In partnership with:





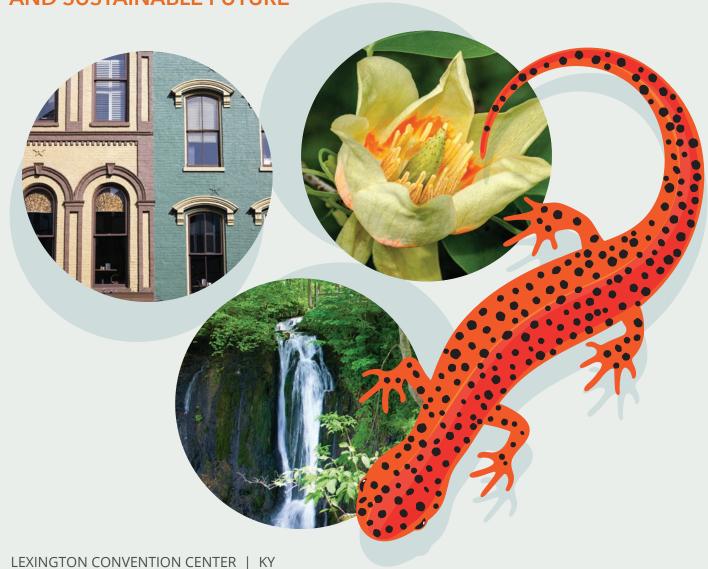
48[™] Annual Conference

OCTOBER 16-19

EDUCATING FOR A JUST AND SUSTAINABLE FUTURE

16TH Annual Research Symposium

OCTOBER 15-16



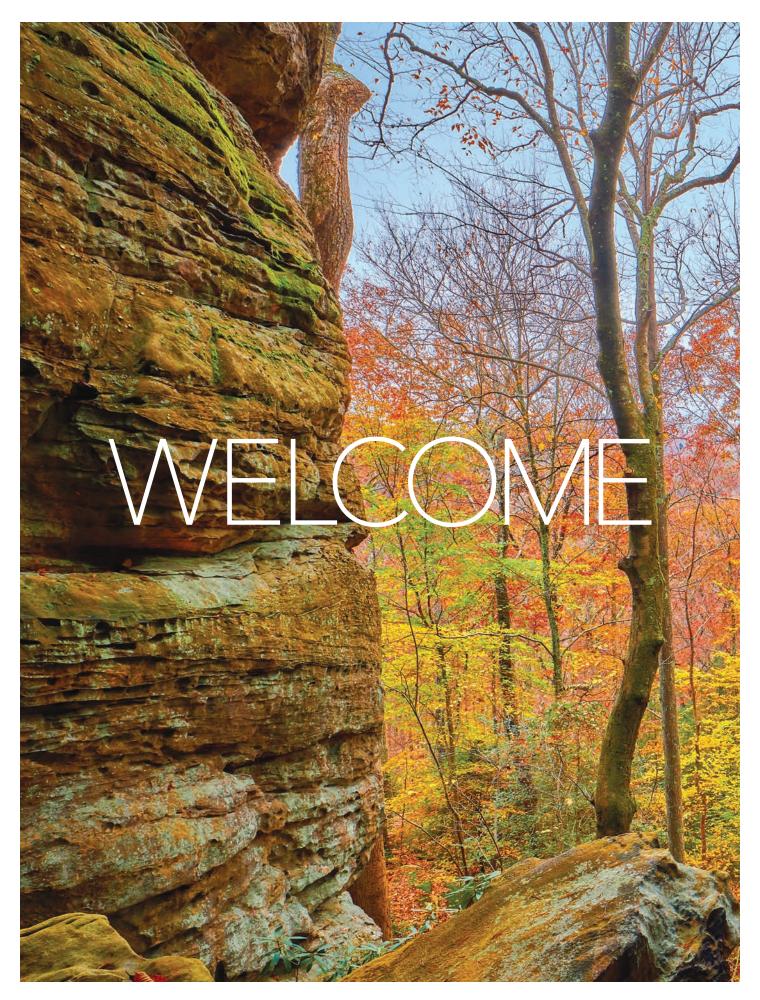






Schedule at a Glance. Check daily schedules (starting on page 55) for detailed information.

EXHIBIT	FAIR: Wednesday, 5:0	00 PM-6:30 PM T	hursday, 9:00 AM–5:00	PM Friday, 9:00 AN	M-2:30 PM
TIME	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
7:00				COFFEE WALK, YOGA	
7:30		RESEARCH	HELEN DANSER WELCOME YOGA	6:30-8:15	YOGA 7:30-8:15
8:00		SYMPOSIUM GRADUATE	7:30-8:15		
8:30		STUDENT/EARLY CAREER BREAKFAST	CONCURRENT SESSIONS	CONCURRENT SESSIONS	CONCURRENT SESSIONS
9:00	RESEARCH SYMPOSIUM	7:30-9:00	8:30-10:00	8:30-10:00	8:30-10:00
9:30	9:00-4:30	RESEARCH SYMPOSIUM 9:00–4:30 WORKSHOPS (Full day, morning, and afternoon) FIELD TRIPS (Start and end times vary)	30 MINUTE	30 MINUTE	30 MINUTE
10:00			COFFEE BREAK	COFFEE BREAK	COFFEE BREAK
10:30			CONCURRENT SESSIONS 10:30–11:10	CONCURRENT SESSIONS 10:30–11:10	CONCURRENT SESSIONS
11:00					10:30-12:00
11:30			PLENARY SESSION Mona Chalabi	PLENARY PANEL Educating for a Just and	
12:00			11:30-12:30	Sustainable Future 11:30–12:45	AWARDS LUNCHEON
12:30			EXHIBIT LUNCHEON	LUNCH (on your own)	12:00-2:30
1:00		WORKSHOP/ RESEARCH	Poster Sessions, Affiliates' Welcome, Silent Auction, and Raffle	12:45-2:15	
1:30	-	SYMPOSIUM LUNCH	12:30–2:15	eePRO Group Meetings 1:15–2:00	PLENARY PANEL EE 30 Under 30: Young Leaders
2:00		12:00–1:30	CONCURRENT	CONCURRENT	Making a Difference
2:30			SESSIONS	SESSIONS	
3:00			2:15–3:45	2:15–3:45	
3:30					
4:00			CONCURRENT SESSIONS	concurrent sessions 4:00–4:40	
4:30	RESEARCH SYMPOSIUM	ORIENTATION	4:00-5:30		
5:00	RECEPTION 4:30–6:00	4:45–5:15 OPENING RECEPTION: EXHIBITS, SHARE FAIR, AND AUTHORS' CORNER	MEETINGS & RECEPTIONS		
5:30			HHMI MOVIE NIGHT	5:00-6:00	
6:00		5:00-6:30	eeBLUE SOCIAL		
6:30		OPENING CEREMONY 6:30–8:30 KEYNOTE John Flicker	5:30-7:00		
7:00			Young Professionals Networking Bourbon and Brew 7:00-10:00	BOURBON & BLUES CELEBRATION AND AUCTION 7:00-9:30	
7:30					
8:00					
8:30				1130 3130	



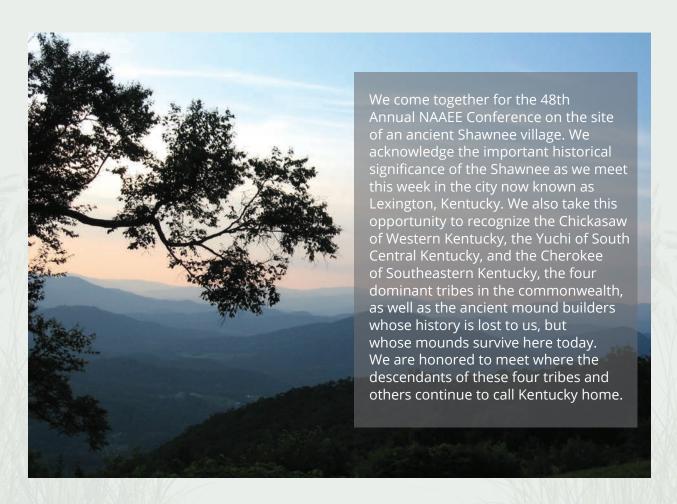


On behalf of the NAAEE board, staff, and conference planning team, welcome to the 48[™] Annual NAAEE Conference!

