her dogs with her family.

Presenting:

Lessons from the Floating Classroom: Partnerships and Programs that Inspire



Krysta Hougen-Ryall
NOAA Chesapeake Bay Office

Krysta Hougen-Ryall has worked as the Environmental Communication Specialist at the NOAA Chesapeake Bay office since 2019. In this role she manages the online courses on Chesapeake Exploration, supports regional environmental literacy efforts, and works with coworkers out of the Environmental Science Training Center to host workshops for formal and nonformal educators with a focus on NOAA science, climate change, and the Meaningful Watershed Educational Experience. Prior to this role, Krysta was an environmental educator and summer camp director for 9 years and holds a Masters in Plant Biology.

Presenting:

Science & Social Emotional Learning



Brandon Swayser
The Da Vinci Science Center

Brandon currently directs environmental education and wildlife related exhibits and programs for the Da Vinci Science Center. Prior to that he worked for 12 years in environmental education and oversaw wildlife ambassador care at Wildlands Conservancy. His academic and research work is in ornithology, he is a licensed bird bander, and avid birder.

Presenting:

• More than a Bird Walk



SPEAKER BIOS

Nicole Landis Wildlands Conservancy

Growing up around the Lehigh Valley, I always had a close connection to nature. Most of my youth was spent exploring the great outdoors, with many fond memories of traversing the grounds of Wildlands Conservancy's Dorothy Rider Pool Wildlife Sanctuary at a young age. My continuing admiration for nature led me to seek a degree that would allow further exploration of my wild passions. In 2018 I graduated from Kutztown University of Pennsylvania with a B.A. in environmental geography, and began working as an environmental educator at Wildlands. In my free time, I enjoy all things outdoors, including mountain biking, hiking, and tennis.

Presenting:

Making Climate Change Connections



Michelle Cugini Longwood Gardens

Michelle joined Longwood Gardens in 2009 with 20 years of experience in elementary and early childhood classrooms. She enjoys the challenges of engaging youth with the outdoors and connecting them to the natural world.

Presenting:

The Benefits of Nature: Improving Student Well-Being by Connecting to the Natural World



Emily Gerber Longwood Gardens

Emily joined the Longwood Gardens School & Youth team in 2021. With a background in conservation biology and informal environmental education, she has enjoyed bringing her experience to the Gardens and creating meaningful learning opportunities for guests and their families.

Presenting:

The Benefits of Nature: Improving Student Well-Being by Connecting to the Natural World



Rebecca Schaufele

Northwest Tri-County Intermediate Unit (IU5)

Rebecca Schaufele is an Educational Facilitator (STEM, Environmental Literacy, & Ed Tech) at the Northwest Tri County Intermediate Unit in Edinboro, PA. Prior to her current position, Rebecca served as a Montessori teacher with over 13 years of classroom experience in a public setting.

Presenting:

Cultivating Togetherness: Harnessing Regional Hubs for Environmental Literacy Advancement in Pennsylvania



Mark Reardon Communitopia

Mark joined the Communitopia team as the Director of Education in March 2022. He oversees all of Communitopia's educational initiatives, including professional development and youth programs. Mark has more than two decades of experience advocating for positive environmental change through the development of STEM programs. He holds a B.S. in Recreation, Park, & Tourism Management and an A.S. in Wildlife Technology from Penn State University. When away from work, he can usually be found outdoors. His favorite pastimes include hiking, camping, kayaking, and running. He believes that personal growth occurs best when we are challenged to get outside of our comfort level, while staying well within our abilities.

Presenting:

Climate Change Adventure Education Project

Becky Thomas Slippery Rock University

Becky is an associate professor of parks and conservation at Slippery Rock University. Her research focuses on just and equitable access to nature-based learning through culturally-relevant Environmental Education. She teaches classes for undergraduate and graduate students at SRU on social science research methods, environmental issues, interpretation, and wildlife management.

Presenting:

- DEIJA in EE: Tools for assessing organizational progress in programming
- Trauma-informed practice for environmental educators



Nick Tonetti

Schuylkill Center for Environmental Education

Nick is an environmental educator at the Schuylkill Center for Environmental Education in Philadelphia. He loves working with kids and sharing his excitement for nature with them. One of his favorite things to teach about is wild edible plants. He hopes to spread a sense of stewardship and appreciation for the outdoors with the kids that he works with.

