



MONDAY'S SESSIONS

	Session 1 8:30am - 9:15am	Session 2 9:30am - 10:15am	Session 3 11:15am - 12:00pm
Salon A	Truck Tour: Explore CBF's Mobile Program	Teaching About Climate Change Utilizing a Wildlife Lens with Project WILD	Have Nature, Will Travel: Taking Environmental Education on the Road
Salon B	Watching Wildflowers: Studying Phenology through Nature's Notebook	The Environmental Educator's Go-Box: A flexible toolkit for tabling, presentations and independent delivery	Trees as Food: Re-Teaching Communities
Salon E	Where The Wild Things Run: Designing Nature Experiences for Moving Minds	Transforming Schoolyards for Water, Wildlife, and Accessibility	What's in Your Glass? A Drinking Water Curriculum
Salon F	Reduce Your Single Use in EE	Telling the Story with ArcGIS StoryMaps	From Concept to Impact: Making Plastic Projects Matter
Eisenhower	Approaching STEELS from the Air: Air Quality as Part of a Watershed Investigation	Miss Pennsylvania: Sustainability Starts With You	The People Connection: Human Ecology Activities to Inspire Teens



MONDAY'S SESSIONS

	Session 4 1:30pm - 2:15pm	Session 5 2:30pm - 3:15pm	Session 6 4:30pm - 5:15pm
Salon A	The Botany of Birding Pennsylvania	Frick Park Field Studies	Portable Pedagogy with UCZ Data: Bringing Place-Based Environmental Science to Your Students
Salon B	Environmentor	Bringing Nature to You: Mobile Strategies for Urban Engagement	Co-creating Inclusive Outdoor Learning Experiences with Youth
Salon E	From Learners to Leaders: Engaging Youth in Environmental Stewardship	Leave No Trace: Ethics for Firefly Ecology Conservation and Outdoor Behavior	Inspiring Inquiry with PA's Wildlife and Local Research
Salon F	A Beautiful Day in the Neighborhood: How Students Design a More Sustainable Future	Beyond Sustainability: Continued Benefits of Minimizing Waste in Children's Programming	Frigid Fungi
Eisenhower	Nature on Wheels: Where the Road Meets the Roots of Learning	Zoo in the Classroom	Will Travel For Nature: Reaching Rural Communities



TUESDAY'S SESSIONS

	Session 7 9:00am - 9:45am	Session 8 10:00am - 10:45am	Session 9 11:00am - 11:45am
Salon A	How Sweet it Is - Using Maple Syrup to Teach History, Nature Connectedness, and Climate Change	What will you have when the Money Runs Out?	Carnivorous & Parasitic Plants of Pennsylvania
Salon B	Building for Both: Connecting Engineering and Environmental Literacy in 2nd Grade	Civic Tides: An educational roleplaying experience (Edu-LARP) for science and civic classrooms.	3 Parks, 1 Girl: The Roving Naturalist
Salon E	From Kits to Classrooms: Mobile Science Resources that Empower Teachers	The Ice Age in a Glass of Water: How Geologic and Industrial History Built Water Treatment and Modern Waterway Stewardship in Pittsburgh	Flexible Florals: Exploring Local Ecosystems Through Flower Hammering
Salon F	Cultivating Connections: Aligning Educational Goals Across Classrooms, History, Nature and STEELS	STEELS on Wheels: Taking Environmental Education on the Road Using an Efficacy Lens	New K-12 Curricula Designed for STEELS and MWEEs
Eisenhower	Creative Inquiry—Art Practices in EE	PEEC Into the Classroom	The Pennsylvania Environmental Literacy Network: It's Systemic, not a Fad!



Salon A

Truck Tour: Explore CBF's Mobile Program – Karen Mullin & Kathleen Davis

Take your inquiry outside with the Chesapeake Bay Foundation and its portable pedagogy! For 35 years, CBF has guided canoe and streamside explorations for students and teachers on Pennsylvania's beautiful waterways. Over three decades of on-the-go programming has enabled CBF to build a mobile education program housed in a truck and trailer that enable hands-on stream assessments and more. Unlike programming located onsite, mobile education requires unique tools, flexible planning, and forethought. Join educators for a hands-on tour of the tools, tips, and tricks used to educate on-the-go. Exchange best practices for streamside assessments, taking students outside, and connecting streams to STEELS standards!

Salon B

Watching Wildflowers: Studying Phenology through Nature's Notebook – Sara Klingensmith

Phenology is the study of seasonal changes, a leading indicator of climate change, and an approachable way to actively engage communities with climate science. We will share our experiences developing a local community science program at Barking Slopes Conservation Area, a forest near Pittsburgh, that uses a free app called Nature's Notebook, learn about the ongoing research at the site, and explore how the phenology program is supporting it.

Allegheny Land Trust (ALT) and Carnegie Museum of Natural History (CMNH) partnered to implement a phenology trail at Barking Slopes Conservation Area. Nature's Notebook is a free app developed by the USA National Phenology Network that empowers the public to record and share observations in a national scientific database. This program relies on community volunteer efforts to collect phenophases, or observable life stages.