We're thrilled you can be here and hope you enjoy everything the conference and Kentucky have to offer. This year's theme, *Educating for a Just and Sustainable Future*, focuses on the power of education to create positive change leading to a more equitable and sustainable future.

This program is designed to help you navigate the conference and find the workshops, field trips, poster sessions, symposia, keynotes, and other presentations that best meet your needs and interests. You can also get the NAAEE 2019 conference app on your mobile device: download the free "CrowdCompass AttendeeHub" from your app store and then search for NAAEE.

You'll see dozens of volunteers wearing bright blue NAAEE t-shirts, who can help answer questions you might have. And if you need anything else, please come to the Registration Desk or the nearby Information Station for assistance.



I loved being outside. We'd hold lightning bugs in our fingers and pretend they were diamond rings.



— Loretta Lynn Butcher Hollow, Kentucky



Here are some highlights of the week:

- Our annual Research Symposium, highlighting current research in the field (Tuesday and Wednesday)
- An exciting conference kickoff featuring a welcome reception and a keynote presentation by John Flicker, president of Prescott College and former president of the National Audubon Society (Wednesday)
- The Exhibit Fair, showcasing new resources and programs in environmental education we'll celebrate with a buffet luncheon on Thursday, which also includes the conference poster presentations and the Affiliate Welcome
- Engaging and provocative plenary presentations, including a talk by Mona Chalabi, Data Editor for *The Guardian* (Thursday), and a series of **short flash talks**, moderated by Anupama Joshi, Executive Director of the Blue Sky Funders Forum, which will give you a taste of how five creative and passionate leaders are thinking about creating a just and sustainable future (Friday)
- Bourbon and Blues on Friday—an engaging evening focused on Kentucky history and culture with a chance to make your own Derby hats and bow ties, sample bourbon, take part in NAAEE's annual auction, and dance to the music of the locally renowned Tee Dee Young blues band
- NAAEE's annual business meeting on Saturday morning, where you can learn more about the Association and have a chance to provide input
- An Awards Luncheon featuring the presentation of NAAEE's awards, including the leske Award, NAAEE's highest honor, and an inspiring panel of young leaders selected from NAAEE's EE 30 Under 30 honorees

Thanks to everyone who has made this conference possible—our committee chairs, the NAAEE board, Advisory Council, and staff, our amazing Affiliate network, hundreds of volunteers, our funders, our partners, and so many other supporters. We also want to thank the Kentucky Association for Environmental Education, NAAEE's Kentucky Affiliate and conference partner, and especially our conference co-chairs, Jim Embry and Ashley Hoffman, for their innovative and tireless efforts to bring Kentucky's unique contributions to the conference.

A final thank you goes to all of you for attending—we know it's a big commitment. We hope you develop long-lasting personal and professional relationships and have a chance to engage in many meaningful conversations throughout the week. When you bring a committed group together, magic happens—and we are looking forward to creating that magic together in Lexington.

With warm regards from your conference leadership team:

Judy Braus

Charlotte Clark

Charlotte Clark

Board Chair Executive Director

Conference Manager



ENVIRONMENTAL EDUCATION WEEK

- WHEREAS, the beauty of Lexington-Fayette County's natural resources from the horse farms, to our streams and to the majestic Kentucky River must be protected for future generations; and
- WHEREAS, to sustain the precious land and water ways of our great city requires the stewardship of every person, as well as future generations; and
- WHEREAS, stewardship is not possible without a strong sense of connection to the natural world and an understanding by our individual and collective responsibilities to protect it; and
- WHEREAS, environmental education increases student engagement in science, improves student achievement in core subject areas, and increases student awareness about how they can help restore the health of the natural environment; and
- WHEREAS, there is a need to engage individuals and organizations throughout our region to sustain a high quality of life through education, conservation, and the restoration and protection of natural resources.
- **NOW, THEREFORE,** I, Linda Gorton, Mayor of Lexington in the state of Kentucky, do hereby declare October 14-19, 2019, as

ENVIRONMENTAL EDUCATION WEEK IN LEXINGTON.

MAYOR

Kinda Gorton

THANKYOU LEX201

Sponsors of the 48th Annual NAAEE Conference

PRESENTING SPONSORS







ee360



PLATINUM







GOLD





SILVER

GREEN

















BLUE













IN KIND

ORANGE













Welcome from the home team!

It is such an honor to host this gathering of environmental educators from across the globe and to have the opportunity to showcase our wonderful state and the amazing work happening in our environmental education community.

Lexington is the Horse Capital of the world, surrounded by over 400 horse farms with green pastures and beautiful Thoroughbreds nourished by the limestone in the soil. If you wish to see horses up close, Keeneland racecourse holds its Fall Meet October 4-26. The Isaac Murphy Memorial Art Garden and the Kentucky Horse Park Museum provide an understanding of the vast contributions of African Americans in establishing horse racing in Kentucky.

But we are more than just horses; Lexington also has natural areas nearby, including McConnell Springs, Raven Run Nature Sanctuary, and Floracliff Nature Sanctuary. You can also take advantage of pre-conference workshops and field trips or participate in an early morning coffee walk for a unique opportunity to explore the natural and cultural history of the local area. And if time allows, plan to visit other beautiful natural areas outside of Lexington, such as Red River Gorge, Cumberland Falls, or Mammoth Cave National Park.

Join us Thursday morning for a welcome from Helen Danser, chair of the Kentucky Native American Heritage Commission, to learn about the history of this region, which once served as the home for the Cherokee, Shawnee, Chickasaw, and Yuchi peoples.

You will find some excellent restaurant and brewery options within walking distance of the convention center. And you'll certainly want to stop at one of the distilleries along the Kentucky Bourbon Trail and learn about the bourbon-making process that plays such a rich role in Kentucky's history and economy.

We hope you feel and see firsthand the passion and dedication our educators bring to the field. Kentucky is proud not only to have a strong Affiliate organization (KAEE) but also to have a state agency dedicated to environmental education (the Kentucky Environmental Education Council, KEEC). We are one of the few states with an NAAEE-accredited Professional Environmental Educator Certification, an environmental education endorsement program for formal educators, and an Environmental Education Leadership Corps.

The work of KAEE and KEEC has been augmented by numerous other groups such as Lexington's Environmental Commission, which has since 1969 provided its citizens with environmental education and many opportunities for engagement in community activities.

All of our universities are deeply committed to environmental education. Berea College has been *Educating for a Just and Sustainable Future* since its founding in 1855 when it became the first college in the South to admit women and African Americans while being devoted to environmental stewardship. We are proud that all across our beautiful state, environmental education is recognized and supported broadly as a vitally important effort.

Jim Embry

Conference Co-Chair Sustainable Communities Network

Ashley Hoffman

Conference Co-Chair Kentucky Association for Environmental Education

See pages 129–132 for suggested restaurants and places to visit in and near Lexington.



The Cal Water H₂O Challenge is coming back for YEAR 6!

A FREE, educational competition tackling California's water issues

In addition to our annual project-based learning classroom competition for grades 4-6, Cal Water is excited to announce a **NEW** challenge:

NEW THIS YEAR!

A media competition about caring for water

Open to students in grades K-12

Learn more at calwater.com/challenge











Achieving great things for our community



When a group of people comes along who have the courage and vision to turn dreams into reality, they make the future bright for everyone.