Presenting:

Adult Restorative Retreat - Reconnecting with Nature and Our Inner-Child



Beth Jones

Deep Green Journey

Beth Jones is the executive director of Deep Green Journey, a non-profit located in North Central PA, committed to creating space in the natural world for people to discover sacred healing, connection, and creativity within themselves and their community. Beth is Certified Nature and Forest Therapy Guide and has over 20 years' experience leading hikes, retreat and workshop experiences designed to lead groups to discover healing, hope and creativity through a restorative connection with the natural world. Beth and her husband Tom live on the banks of the Loyalsock Creek north of Williamsport, PA and enjoys spending time hiking and backpacking, reading by the fire and is trying (slowly) to learn to play the mandolin.

Presenting:

Connecting with natures' healing invitations



Ken & Peggy Butler

Pennsylvania Firefly Festival, Inc

Ken and Peggy are the co-founders and hosts of the Annual Pennsylvania Firefly Festival in Tionesta, Forest County. In 2012, the Butlers were the owners of a small B&B in the village of Kellettsville when a group of firefly researchers from Tennessee visited them and changed their lives profoundly. The researchers identified the unique species of firefly commonly known as the "Synchronous Firefly" in their own backyard. The researchers also documented over 18 other species throughout the Allegheny National Forest that surprised and impressed the Butlers. Once they discovered that the firefly is Pennsylvania's Official Insect of the Commonwealth, they took it upon themselves to start an event that would celebrate and educate more people about this charismatic lightning bug. Little did they know that this would lead them to meet some of the world's most influential people in conservation like Sir David Attenborough and Sara Lewis, PhD. The festival is going on its 12th year. The Butlers have learned a lot over the years not only about fireflies, but also some pitfalls in firefly tourism that others should try to avoid when starting or improving their own firefly program.

Presenting:

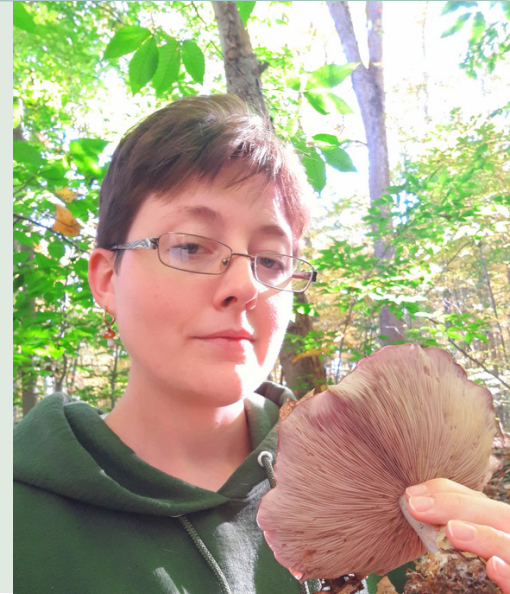
Firefly Tourism in Pennsylvania: Be Careful What You Wish For



Sara Klingensmith Allegheny Land Trust

Sara joined Allegheny Land Trust in May 2023 as the organization's first Education Associate. She manages school and education partner relationships, outreach program coordination, and internal material supplies. She holds a B.S. in Wildlife Biology from the University of Alaska Fairbanks, and has been teaching non-formal environmental education for about 10 years. Through her involvement and organizational partnerships with the Western Pennsylvania Mushroom Club (WPMC), she has helped plan fungi-related educational events, walks, and lectures. She currently serves on the Board of Directors of the Pennsylvania Association of Environmental Educators, and is WPMC's Secretary, Identifier, and Photography Chair.

Presenting:
Into the World of Fungi



Zaina Asaad The Schuylkill Center

My name is Zaina, I am the Manager of Public Programs at the The Schuylkill Center for Environmental Education and I work to develop and coordinate programs that best serves our community! I obtained my degree in Environmental Studies from Temple University and have a strong passion for engaging communities in nature in a way that is both enjoyable and accessible. I find that not many people including myself have had the opportunity to immerse themselves in nature at a young age and hope to continue create programming for adults to cultivate their minds and passions. I've lived in Philadelphia for 5 years now and have a deep love for the city and all that it has to offer!

