# 15<sup>th</sup> Annual Environmental Education Conference

Fred Fifer III Middle School Camden, Delaware

February 24, 2024









Delaware Association for Environmental Education



# 2023-2024 DAEE Board

#### **Executive Committee**

Chair: Todd Klawinski, Caesar Rodney School District

Vice-Chair: David Pragoff, Delaware Nature Society

Secretary: Claire Mickletz, Delaware State Parks

Co-Secretary: Kara Okonewski

Treasurer: Stacey Georgov, Delaware Solid Waste Authority

NAEE Liaison: Maureen Larkin

Member at Large: Ashley Melvin, Delaware Forest Service

#### **Board of Directors**

Angel Burns, Delaware State Parks

Brian Marsh, US Fish & Wildlife Service - Delaware Bay Coastal Program

David Christopher, University of Delaware – Delaware Sea Grant

Lisa Watt, Delaware State Parks

Cheryl Jackson, W.L. Gore & Associates

Kerry Wilson, Delaware Nature Society

Katie Pollock, University of Delaware – The Lab School

Lisa Swanger, Delaware Center for the Inland Bays

Jen Cippola, Healthy Foods for Healthy Kids

Brigid Gregory, Plastic Free Delaware

Karen Igou, Green Building United

Tess Charney

Sonia Saunders, Red Clay School District

Laurel Sullivan, Delaware National Estuarine Research Reserve

Leah Brooks, Mt. Cuba Center





4:30 - 5:00 pm

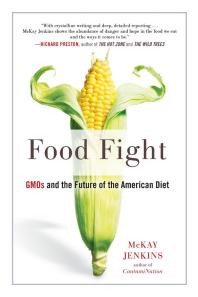
**Networking and Silent Auction Pickup** 

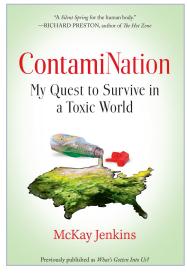
## 15th Annual DAEE Environmental Education Conference

February 24, 2024
Fred Fifer III Middle School Camden, Delaware

Environmental Education Nature Access for ALL!					!
8:15 am	Registration, Networking and Silent Auction				
8:45 am	Welcome: Nicole Hill, Caesar Rodney School District Board of Education Morning Announcements: Todd Klawinski, DAEE Chair				
PLENARY SESSION 9:00 - 10:30 am	Keynote Speaker: Dr. McKay Jenkins DAEE Annual Business Meeting: Todd Klawinski DAEE Mini-grant Presentation: Erin Ahern, Skyline Middle School				
10:30 - 10:45 am	Break, Networking, Silent Auction				
Strand	Connecting People with Nature	Connecting People with Nature	EE and Formal Education	Cultivating Outdoor Learning	Innovative and Inclusive EE
Location	Room 104	Room 105	Library	Room 100	Room 109
CONCURRENT SESSION I 10:45 - 11:30 am 45 min. session	Doing the ROT Thing with DSWA Double Session Off-site Field Trip	Journey Up the Coast: An Exploration of the Inland and Coastal Bays Jackie Knoll & Lisa Swanger, Delaware Center for the Inland Bays	Science, MWEE's & Social Emotional Learning Bart Merrick, NOAA	Use it or Lose it: How to get the most out of your school garden space Shandra Furtado, SNAC Garden Foundation	Big Ideas! & No Budget Kara Okonewski, DAEE Board of Directors
11:30 - 11:45 am	Meet at Registration Table for Trip	Break, Networking, Silent Auction			
CONCURRENT SESSION II 11:45 - 12:30 am 45 min. session	Andie Errico, Amanda Menasion & Bryn Kolmansberger, DSWA	What We Need to Know About Tickborne Diseases Marilyn Williams, Lyme Disease Association of Delmarva	"Branching Out: UD Lab School's Urban Nature Model" Katie Pollock, Kristen Chandler & Dorit Radnai-Griffin, UD Lab School	Funding Schoolyard Conservation Roundtable Discussion	Making Watershed Education & Stewardship Accessible for Middle School Students David Kline, Stroud Water Research Center
12:30 - 1:15 pm	Lunch				
PLENARY SESSION 1:15 - 2 pm	DAEE Environmental Literacy and Communities in Nature Network: Cynthia Gober & Todd Klawinski DAEE Awards for Excellence: Ashley Melvin & Sonia Saunders				
CONCURRENT SESSION III 2:15 - 3:00 pm 45 min. session	Let's Go Outside: Endless Discoveries Across the State of Delaware Katie Pollock, UD Lab School & Christine Skrobot, DIEEC	Delaware Native Species Comission Mission: Biodiversity Sheila Smith, Delaware Native Species Commission	Recent Environmental Literacy Initiatives in Delaware Roundtable Discussion	Developing Outdoor Learning Spaces While Improving Schoolyards Tara Muenz, Stroud Water Research Center	Tears of the Kingdom & Sludge: Environmental Disaster & the Hope for Survival  Eleanor Carver, University of Delaware
3:00 - 3:15 pm	Break, Networking, Silent Auction Closes at 3:15 pm				
CONCURRENT SESSION IV 3:15 - 4:00 pm 45 min. session	Connecting People with Nature Through Art Amy Sypher & Sara Tideman, Delaware State Parks	Talking Trash: A School Year-long Approach to Marine Debris Jackie Knoll & Lisa Swanger, Delaware Center for the Inland Bays	Bringing the Amazon Rainforest Home Ashley Carter, Millsboro Middle, Joseph Parrett, Wilbur Elementary, Jon Cox, UD	Keystone Species for Pollinator Gardens Leah Brooks, Mt Cuba Center	Cultivating Community Connections to Improve Outdoor Education Jen Cipolla & Rachel Terracina, Healthy Foods for Healthy Kids Teresa Price, DAEE
4:00 - 4:15 pm	Break, Networking, Pay for Silent Auction Items				
PLENARY SESSION 4:15 - 4:30 pm	Closing Remarks and Evaluations				
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# **Keynote Speaker**

McKay Jenkins is a noted writer, professor, restoration ecologist and urban farmer. He has published nine books and many articles and essays about the natural world and social justice. His forthcoming book, *The Maryland Naturalist* (Johns Hopkins University Press, 2024) is a collection of natural history essays that will be the primary text for the Maryland State Master Naturalist Certification Program. His book, *The Delaware Naturalist Handbook* (University of Delaware Press, 2020, co-edited with Susan Barton), is the primary text for the Delaware State Master Naturalist Certification Program.