We proudly celebrate the achievements of the 2019 NAAEE 30 Under 30 award winners.

wellsfargo.com

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Table of Contents

Schedule at a Glance	2			
Conference Sponsors				
About NAAEE				
Conference Basics				
Registration & Check-In and Information Station	16			
General Information	16			
Conference Strands & Session Key	18			
Research Symposium	18			
Session Formats	19			
Finding Sessions of Interest	19			
Networking Opportunities				
eePRO and eePRO Group Meetings	24			
Meetings and Gatherings	26			
Community Service Project	27			
ee360 at the Conference	28			
NAAEE and the Affiliates	30			
Professional Development Opportunities	31			
Especially for Young Professionals	32			
Partners and Supporters				
Thank You Conference Committees	34			
Conference Scholarships	35			
Cal Water H ₂ O Challenge	35			
UL Innovation Education Awards	35			
EE 30 Under 30	39			
Keynote Speakers	40			
Special Events				
Opening Reception with Exhibits, Share Fair, and Authors' Corner	45			
Opening Ceremony	46			
Welcome from the Kentucky Native American Heritage Commission	46			
Exhibit Fair Luncheon and Poster Session	47			
HHMI BioInteractive Film Screening	47			
eeBLUE Social	47			
Bourbon & Brew	47			
Kentucky Bourbon and Blues Celebration and Auction	48			
Awards Luncheon and Closing Panel	50			
At Leisure in Lexington	51			
Daily Schedules				
Monday	55			
Tuesday	55			
Wednesday	56			
Thursday	62			
Friday	98			
Saturday	119 129			
Getting Around Town (Places to Eat, Places to Visit)				
NAAEE Staff, Board, and Advisory Council				
NAAEE Affiliate Network				
2019 Exhibitors				
Lexington Convention Maps				
Hyatt Regency Lexington Maps				





Education we need for the world we want

There has never been a greater need for environmental education—or a greater opportunity. The world is facing unprecedented environmental, social, and economic challenges—from a changing climate and loss of species and habitats, to decreasing access to nature, the unequal distribution of resources, and other threats to our well-being. Environmental education has the potential to transform lives and society by addressing these challenges through helping to create a motivated and committed citizenry. Environmental education informs, inspires, and enlightens. It builds human capacity, influences attitudes, and can lead to action. And most importantly, it can help people make informed decisions about the environment that lead to informed stewardship and a more sustainable society.





For nearly five decades, the North American Association for Environmental Education has worked to strengthen and expand the field of environmental education, with a growing network of support including:

20,000+

MEMBERS AND SUPPORTERS

STATE AND REGIONAL **AFFILIATES**

COUNTRIES



Today, as we build on this foundation, NAAEE looks forward to stimulating new thinking and building new partnerships that will best meet the environmental and social challenges of the next decade.

Driving Excellence and Innovation

EE Resources: NAAEE's Guidelines for Excellence series is the most widely accepted standard for effective practice in environmental education around the globe. NAAEE's website, including eePRO, is a hub for resources and networking for environmental education professionals around the world.

eeBLUE: NAAEE and NOAA are working together to increase environmental and science literacy among NOAA partners and external networks. NAAEE is also collaborating with NOAA to administer a Watershed STEM Education Partnership program, an initiative designed to integrate high-quality STEM programming into 21st Century Community Learning Center program sites.

Research and Practice: Through eeWORKS, NAAEE and Stanford University are working with several partners to highlight existing research that demonstrates the impact of EE and helps translate research into practice.

Investing in Leadership

EE 30 Under 30: Each year, NAAEE awards 30 highpotential leaders under 30 years of age who are creating change in their communities using EE. We provide professional development and networking to build their capacity as leaders in our field.

Broadening the Conversation: NAAEE, through a cooperative agreement with US EPA and seven partner organizations, is leading an ambitious five-year initiative called ee360 to support a diverse cadre of environmental education leaders who are better prepared to increase environmental literacy and advance civic engagement.

Cultivating Collaboration

Annual Conference: NAAEE has convened an annual conference for environmental education professionals since 1972. Averaging more than 1,000 participants each year, the event is designed to promote innovation, networking, and learning.

Early Childhood Environmental Education: In 2013, NAAEE launched the Natural Start Alliance—a coalition of educators, parents, and organizations focused on linking early childhood education with EE to connect young children with nature and enhance opportunities for creative play and learning.

Global Environmental Education Partnership: In partnership with US EPA and the Taiwan Environmental Protection Administration, NAAEE is creating a vibrant learning network designed to build capacity for environmental educators around the world.

Serving as a Champion

EE Advocacy: Since its inception, NAAEE has helped lead policy and outreach efforts in North America. NAAEE highlights key opportunities to get involved in strengthening public support for environmental education.

Civic Engagement: NAAEE collaborates with the civic engagement education community to strengthen leadership and support initiatives that will advance our collective work to build a more engaged and environmentally literate citizenry.

Connect with NAAEE today and join us in creating a more sustainable future together.

naaee.org

Bow Seat's

2020 OCEAN AWARENESS CONTEST



A creative opportunity to speak up for our blue planet

Open to students ages 11-18 worldwide

Accepting visual art, film, music, poetry, prose, interactive & multimedia

2a Deadline: June 15, 2020

Scholarship awards of up to \$1,500

\$750 Educator **Innovation Awards** for teachers

Climate Hope: Transforming Crisis

Visit bowseat.org/contest for details, classroom resources, and to submit





The Division of Natural Areas at Eastern Kentucky University is a proud sponsor of the 48th Annual NAAEE conference.

To learn more visit naturalareas.eku.edu







The Forestry Outreach Center is a space in which people of all ages can learn about the natural world and the 9,000-acre Berea College Forest. We offer:

- Recreational opportunities, including group hikes to the Pinnacles, rated the "Best Hike in Kentucky" by Outside magazine, 2019
- Environmental Education programming for pre-school through college students
- Community Programming focused on the ecosystems and watersheds that sustain us.







Conference Basics

Registration & Check-In Hours

Monday 1:00 PM-2:30 PM; 5:00 PM-7:00 PM 7:30 AM-10:30 AM; 5:00 PM-6:30 PM Wednesday 7:00 AM-10:30 AM; 12:00 PM-6:30 PM 7:30 AM-10:30 AM; 1:30 PM-6:00 PM Friday 7:30 AM-10:30 AM; 1:30 PM-4:00 PM

Saturday 8:00 AM-10:30 AM

Location: Thoroughbred Bridge

Information Station

Tuesday 7:30 AM-1:30 PM Wednesday 7:00 AM-6:30 PM Thursday 8:00 AM-6:30 PM Friday 7:30 AM-6:00 PM Saturday 10:00 AM-12:30 PM

Have questions about the conference? Want to sign up for the Community Service Project or Fundraising Roundtables? Volunteers are here to help. The Information Station is located near the registration counters on the **Thoroughbred Bridge**.

General Information

Accessibility Assistance

NAAEE strives to make our conference accessible to all attendees; please request accommodations at the registration desk or ask any staff member for assistance.

Auction Items

Please bring auction items to the **Bluegrass Lobby**, where volunteers will be ready to accept your donation. (If the office is not open, please leave donations at the Information Station.)

Bidding on silent auction items begins during the opening reception on Wednesday evening in the Bluegrass Lobby. The live auction will be held and the silent auction will close during the gala on Friday evening. Some sections of the silent auction close Thursday.

New this year! Bid anywhere anytime! Silent auction bidding will be online, so you can raise your bid wherever you are! Sign up at 32auctions.com/ NAAEEAuction2019. No mobile device? Volunteers at the auction tables can assist with online bidding.

Audio-Visual Equipment Problems

If presenters experience audio-visual issues during sessions, ask the volunteer room monitor to report it to any staff member or the Information Station for help connecting with our audio-visual experts.

We have a limited number of flip charts available by advance request. We will try to accommodate special audio-visual requests, but guarantee only the computer, LCD projector, and wireless Internet access provided in all meeting rooms. Please put PowerPoint presentations on a portable USB drive and use the equipment provided; we cannot guarantee availability of other connecting cords. Requests for special audio-visual needs must be made at the Information Station by 5:00 PM the evening before morning sessions, and by 10:30 AM on the day of for afternoon sessions.

Authors' Corner

Authors will be available to sign and sell books during the opening reception on Wednesday. See page 45 for more information.

Coffee Breaks

There will be 30-minute coffee breaks at 10:00 AM, Thursday through Saturday, in Bluegrass Ballroom 1.

Community Service Project

Each year, NAAEE participates in a Community Service Project to give back to our host community. This year, we will be helping to plant trees at Isaac Murphy Memorial Art Garden as part of Lexington's Tree Week. See page 27 for details, and sign up to volunteer at the Information Station.