Presenting:
Adult Restorative Retreats - Reconnecting with Nature and Our Inner-Child

Michael Griffith Berks Nature

Michael Berks Nature in August of 2015. He has volunteered for many environmental organizations and is a board member of several more. He was an intern during the summer of 2013, while he was acquiring his Bachelor's degree in Environmental Science/Biology at Kutztown University. He has experience in management, photography, citizen education at the Department of Agriculture, laboratory work, and concentrated on limnology (water ecology) at school. He lives in Sinking Spring with his son Michael Jr.

Presenting:
GLOBE Citizen Science Made Easy





Brad Kunsman
Penn State Extension

Brad currently serves as a Water Resources Extension Educator across Pennsylvania and a Master Watershed Steward Coordinator in Lehigh and Northampton Counties. In this role, he focuses on youth water, drinking water, and watershed protection and restoration education. Brad also trains and manages Master Watershed Steward volunteers who assist in restoration projects, water quality testing, host programs and workshops, organize stream clean-ups, and facilitate outreach efforts. Brad serves as the point of contact for the Future Master Watershed Steward Program, started the Master Watershed Steward TapTalk Series, and chairs the Dive Deeper Summit steering committee.

Brad is actively engaged with several statewide and local stakeholders. He serves as a Penn State Extension representative on the Pennsylvania Watershed Education Task Force, a Leadership Committee member for the DCNR's Lehigh Valley Greenways Conservation Landscape, as a Director for the Watershed Coalition of the Lehigh Valley, a Committee Member and Day Planner for the Delaware River Sojourn, and as a Board Member at Quiet Valley Living Historical Farm.

Brad holds two degrees, one in Education from Northampton Area Community College and one in Elementary and Kindergarten Education K-6 from Penn State. He is a Pennsylvania Certified K-6 teacher and holds many other certifications specifically related to his work. Brad comes from a family steeped in agriculture and is passionate about the environment. He enjoys spending time with his family on his unique hobby farm, taking in Pennsylvania's natural spaces, and going on environmental vacations.

Presenting:

Introducing Dr. Watt R Shedd - Stream Doctor & Penn State Extension's Future Master Watershed Steward Program (FMWS)



Jennifer Fetter
Penn State Extension

Jennifer is the Director of the Center for Agriculture Conservation Assistance Training and the Penn State Extension Water Resources Program Team Leader. She holds a bachelor's and master's degree in Biology from Villanova University. The Center for Agricultural Conservation Assistance Training (CACAT) provides education and technical assistance to conservation professionals and others working in the ag sector to support the implementation of best management practices and conservation activities on Pennsylvania's farms. The Water Resources Team programs focus on water quality education that helps to protect and restore Pennsylvania's abundant waterways and groundwater supplies. Programming includes collaborative watershed restoration efforts, agricultural and urban stormwater management education, safe drinking water clinics, and more. Jennifer specializes in developing timely and critical education programming specifically for conservation professionals and youth audiences. She is also interested in programming that engages Pennsylvania's citizens as water conservation volunteers. Jennifer is also on the steering committee for the Dive Deeper Summit, a biennial conference on youth water education designed for educators and volunteers who teach in formal and informal settings.

Presenting:

Introducing Dr. Watt R Shedd - Stream Doctor & Penn State Extension's Future Master Watershed Steward Program (FMWS)

Jenifer McMurray
Seneca Valley School District

Jenifer McMurray has been a dedicated biology teacher for 29 years, passionately nurturing young minds and fostering a love for the natural world. Her commitment to education and the sciences has been unwavering, inspiring countless students to pursue careers in biology and environmental science. Currently, she is pursuing further education as a student at Slippery Rock University, demonstrating a lifelong dedication to learning and personal growth. In addition to her academic pursuits, Jenifer has been actively engaging her students in the wonders of the natural world through nature journaling for the past two years. This innovative approach to science education has allowed students to develop a deeper connection with the environment, honing their observational skills and nurturing a sense of curiosity about the world around them. Through nature journaling, Jen has empowered her students to become keen observers and budding scientists, instilling in them a profound appreciation for the biodiversity of our planet. With nearly three decades of experience in the classroom and a continued passion for learning and teaching, Jenifer McMurray exemplifies the qualities of an exceptional educator and mentor.