Jenkins' books include Food Fight: GMOs and the Future of the American Diet (Avery, 2017); Poison Spring: The Secret History of Pollution and the EPA (co-authored with Evaggelos Vallianatos) (Bloomsbury, 2014); and ContamiNation: My Quest to Survive in a Toxic World (Avery, 2016), originally published as What's Gotten Into Us: Staying Healthy in a Toxic World (Random House, 2011), which chronicled his investigation into the myriad synthetic chemicals we encounter in our daily lives, and the growing body of evidence about the harm these chemicals do to our bodies and the environment.

Jenkins holds degrees from Amherst, Columbia's Graduate School of Journalism, and Princeton, where he received a PhD in English. A former staff writer for the Atlanta Constitution, he has also written for Outside, Orion, The New Republic, and many other publications. Jenkins is currently the Cornelius Tilghman Professor of English, Journalism and Environmental Humanities at the University of Delaware, where he received the Excellence in Teaching Award and the Outstanding Scholarship Award from the College of Arts and Sciences. He oversees the Rock Rose Food Justice Project, an urban farm in Baltimore, where he lives with his family.



# **Sponsors**

## **Canopy Champion**

- Delaware Department of Agriculture
- Delaware Forest Service & Pesticides

## **Sprout Supporter**

- New Castle Conservation District
- **UD Master Naturalist Program**
- Carol Larson & Peter Compo

#### Acorn Advocate

- American Dairy Association Northeast
- Delaware State Parks
- Flavia Rutkosky
- DNREC Division of Watershed Stewardship
- Delaware Sea Grant
- Healthy Foods for Healthy Kids

# Lyme Disease Association of Delmarva

# **Exhibitors**

- American Dairy Association North East
- **Delaware Aerospace Education Foundation**
- Delaware Community Composting Initiative
- Zero Waste First State
- **Delaware Envirothon**
- Delaware Forest Service
- Delaware Libraries
- **Delaware Native Species Commission**
- **Delaware Nature Society**
- Delaware Sea Grant
- **Delaware State Parks**
- Delaware Solid Waste Authority
- Delaware Teachers of Science
- Leave No Trace
- Lyme Disease Association of Delmarva
- **New Castle Conservation District**
- Stroud Water Research Center









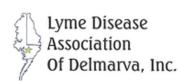




















# **DAEE Annual Business Meeting**

#### **Delaware Association for Environmental Education** Annual Business Meeting Agenda 15th Annual Conference

#### Fred Fifer III Middle School, Camden February 24, 2024

- Welcome to new DAEE Members
- Treasurer's Report
- DAEE Year in Review
- 2024-2025 DAEE Board of Directors Election

#### **Current Board Members**

- Leah Brooks, Mt. Cuba Center
- **Tess Charney**
- David Christopher, Delaware Sea Grant
- Karen Igou, Green Building United
- Cheryl Jackson, Gore & Associates
- Claire Mickletz, Delaware State Parks
- Sonia Saunders, Red Clay School District
- Laurel Sullivan, Delaware National Estuarine Research Reserve
- Kerry Wilson, Delaware Nature Society

## 2024 Renomination to the Board

- Jen Cipolla, Healthy Foods for Healthy Kids
- Todd Klawinski, Caesar Rodney School District
- Lisa Watt, Delaware State Parks
- Maureen Larkin
- Ashley Melvin, Delaware Forest Service
- Katie Pollock, University of Delaware Lab School
- David Pragoff, Delaware Nature Society
- Lisa Swanger, Delaware Center for the Inland Bays

#### **Outgoing Board Members**

- Angel Burns, Delaware State Parks
- Brigid Gregory, Plastic Free Delaware



# **Conference Agenda**



8:15 am Registration, Networking and Silent Auction

8:45 am Welcome: Nicole Hill, Caesar Rodney School District Board of Education

Morning Announcements: Todd Klawinski, DAEE Chair

#### PLENARY SESSION I

9:00 am - 10:30 am Keynote Speaker: Dr. McKay Jenkins

**DAEE Annual Business Meeting:** Todd Klawinski, DAEE Chair **DAEE Mini-Grant Presentation:** Erin Ahern, Skyline Middle School

10:30 am - 10:45 am Break, Networking, Silent Auction

CONCURRENT SESSION I & II Double Session 10:45 am to 12:30 pm

#### Doing the ROT Thing (Off-Site Field Trip)

DSWA has opened its second environmental education center in Dover to better serve Kent and Sussex County communities. Participants can tour the new center complete with the beloved conveyor belt in the activity center and new interactives to explore. Both the activity room and classroom are ADA compliant and can accommodate large groups. With the appeal of celebrity "Trash Can Dan" and an engaging crew of educators, DSWA programming can be enjoyed by students and also alleviate lesson planning stress for teachers. The center has a wealth of resources that expand beyond waste management and presenters will share how to implement fun and fresh ways to engage learners with this session.

Presenters: Andie Errico, Environmental Educator, Amanda Menasion and Bryn Kolmansberger, Community Outreach Coordinators

CONCURRENT SESSION I 10:45 am to 11:30 am

## >>> Strand: Connecting People with Nature >>>>

#### Journey Up the Coast: An Exploration of the Inland and Coastal Bays

"Journey Up the Coast" was born out of the pandemic as an effort to engage young learners while at home. Now in its fifth year, Journey Up the Coast has grown into a meaningful collaboration between two neighboring National Estuary Programs – the Delaware Center for the Inland Bays & the Maryland Coastal Bays Program. This session will dive deeper into how both organizations have created a program that allows students to take control of their own learning and exploration.