Conference Buddies

If you're new to the conference and signed up through registration for a conference buddy, or if you're an experienced conference-goer and volunteered to serve as a buddy, please meet your partner immediately after the conference orientation on Wednesday at 5:15 PM in Thoroughbred 4 to set a meeting time and head to the opening reception.

Exhibit Fair

Wednesday 5:00 PM-6:30 PM Thursday 9:00 AM-5:00 PM Friday 9:00 AM-2:30 PM

See page 135 for a list of exhibitors.

Field Trips

If you are registered for a field trip on Wednesday, meet your vans at the High Street Rotunda entrance to the convention center. Please arrive 15 minutes before departure times, which are listed on page 58.

Jobs and Resumes

You can upload your resume, build your eePROfile, search for jobs, or post job listings in eePRO, NAAEE's online hub for professional development in EE. Visit NAAEE's exhibit in the Bluegrass Lobby for more information or a demonstration.

Lunch on the Go

Grab-and-go concessions will be available in the Bluegrass Lobby on Friday from 12:30 PM to 2:00 PM.

Mobile App

Our conference mobile app allows you to search the conference program, build your own schedule, network with other attendees, and more. Download "CrowdCompass AttendeeHub" from your app store and then search for "NAAEE." Need support? Ask at the Information Station.



Guest Tickets for Special Events

Opening Reception and Ceremony, Wednesday, 5:00 PM-8:30 PM. Includes hors d'oeuvres. exhibits, Share Fair, Authors' Corner, and John Flicker's keynote. Add by Sunday 11:30 AM.

Exhibit Fair Luncheon, Thursday, 12:30 PM-2:15 PM. Includes a full buffet luncheon, exhibits, poster presentations, and the Affiliate Welcome. Add by Monday 11:30 AM.

Bourbon & Blues Celebration and Stapp Auction, Friday, 7:00 PM-9:30 PM. Includes substantial hors d'oeuvres, a blues band and dancing, Derbythemed activities, and our annual live auction. Add by Tuesday at 11:30 AM.

Awards Luncheon and Closing Plenary, Saturday, 12:00 PM-2:30 PM. Includes luncheon, awards ceremony, and the inspiring EE 30 Under 30 plenary panel. Add by Wednesday at 11:30 AM.

Purchase guest tickets at the Registration Desk.

Nursing Mothers

The Thoroughbred Show Office (near Thoroughbred 3) is available for nursing mothers. There is a refrigerator in the room.

Volunteer Check-In

The Volunteer Office is in Thoroughbred 6. Registered volunteers should check in at the office 15 minutes prior to the start of their shifts.

Wi-Fi Access

Free Wi-Fi is available in the hotel's public areas and meeting rooms. Take advantage of the access to send a few tweets using #NAAEE2019 to share your favorite session or let folks know what you think of the conference!

Continuing Education Hours (CEHs)

NAAEE has partnered with the University of Wisconsin–Stevens Point (UWSP) to offer CEHs for attending the Annual Conference and Research Symposium. Participants can receive a certificate documenting their continuing education hours by completing an application form that verifies session attendance and submitting the form, along with a \$30 processing fee, to UWSP Continuing Education and Outreach. You can pick up an application form at the Information Station. Ten contact hours of professional development equals 10 CEH.

For more information, contact Tyler Pozolinski, TPozolin@uwsp.edu



Continuing Education and Outreach University of Wisconsin-Stevens Point



Follow @TheNAAEE on social media!



Follow us on Facebook to stay connected to **#NAAEE2019** trends and events!



Follow @TheNAAEE on Instagram for NAAEE2019 photos and videos!



Access our conference mobile app via your app store: Download "CrowdCompass AttendeeHub" and search for "NAAEE".

Conference Strands

Six cutting-edge thematic strands characterize this year's conference:











Building Leadership for Environmental Literacy Strategies for building leadership and infrastructure to further EE on the state and provincial levels, and for advancing efforts to motivate the public to take informed actions on environmental and other civic issues

Strand Leader: Dave Chase, DRC Consulting, LLC

Connecting with Nature •

Cultivating partnerships and providing universally accessible outdoor education experiences that connect people of all ages and backgrounds to nature

Strand Leader: Jean Kayira, Antioch University New England

Conservation and Environmental Education •



Strand Leader: Michelle Eckman, Connecticut Audubon Society

Educating for Sustainable Communities

Creating sustainable, equitable, and resilient communities through partnership building, informed civic engagement and personal decision making, systems thinking, connecting community and environment, and understanding historical impacts on communities of color

Strand Leader: Lee Frankel-Goldwater, University of Colorado-Boulder

Green Schools and Preparing for 21ST Century Careers ●

Using environmental education to transform education, enhance student achievement, conserve resources, prepare students for green careers, support national and international education trends, link schools and communities, and build support for environmental education in formal education

Strand Leader: Jennifer Ortega, Humboldt State University

Linking Research and Practice to Increase Impact

Using research to inform how we design, develop, refine, and promote environmental education programs for maximum effectiveness, and using practice to inform research

Strand Leaders: Justin Hougham, University of Wisconsin-Extension and Steve Kerlin, Stroud Water Research Center



16th Annual Research **Symposium**

NAAEE's annual Research Symposium brings the academic community together to explore the current state and future directions of environmental education research and to advance the use of practices proven to be effective. Join new and experienced researchers from around the globe to converse on emerging and traditional areas of environmental education research.

This year's research symposium contributes to advancing EE towards a just and sustainable future through a dual focus on discussing research processes and impacts. In addition to dozens of poster presentations sharing completed or in-progress research projects, a range of panels, roundtable discussions, and workshops will provide multiple perspectives on how we do EE research, and to what ends.

Chair: Marcia McKenzie, University of Saskatchewan

Co-Chair: Olivia Aguilar, Denison University

THANKS TO THE GRAY FAMILY FOUNDATION, SPONSOR OF THE BUILDING LEADERSHIP FOR ENVIRONMENTAL LITERACY STRAND.



Concurrent Session Formats

Conference participants will see a wide variety of session types listed in the conference program. The different formats help us maximize the diversity and number of presenters. Session formats vary in length and degree of depth and interaction.

Workshop (full or half day)

Workshops are in-depth sessions that actively develop specific professional competencies and have widespread potential for implementation. Workshops are scheduled on Wednesday, prior to the formal start of the conference. Onsite registration is accepted as space allows; fees apply.

Symposium (90 minutes)

Symposia are panel discussions presenting different perspectives on a topic or question related to one of the focus points for each strand. Panels generally include at least three panelists and a moderator.

Hands-on Presentation (90 minutes)

Hands-on sessions provide participants with an opportunity to engage in teaching activities and interactive discussions about a particular topic.

Traditional Presentation (40 minutes)

Traditional presentations focus on a single topic or program, typically including a talk or media presentation followed by a short discussion.

Roundtable Discussion (40 minutes)

Roundtable discussions emphasize spirited discussion between the presenter(s) and session attendees. Presenters briefly introduce the baseline question they wish to explore, and then open the discussion for input and exchange of ideas. Multiple roundtable discussions occur simultaneously in one large room.

Poster Presentation (40 minutes)

Posters are two-dimensional printed presentations illustrating research studies, programs, or other work. Posters are fixed to bulletin boards for conference participants to review at leisure. In addition, all presenters will be available during the Exhibit Fair Luncheon on Thursday to share their posters, answer questions, and interact with attendees.

Bright Spot (10 minutes)

Bright spots are succinct talks that celebrate specific triumphs and showcase things that work. Each presenter has 10 minutes to highlight important research findings, and successful and innovative family programs, school programs, community partnerships, conservation achievements, and more. Two or three loosely related bright spots are presented back-to-back during each 40-minute time block.

Finding Sessions of Interest

Equity and Inclusion

NAAEE strives to dedicate at least 15 percent of our concurrent sessions within each strand to advancing equity and inclusion in EE. These sessions explore ways to strengthen our field through strategies and programs that, among others, help diversify our audiences as well as our workforce, build cultural competence, support environmental justice, engage with new audiences, forge new and lasting partnerships, honor traditional knowledge, and increase our reach and relevance throughout society.