During the presentation, we will elaborate on successes and challenges in establishing the community science project, how we communicated the project to the public, how we connect the project with current and future research goals, and our plans for incorporating phenology in other programs.

Salon E

Where The Wild Things Run: Designing Nature Experiences for Moving Minds – Rebecca Escott

Environmental education can offer powerful, transformative experiences for young children, but only when programs and spaces are designed with their developmental needs in mind. This session invites environmental educators to view children's "wild" behaviors such as running, climbing, crashing, and kicking, not as disruptions, but as essential expressions of growth, regulation, and learning.

Participants will gain foundational insight into early motor development and sensory integration and how these influence behavior and engagement. By exploring how structured movement and unstructured, even risky play support physical, emotional, and cognitive development, educators will be better equipped to create outdoor and environmental learning experiences that are inclusive, joyful, and impactful.

This session will include opportunities to work with colleagues to adapt traditional learning experiences to be more engaging for, and inclusive of, the youngest learners. Explore the intersections of child development principles and environmental education in order to increase children's and families' access to memorable learning experiences.

Join us to reimagine outdoor/ environmental education spaces not just as places of learning but as gateways to adventure and initiation spaces for a lifelong appreciation of the natural world.

Salon F

Reduce Your Single Use in EE – Allison O'Donnell & Samantha Bortz

Do you ever feel "like a plastic bag"? Drifting through the wind? Feeling like you want to start again because you realized there is simply too much plastic use at your site! The Macoskey Center's Zero Waste & Sustain-a-Swap Programs have been used to teach college students about the plastic life cycle, hidden plastics in their lives, and ways to swap out those plastics for more eco-friendly alternatives. This program will be modified to focus on plastic use in EE professional and educational settings. It will encourage the audience to reflect on their organization's plastic use and sustainable, educational item sourcing. Practitioners will leave this program with a deeper understanding of plastic presence at their organization, action steps they can take to minimize their plastic use, and tangible examples of "sustain-a-swaps" that they can use at their site.

Eisenhower

Approaching STEELS from the Air: Air Quality as Part of a Watershed Investigation – Elly Helgen & Jessica Kester

Dovetailed with Pennsylvania's industrial past is our air quality, including the worst air quality event in US history. In 1948 the SWPA town of Donora experienced three days of smog so thick you could not see your hands. The severity of the incident, including the death of 20 residents, spurred the creation of the state's first Air Pollution Control Act in 1960 followed by the national Clean Air Act in 1963. Today American's spend nearly 90% of their day indoors where the indoor air quality (IAQ) can 2-5 times worse than outdoors. Many air quality hazards aren't easy to detect by sight or smell, so how do you know if you have a problem? Low-cost air quality monitors have made it easier than ever to learn the truth about our exposure to air pollution. Let the ROCIS Low Cost Monitoring Project (LCMP) team introduce ways for your students to investigate IAQ, collect data, and compare their indoor/outdoor air quality to local, state, and national real time data using a variety of GIS mapping programs. The LCMP model will help educators meet the STEELS standards, implement behavioral changes, and improve school health using methods that show immediate results.



Salon A

Teaching About Climate Change Utilizing a Wildlife Lens with Project WILD – Carissa Longo
Teaching about climate change is complex, often abstract, & it can be emotionally charged. Join the PA Project WILD Coordinator to learn how to utilize Project WILD’s NEW Climate & Wildlife: An Activity Module for Grades 6-12. Utilizing wildlife as a focal point to build student interest and relevancy, the 8 activities in this module connect students to ecological phenomena relating to a changing climate. All of the module’s activities are aligned to both NGSS and the PA STEELS Standards. Attendees will receive their own copy of the module, access to the STEELS alignments, and tips for connecting the activities to the STEELS standards. This session is meant for both classroom teachers and non-formal educators teaching grades 6-12.

Salon B

The Environmental Educator’s Go-Box: A flexible toolkit for tabling, presentations and independent delivery – Ann Czeponis & Siobhan Fathel
This session introduces the Multi-Format Go-Box, which is a portable, adaptable toolkit designed to make environmental education accessible across a wide range of settings.
In this session, we’ll explore how a single Go-Box can be used in three flexible formats:
– tabling, where quick “hit and run” activities capture attention
– moderated presentations, where subject matter experts bring fieldwork into the spotlight
– independent delivery, where any educator can confidently guide the experience.
Participants will examine a sample box firsthand and explore the blueprint for building their own successful Multi-Format Go-Box, including essential materials, resources, and how-to guides. The session will also include an interactive segment where we will encourage participants to brainstorm new Go-Box themes, capture ideas for STEELS aligned themes, and share strategies for building or borrowing boxes from local organizations, libraries, and intermediate units.

Salon E

Transforming Schoolyards for Water, Wildlife, and Accessibility – Tara Muenz
Schoolyards are low-hanging fruit to support teachers in delivering the new STEELS standards while also benefiting water and wildlife. Often, schools are not able to afford off-site field experiences, so turning back to the schoolyard and making it a space to offer these experiences and lessons is one way to ensure accessibility. School campuses are also an integral part of the watershed, spanning from as little as 0.25 to thousands of acres, with a potential impact on stormwater and wildlife. In this session, we share insights from four cohorts of DEP EE funding to create outdoor learning spaces for teachers and their K-12 students, local communities, and the land, water, and wildlife. You will also 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 to 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 2026 school year.