Presenting:
Nature Journaling



Jill Shashaty
Riverbend Environmental Education Center

Jill Shashaty works as Riverbend Environmental Education Center’s Education Specialist. In this role, she develops EE programming for students and PD for teachers, directs Riverbend’s Nature-Based STEM Community of Practice, and ensures that Riverbend’s programs embody high-quality, best-practice environmental and science education. Jill began her career teaching literature and writing in high school and university classrooms, with the natural world always a focal point of her teaching and research. She brings this interdisciplinary experience and mindset to her work in STEM education. Her volunteer work in the ECE field and with Girl Scouts and Cub Scouts has expanded her education experience to include students from preschool through elementary school. Jill graduated from Georgetown University (BA, English), Vanderbilt University (MDiv, environmental ethics), and the University of Pennsylvania (PhD, American literature), and serves as a Pennsylvania Master Naturalist. In her free time, she enjoys backpacking, birding, guitar, and reading.

Presenting:
Putting Down Roots: Utilizing Urban School Yards for Nature-Based STEM

Suzanne Safran
Riverbend Environmental Education Center

Suzanne is passionate about connecting people to nature and believes it is important for mental health, physical health and the health of the planet. She worked for six years managing zoo education programs and has been with Riverbend for the past year and a half overseeing education programs. She is an outdoor enthusiast who loves hiking, camping and birding especially. She holds a BS in Biology from James Madison University, an MS in Public Policy from Georgia Institute of Technology and is currently working toward a M.Ed. in Environmental Education at Slippery Rock University.

Presenting:

Putting Down Roots: Utilizing Urban School Yards for Nature-Based STEM



Ryan Beltz
Perkiomen Watershed Conservancy

Ryan began his tenure with the Conservancy in 2016. His goal then, as it remains today, is to provide opportunities for local residents to create meaningful connections with the green spaces around them. Whether in the form of conservation, education or recreation, the hope is that these opportunities inspire the communities of the watershed to invest both in the preservation and restoration of the Perkiomen Creek and its tributaries. Prior to his tenure with the Conservancy, Ryan worked as a land manager at Hawk Mountain Sanctuary, as an instructor of English at Alvernia University, as a ranger with the US Fish and Wildlife Service in Alaska and as a canoe guide on the Inside Passage. He holds two degrees in English.

Presenting:

Lessons from the Floating Classroom: Partnerships and Programs that Inspire

Esther Brennan
Williamsport Area School District/ Hope Enterprise

Esther lives in Williamsport, Pennsylvania in which she has been an Autism Support teacher in a self-contained classroom for 8 years in the Williamsport District. Additionally Esther is employed by Hope Enterprise in the Autism Resource Center. Esther runs a parent support group for families with neurodivergent children. She has also recently become certified in teaching yoga and mindfulness for children and teens with an emphasis on inclusion and accessibility. Esther attended Lycoming College in which she received Bachelor's Degree in Psychology and completed Education Program becoming a certified teacher. Esther also received a Master's Degree in Special Education with an emphasis in Applied Behavior Analysis from Penn State University.

Presenting:

Connecting with nature's healing invitations





Sonia Jaiswal
Point Park University

Sonia Jaiswal is excited to be part of PAEE and is currently serving as the membership director and as part of the DEIJA committee. Sonia teaches environmental science, environmental communication, and life sciences at Point Park University. Sonia holds a B.S. in Environmental Studies from the University of Hertfordshire and a M.S. in Environmental Science with an Environmental Management specialization from Oklahoma State University. Sonia has over 10 years of experience of teaching environmental science classes to students in undergraduate and graduate programs. Sonia is currently pursuing a Doctor in Education from the University of Pittsburgh focusing on social justice and equity in STEM and investigating membership engagement in environmental education as part of her dissertation. Sonia has been involved in various committees in schools and the community, and most recently as the director of the Cranberry Area Diversity Network to develop and implement initiatives that promote diversity, equity, inclusion and belonging. Sonia is a lifelong learner and in her spare time, she is an avid traveler with a special interest visiting national parks.