Presenters: Jackie Knoll, Manager of Environmental Education; and Lisa Swanger,
Director of Outreach & Education, and Delaware Center for the Inland Bays

#### >>> Strand: EE and Formal Education >>>>

#### Science, MWEE's & Social Emotional Learning

Teachers on the Estuary is a long-standing professional development (PD) program supported by a partnership among the Chesapeake Bay Foundation, Chesapeake Bay National Estuarine Research Reserve Maryland and NOAA Chesapeake Bay Office. For over a decade the program has supported 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 weaved 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. Session Outcomes: Attendees will be able to describe the five Social-Emotional Learning (SEL) competencies: Social Awareness, Self-Awareness, Self-Management, Relationship Skills, and Responsible Decision Making, Attendees will discuss how and where SEL competencies can support teacher planning and student learning during a Meaningful Watershed Educational Experience (MWEE). Attendees will practice SEL activities that support student learning during a MWEE.

Presenter: Bart Merrick, Education Coordinator, NOAA Chesapeake Bay Office

#### >>> Strand: Cultivating Outdoor Learning >>>>

#### Use it or Lose it: How to Get the Most Out of Your School Garden Space

Join us to explore sensory learning, STEM (Science, Technology, Engineering, and Mathematics), and garden-based education for young students in grades K-3 that fosters a meaningful relationship with the garden over the long run. Engaging students in the garden on a regular basis is the key to long-term school garden success.

Key Topics Covered: Fostering Independence: Encourage young learners to explore the garden independently while nurturing their curiosity. Skills for Managing an Outdoor Classroom: Understand the key skills educators need to effectively manage an outdoor classroom. Hint: It's much more than just weather preparedness. Hands-On Learning in the Garden: Gardens are ideal for interactive learning. We'll share some techniques to actively involve a classroom with plants, insects, soil, and other garden elements. Selecting Sensory Plants: Learn to choose plants that engage the senses, creating a multisensory garden experience (added bonus: Garden Biodiversity!!) Expanding Vocabulary and Critical Thinking: Sensory observation in the garden helps students grow their vocabulary and develop critical thinking skills by categorizing garden elements. This is especially helpful and critical for classrooms with English Language Learners (ELL). Learn some ways to help foster inclusiveness in ELL students through sensory observation. Engagement, Attention, and Mindfulness Support: Discover how mindfulness activities enhance STEM engagement and support attention theories, fostering both restorative and active attention. These sensory and garden-based experiences provide a foundation for grasping more advanced scientific concepts in later grades. Be prepared to ditch everything you know about managing an indoor classroom and embrace the chaos of nature, in order to support and nurture lifetime exploration and curiosity in children.

Presenter: Shandra Furtado, Executive Director, SNAC Garden Foundation

#### >>> Strand: Innovative and Inclusive EE >>>>

#### "Big Ideas & No Budget"

"I have BIG ideas... but I have no budget." Sound familiar? Come join us for a session of low-budget, high-quality programming ideas and activities. As an environmental & art educator for more than 12 years, Kara Okonewski has journeyed down the rabbit holes of Pinterest, Google, and more to find top-notch science/EE activities and eco-art projects on a microscopic budget. Participants will engage in hands-on activities, receive print outs, create their own take-home samples and more. Participants will also have the opportunity to share their best tips and tricks (or fails without judgement!) with the group.

Presenter: Kara Okonewski, DAEE Board of Directors

11:30 am - 11:45 am Break, Networking, Silent Auction

**CONCURRENT SESSION II** 

11:45 am to 12:30 pm

#### >>> Strand: Connecting People with Nature >>>>

#### What We Need to Know About Tickborne Diseases

This informative session will discuss the common tick-borne diseases including the different species of ticks found in our area. We will also cover when to suspect a tick-borne disease and what to do about it. This session will also include strategies for how to prevent tick bites when venturing outdoors. The Lyme Disease Association of Delmarva, Inc. is a 501(c) (3) non-profit whose purpose is to provide educational resources regarding tickborne diseases to those living, working & visiting the Delmarva Peninsula (and beyond).

Presenter: Marilyn Williams, Lyme Disease Association of Delmarva, Inc.

#### >>> Strand: EE and Formal Education >>>>

#### **Branching Out: UD Lab School's Urban Nature Model**

Connecting ALL children, families and teachers with nature is one of many missions of the UD Lab School. Building relationships is what we do best! We knew partnering with Wilmington Head Start would ensure children and teachers in an urban setting an opportunity to bring nature into their limited green spaces. Nature and mindfulness are closely knit together. Giving teachers and admin time to connect to nature themselves, through a variety of activities, gave them an opportunity to exhale and get in a good place for the children and families. Come hear our story! And, think about how YOU can help share nature with ALL!

Presenters: Katie Pollock, Master Teacher, Kristen Chandler, Master Teacher and Dorit Radnai-Griffin, Director University of Delaware Laboratory School

#### >>> Strand: Cultivating Outdoor Learning >>>>

#### **Funding Schoolyard Conservation**

#### Roundtable Discussion

Our first presenter will inform us on opportunities for Backyard Conservation through the Delaware Community Conservation Assistance Program (DeCAP): Get ready for the scoop on the Delaware Community Conservation Assistance Program (DeCAP), launched just last May. This program aims to provide financial and technical assistance for installing water quality best management practices (BMPs) in urban areas of the Delaware portion of the Chesapeake Bay Watershed. Eligible BMPs include rain gardens, conservation landscaping, and buffers. This session will explore our initial successes and the program's future. Join us for a brief presentation followed by an open discussion exploring how the program could be a perfect fit for funding outdoor classrooms. Next, we will hear from representatives from two school districts who have recently received funding for Schoolyard Conservation. Lastly, we will learn about funding available for focus-funded schoolyard tree plantings through the Delaware Forest Service.