Sessions marked with this icon have been identified using criteria developed by a team from NAAEE's Equity and Inclusion eePRO group as helping to meet this goal.

YP Young Professionals

NAAEE has planned several sessions specifically targeted to the needs of those who are in the early stages of their career. These include a skillbuilding clinic, presentations by NAAEE's EE 30 Under 30 honorees, and sessions about or for young professionals as identified by their presenters.

Sessions marked with this icon are suggested for early-career professionals. See page 32 for more information.

A Affiliate Network

Sessions marked with this icon are offered by and for leaders and members of the state and provincial organizations that comprise the NAAEE Affiliate Network. See page 30 for more information.



ee360 Partners

Sessions marked with this icon are offered by NAAEE and our partner organizations in the ee360 initiative, a cooperative agreement between NAAEE and US EPA. See page 28 for more information.

Keywords

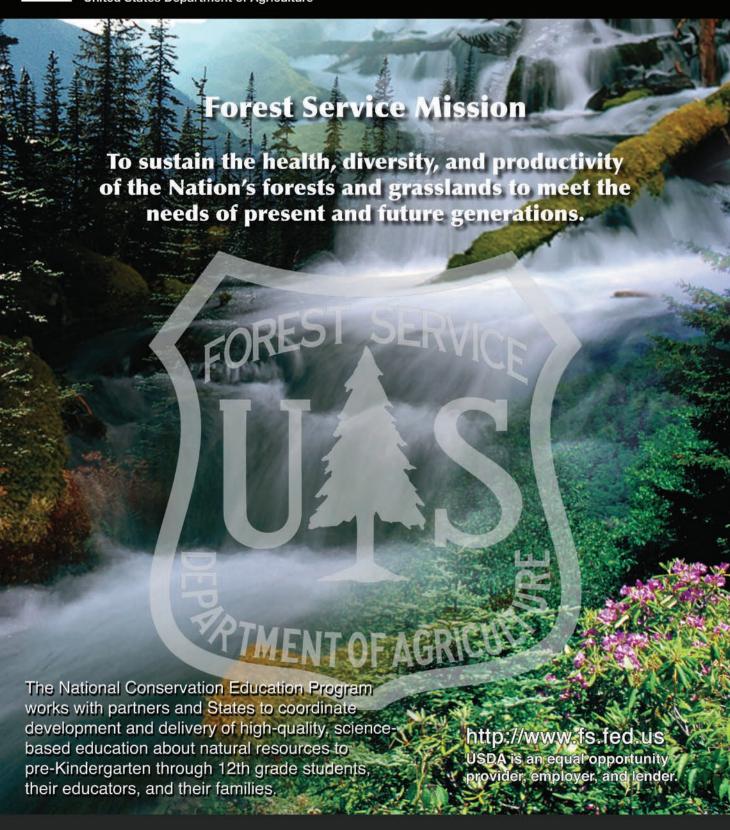
In addition, search on these tags in the mobile app to find sessions of particular interest in these areas:

Arts Capacity building Early childhood Elementary school programs Gardening International EE Middle & high school programs

NGSS/Common Core Spirituality **STEM** Traditional knowledge Underserved audiences



United States Department of Agriculture



HHMI MOVIE NIGHT AT NAAEE

OUR GORONGOSA

Our Gorongosa tells the eye-opening story of an iconic national park that is creating a new vision for conservation in the 21st century. A vision as invested in elevating the lives of the people — and especially the women — outside the park as it is to protecting the animals within it.



Join us for complimentary drinks and snacks Thursday, October 17 at 5:30 p.m. (film starts at 6:00 p.m.) Bluegrass Ballroom 2

Tangled Bank





Center for **NATURE & PLACE**

"Take learning beyond the classroom!"

Prescott's early education teacher preparation programs focus on empowering educators with the tools they need to nurture children's sense of curiosity and wonder. Our hybrid online program allows you to earn a Bachelor of Arts or Masters of Education from wherever you call home.

Interested? Prescott.edu/NPECE

220 Grove Avenue • Prescott, AZ 86301 • 877-350-2100• prescott.edu









Future Site of Monarch Waystation



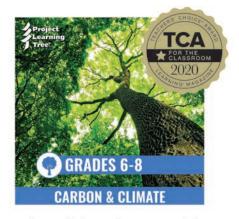


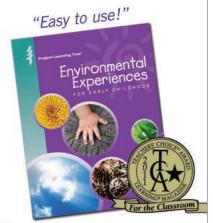


PROJECT LEARNING TREE AWARD-WINNING CURRICULUM

"Targets NGSS Standards"







"Extremely well thought out and thorough!"

Winner of multiple Teachers' Choice Awards from Learning® Magazine

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PLT is an initiative of SFI.



SCA Alum meet-up on Thursday!

SCA alums are invited to join us at HopCat from 5:30–7 p.m. for a FREE HAPPY HOUR to be followed by the official NAAEE Young Professional Networking event. Attend for your chance to win SCA swag and network with other alums in the field.

RSVP at http://bit.ly/SCA_NAAEE2019



Also, be sure to find the SCA table near the registration desk to get your SCA ALUM RIBBON to add to your name badge and other FREE SWAG!

Email pmalizia@thesca.org for more info.





Networking Opportunities

Stay Connected through eePRO!



NAAEE's professional development hub, eePRO, is the online place to connect, share, and learn! You can find resources, learn about new ideas and professional development opportunities, connect with people with similar interests, and continue the inspiring conversations that get started here at the conference. You can also attend NAAEE's monthly webinars, and discover new workshops and other training opportunities, the latest research, and much more.

Sign up today at naaee.org/eePRO/join-eePRO.



eeJOBS: Leading EE Job Listing Service



eeNEWS: Latest News from NAAEE and the EE Community

eeLEARN 🕥

eeLEARN: Online Learning Modules

eeRESEARCH *®*

eeRESEARCH: Connecting Research and Practice

eeWEBINARS A

eeWEBINARS: Bringing New Ideas and Innovation to the Field of EE

eeWORKS \(\nabla\)

eeWORKS: Research Reviews and Communication Tools



As part of ee360, NAAEE is continuing to build on the series of online learning modules exploring the foundations of environmental education with the newest module, Equitable and Inclusive EE. Coming soon to naaee.org/ eepro/learning/eelearn

Want to help test the module? Ask at the NAAEE Pavilion in the Bluegrass Lobby.





Join the Discussion: eePRO Groups

At the center of eePRO's group discussion platform are the 15 eePRO Groups—special interest groups created by and for our members and supporters. These forums offer the opportunity to discuss important subjects with experts, peers, budding environmentalists, and more. Enthusiastic moderators keep the discussions active, positive, inclusive, and informative.

Most of the eePRO groups will meet during Friday's lunch break and—whether you're a current member or want to develop new networking opportunities—you are encouraged to bring your lunch and join in! You can pick up a quick "to go" lunch at the concession stand in the Bluegrass Lobby the convention center.



LOCAL CULTURE

Kentucky Dulcimer (mountain dulcimer)

In 1880 Edward Thomas of Knott County, Kentucky began building and selling dulcimers. Due to its modest volume, it was mostly used as a parlor instrument suited for small home gatherings.

eePRO Group Meetings





Advocacy, Policy, and **Civic Engagement Thoroughbred 1**



Climate Change Education Regency Ballroom 1



Connecting to Nature Heritage Ballroom 3



Conservation and Behavior Change Heritage Ballroom 3



Data Literacy Heritage Ballroom 2



Early Childhood EE **Thoroughbred 4**



Equity and Inclusion Heritage Ballroom 1



E-STEM **Thoroughbred 1**



Global EE **Thoroughbred 1**



Guidelines for Excellence Regency Ballroom 2



Higher Education Regency Ballroom 3





Thanks to the US Environmental Protection Agency for supporting eePRO maintenance and enhancements through ee360.

Meetings & Gatherings

Affiliate Network Dinner

Tuesday, 7:00 PM-9:30 PM, HopCat Lexington (410 W. Short Street)

Informal networking dinner for Affiliate leaders, preregistration and payment required.

Coordinator: Brenda Metcalf

Cal Water H2O Challenge: Leadership Summit Thursday, 8:30 AM-11:00 AM, Mary Todd Lincoln By invitation.

