# **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  |











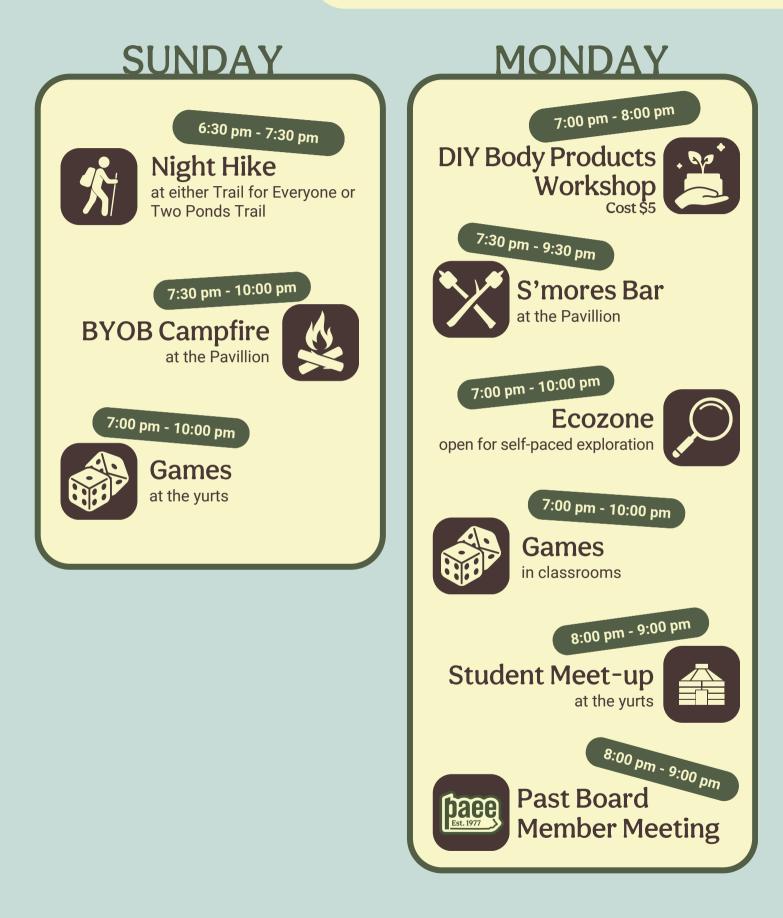






ALLEGHENY LAND TRUST

## **EVENING ACTIVITIES**



# MONDAY SESSIONS



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

# TUESDAY SESSIONS



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

MONDAY

Session 1 10:00 am -11:00 am

#### 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.

#### 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.

#### 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!

#### 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.

#### 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.

MONDAY

#### 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 schoolaged 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, canceing 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!

#### 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.

#### 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.

#### Session 2 continued on next page

### MONDAY

#### 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.

#### MONDAY Session 3 3:30 pm - 5:00 pm

#### 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.

#### 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.

#### 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.

#### 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.

#### 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.

Room 1

### TUESDAY

#### 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

#### Climate Change Adventure Education Project - Mark Reardon & Mandy Revak

Communitopia 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.

#### 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.

Room 2

#### Session 4 continued on next page

# TUESDAY

#### 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

#### 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.

#### 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.

## TUESDAY

### 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.

#### 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.

#### 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.

Room 3

## TUESDAY Se

#### 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.

#### 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.

### TUESDAYSession 611:00 am - 12:30 pm

#### 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.

#### 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 NASAsponsored 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.

#### Cultivating Togetherness: Harnessing Regional Hubs for Environmental Literacy Advancement in Pennsylvania – Rebecca Schauffele & 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.

#### 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.

#### 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.

#### 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.