Participants: Joe Schell, Conservation Planner, DNREC

Todd Klawinski, Caesar Rodney School District Sonia Saunders, Brandywine Springs School Ashley Melvin, Delaware Forest Service David Christopher, Delaware Sea Grant David Pragoff, Delaware Nature Society Tara Muenz, Stroud Water Research Center

#### >>> Strand: Innovative and Inclusive EE >>>>

#### Making Watershed Education & Stewardship Accessible for Middle School Students

Bring your computer to experience the NEW, FREE, publicly available WATERS curriculum and other online tools that support environmental literacy, civics, and stewardship. Watershed Awareness using Technology and Environmental Research for Sustainability (WATERS) is an online, student-centered, place-based, and accessible curriculum that teaches watershed concepts, stewardship, and water-centered career awareness for middle school students. The WATERS curriculum, funded by the National Science Foundation, supports all learners with Universal Design for Learning (UDL) features. This 10-lesson place-based unit includes online, classroom, and field activities. Students use a professional-grade online GIS modeling resource, simulations, sensors, and other interactive resources to collect environmental data and analyze their local watershed issues. The WATERS project is paving a path to research-based, open-access curricula that hold the potential to significantly increase awareness of and engagement with watershed concepts and career pathways in learners nationwide. Additional online tools from the WikiWatershed™ Toolkit and other resources will be highlighted to enhance your programs and inspire your students.

Presenter: David Kline, Watershed Education Specialist, Stroud Water Research Center

12:30 pm - 1:15 pm

Lunch

#### **PLENARY SESSION II**

1:15 pm - 2:00 pm DAEE Environmental Literacy and Communities in Nature Network

Cynthia Gober and Dr. Todd Klawinski

**DAEE Awards of Excellence:** 

Ashley Melvin and Sonia Saunders

#### **CONCURRENT SESSION III**

2:15 pm to 3:00 pm

### >>> Strand: Connecting People with Nature >>>>

#### Let's Go Outside: Endless Discoveries Across the State of Delaware

Delaware is surprisingly diverse for a small state: you'll find cityscapes to beachfront; forests to farms. This session will highlight the diverse early childhood programs that use their unique backdrops to get children and educators outside playing, learning, and thriving. The Let's Go Outside Initiative supports family child care professionals, administrators, and educators with professional learning experiences and the funding to make outdoor learning a little easier, a little better, and a whole lot more impactful. Let's explore how programs, like yours, embraced their uniqueness and individualized their outdoor experiences for kids.

Presenters: Katie Pollock, Master Teacher, University of Delaware Laboratory School

Christine Skrobot, Associate Director of Early Childhood, Delaware Institute

for Excellence in Early Childhood

#### **Delaware Native Species Commission Mission: Biodiversity**

The Delaware Native Species Commission was formed by the Delaware General Assembly to continue the work started by the Statewide Ecological Extinction Task Force and to implement recommendations made in the final report of the Task Force. The Commission, made up of a diverse group of individuals reflecting a balance of interests between environmental professionals, government, and business stakeholders, began its work in the summer of 2018. This session will provide information about the Delaware Native SpeciesCommission: Its mission, the specific goals, and how environmental educators and independent organizations can support the goals.

**Presenter: Sheila Smith, Delaware Native Species Commission** 

#### >>> Strand: EE and Formal Education >>>>

#### Recent Environmental Literacy Initiatives in Delaware Roundtable Discussion

Are you interested in learning more about the environmental literacy movement in Delaware schools? Join us for a roundtable discussion on current Environmental Literacy efforts in Delaware including school district and state-level capacity-building efforts, recent and upcoming professional development opportunities, and how you and your school can become involved.

Participants: Bart Merrick, NOAA

Sonia Saunders, Red Clay School District Todd Klawinski, Caesar Rodney School District

David Pragoff, Delaware Nature Society David Christopher, Delaware Sea Grant Ashley Melvin, Delaware Forest Service

## >>> Strand: Cultivating Outdoor Learning >>>>

#### **Developing Outdoor Learning Spaces While Improving Schoolyards**

School campuses provide benefits to water quality and wildlife habitat as well as meaningful outdoor learning opportunities for teachers and all of their K-12 students. They also provide opportunities for communities to engage with the school to learn about the local watershed. In this session, you will learn tips on how to get started creating outdoor learning spaces at all phases from the design and building, as well as lesson creation, while also learning about funding outlets, design tools, and successful ways of communicating with key staff in a school district. Weather permitting, we will head outdoors to see and engage in the outdoor learning spaces on Fifer Middle School's campus.

Presenter: Tara Muenz, Assistant Director of Education, Stroud Water Research Center

#### >>> Strand: Innovative and Inclusive EE >>>>

#### Tears of the Kingdom & Sludge: Environmental Disaster & the Hope for Survival

"Tears of the Kingdom & Sludge: Environmental Disaster & the Hope for Survival" explores how video games (in particular: The Legend of Zelda: Tears of the Kingdom) can help players think-with and through climate change. This presentation compares the sludge in Tears of the Kingdom to both the 2011 Fukushima nuclear disaster and the ongoing problems of plastic waste in the ocean. The presentation also explores what it means to analyze video games, which produce large quantities of waste and environmental harm in their production. The goal of this presentation is to help audience members consider the impact video games have on the environment by making players directly experience climate disaster in the world of the game, and, in so doing, make them (potentially) apply their experiences from the game to the real world, leading to action and change for good.