Coordinator: Chris Hutton

eeBLUE Social

Thursday, 5:30 PM-6:45 PM, Patterson E-G

Join NOAA and NAAEE for an informal reception highlighting our eeBLUE partnership to advance ocean education and environmental literacy. Enjoy light hors d'oeuvres and a cash bar. Everyone welcome.

Coordinator: Bronwen Rice

eePRO Group Meetings Friday, 1:15 PM-2:00 PM

Several eePRO Groups are meeting over a brown bag lunch. See page 25 for groups and locations.

Environmental Professionals of Color Annual Meeting

Friday, 10:30 AM-11:10 AM, Thoroughbred 4

The Environmental Professionals of Color (EPOC) annual business meeting is open to EPOC members and potential members. Join us as we co-create a space to talk about what's on our minds, our challenges and successes, our hopes, and ways we can support one another.

EPOC is a program of the Center for Diversity & the Environment.

Coordinator: Queta González

Environmental Education Research Editors' Meeting Thursday, 8:30 AM-10:00 AM, Mary Todd Lincoln Working meeting for journal editors. By invitation.

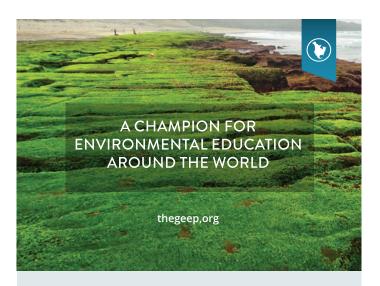
Coordinator: Alan Reid



LOCAL WILDLIFE

The Bluegrass State

Kentucky is known as the Bluegrass State. Bluegrass is not really blue—it's green. In the spring bluegrass produces bluish-purple buds that when seen in large fields give a blue cast to the grass.





GLOBAL 全球 ENVIRONMENTAL 環境 EDUCATION 教育 PARTNERSHIP 夥伴

GEEP Meeting

Monday, 8:30 AM-5:30 PM, Thoroughbred 1 By invitation.

GEEP Dinner

Monday, 7:00 PM, Saul Good Restaurant & Pub (123 N. Broadway)
By invitation.

Making the Most of the NAAEE Conference Wednesday, 4:45 PM-5:15 PM, Thoroughbred 4

Young professionals and first-time conference participants are welcome to join this brief orientation to the NAAEE conference, including keys to selecting sessions of interest, scheduling, networking opportunities, and more.

Coordinator: Lori Mann

NAAEE 2020: Share Your Ideas!

Saturday, 10:30 AM-11:10 AM, Mary Todd Lincoln

How can we improve on this year? We'd love to hear your thoughts. Come share your ideas and suggestions for our 49th annual conference, scheduled for October 13–17 in Tucson, Arizona.

Coordinator: Lori Mann

NAAEE Business Meeting Saturday, 9:20 AM-10:00 AM, Elkhorn B

Join NAAEE's board chair, executive director, board members, and staff for a discussion on the current state of the organization and future directions for NAAEE. Topics will include strategic planning, a financial report, and your questions. We welcome your input!

Coordinators: Charlotte Clark, Judy Braus

Queer Environmental Educators Network (QEEN) Gathering

Thursday, 4:50 PM–5:30 PM, Heritage Ballroom 1 Join us for the first-ever gathering of QEEN, the Queer Environmental Educators Network, for LGBTQ+ identified educators.

Coordinator: Rochelle Gandour-Rood

Student Conservation Association Alumni Networking Event

Thursday, 5:30 PM-7:00 PM, HopCat Lexington (410 W. Short Street)

Please join SCA staff and alumni as we gather to share stories from our service experience and professional accomplishments since.

Pre-registration through SCA required.

Coordinator: Patricia Malizia

Southeastern Environmental Education Alliance Meeting

Friday, 5:00 PM-6:00 PM, Regency Ballroom 1 Members of the southeast state Affiliates will meet to discuss current activities and opportunities for collaboration. Member states include Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee. Coordinator: Ashley Hoffman

University of Michigan School for Environment and Sustainability Gathering Friday, 5:00 PM–6:00 PM, Regency Ballroom 3 University of Michigan SEAS alumni are invited to attend a casual happy hour with drinks and light appetizers. This is a great opportunity to connect and catch up with fellow alumni. Current and prospective students are welcome.

Young Professional Networking Dinner & Drinks Thursday, October 11th, 7:00 PM, HopCat Lexington (410 W. Short Street)



Network with other young professionals over drinks and dinner at HopCat Lexington, a top beer bar with famous fries! Meet at the restaurant. Coordinators: Elise Trelegan, Danny Woolums



Community Service Project

Friday, 12:45 PM-2:45 PM

Transportation and a box lunch provided. Meet at the High Street Rotunda.

Isaac Murphy Memorial Art Garden Tree Planting Each year, NAAEE works with a local organization to organize a community service project through which conference participants can give back in a meaningful way to our host community. This year's conference coincides with Lexington's Tree Week, October 13–20, 2019, a celebration of Lexington's trees and all the ways trees impact our lives. The week celebrates and synthesizes the roles trees play through creative, informative, and funfilled activities, including community tree planting; educational programs for youth and adults; a Kentucky tree climbing competition; tree walks; tours and hikes; tree care and tree benefits; trees in art and culture; and trees' roles in our bodies, minds, and spirits.

As part of Tree Week, project participants will help plant trees at the recently established Isaac Murphy Memorial Art Garden. The park honors the contributions of African-Americans in the horse racing industry, including Isaac Murphy, a three-time Kentucky Derby winner whose home once sat on this exact site overlooking the Kentucky Association Race Track in Lexington's East End. Considered the greatest jockey of the 19th century, Murphy's legacy (as well as other African Americans) had been largely ignored in equine history until recently.

Three years ago, the first signature piece of art was placed in the art garden, which now needs additional trees to reduce the urban heat island effect by reflecting sunlight and providing shade for visitors, to increase community biodiversity, and to enhance the natural beautification.

Participation is limited to the first 20 people to sign up at the Information Station.



ee360 at the Conference

ee360 supports innovative environmental education across North America. NAAEE, through a cooperative agreement with US EPA and seven partner organizations, is leading an ambitious five-year initiative to support a diverse cadre of environmental education leaders who are better prepared to increase environmental literacy for everyone in their communities.

NAAEE is strengthening the field, advancing environmental literacy, and building a more inclusive movement that we hope will have both short- and long-term impacts. Together with our partners and advisors, NAAEE is bringing nearly five decades of expertise to our effort to grow, strengthen, and diversify the field of environmental education.

ee360 builds on 25 years of US EPA's long-standing commitment to support a nationwide effort to strengthen the field and support professional development. This effort supports innovative leaders in the environmental education field through leadership training, state-of-the-art education materials and research, networking opportunities, and an online hub where educators can share new approaches and best practices.

ee360 is powered by collaboration, and we couldn't do this work without the support of our amazing partners and advisors. As we near the end of the third year of this project, we're excited to share what we've collectively learned so far. To learn more about ee360's work, we invite you to participate in one or more of these sessions and visit ee360.org.

Look for this symbol marking ee360 sessions in the daily listings.

ee360 Pre-Conference Meetings and Workshops

Tuesday

ee360 Community EE Fellows Leadership Workshop 1:00 PM-5:00 PM, Kentucky By invitation.

The Road to NAAEE Higher Education Accreditation: A Map for Success 8:30 AM-4:30 PM, Elkhorn A Registration required.

Train-the-Trainer Workshop: NAAEE's Community **Engagement Guidelines for Excellence** 8:30 AM-4:30 PM, Heritage Ballroom 3 Registration required.

Building Inclusion by Exploring White Fragility and **Emotional Intelligence** 8:30 AM-12:00 PM, Regency Ballroom 1 Registration required.

Designing for Change: Connecting Environmental **Education Research and Practice** 8:30 AM-12:00 PM, Regency Ballroom 2 Registration required.

Introducing the Newly Revised *K–12 Environmental* Education: Guidelines for Excellence 1:00 PM-4:30 PM, Regency Ballroom 2 Registration required.