Salon F

Telling the Story with ArcGIS StoryMaps – Sara Jeffries
Learn how ArcGIS StoryMaps can be used to develop a sense of place. Many Geographic Information System (GIS) tools are easily accessible, freely available, and can provide data for authentic investigations. A StoryMap, created for Delaware County educators, will be shared that highlights many GIS tools and how they can support STEELS standards.

Eisenhower

Miss Pennsylvania: Sustainability Starts With You – Victoria Vespico
In times of funding challenges and growing educational inequities, Sustainability Starts with You demonstrates how adaptive teaching and inclusive programming can truly reach learners of all ages and abilities. Rooted in the 17 Sustainable Development Goals, this K-12 program is aligned with Common Core standards and designed with differentiation at its core. From writing children’s books for early readers to developing interactive, age-appropriate lesson plans that weave in current slang and pop culture, the program dismantles learning barriers by meeting students where they are. With a clear call to action that all children can understand, Sustainability Starts with You ensures that every learner, regardless of background, can develop the skills and confidence to engage with sustainability and environmental justice in meaningful ways.



Salon A

Have Nature, Will Travel: Taking Environmental Education on the Road

- Jill Shashatyn, Dan Del Duca and Julia Boyer

This session will share tips and insights from Riverbend’s wide-ranging “Riverbend on the Road” – a.k.a. “ROR” – series. We’ll draw from our program offerings delivered in classrooms, on schoolyards (including urban ones), at neighborhood parks, and at a nearby National Wildlife Refuge to help participants mobilize their own off-site STEELS-aligned programming with confidence.

We’ll begin with the big ideas that guide us on our mobile education adventure. This begins with our ROR pedagogy – grounded in place-based learning – as well as our commitment to facilitating rich, meaningful environmental education experiences even in places that seem anything but “green.” We’ll provide examples of key partnerships that have been instrumental in bringing high-quality learning experiences to schools. We’ll also consider the pros and cons of one-off vs. series programs – how can one-time programs be impactful, and how can series programs make the most of the generous hands-on time they allow for?

We’ll then shift to logistics, focusing on strategies for: managing materials, coordinating staff, teaching with confidence in unfamiliar spaces, prioritizing hands-on activities for students, and connecting lessons to relevant school curriculum. The session will close with time for Q&A.

Salon B

Trees as Food: Re-Teaching Communities – Hannah Rhodes

So often when planting edible and medicinal native trees across Erie, PA, we get the question, "You can eat THAT?!" From Beach Plum to Paw Paws, our educational programming often includes the many uses of native trees that nourish. Did you know you can make a tea from Willow Bark? Can we tell you the many names and uses of a Serviceberry Tree? Learn with us as we share the stories of native edible and medicinal trees that we can and will plant right here in PA.

Salon E

What's in Your Glass? A Drinking Water Curriculum – Brad Kunsman, Susan Boser, & Danielle Rhea

Access to clean drinking water is fundamental but too often, young people don’t know where their water comes from, what threats drinking water faces, or how science plays a role in safeguarding it. What’s in Your Glass? A Drinking Water Journey is a hands-on curriculum developed by Penn State Extension that bridges that gap. Designed for youth audiences, it walks students through the water cycle, watershed dynamics, and the hidden journey from source to tap. Participants engage in inquiry-based activities – such as modeling watersheds “Foil the Flow”, simulating runoff and pollutant transport “H2-Oh No!”, using simple test kits, interpreting real water lab reports, and assessing water quality measures like pH, nitrates, and total dissolved solids.

This curriculum is built to align with Pennsylvania’s STEELS (Science, Technology & Engineering, Environmental Literacy & Sustainability) standards and supports the Chesapeake Bay Program’s MWE framework. Each activity helps students ask questions, collect and analyze data, and make evidence-based decisions about water resources in their community. Attendees will have a hands-on experience to gain strategies to integrate this curriculum into standards-based lessons and use it as a foundation for authentic watershed investigations that connect science content to real-world stewardship.

Salon F

From Concept to Impact: Making Plastic Projects Matter – Ken Hamilton & Vanessa Holloway

Educators everywhere seek effective strategies to guide students in creating meaningful, high-impact projects on plastic pollution. This workshop highlights two essential components for success: model projects that spark ideas and practical methodologies for developing student-led initiatives.

GreenAllies and the Youth Climate Institute (YCI) have partnered to share proven approaches and real-world examples that inspire plastic-free action. YCI will showcase a variety of student-led projects that participants can adapt as models in their own classrooms and communities. GreenAllies, a national leader in student leadership development, will provide strategies for empowering students to take ownership of their ideas, turning them into impactful service-learning projects.

Together, these organizations will equip educators with both inspiration and tools needed to develop creative and impactful projects to reduce plastic use in their schools and community. Participants will leave with concrete project examples, empowerment techniques, and a deeper understanding of how to foster student leadership that drives lasting environmental impact.