Presenter: Eleanor Carver, Ph.D. Student in English at the University of Delaware

3:00 pm - 3:15 pm

Break, Networking, Silent Auction ends at 3:15 pm



**CONCURRENT SESSION IV** 

3:15 pm to 4:00 pm

#### >>> Strand: Connecting People with Nature >>>>

#### **Connecting People with Nature Through Art**

Quilts are one way art can be used to preserve a community or individual's memories. This session will introduce participants to the Delaware Folk Art Collection, housed at the Blue Ball Barn in Alapocas Run State Park. We will connect quilts featured in the collection with participants' own memories by having guests create their own quilt squares based on their favorite nature experiences. Additionally, we will be stepping outside for a brief walk and art lesson focused on nature journaling.

Presenters: Amy Sypher, Lead Naturalist, Alapocas Run State Park Sara Tideman, Folk Art Collection Specialist

#### Talking Trash: A School Year-Long Approach to Marine Debris

Rapid development is driving many changes across the Delaware Inland Bays watershed. Since 1992, the percentage of land covered with impervious surfaces has increased by 22.5%, leading to higher amounts of polluted runoff—a common source of marine debris—entering the Bays and their tributaries. To address the pervasive issue of marine debris, the Delaware Center for the Inland Bays launched the Inland Bays Pollution Prevention and Removal Project in 2023. This watershed-wide project is comprised of three focus areas including a nature-based youth education program, derelict crab pot removal efforts, and a series of community clean-up events. This presentation will provide an overview of the project before taking a deeper dive into the youth education focus area and its key pillars—learn, research, and action—piloted with two local elementary schools during the 2023-2024 school year.

Presenters: Lisa Swanger, Director of Outreach & Education, and Jackie Knoll,

Manager of Environmental Education; Delaware Center for the Inland Bays

#### >>> Strand: EE and Formal Education >>>>

#### **Bringing the Amazon Rainforest Home**

Bringing the Amazon Rainforest Home will showcase the outcomes of a 2-year UD Delaware Teachers Institute Seminar led by Jon Cox in collaboration with the ACEER Foundation. The seminar included a trip for K-12 teachers to Peru in the summer of 2022. Teachers developed interdisciplinary curricula, including participating in field-based experiential learning in Pennsylvania in partnership with the Lenape Indian Tribe of Delaware, and in the Peruvian Amazon in partnership with the Maijuna Indigenous Community of Sucusari. Each curriculum developed by teachers is accompanied by multimedia learning materials that can be implemented by teachers worldwide. Curricula span the breadth of K-12 education, including environmental sciences, sociology, math, art, and more. We worked closely with teachers and schools from Delaware (USA) to develop bilingual K-12 curricula that not only meets the robust Next Generation Science Standards of the US education system, but also fosters mutual understanding between cultures, prioritizes conservation science, and allows teachers and students to engage directly with a network of professionals working in the Amazon rainforest. https://aceer.org/programing/experiential-education-curricula/

Presenters: Ashley N. Carter, MS, MEd, Pride Science & Team Lead, Millsboro Middle School Joseph Parrett, Kindergarten Teacher, Kathleen Wilbur Elementary Jon Cox, Associate Professor, Art and Design, University of Delaware

## >>> Strand: Cultivating Outdoor Learning >>>>

#### **Keystone Species for Pollinator Gardens**

Do you want to bring more butterflies, birds, and bees into your garden? Join Leah Brooks, to find out which plants will give you the most bang for your buck. Bring a list of your favorites to the nursery this spring and create the ultimate pollinator-friendly garden.

Presenters: Leah Brooks, Public Programs Coordinator, Mt. Cuba Center

#### >>> Strand: Innovative and Inclusive EE >>>>

#### **Cultivating Community Connections to Improve Outdoor Education**

This joint session will begin with Healthy Foods for Healthy Kid's (HFHK) presentation on their strategies for combining a Speaker Series with a summer garden program. HFHK held a successful pilot Speaker Series at Serviam Girls Academy during the summer of 2022. They combined a speaker series with a summer garden and brought in guest speakers from various specialties in the world of Agriculture. HFHK will discuss how the series came to be, what the students learned and the outcomes we observed. The second portion of the session will focus on Gardening with Grandparents. You will hear from GIGI, our gardening grandmother, who will share a unique way to introduce environmental education to young children while engaging our elderly community members. This project is brought to you by the Caesar Rodney School District.

Presenters: Jen Cipolla, Program Manager & Rachel Terracina, Program Coordinator, Healthy Foods for Healthy Kids Teresa Price, DAEE Administrative Assistant

4:00 pm - 4:15 pm

Break, Networking, Pay for Silent Auction Items

#### PLENARY SESSION III

4:15 pm - 4:30 pm Closing Remarks and Evaluations

4:30 pm - 5:00 pm Networking and Silent Auction Pickup



**DAEE** needs your thoughts and opinions!

Please take a few minutes to scan the QR Code at the left and complete the DAEE Network Coordination Team Survey.



# **Speaker Biographies**



**Leah Brooks** is Mt. Cuba Center's Public Programs Coordinator. She graduated from the University of Delaware with dual bachelor's degrees in Environmental Science and Wildlife Ecology. She's an avid contributor to the Delaware Native Plant Identification and Exchange group on Facebook. Her with others.

Ashley Carter is a science educator at Millsboro Middle School in the Indian River School District. After spending over eight years in the field of forensic science doing serology, DNA analysis, fire debris analysis, forensic chemistry, and crime scene investigation, she decided she could inspire the next generation of scientists in the classroom. In 2021, Ashley became the first teacher from Sussex County to participate in the Delaware Teachers Institute, which allowed her to travel to the Peruvian Amazon, and develop relevant curriculum that draws parallels between the Amazon Rainforest and agriculture in Delaware. Her unique field experience allows her to take "real life scenarios" and translate them to a classroom setting—creating a deeper, more connected, and relevant learning experience for her students. Ashley holds an M.Ed in Special Education from University of Delaware, an M.S. in Forensic Science from Arcadia University, and a B.S. in Biology from Bay Path University. Outside of the classroom, she is a Space Foundation Teacher Liaison, a Delaware Aerospace Education Foundation volunteer, and an Amplify Ambassador. She also enjoys presenting at conferences, and has even traveled as far as Lagos, Nigeria to present at their first annual Forensic Symposium.