Where Civic Experience and Environmental **Education Connect** 1:00 PM-4:30 PM, Heritage Ballroom 1 Registration required.

ee360 Conference Sessions

Thursday

Learn About NAAEE's New EE Evaluation Portal! 8:30 AM-10:00 AM, Heritage Ballroom 1

Using Virtual Reality To Inspire Learning About New Zealand's Marine Environment 8:30 AM-9:10 AM, Elkhorn C

We're Updating and Revising—*Environmental* Education Materials: Guidelines for Excellence 8:30 AM-9:10 AM, Thoroughbred 2

A Conversation on Higher Education Accreditation 9:20 AM-10:00 AM, Thoroughbred 5

NAAEE's Nationwide Effort to Strengthen the Field: ee360

9:20 AM-10:00 AM, Elkhorn C

Flexing the Guidelines Trainer Bureau Model: A Pilot

10:30 AM-11:10 AM, Hyatt Suites

Hood 2 Farm

10:30 AM-11:10 AM, Elkhorn D

Alphabet Soup: Establishing Common Ground

Through Definitions

2:15 PM-2:55 PM, Thoroughbred 1

Designing Inclusive Professional Development for Educators

2:15 PM-2:55 PM, Thoroughbred 2

A Community Action Program for Teen Volunteers 3:05 PM-3:45 PM. Elkhorn C

Updated and Revised—K-12 Environmental Education: Guidelines for Excellence 4:00 PM-4:40 PM, Thoroughbred 1

Using the Guidelines for Excellence in College Classrooms 4:00 PM-4:40 PM, Thoroughbred 5

A Toolkit for Starting an Early Childhood **Nature-Based School** 4:50 PM-5:30 PM, Elkhorn C

Digging Deeper: How an App Can Teach Sustainable Decision Making 4:50 PM-5:30 PM, Elkhorn D

EE Certification: The Benefits of Being Certified 4:50 PM-5:30 PM, Thoroughbred 1

Youth Summits: Inspiring Stewardship and **Civic Engagement**

4:50 PM-5:30 PM, Thoroughbred 2





Cardinal

The cardinal is the state bird of Kentucky, adopted in 1926.

Friday

Diversity, Equity, and Inclusion: Strengths & **Growing Edges at Multiple Scales** 9:20 AM-10:00 AM, Thoroughbred 1

Asset-Based Communities and Timebanking 10:30 AM-11:10 AM, Elkhorn D

Sadhu for Green: Discovering Environmental **Connections in the Khmer Community** 10:30 AM-11:10 AM, Elkhorn C

eePRO Group Meetings

1:15 PM-2:00 PM, Locations vary, see page 25

Advocacy, Policy, and Civic Engagement Climate Change Education

Connecting to Nature

Conservation and Behavior Change

Data Literacy

Equity and Inclusion Early Childhood EE

E-STEM Global EE

Guidelines for Excellence

Higher Education

Empower Youth Through Social Enterprise, Sustainability, and Collaboration 2:15 PM-2:55 PM, Thoroughbred 1

Hurricane Island's Sustainability Through Engagement with Place (STEP) Teacher Cohort 2:15 PM-2:55 PM, Elkhorn D

School Pollinator Garden Project 2:15 PM-2:55 PM, Elkhorn A

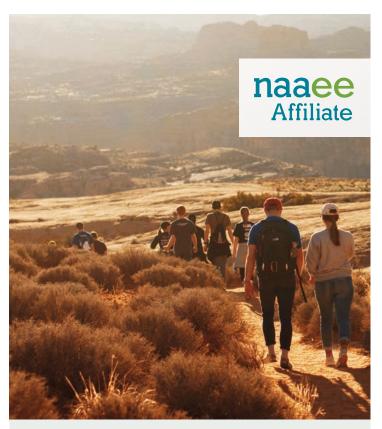
Using eeRESEARCH to Bridge the Researchto-Practice Gap

2:15 PM-2:55 PM, Elkhorn B

Shell Day & Community Approaches to Ocean and Coastal Acidification 3:05 PM-3:45 PM. Elkhorn D

The Importance of Youth Voice in Education 3:05 PM-3:45 PM, Thoroughbred 1

Water, Wind, and Fire: How to Rock Community & Citizen Science 4:00 PM-4:40 PM, Berea



NAAEE and the Affiliates: A Force for Nature

NAAEE and its 56 Affiliate organizations form the largest network of environmental educators in North America. Together, we are a driving force for creating a more environmentally literate citizenry through education. We have been working together for decades to build a robust and dynamic community of EE professionals and partners who understand the value and power of EE to ensure an equitable, sustainable, and vibrant world.

Each year, the NAAEE conference features a number of sessions designed by Affiliates, for Affiliates. This year, all Affiliate-focused sessions will take place in the Hyatt Suites, making it easier for participants to find content that meets the unique needs of Affiliate organizations. Morning sessions will feature traditionally styled conference presentations, while afternoon sessions will offer open space discussion and more free-formed networking and learning opportunities. Specific topics for afternoon sessions will be crowdsourced and co-created within the affiliate network as the conference unfolds.

(A) Look for this symbol marking Affiliate sessions in the daily listings.

Affiliate Sessions

Wednesday

Affiliate Workshop: Systems Thinking and Strategic Planning 8:30 AM-4:30 PM, Hyatt Suites Registration required.

Thursday

Making your Affiliate Flourish: Fundraising and Sponsorships 8:30 AM-9:10 AM, Hyatt Suites

Affiliates Bringing Back the BEETLES 9:20 AM-10:00 AM, Hyatt Suites

Flexing the Guidelines Trainer Bureau Model: A Pilot 10:30 AM-11:10 AM, Hyatt Suites

Affiliate Network Open Space 2:15 PM-3:45 PM, Hyatt Suites

Exploring the Status and Needs of the **Affiliate Network** 4:00 PM-4:40 PM, Hyatt Suites

Affiliate Heads Together 4:50 PM-5:30 PM, Hyatt Suites

Friday

Strategic Planning for Affiliates 8:30 AM-9:10 AM, Hyatt Suites

Governance: Boards Making a Difference 9:20 AM-10:00 AM, Hyatt Suites

EE Certification and NAAEE Accreditation: Here's What's New!

10:30 AM-11:10 AM, Hyatt Suites

Affiliate Committee Working Session 2:15 PM-3:45 PM, Hyatt Suites

Fill Your Dance Card! 4:00 PM-4:45 PM, Hyatt Suites



LOCAL CULTURE

Middlesboro, KY Middlesboro is the only city in the United States

built within a meteor crater.



Saturday

Affiliates and Advocacy 8:30 AM-9:10 AM, Hyatt Suites

Introduction to Crowdfunding: Using Your Team to Fundraise

9:20 AM-10:00 AM, Hyatt Suites

EE Associations: Making the Most of Membership 10:30 AM-11:10 AM, Hyatt Suites

Talking About EE: Crafting Messaging with Affiliates 11:20 AM-12:00 PM, Hyatt Suites

LOCAL WILDLIFE

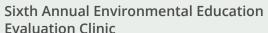
Swamp Rabbit

The swamp rabbit, or swamp hare, is a large cottontail rabbit found in the wetlands of western Kentucky. They are at home in water, with webbing between their toes to help them swim and walk through mud.



for Environmental Education

Professional Development Opportunities



Thursday, 2:15 PM-3:45 PM, Patterson Ballroom B

Do you have questions about evaluation or assessment? Bring them to NAAEE's sixth annual Evaluation Clinic, where you can ask questions of the experts and contribute your own relevant experience. Learn from evaluation experts as well as peers through informal, roundtable conversations. See page 82 for the list of expert participants. Coordinated by Kathryn Stevenson.



Fundraising Roundtables Thursday & Friday, times below, Thoroughbred 4 Sign up required.

How do I start conversations that lead to bigger gifts? How can I get my board members more engaged in fundraising? Is this project right for corporate or foundation support? Am I doing ANY of this right? Whether you're new to fundraising or a seasoned professional, bring your questions to NAAEE's fundraising roundtables, small group coaching sessions with fundraising consultants Lea Harvey and Krishna Roy.

Participation is limited and space will be filled on a first-come, first-served basis. Sign up at the Information Station.