Presenting:

DEIJA in EE: Tools for assessing organizational progress in programming

Kathryn Metzker
Stroud Water Research Center

Kathryn Metzker has dedicated herself to conservation and education in roles in research and in formal and non-formal education. She has incorporated equity and gender into her work and studied issues of justice around the world. She received an MA in Geography and a BA in Ecosystem Science and Policy and Anthropology. At the Stroud Center, she works with teachers conducting after-school programming in Philadelphia, girls interested in STEM, and local Spanish-speaking families and students through community education and outreach.

Presenting:

Engaging Diverse Youth in Science Activities and Careers while Developing Identity and Agency



Christie Schlaner
Parkland School District

I have a Bachelor Degree in Biology, worked as an immunologist scientist for 4 years before becoming a teacher. I have a Masters of Education and Masters of Science in STEM Education. I run a STEAMM Club, STEAMM Camp, and enjoy taking students on field trips to experience science.

Presenting:

An Overview of OMS Environmental Day





Brian Holtzhafer
Parkland School District

Brian Holtzhafer, Christie Schlaner, and Jason Klinger are dynamic science teachers whose commitment to environmental education goes beyond the classroom. With a background in environmental science, Brian Holtzhafer has dedicated 20 years to shaping young minds and instilling a profound love for science and nature. Jason and Christie also teach 8th grade science at Orefield Middle School in Orefield, PA and serve as amazing colleagues and support to help students realize their potential. Beyond their roles as classroom educators, they are passionate advocates for getting students out into nature and learning about their local environment. They have taken the lead in organizing an Environmental Day at a local Park that involves the community. Participants from local Environmental Agencies teach the students about their areas of expertise with the intent of fostering a sense of environmental stewardship among students. Christie, Jason, and Brian believe in the power of education to drive positive change and actively collaborates with local organizations to extend their impact beyond the school walls.

Presenting:
Environmental Awareness Day with help from our friends

Heather Drzal
Longwood Gardens

Heather Drzal is the Director of School and Youth Programs at Longwood Gardens. She earned a B.S in Biology from Delaware Valley University and an M.Ed in Agricultural and Extension Education from The Pennsylvania State University. Prior to Longwood, Heather was a high school agricultural education teacher and FFA advisor. Using her experiences from the classroom, Heather hopes to continue building opportunities at Longwood for PreK-12 students, teachers and families. Some of the opportunities currently offered through the School and Youth department are educator guided field trips, virtual field trips, Discovery Boxes, summer workshops, Scout programs, teen volunteer program, Unearth It!, STEAM competitions, and teacher professional development opportunities. Heather is an active committee member in other organizations including Pennsylvania Association of Environmental Educators, PA SEED Ecosystem and the Brandywine Valley Educators Collaborative.

Presenting:
The Benefits of Nature: Improving Student Well-Being by Connecting to the Natural World





Denise Bauer
Wildlands Conservancy

Almost 30 years ago, Denise Bauer stepped in as a substitute program presenter and fell in love with environmental education and Wildlands Conservancy. Denise grew from a last-minute stand-in into a leader. Currently, her favorite part of her job is creating imaginative, and fun nature-based experiences that stick. She is focusing on developing curriculum for schools and summer camps and inspiring new environmental educators to make fun an integral part of each lesson. She believes a passion for learning and an engaging personality can make anyone an effective teacher.

Presenting:
Making Climate Change Connections

Katie Ruth
Pennsylvania Interfaith Power & Light

Katie connects humans to the planet, each other, and themselves. As Executive Director at Pennsylvania Interfaith Power & Light, they are responsible for supporting a volunteer board and small team of staff in cultivating a moral response to climate change that is interfaith, inclusive, and intentional. They hold an MA in Public Leadership, and a BA in Christian theology. Katie is focused on facilitating partnerships between individuals and institutions to promote social change and build community. They are passionate about peacemaking and justice, rooted in their deep connection to the environment. Their career spans a variety of experience in nonprofit administration, grassroots organizing and outreach, and faith-based community services. Katie is involved in several community resilience projects including environmental organizing, safe shelter, and the arts. They are an avid reader, enjoy exploring new places, and are almost always found with a cup of tea in hand.