Eleanor "Ellie" Carver is a current PhD student in English and Teaching Assistant at the University of Delaware. Ellie graduated from William & Mary with a Bachelor of Arts in 2019, with a double-major in English and Chinese Language and Culture. Ellie earned a Master of Education in Curriculum & Instruction in Secondary (6-12) English in 2020 from William & Mary's School of Education. Post-graduation, Ellie worked as a Middle School English & Writing teacher at a school for twice-exceptional students in Alexandria, VA, before returning to school and pursuing a PhD. While Ellie's first language is English, she is proficient in both Chinese and Japanese, and she plans to use her language skills in her research. Ellie's academic interests include game studies, new media studies, blue humanities, environmental humanities, East Asian studies, early modern and renaissance literature, creative writing, speculative fiction, and gender and sexuality studies.

Kristen Chandler holds a bachelor's degree in Special Education and has over 20 years of experience teaching children ranging in ages from 6 weeks to 10 years old, in public and private settings. As the Master Teacher of the Outdoor Pre-K/K classroom, she provides all children with engaging, developmentally appropriate learning opportunities both inside the classroom and outdoors. Kristen facilitates daily mindfulness lessons with the children to encourage social growth and emotional well-being, while supporting the individual needs of each and every child. She also serves as a mentor for future Early Childhood Educators and models various strategies and techniques to support learners of varying exceptionalities. Kristen completed an Internationally Accredited Mindfulness for Children Teacher Training program, is a Certified Mindfulness for Children Teacher and has completed her Certificate in Nature-Based Early Childhood Education at Antioch University. She is working on her master's degree in Educational Teacher Leadership, at the University of Delaware. She serves as a Co-Leader, with Katie Pollock, for the Delaware Chapter of Inside Outside, a national organization devoted to connecting, educating, supporting, and empowering nature-based educators. Kristen is a part of the Kindergarten Play Committee for Red Clay School District where they work hard to get play back into public Kindergartens. Before teaching at the Lab School, Kristen taught 2nd and 3rd grade Special Education in the Brandywine School District, educated 2- and 3-year-olds at a developmental preschool in South Florida, served as an Exceptional Student Education Specialist, and provided educational experiences in a multi-age classroom, as part of an Early Head Start program.

**David Christopher** is the Marine Education Specialist at Delaware Sea Grant where he conducts teacher and student programs as well as works with researchers to communicate science to schools and the public. David is the former President Elect of the National Marine Educators Association (NMEA) and he is on the board of the Mid Atlantic Marine Education Association MAMEA) and the Delaware Association for Environmental Education (DAEE).

Jen Cipolla has worked for Healthy Foods for Healthy Kids since May 2019. As the Program Manager, she enjoys working with children, teaching them new skills and watching their curiosity bloom as they plant gardens and try new vegetables. Jen was a certified swim instructor for the YMCA of Delaware for 9 years. She has incorporated her teaching experience into how she interacts with students and teachers at our Partner Schools. Jen has an M.S. in Environmental Engineering and a B.S. in Chemical Engineering. Jen is also a board member of the Delaware Association for Environmental Education.

Jon Cox is an Associate Professor in the Department of Art and Design at the University of Delaware and Vice President and Director of Arts and Culture of the Amazon Center for Environmental Education and Research (ACEER Foundation https://aceer.org). He is a community-engaged collaborative artist who works primarily in photography and film on the local, national, and international levels. Cox's work has taken him to all seven continents, covering social and environmental issues, where he hopes to make a positive change. He is a Fulbright Specialist, a National Geographic Explorer, and a Delaware Environmental Institute (DENIN) Faculty Fellow. He has co-authored two books with Indigenous communities in Tanzania, Hadzabe, By the Light of a Million Fires, and in Peru, Ancestral Lands of the Ese'Eja: The True People. His current collaborative projects are supported by the National Science Foundation, the National Institute of Health, Fulbright, and the National Geographic Society.

Andie Errico now has two years under their belt working for DSWA as their environmental educator. They really enjoy working with the communities of their home state and sharing their passion for environmental justice through the lens of waste management. After graduating with a degree in Environmental Studies with minors in Leadership and Business Management, Andie worked as a field guide with the research company Global Treks and Adventures with whom they published papers on the water quality of Big Sky, MT and ecotourism of Big Island, HI. As a lifelong nature enthusiast, Andie is proud of the work they get to do with DSWA and looks forward to students visiting their new education center!

**Shandra Furtado** is the Executive Director of the SNAC Garden Foundation. Shandra designs and manages our programs and vibrant outdoor spaces. She loves sharing her knowledge of ecology, mindfulness, nutrition, and art with students, helping them make real life learning connections that extend beyond the garden. She has a Bachelor of Arts in Environmental Studies and Ecology from George Washington University, is a certified permaculture designer through the Occidental Arts and Ecology center, and studied yoga & mindfulness in India.

**Dr. Todd Klawinski** recently completed his doctoral dissertation in educational leadership. This was done in the context of the unique role of Environmental Education Specialist (EES) in the Caesar Rodney School District which he has developed over the past six years. The EES role is responsible for (1) locating and securing grant funding and resources to support student, staff, and community initiatives, (2) supporting district Strategic Plan priorities by integrating environmental literacy (ELit) systemically into what the District is already doing, (3) designing, installing, and maintaining meaningful outdoor learning and sustainability education facilities, and (4) reviewing and supporting project proposals submitted by students, staff, and community.