The People Connection: Human Ecology Activities to Inspire Teens - Molly Carlson

Our species has an outsized influence on environmental changes. This includes using natural resources which can alter ecosystems such as forests and marine areas, introducing invasive species and pollution, and bringing about changes in climate. In implementing the STEELS Standards, it's important to incorporate hands-on components that really engage students in learning about their relationship to the natural world and empower them to be part of sustainable solutions.

In this inquiry-based, hands-on workshop, participants will engage in experiential activities that address population ecology, carrying capacity in nature, environmental impacts of different food and energy sources, and understanding cause-and-effect relationships in nature. Activity formats include developing and using 3D models to explain ecological phenomena, role-playing simulation, concept-mapping, and group problem-solving challenges.

We will discuss how to implement these activities as part of broadening students' understanding of Human Impacts on Environmental Systems, and how the presented activities address build environmental literacy skills and encourage individual and group stewardship.



Salon A

The Botany of Birding Pennsylvania – Anthony Croasdale

This presentation explores how understanding habitat can enhance both bird and plant identification. Participants will learn about Pennsylvania’s major ecoregions and the characteristic bird and plant communities within them. The session will highlight how birds use specific vegetation types and vertical strata—from ground cover to canopy—and how this knowledge can improve birding skills. We will also cover practical strategies for attracting birds through habitat management, from backyard gardens and raised beds to larger-scale plantings at schools and nature centers. This talk offers a holistic approach to birding by linking avian ecology with native plant knowledge and conservation landscaping.

Salon B

Environmentor – Denise Bauer & Arianna Kohler

With thanks to PA DEP, good things are flowing at Roberto Clemente Charter School in center city Allentown! High school and middle school students are teaming up with Wildlands Conservancy and the Lehigh County Conservation District for a year-long adventure in learning and leadership. Through hands-on classroom lessons and exciting field trips, students are exploring ways to reduce negative human impact right in their own neighborhood. Even better, high schoolers are stepping in as mentors, guiding middle schoolers as they prepare for a school-wide environmental festival. And the grand finale? A one-of-a-kind water cycle obstacle course- complete with the chance to get flushed at the finish line!

Salon E

From Learners to Leaders: Engaging Youth in Environmental Stewardship – Kathryn Wolfe

Women for a Healthy Environment created the Eco-Student Stewardship Program (ESSP) to empower students in grades 6-12 to advocate for healthier, more sustainable communities. The program’s four units—Safe & Clean Water, Air Quality, Waste in Our Community, and Community Service Learning—blend knowledge-building, discussion, experimentation, and reflection. Students complete a project addressing an environmental challenge of personal importance, guided by WHE’s Environmental Education Coordinator.

ESSP focuses on communities in southwestern Pennsylvania impacted by industrial pollution, disinvestment, and health inequities, especially for children. Schools in these areas often lack resources for environmental engagement, making ESSP a vital platform for youth leadership.

Over the past year, ESSP reached middle and high school students at five anchor sites, hosting more than 40 workshops and events. Projects included the Grayson Center’s 115 eco-friendly hygiene kits and Clairton Middle School’s sustainable fashion show promoting upcycling. Other initiatives, such as community gardens in Clairton and Duquesne, improved fresh food access and promoted sustainable land use.

Salon F

A Beautiful Day in the Neighborhood; How Students Design a More Sustainable Future – Felicity Johnston

What should cities look like in 100 years? We ask our 6th grade students this question in their Environmental Citizenship class. As students consider this question, they seek to balance their natural, built and social environments to create utopias of the future. In this session, we will look at some of the model cities students have built from the last two years of this class and discuss how we are meeting the STEEL standards through place based project learning.

Eisenhower

Nature on Wheels: Where the Road Meets the Roots of Learning – Julie Travaglini & Sarah Holton

Nature on Wheels (NoW), an initiative of the Allegheny Land Trust’s Environmental Education Team, is a mobile learning laboratory designed to bring nature-based education directly to communities, especially those historically underserved. By meeting learners where they are, NoW removes barriers to environmental engagement and invites exploration in a whole new way. Built around the principles of three-dimensional learning, every surface of this innovative mobile classroom is packed with opportunities for hands-on discovery. natural world. In this session, Allegheny Land Trust and Cannon Design will share the journey of bringing Nature on Wheels from concept to reality. From early community conversations that shaped the project’s goals, to raising \$250,000 in funding, and partnering with Cannon Design’s Open Hands Studio to create a space that is both functional and inspiring, we’ll walk through the process, challenges, and outcomes. Attendees will leave with ideas and inspiration for how mobile learning can expand access, build environmental literacy, and spark wonder across all ages.



Salon A

Frick Park Field Studies – Nida Wilson

We will look at how the Environmental Charter School is implementing STEELS standards using out-the-door education. Frick Park Field Studies are extended Environmental Literacy lessons that take place in Frick Park. ECS Intermediate students, teachers, and parent volunteers become scientists “in the field” exploring the connections between built, social, and natural environments through themes like biodiversity, eco-footprints, and watersheds. Frick Park Field Studies allow students to connect curiosity and play while learning about human impacts on the natural environment, take part in stewardship and citizen science while exploring the Frick Park ecosystem, and partner with local organizations to understand stream health and water quality.