Presenting:
Community Approaches to Watershed Education



Melissa A. Troutman



Melissa A. Troutman is an award-winning writer, filmmaker, environmental justice advocate, and vocal artist from the ancestral homelands of the Susquehannock and Haudenosaunee, which today are known as the Pennsylvania Wilds. In 2011, Melissa co-founded the investigative news nonprofit Public Herald and has since produced four feature documentaries. Her latest, Lake Erie Our Kin, explores how the health of Lake Erie is directly related to the type of relationship we have with it. Melissa also does climate justice work for WildEarth Guardians based in Santa Fe, NM and resides on the Lake Erie bluffs in northwestern PA.

Presenting:
Lake Erie, Our Kin

2024 PAEE Award Winners



KEYSTONE AWARD



Judy Acker

French Creek Valley Conservancy

Judy Acker is the French Creek Education and Outreach Specialist for the French Creek Valley Conservancy currently doing programming in nine school districts within the watershed as well as adult and community programs. Previous to that position, she worked for Audubon Pennsylvania for five and a half years focused on French Creek and native plants. Before that, Judy was the Director of the French Creek Outdoor Learning Center for 12 years located along French Creek on 179 acres doing outdoor programming for thousands of students each year. Acker became fascinated by French Creek as a non-traditional adult student at Allegheny College where she graduated with honors with a BS in Environmental Science. She has over 25 years' experience working with students, teachers and adults doing environmental programming on various topics.

OUTSTANDING ENVIRONMENTAL EDUCATION PROGRAM AWARD

Green Allies

The GreenAllies organization engages with, empowers and supports students to become local community leaders in environmental sustainability. Their Pottstown headquarters is the home of the student-led Althouse Arboretum, which serves as a replicable model of locally-focused, student environmental leadership. GreenAllies works with students to provide them with the knowledge and skills necessary to impact their communities. Nowhere is this more visible than the work the students do at GreenAllies' outdoor education center called the Althouse Arboretum. It started ten years ago as a vacant 17 acre lot, and through the vision, designing, planning, and physical labor by students from nearby high schools, it was converted into the most popular outdoor destination in the township. Today, GreenAllies students manage the facility and all its gardens and trails. They meet on a regular basis to design and plan over 30 community programs a year. GreenAllies visions a world where students lead the way to a more sustainable world and the Althouse Arboretum has distinguished itself as the exceptional example.



DAISY S. KLINEDINST MEMORIAL AWARD

Justine O'Gara

Schuylkill Center for Environmental Education

Justine O'Gara began discovering her passion for connecting with people and nature after graduating with a double major in Biology and Environmental Science from La Salle University in 2021. After graduation, Justine began working as an Environmental Educator for the Wissahickon Environmental Center, where she led guided hikes, a variety of nature-based programming, and fostered communities in the Philadelphia area. Since then, Justine has transitioned to working with the Schuylkill Center for Environmental Education where she currently oversees their Summer Camp, and continues making connections in other various educational programs. As an avid birder, Justine finds joy in observing our feathered friends and the ways they interact with their ecosystems. Outside of work, she enjoys spending time at the Wissahickon looking for new discoveries, trying to teach anyone who will listen, and playing with her two cats and lovely senior dog.



GOVERNMENT PARTNER AWARD

Carissa Longo

Carissa Longo is a Pennsylvania native who has worked in the EE field for over 26 years. She spent her childhood playing in the creeks and woods of Northeastern Pennsylvania, and this instilled an early passion for nature and conservation education. She joined the Department of Conservation & Natural Resources (DCNR) - PA State Park's family in 1998 as a seasonal Environmental Education Specialist (EES). In 2013, after many years as an EES in the field, she moved to Harrisburg to become a Natural Resource Program Specialist (NRPS) for DCNR - PA State Parks.

As a NRPS and the Pennsylvania Project WILD and PA Songbirds Coordinator, Carissa's focus is working with PA State Park Outdoor Programming Services (OPS) staff, statewide facilitators, and other partners to offer top-quality teacher workshops, coordinate curricula, and improve and increase teacher professional development. In her career, Carissa has facilitated over 155 teacher workshops, has coordinated more than 60 staff trainings, and has led numerous facilitator trainings.



BUSINESS PARTNER AWARD

Aqua Pennsylvania

Aqua Pennsylvania, an Essential Utilities company, provides water and wastewater services for approximately 1.5 million people in 32 counties throughout the Commonwealth of Pennsylvania. For more than 135 years, Aqua has been protecting and providing Earth's most essential resource, water. The company takes its responsibility seriously and has a strong commitment to sustainable business practices, as well as giving back to the communities they serve.