**David Kline** is a Watershed Education Specialist at Stroud Water Research Center, where the focus is to advance knowledge and stewardship of freshwater systems through global research, education, and watershed restoration. The education department develops and facilitates multidisciplinary programs to advance sustainability and stewardship of the environment to audiences K through gray. David is a member of the DE Environmental Literacy Community of Practice working to ensure that every learner in Delaware has access to high-quality environmental education.

Jackie Knoll is the Manager of Environmental Education with the Delaware Center for the Inland Bays. She is responsible for overseeing the Center's youth and public programs and helping people get connected to their local estuary. Originally from the Philadelphia area, Jackie received a degree in Environmental Studies from Skidmore College and has been working in the environmental education field since. In her free time, Jackie likes to fish, do crossword puzzles and watch Philadelphia sports.

**Bryn Kolmansberger** has been working with DSWA for a year as one of the education team's Community Outreach Coordinators. She graduated from the University of Delaware with a degree in Environmental Studies, along with minors in Environmental Humanities, Public Policy, and History. Before educating the public on recycling, she worked for a local land management company focused on invasive plant removal and the reintroduction of native plants.

Ashley Melvin joined the Delaware Forest Service as a casual seasonal in 2001 after receiving her bachelor's degree in Plant Science from Delaware State University. She worked as the botanist for the Forest Inventory Analysis (FIA) Program for three years before moving into the education position in 2004. A native Delawarean, Ashley developed a deep connection with nature at a young age and understands the importance of fostering that connection in today's youth. Currently she serves as Delaware's Project Learning Tree (PLT) Coordinator and manages two education centers at Blackbird and Redden State Forests. Ashley also coordinates the Smokey Bear Fire Prevention Program and the Annual Arbor Day Poster Contest. A founding member of the Delaware Association for Environmental Education (DAEE) and current Member at Large, Ashley helps increase the quality and opportunity for outdoor learning on a state, regional and national level. Ashley enjoys sharing her love of nature and the outdoors with her son, Marcus on their farm just outside Camden, Delaware.

Amanda Menasion has worked with DSWA for a year as one of the Community Outreach Coordinators and as Trash Can Dan. Before donning the big yellow trash can, she worked with NJDEP in the endangered species unit after graduating from Montclair State University with her M.S. in Biology, with an Ecology and Evolution concentration. Amanda has worked with students of all ages at one of the nation's first and largest environmental education centers, New Jersey School of Conservation. Her background in protecting wildlife and love for nature has led her to a passion for teaching others about best waste practices to ensure we protect the environment around us.

**Bart Merrick** has been an environmental educator for 28 years, working with teachers and students from Massachusetts to Virginia, promoting environmental literacy and fostering understanding, awareness and respect for the natural world while working for state parks and environmental education nonprofits. Upon receiving a Masters in Environmental Science, Bart worked with MD-DNR as the Education Coordinator for CBNERRs. Currently, Bart Merrick is the Education Coordinator for NCBO's Environmental Science Training Center focusing his on integrating the use of environmental science and technology with field-based learning experiences to support environmental literacy and education for climate action.

**Tara Muenz** 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.

Kara Okonewski has worked in informal environmental education in Delaware for more than 12 years. She currently serves on the DAEE Board while completing her Environmental Science Degree. Originally born in Detroit, Michigan, Kara moved to Delaware 18 years ago and discovered it's beautiful nature! Recently, she spent 2 years as an assistant herpetologist for the National Aquarium and managed a non-profit art league in Milford, DE promoting art accessibility and education. She believes in the fundamental relationship between art and science and advocates for it's accessibility. Kara has a husband, two daughters, and (never) enough houseplants.

Joseph Parratt is a kindergarten teacher from Kathleen Wilbur Elementary School in Colonial School District. He is known for co-teaching with puppets to help his students access challenging topics. Joseph is a fellow in both the Delaware Teachers' Institute and the Yale National Initiative providing him the opportunity to develop curriculum for use in the classroom, much of which has an environmental focus. He is also a National Geographic certified teacher.

Katie Pollock has worked as a Master Teacher at the Laboratory School for 18 years. Katie is a certified naturalist through the Delaware Nature Society, but her quest for learning more about the land on our children's campus does not end there. Katie has worked with the Delaware Institute for Excellence in Early Childhood for the last two summers to expand nature experiences for children, teachers and families through the Let's Go Outside initiative. Katie joined the Delaware Association for Environmental Education's board in the Spring of 2022. She has been awarded the DAEE Outstanding Field Educator award in 2019 and the Delaware Nature Society Outstanding Environmental Educator award in 2021. Katie received her Nature Based Educator certificate from Antioch University. She earned an MS in Literacy from Wilmington University and a BS in Early Childhood Education from the University of Delaware. She is a licensed Delaware teacher of Early Childhood & Early Childhood Special Education, an Early Childhood Administrator in Delaware, and teaches an undergraduate course for the Human Development and Family Studies Department at the University of Delaware.

**David Pragoff** is the School and Group Programs Team Leader with Delaware Nature Society, based at the Ashland Nature Center in Hockessin, Delaware. David oversees program development and delivery for school, scout, and group audiences including children and adults together reaching approximately 35,000 participants each year. In his 16 years working at the Delaware Nature Society, David has collaborated with numerous groups to advance environmental education in Delaware. David was the 2021 DAEE Awards for Excellence, Exemplary Partnership recipient and is a long serving DAEE Board Member.

**Teresa Price**, CEOE, is a recently retired employee of Caesar Rodney School District and a grandmother of four boys including a set of identical twins. She is an experienced florist and avid gardener. Having joined DAEE this year, she continues to be involved in education, community, and the values of DAEE while working as a full-time nanny for her grandsons.