Salon B

Bringing Nature to You: Mobile Strategies for Urban Engagement – Erin Poole & Haley Phillips

Environmental education does not have to stay in one place. Join us to explore how mobile education can break down barriers and bring STEELS aligned, nature-based learning directly into urban communities. Haley and Erin, Environmental Education Specialists with the Pennsylvania Game Commission, share their experience traveling across Philadelphia to deliver adaptable, place-based programming in schools, libraries, parks, and more. Their work prioritizes culturally aware and accessible approaches to make conservation education meaningful and relevant in every neighborhood. This session will offer insights into creating mobile lesson kits, managing logistics, forming community-led partnerships, and evaluating program success. Attendees will leave with practical strategies for starting or strengthening their own mobile education efforts.

Salon E

Leave No Trace: Ethics for Firefly Ecology Conservation and Outdoor Behavior – Peggy Butler & Ken Butler

The presentation will provide easy to follow guidelines for the 7 Leave No Trace principles that encourage safe, sustainable, mindful and ethical behavior in the outdoors for all ages. The presentation will focus on applying the principles to firefly ecology conservation specifically, but can and should be applied to any outdoor activities or PAEE programming. The presentation will allow for different learning styles and encourage audience participation in small group discussions.

Salon F

Beyond Sustainability: Continued Benefits of Minimizing Waste in Children's Programming

– Mary Licciardello & Sabrina Rothschild

The benefits of plastic-free programming go beyond sustainability: At the Children’s Museum of Pittsburgh, rethinking our programming to avoid plastic usage has furthered our goals of creativity and accessibility while allowing us to mitigate waste and find uses for difficult-to-recycle items. First, we prioritize exploratory programs over “make-and-takes” to empower ourselves to reduce the number of consumable materials needed and to allow families to recreate similar activities at home. Second, we reuse museum-created and donated items that would otherwise find their way to the landfill in our programming. In our Art Studio, we have activities like “Is It Done Yet?” in which visitors are invited to continue the story of a left-behind piece of artwork and “Recycled Art Mosaics” in which small squares of forgotten art are repurposed into new pieces. In our MAKESHOP, we teach kids to use tools to take apart old, broken electronics. Our classic “Recycled Sculpture” activity, encouraging visitors to reimagine our collection of hard-to-recycle materials, provides inspiration for what they can do with those same materials in their homes. We would love to continue this conversation and share plastic-free programming strategies with our PAEE peers in March!

Eisenhower

Zoo in the Classroom – Chelsea Geist

Zoo in the Classroom is a program where high school students share live animals with elementary students. We house over 100 exotic animals in my high school classroom, and I train my high school students on how to properly handle and share each animal with elementary students. There are 16 stations in my classroom where students have hands-on interactions with many species of animals including: betta fish, millipedes, Madagascar hissing cockroaches, a Central American box turtle, a red eared slider turtle, a Mississippi musk turtle, Serama chickens, a high-yellow uromastix lizard, fire-bellied toads, Mississippi mud turtles, hermit crabs, fiddler crabs, bearded dragons, a crested gecko, Russian tortoises, tarantulas, scorpions, Asian painted frogs, green tree frogs, cane toads, leopard geckos, lab mice, a Syrian teddy bear hamster, and a cockatiel. We have also added aquaponics and hydroponics to the program to show how we can grow our own plants to feed some of the animals in our classroom.



Salon A

Portable Pedagogy with UCZ Data: Bringing Place-Based Environmental Science to Your Students

-Angela Hood

The Critical Zone (CZ) - where rock, soil, water, air, and life interact - is vital for sustaining ecological and human systems. Centuries of human development along the Mid-Atlantic Fall Zone have left lasting impacts on soils, streams, and landscapes. The Urban Critical Zone (UCZ) cluster, of the NSF-supported CZ Network, investigates how urban processes influence the CZ, generating data that communities from Philadelphia, PA through Baltimore, MD to Raleigh, NC can use to plan for more resilient, sustainable futures.

To connect this research with classrooms, the UCZ Education team partnered with local teacher fellows to create educational resources that transport CZ science to urban/suburban classrooms along the Fall Zone. These include UCZ Data Lessons - data-driven, student-centered activities aligned with NGSS and Pennsylvania's new STEELS standards - and the UCZ Data Jam - an engaging competition that invites students to analyze local UCZ datasets and share their findings in both scientific and creative formats.

In this session, participants will explore how UCZ resources can be used in their classrooms to promote environmental literacy among their students, a core domain of Pennsylvania's STEELS standards. Attendees will leave with ready-to-use materials and a concrete plan for bringing place-based, data-driven learning to their students.

Salon B

Co-creating Inclusive Outdoor Learning Experiences with Youth - Ivy Ryan & Nyjah Cephas

Think back to your middle or high school self; you were likely focused on your identity, sense of belonging, and forming new opinions every day. The years of adolescence are rich with both challenges and opportunity.