Accepting the award for Aqua is Krista Seng, who leads their corporate giving and community affairs programs. Krista is an environmental scientist who has spent her career partnering with nonprofits to protect water resources and improve Pennsylvania communities.



OUTSTANDING ENVIRONMENTAL EDUCATOR AWARD

Christina Moresi

Christina Moresi has been creating programming and connecting community youth and families with nature, sustainability practices, natural sciences, permaculture, and Pennsylvania environmental and agricultural history through hands-on, inclusive lessons and outdoor experiences since high school (almost 25 years!) in schools, nature-based nonprofits, urban arboretums and farms, and environmental centers. She is currently a part of Philadelphia Parks & Recreation's Pennypack Environmental Center education team. She loves working outdoors and sharing the mysteries of nature with children and adults. When she is not at work, she is in the garden or on "Auntie Adventures" with her nibblings.



OUTSTANDING CONTRIBUTION TO EE AWARD #1

Leon Ressler

Leon Ressler is currently serving as a Penn State Extension Educator working on the Agronomy and Water Quality teams. He has been with Extension for 36 years and his first assignment was working in the Upper Conestoga Watershed on pioneering Nutrient Management planning focused on reducing Nitrogen and Phosphorus losses from farm fields. Leon has also done programming in well head protection, private well management, water rights, composting, odor reduction and served on the Susquehanna River Basin Commission's Agricultural Advisory Committee. He has also been a County Extension Director for 17 years. Leon and his wife Lou Ann have 4 adult children and 12 grandchildren and reside on their family farm in Lancaster County.



OUTSTANDING CONTRIBUTION TO EE AWARD #2

Lucy McClain

McClain is an Associate Teaching Professor and the Graduate Assistant Program Director at Shaver's Creek Environmental Center (Penn State University). She teaches environmental education and sustainability courses in both Penn State's Curriculum and Instruction (Science Education) department and Recreation, Park, and Tourism Management (RPTM) department, while also serving as the co-chair for Penn State's Outreach Sustainability Council.

Trained in the learning sciences, McClain studies how families engage with and learn about science in non-formal educational settings – including outdoor spaces, nature centers, and libraries – using both non-mobile and mobile devices as learning tools. This work has contributed to over 25 peer-reviewed articles and over 50 conference presentations on the topic since 2011.

McClain's happy place is exploring the Laurel Highlands area of Pennsylvania with her husband, two sons, and their dog, Scout.



2024 MWEE Award Winners



MWEE SCHOOL OF EXCELLENCE

Millville Jr/Sr High School Agriculture Department

The Millville Jr/Sr High School Agriculture Department MWEE experience took place during the 2022-2023 school year and continues to occur this school year. Ms. Guise, the Agriculture Education Teacher, made the connection with the Susquehanna River Basin Commission and began implementing the Eels in the Classroom program in her Wildlife Management and Natural Resource Management courses. Throughout the MWEE experience, students participated in cross-curricular learning activities, engaged with industry guest speakers, competed in the Agriscience Fair, and learned about the importance of the American Eel within the Susquehanna River Basin. At the conclusion of the MWEE experience, students demonstrated an average growth in knowledge of 17% (with some growth as high as 43%). In addition, 47% of students stated that they strongly agreed that the MWEE experience "deepened their understanding of environmental science" and 52% of students stated the experience "taught industry skills related to environmental science" that they could use in future careers within the field.



Riverbend Environmental Education Center Riverbend's Nature-Based STEM Community of Practice

The Nature-Based STEM Community of Practice is a yearlong PD program that gives teachers both confidence and skill in teaching nature-based STEM outdoors on their school grounds and beyond. Teachers become adept in teaching science with the new STEELS standards by designing and completing a MWEE with their students. This program develops teacher leaders in MWEES and STEELS, phenomenon-based learning, outdoor nature education, sustainability, and environmental literacy, and it supports teachers with a regional community of peer science teachers and professional environmental educators.