Dorit Radnai-Griffin is in her fifth year as the Lab School Director and is responsible for leadership in program development and maintaining high-quality programming for children and families and the University of Delaware students in clinical experiences. She provides leadership and oversight of research activities and supervision and evaluation of the staff. Dorit collaborates with professionals from other Lab Schools from across the country to spread the incredible work of her talented teaching staff in the areas of pre-service early childhood teacher preparation, emergent curriculum, nature-based education, and mindfulness. She encourages and seeks opportunities for outreach connections in Delaware communities and beyond. She ensures that the day-to-day operations at the Lab School comply with state licensing requirements and accreditation standards and demonstrate current best practices in curriculum and teaching. She also oversees enrollment and financial operations. Dorit has a Secondary Appointment in the rank of Assistant Professor with the Department of Human Development and Family Sciences, where she has been an Instructor and taught several undergraduate and graduate courses for over a decade.

Dorit is a former Program Manager of the Lab School and Program Coordinator with New Directions Early Head Start. She has vast experience working with children, families, teachers, university students, and other support staff. Dorit earned a Ph.D. and an MS in Human Development and Family Studies from the University of Delaware and a BS with High Honors in Psychology from Delaware State University. Dorit is a certified Intermediate Instructor at the Delaware Institute for Excellence in Early Childhood and has a Delaware Department of Education Early Childhood Administrator certification.

**Sonia Saunders** is currently Red Clay School District's first Environmental Educator Specialist. In this role she is managing environmental learning grants; initiating a district environmental steering committee to help standardize environmental practices; contributing to district curricular connections with environmental literacy, as well as promoting, assisting, and bringing environmental resources to schools across the district. She was previously a fifth-grade teacher at Brandywine Springs School, Wilmington, Delaware. She has received prominent awards such as: State Finalist for the Presidential Award for Excellence in Science and Mathematics; Environmental Educator of the Year, Ashland Nature Society; Distinguished Teacher Award, National Council of Geographic Education; and Distinguished Teacher Award, Delaware Geographic Alliance.

Joe Schell is a Conservation Planner for DNREC's Division of Watershed Stewardship. His work has stretched across the mid-Atlantic from Pennsylvania, New Jersey, and Maryland's Eastern Shore. He completed his master's degree focused on the conservation of bats in the Delaware Water Gap National Recreation Area, where his love for native plants and plant ecology first took shape. Though his background is in wildlife conservation, he has always had a focus on naturalism and community engagement. When not advocating for native landscaping, he enjoys birding, hiking, and tending to his own budding native plant garden.

Christine Skrobot joined Delaware Institute for Excellence in Early Childhood more than ten years and has experience working for Delaware Stars, PD, and Research team. Christine is currently the Associate Director of Early Childhood: Learning Environments. She has six years of experience teaching preschool prior to joining DIEEC. She received her master's degree in Human Development and Family Studies from the University of Alabama.

**Sheila Smith** is a long time Environmental Educator, retired elementary and middle school science teacher, former Delaware Nature Society, teacher/naturalist. Received the DNS Outstanding Environmental Educator Award (30 years ago!) Currently a Backyard Habitat Steward, a Delaware Master Naturalist and serves on the Delaware Native Species Commission and on the City of Newark's Conservation Advisory Commission.

Lisa Swanger joined the Delaware Center for the Inland Bays as the Director of Outreach and Education in February 2020. She has 15 years' experience in the field of environmental education and program management, and is committed to combining sound science with engaging education programs that foster meaningful community-watershed connections and responsible natural resource use. She also proudly serves at the state of Delaware's representative for the Mid-Atlantic Marine Educators Association. Her primary responsibility is to lead education and outreach efforts for diverse audiences within the Inland Bays watershed and beyond. Lisa's deep-rooted passion for the ocean and particular interest in the human dimensions surrounding coastal and marine conservation led her to obtain her Master of Science Degree in Marine Resource Management from the College of Earth, Ocean, and Atmospheric Sciences at Oregon State University with a focus in outreach and education. As a personal motto, Lisa strives to "live with intention" which inspires her to make a positive impact on the environment in both her professional and personal life.

**Amy Sypher** (Lead Naturalist) creates and leads environmental education programs for all ages at Alapocas Run and Wilmington State Parks.

Rachel Terracina is our Kent and Sussex Counties Program Coordinator. Rachel joined Healthy Foods for Healthy Kids in May 2022. She is passionate about educating and empowering people from every background to make the best choices for their bodies, communities, and environment. Armed with a B.S. in Biology from the University of Wisconsin- Whitewater and nine years of science communication experience, Rachel is excited to help grow HFHK's programming to reach even more students and teachers in Delaware. Nothing makes Rachel happier than watching a child's confidence grow as they learn new skills. In her free time, Rachel enjoys the wonderful beaches of Delaware and exploring marshes in a kayak. Rachel is currently studying to become a Master Naturalist.

**Sara Tideman** (Folk Art Collection Specialist) focuses on the Delaware Folk Art collection homed at the Blue Ball Barn for Alapocas Run State Park. Together we blend nature and art with various programs to connect people with the natural world.

**Marilyn Williams** is the Executive Director of the Lyme Disease Association of Delmarva, Inc., a 501(c) (3) non-profit organization whose purpose is to provide educational resources to those living and working on the Delmarva Peninsula. We participate as an exhibitor at several medical conferences each year, provide presentations to civic organizations, and participate in local community events.

The **Delaware Association for Environmental Education** promotes environmental education and meaningful outdoor experiences to create positive community impacts that lead to the conservation and sustainability of Delaware's natural resources.

DAEE helps to ensure that every citizen in Delaware has the opportunity to become involved in meaningful outdoor experiences. DAEE provides resources for administrators, formal and non-formal educators, and concerned citizens on how and where to introduce students of all ages, to safe, educational, and life-changing outdoor experiences that will connect them to nature and instill the importance of conservation.

DAEE acknowledges the importance of conservation actions needed to sustain future resources and encourages every citizen to be aware of how their individual actions directly impact the natural resources that sustain them.

DAEE's Annual Conference provides insight for community leaders, educators, and citizens on how to learn about the environment, conservation methods, best practices in environmental education, sustainability initiatives, and opportunities for individuals to make a difference in their communities.