As environmental educators we want to engage youth in outdoor learning experiences where they can be curious, express their opinions, and experiment with new ideas, free from the barriers inherent in the traditional classroom. The Pittsburgh Parks Conservancy has developed multiple programs dedicated to getting middle and high school students from environmental justice communities outdoors in their own neighborhoods and local parks. By incorporating place-based learning, youth voice and choice, and fostering a safe and welcoming atmosphere, we're able to co-create meaningful learning experiences with the youth we serve.

Our approach inherently requires adaptability and flexibility, while still supporting the program in meeting its high-level goals. Join Naturalist Educators at the Pittsburgh Parks Conservancy for a discussion on how we create engaging and impactful experiences for middle and high school students, and how you can make your own work more adaptive and inclusive.

Salon E

Inspiring Inquiry with PA's Wildlife and Local Research - Jake Smith & Jordan Sanford

Step into the wild with the Pennsylvania Game Commission's education team as we showcase how we're transforming our lessons and award-winning Wildlife on WiFi program to align with Pennsylvania's STEELS standards. In this fast-paced, resource-packed session, you'll see how local wildlife can spark curiosity, drive student-led investigations, and make science come alive. We'll explore ways to connect students to real-world data and current wildlife research happening in your own backyard, all while meeting academic expectations. Whether you teach in a classroom, nature center, or anywhere in between, you'll leave with adaptable tools, fresh ideas, and a renewed excitement for weaving Pennsylvania's biodiversity into your programs.

Salon F

Frigid Fungi - Sara Klingensmith

When the leaves fall, the flowers wither, and the temperatures drop, fungi can still be found! Learn where to look for cold-weather fungi while understanding their ecology and examining their habitats. Some species can even be helpful in identifying defoliated trees. Join Allegheny Land Trust educator and Western Pennsylvania Mushroom Club identifier to learn how to liven up winter walks and programs by exploring fungi that persist or even fruit in the cold. 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.



Will Travel For Nature: Reaching Rural Communities – Lindsey Waugaman

Mountain Watershed Association is a rural non-profit that protects the Youghiogheny River. We're located in Melcroft, Pa, a tiny town in a county with very low-population density, 163 people per square mile in Fayette Co. (and decreasing yearly) vs 1,678 in Allegheny Co and 11,936 in Philadelphia Co. We also experience higher than national poverty averages at 18.9% (national average is 11%.) Our citizens are worried about food on the table, getting their kids to school, poisoned drinking water and air from industry; they're not worried about the type of mushroom or lichen on their tree, they're not prioritizing traveling to an environmental education program, they've got enough on their hands.

We've got a lot riding against expanding environmental education programming, but we've been wildly successful in the wider Youghiogheny River Basin. It's taken 3 years, but, with only 1 educator and a whole lot of teamwork, we've expanded our engagement from 12 programs per year to about 200 per year, from about 120 students and participants per year, to nearly 10,000 people per year.

How? We travel. A lot. To area schools and afterschool programs, to summer camps, to state and county parks, to churches, homeschool groups, community groups, and libraries. For free.



Salon A

How Sweet it Is - Using Maple Syrup to Teach History, Nature Connectedness, and Climate Change - Katrina Stanley

Sometimes all you need is a little sweetener to open your programming up to a whole new variety of folks! This presentation will cover how Latodami Nature Center has used maple syrup to introduce history, indigenous teachings, and climate change to audiences that may least expect it. Maple syrup making often includes a huge barrier to entry; expensive tools and extensive knowledge may mean that the average person would not give a nature-based activity like this a try. But Latodami Nature Center flips this idea on its head by using home-style methods and sparking an interest in nature that may not have existed before.

In this session, learn how you can bring a unique activity to your learning space and use something sweet to hook your audience on nature. Who doesn't love maple syrup?

Salon B

Building for Both: Connecting Engineering and Environmental Literacy in 2nd Grade - Jennifer Sciacca

How can young learners begin to see themselves as problem-solvers who balance human needs with the needs of the natural world? This session highlights a 2nd grade unit, Building for Both, that integrates Pennsylvania's STEELS standards in science, technology, and engineering through a storyline about animals navigating human spaces. Participants will explore how the unit connects environmental literacy concepts—such as habitat needs and human impact—with engineering design challenges, as students create solutions for safe crossings and shared spaces.

Grounded in phenomena and aligned to three-dimensional learning, this resource provides accessible entry points for students to engage in authentic sensemaking while developing empathy for both people and wildlife. Attendees will experience sample activities, see student-friendly learning goals, and consider ways to adapt the storyline for their own contexts. Whether you are an elementary teacher, STEM coach, or curriculum leader, you will leave with practical strategies for weaving engineering design into environmental topics in ways that are developmentally appropriate, standards-aligned, and deeply engaging for students.

Salon E

From Kits to Classrooms: Mobile Science Resources that Empower Teachers - Val Stone

Discover how Gettysburg College's Advancing Science program delivers mobile, standards-based science education directly to K-12 classrooms. Through a lending library of resource kits, co-teaching support, and professional development, the program equips teachers with the tools and confidence to bring STEELS-aligned, hands-on science to their students.