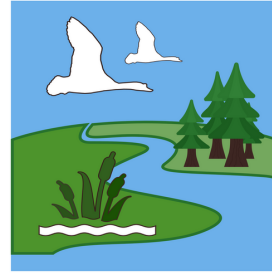
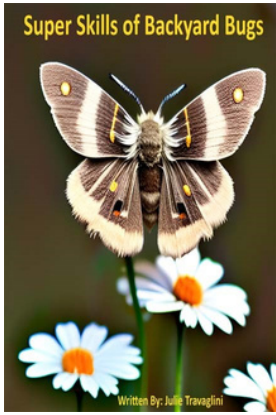
Jill Shashaty

Jill Shashaty serves as Riverbend's Education Specialist. In this role, she develops EE programming for students and PD for teachers, directs Riverbend's Nature-Based STEM Community of Practice, and ensures that Riverbend's programs embody high-quality, best-practice environmental and science education. Jill's work in education has included teaching literature and writing in high school and university classrooms, with the natural world always a focal point of her teaching and research. She brings this interdisciplinary mindset to her work in STEM education. Jill is passionate about high-quality education for all learners, especially young children, and volunteers in the ECE field, with Girl Scouts and Cub Scouts, and as a PA Master Naturalist.

Suzanne Safran

Suzanne Safran serves as Riverbend's Education Operations Manager, designing programs, connecting with community partners, and overseeing program logistics. She is passionate about Riverbend's student-centered, hands-on approach to environmental education, and commitment to equity and access as core values in our work. Suzanne is an outdoor enthusiast who loves hiking, camping, and birding especially. She holds a BS in Biology from James Madison University, an MS in Public Policy from Georgia Institute of Technology, and is currently working toward a M.Ed. in Environmental Education at Slippery Rock University.

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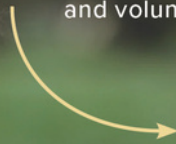
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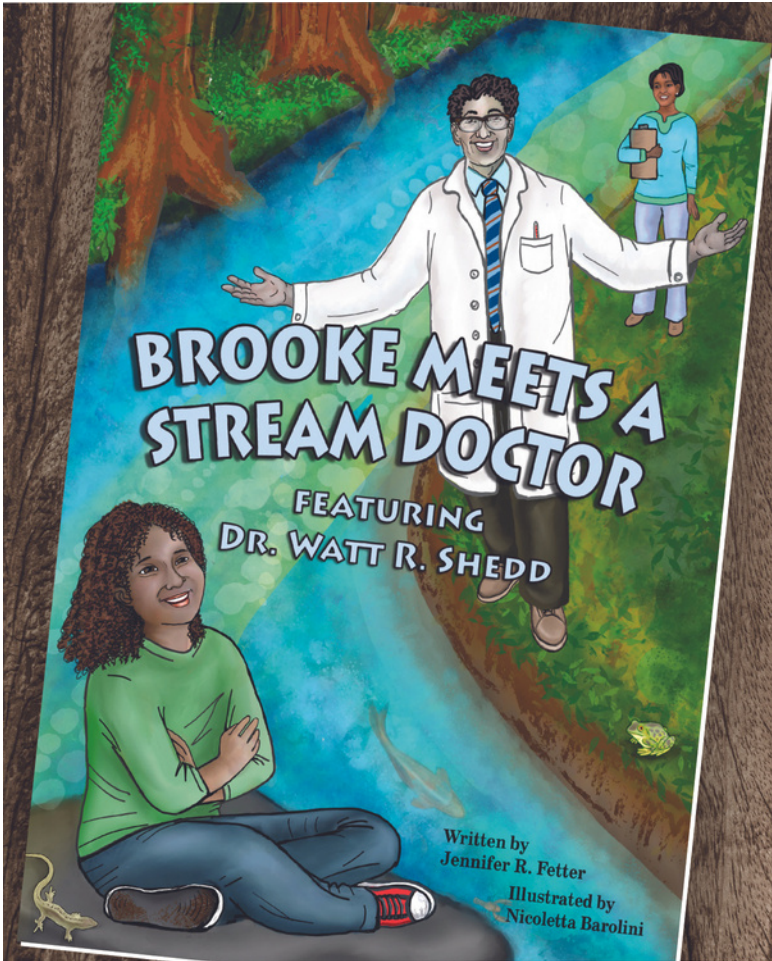
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