This session will highlight a recent Pennsylvania Department of Environmental Protection Environmental Education grant that funded the creation of renewable energy and energy audit kits for grades 4-9. Each kit contains equipment such as solar panels, wind turbines, and energy audit tools. The kits are paired with lessons aligned to STEELS standards in physical science, Earth science, technology/engineering, and environmental literacy/sustainability. Teachers use these resources to implement MWEs, guiding students through issue investigation, field-based data collection, synthesis, and civic action/stewardship.

The Advancing Science model demonstrates how portable pedagogy saves time, reduces costs, and empowers teachers to connect students with locally relevant science and environmental challenges. By providing accessible, community-centered resources and sustained educator support, Advancing Science serves as a valuable partner for teachers working to implement STEELS and foster environmental literacy.

Salon F

Cultivating Connections: Aligning Educational Goals Across Classrooms, History, Nature and STEELS - Erin McCool & Molly Jobson

Join us to learn how four different organizations, Montgomery County Intermediate Unit, Morgan Loghouse, Peter Wentz Farmstead and Wissahickon Trails, came together to develop 4th grade field experiences with local elementary teachers from a large suburban school district, aligned to the PA STEELS and social studies standards. Key elements of successful partnerships will be identified by developing an understanding of the foundational components that make collaborations between formal (K-12) and informal (museums, historical sites, environmental centers) education providers mutually beneficial. Models for integrating outdoor field experiences will be examined for strategies to embed meaningful, standards-aligned outdoor learning into existing environmental literacy and social studies curricula. Lastly, actionable next steps will be developed by drafting a personalized roadmap or checklist for initiating or strengthening partnerships in participants' own contexts.



Creative Inquiry—Art Practices in EE – Kathlean Davis & Karen Mullin

Inspire your inner artist and discover creative techniques through hands-on investigation. Explore examples of plastic-free arts integration and join in the conversation about the role of art in STEAM.

Creative inquiry is a crucial element in the processing and understanding of data-driven research. This session provides conference-goers the opportunity to join in the conversation about the role of art in STEAM and understand its value through hands-on learning. Participants will develop plastic-free creative techniques through the building of biodiversity bouquets, the weaving of watershed content through literacy, the analysis of data through art, the observation of found materials, and more. Examples of curriculum integration in the field and classroom will be provided along with research about the implications of plastic pollution on waterways.



Salon A

What will you have when the Money Runs Out? – Carrie Lankford

“Wealth is not measured by what we have, but by the connections we build.”

Funding can be a sensitive subject when supporting Environmental Literacy and Sustainability. As a recent recipient of a BWET grant, I’ve seen how financial support can open doors and create opportunities—but I’ve also witnessed how quickly progress can be put at risk. This presentation will highlight the critical role of relationship-building in advancing environmental literacy within our students and communities. We will explore how strong teams cultivate trust and collaborate consistently, ensuring that when challenges arise, the collective work remains resilient and supported.

Salon B

Civic Tides: An Educational Roleplaying Experience (Edu-LARP) for Science and Civic Classrooms –

Adam Hnatkovich

Civic Tides is an educational roleplaying experience (Edu-LARP) that provides a platform for studying climate change, environmental justice, collaborative decision making, and natural resource management. Players take on the role of a community stakeholder, having a unique set of personal values that will guide their decisions throughout the game. Working together and leveraging resources, players launch projects which shift community values (commerce, culture, environment), creating abundant opportunities to discuss shared and antagonistic values that we experience in complex community processes. At the end of the game, players earn points if their personal values align with the values of the community. This scoring system creates dynamic tension throughout the game and requires players to think critically and use tactics to selectively engage other players; this interaction allows students to practice power skills such as leadership and negotiation. Because characters are assigned randomly, players can interact with a set of values they may not hold in everyday life, which also provides a unique experience for emotional learning. Civic Tides is scalable, accommodating 12 to 60 players, and requires minimal physical resources.

Salon E

The Ice Age in a Glass of Water: How Geologic and Industrial History Built Water Treatment and Modern Waterway Stewardship in Pittsburgh – Holly Bomba

A look at the fascinating connections between geology, land, water and modern water infrastructure. This story follows the beautiful Allegheny River and larger Ohio River basin through history, extending all the way back to the ice age. Larger-than-life forces carved the land and shaped the waterways that so many depend upon today for drinking water, recreation, transportation and countless other things.

Find out how events during the ice age and earlier translated into seemingly unconnected effects, like a booming industrial era, the growth of the cities like Pittsburgh, and the need for water treatment and water infrastructure to support the growing population. We'll take a look at how land continues to shape water and the places where people gather today and what is being done to be better stewards of land and water resources today, using Pittsburgh's Green Infrastructure projects as a case study.

Salon F

STEELS on Wheels- Taking Environmental Education on the Road Using an Efficacy Lens

– Carol Luthar & Megan Roselli

Take your portable programs to the next level in this engaging, hands-on session designed for environmental educators on the go. Participants will engage in a short STEELS-aligned lesson that models what effective, easy to use portable programs look like from a learner’s perspective. We’ll discuss strategies to improve the quality and capacity of your outreach programs that ultimately lead to stronger student engagement and educator efficacy. You’ll leave empowered with tools to assess how you select, organize, transport, and store every lesson from inception to implementation. Whether you’re navigating school hallways or setting up class along the trail, this session will leave you rethinking how you move your mission.



PEEC Into the Classroom - Holli Saar

PEEC Into the Classroom (PITC) is a STEELS-aligned environmental education program that engages students through hands-on, experiential learning. Designed to meet the unique needs of each classroom, the program offers flexible options including in-school outreach and field trips, both day and overnight, to PEEC's environmental education campus. Courses such as Watershed Study, Plant Life, and Geology allow educators to tailor content to their curriculum while providing students with meaningful connections to the natural world.

Led by PEEC's Director of Education, Holli Saar, this presentation will examine the implementation of PEEC Into the Classroom as a portable, standards-aligned environmental education model. This session will outline the structure of the program, including the design of standards-aligned lesson plans, one-hour in-person sessions that integrate interactive, hands-on activities, and opportunities for outdoor learning. The session will also review outcomes from PEEC's ongoing DEP Environmental Education grant, which facilitates delivery of PITC to environmental justice communities in Pennsylvania. Emphasis will be placed on aligning program content with academic standards, connecting lessons to environmental issues relevant to students' lives, and supporting formal educators in enhancing curriculum through experiential learning opportunities.



Salon A

Carnivorous & Parasitic Plants of Pennsylvania – Sara Klingensmith

“Plant blindness,” coined by botanist educators J. H. Wandersee and E. E. Schussler, refers to the inability to recognize the plants in one’s own environment. For many, the foliage of different trees, shrubs, grasses, and forbs merge into green carpets and walls--people often don’t identify the different species or all the services they provide.

Reinvigorate your curiosity about the plant world by exploring the weird and wonderful local botanicals that evolved a “bite!” Both parasitism and carnivory are considered uncommon traits for plants; however, Pennsylvania is home to over 30 different parasitic and carnivorous species. You may have encountered one without realizing it! Uncover the adaptations they use to blur the line between producer and consumer while digging into their ecological importance within our nearby ecosystems.

As interesting connectors to biodiversity and interdependence, they are a fun way to spark conversations about our local plant life. From sneaky root systems to sticky traps, we’ll learn how these leafy, evolutionary outliers can hook you and your learners back into plant appreciation.

Salon B

3 Parks, 1 Girl: The Roving Naturalist – Stephanie Sherman

How do you start an environmental education program from scratch? What do you do when you can't get your guests to your site for programs? Join Steph Sherman as she recounts her lessons learned from adapting field experiences for the road as a traveling naturalist. From starting the "PEEC in the Classroom" outreach initiative, to a college professor in Environmental Education, to a year of setting up new programs for 3 state parks as a new Environmental Education Specialist. She'll break down the art of crafting flexible programs for all.

Salon E

Flexible Florals: Exploring Local Ecosystems Through Flower Hammering – Tess Wilson

Join naturalist and artist Tess Wilson for a workshop about incorporating flower hammering into your programming! This easy and adaptable craft requires very few supplies and is a highly interactive way to learn more about the flora that makes up your local ecosystem. Flower hammering can be used to create personalized field guides to native flowers, which invites learners to explore their environment in an exciting new way. This craft is a fantastic addition to your plastic-free programming repertoire!

Salon F

New K-12 Curricula Designed for STEELS and MWEEs – Kathryn Difo & Nanette Marcum-Dietrich

Attendees will have an in-depth look at three new curricula designed to be hands-on, engaging, and aligned with the STEELS standards. An elementary, high school, and middle school curriculum will be presented along with specific hands-on activities from these lessons to understand the scope of the curricula. Presenters will focus on where and how STEELS are incorporated into these curricula and how to design or alter curricula to meet the new standards. These courses are designed as Meaningful Watershed Educational Experiences (MWEEs), so incorporate all essential elements in simple ways that can be adapted for different locations. Curriculum content focuses on issues local to Pennsylvania and include real data for students to analyze alongside data they take during outdoor field experiences.

Presenters will also share a rubric they designed to assess how well any curriculum meets the STEELS standards and MWEEs. This rubric can be used by any educator looking to assess their own curriculum or others they find to see if it will meet their needs. These curricula were designed to be used by formal classroom educators, and activities are also pertinent to non-formal educators looking to align their practices with STEELS standards or get ideas for new activities.

Eisenhower

The Pennsylvania Environmental Literacy Network: It’s Systemic, not a Fad!

– Tamara Peffer & Michelle Niedermeier

During this session, participants will learn how the PA Environmental Literacy (ELit) Network has grown over the last eight years to support the environmental literacy goals and needs across the Commonwealth. Presenters will share ways that the PA ELit Network has been designed to systemically fulfill goals outlined by our mission and vision, which are prioritized and supported statewide by policy and in the K-12 academic standards, and regionally by goals and cross collaborative initiatives. Attendees will learn how to get involved with their Regional Hub (six across the state, aligned with PAEE’s Regions) to support and address local goals and needs, while also connecting to watershed and statewide efforts. By fully integrating the PA ELit Network into our workplaces and mindsets, we can sustainably celebrate, support, and advance environmentally literacy efforts across Pennsylvania.