Thursday 2:15 PM-2:55 PM
Thursday 4:00 PM-4:50 PM
Friday 9:20 AM-10:00 AM
Friday 10:30 AM-11:10 AM
Friday 3:05 PM-3:45 PM

With a background that spans environmental, higher education, and policy organizations, Lea Harvey is committed to building the capacity of the nonprofit sector to be a force for positive change. Across more than two decades, Lea has held fundraising and senior management roles at organizations like World Wildlife Fund, BoardSource, and Resources for the Future. She currently leads her own fundraising consultancy, LLH Strategy Advisors, LLC, based in Northern Virginia, and also serves as Director of Foundation and Corporate Relations for her alma mater, Sweet Briar College.

A social activist and strategist, **Krishna Roy** designs and implements laser-focused nonprofit management, fundraising, and communications programs to support social causes. She has created groundbreaking campaigns, produced awardwinning videos, built unlikely partnerships, and raised millions of dollars. Krishna serves on several boards including the Oceangate Foundation, Trust for Architectural Easements, and Sound Principles.

Especially for Young Professionals



NAAEE has planned sessions and activities specifically targeted to the needs of those who are in the early stages of their career. These include an expanded skill-building clinic, presentations by NAAEE's EE 30 Under 30 honorees, sessions identified by presenters as appropriate for young professionals, networking opportunities, and the awe-inspiring closing panel on Saturday.

Look for this symbol marking sessions for young professionals sessions in the daily listings.

Conference Buddies

If you're new to the conference and signed up through registration for a conference buddy, meet your partner immediately after the conference orientation on Wednesday at 5:15 PM in Thoroughbred 4 to set a meeting time and head to the opening reception.

Making the Most of the NAAEE Conference Wednesday, 4:45 PM-5:15 PM, Thoroughbred 4 Young professionals and first-time conference participants are welcome to join this brief orientation to the NAAEE conference, including keys to selecting sessions of interest, scheduling, networking opportunities, and more.

EE 30 Under 30 Bright Spots Thursday–Saturday, Elkhorn C

Eighteen of NAAEE's 2019 EE 30 Under 30 honorees are presenting bright spots about their inspiring work throughout the conference. Look for sessions marked "EE 30 Under 30 Honorees" in the daily session listings.

Young Professional Networking Dinner & Drinks Thursday, October 11th, 7:00 PM, HopCat Lexington (410 W. Short Street)

Network with other young professionals over drinks and dinner at HopCat Lexington, a top beer bar with famous fries! Meet at the restaurant: no-host event.

EE 30 Under 30: Young Leaders Making a Difference

12:00 PM-2:30 PM, Bluegrass Ballroom 2

To close the conference on a high note, NAAEE has brought together four inspiring young leaders from our EE 30 Under 30 honorees to share their stories and perspectives on how to develop leadership in the field of environmental education.



Young Professionals Clinic

Thursday, 8:30 AM–11:10 AM, Patterson Ballroom

Whether you're a student, just getting started on your career path, or in your first professional position, this clinic will help build essential skills that will help you now and in the future. Choose from sessions in two tracks: Job Seekers and Early-Career Educators.

Track 1—Job Seekers, Patterson Ballroom B

Sustaining an Effective Job Search 8:30 AM-9:10 AM

Too often, a job hunt involves hours of sifting through irrelevant posts on job search sites. This session will help you devise a more effective process, starting with strong application documents and culminating with strategies to better leverage your time, talents, and knowledge in discovering promising opportunities. Michael Cronk

Need To Know Networking 9:20 AM-10:00 AM

This program covers the four "Need To Know Networking" tips. Networking is essential throughout our entire lives, both with our careers and personally. This session will help overcome the jitters that often go with the thought of networking, as well as how to make the absolute most of every networking opportunity. Relevant to the conference at hand, participants will be armed and ready with networking know-how! Terri Thompson

Nail It! Acing the Interview and Getting Paid 10:30 AM-11:10 AM

An effective application can land you an interview, but the interview gets you the job. Learn best practices for preparing for and executing an effective interview. Additionally, entering salary negotiations, upon receiving an offer, requires research to provide evidence for your demands; tips and strategies will be provided to assist your efforts.

Michael Cronk

Track 2—Early Career Educators, Patterson C

Fundraising Essentials: Message, Momentum, and Mindset

8:30 AM-9:10 AM

Like it or not, every nonprofit employee is also a fundraiser and must build the relationships that enable their organizations to thrive. In this session, you'll learn how to craft fundraising messages and winning proposals, while creating the donor connections, forward energy, and rapport that make gifts happen.

Lea Harvey and Krishna Roy

Transformational Leadership 9:20 AM-10:00 AM

Using a transformational leadership model, we will explore how we want to show up as rising leaders in our organizations and the field of EE. Through facilitated activities we will experiment with tools that guide the cultivation of an abundance mindset moving us towards authentic leadership. Eileen Everett, Olivia Griset, and Charissa Jones

Game-Changing Communication 10:30 AM-11:10 AM

Take a look at the often overlooked power of how body language, first impressions, and business attire communicate far more than our words. Communicating with co-workers, colleagues, bosses, and staff is essential to every step of the career journey, and this program covers the ten habits of exceptional communicators.

Terri Thompson

Presenters:

Michael Cronk serves as the Associate Director of Career Development at Transylvania University, a private, liberal arts college, in downtown Lexington, KY. Michael has 16 years of experience in teaching effective job search and application strategies. Additionally, Michael served as Board Chair for Bluegrass Greensource, an environmental nonprofit serving 16 counties in central Kentucky.

For more than 15 years, **Eileen Everett** has worked as an environmental educator, personally teaching more than 25,000 New Mexican students around the state through mostly outdoor, multi-day programs. She deeply values an abundance mindset, education designed for all students, and a more equitable and inclusive world. Eileen has strong nonprofit experience, having worked in the social sector for over 15 years and serves as an Associate Facilitator for the Santa Fe Community Foundation's Emerging Social Sector Leaders Program.

Olivia Griset is the Executive Director of the Maine Environmental Education Association (MEEA) and the cofounder of the Maine Environmental Changemakers Network. Through a systems-thinking approach and the power of network weaving, Olivia works in collaboration to innovate solutions that result in more equitable, sustainable, and healthy communities. Olivia serves on the Affiliate Steering Committee for the NAAEE and is chair of the steering committee for the Maine Nature Based Education Consortium.

With a background that spans environmental, higher education, and policy organizations, Lea Harvey is committed to building the capacity of the nonprofit sector to be a force for positive change. Lea has held fundraising and senior management roles at organizations like World Wildlife Fund, BoardSource, and Resources for the Future. She currently leads her own fundraising consultancy, LLH Strategy Advisors, LLC, based in Northern Virginia, and also serves as Director of Foundation and Corporate Relations for her alma mater, Sweet Briar College.

Charissa Jones is a cis-gender Black Immigrant, Dutch Creole, Dutch Caribbean South American lesbian educator and advocate who provides organizational leadership for enhancing a collaborative, just, equitable, and inclusive Statewide Oregon Outdoor School Program. Originally from Suriname, Charissa is interested in (re)connecting folks to their environments and helping them feel welcomed and rooted. She's committed to and passionate about removing barriers and increasing access and opportunities for those often left out of the conversation.

A social activist and strategist, **Krishna Roy** designs and implements laser-focused nonprofit management, fundraising, and communications programs to support social causes. She has created groundbreaking campaigns, produced award-winning videos, built unlikely partnerships, and raised millions of dollars. Krishna serves on several boards including the Oceangate Foundation, Trust for Architectural Easements, and Sound Principles.

Terri Thompson is a nationally renowned speaker, author, and entrepreneur specializing in helping individuals succeed. Her programs are dedicated to inspiring and challenging people to achieve their own brand of wild success. Using humor and reallife lessons, it is Terri's goal to bring out the best in every person in her audience. Terri has delivered her powerful presentations to thousands across the country.



Partners and Supporters

Thank you to our partners and supporters!

This conference wouldn't be possible without the dedication of all the people on this list, as well as their employers and families. These amazing volunteers gave generously of their time and talents. There are also hundreds of others, not listed here, who pitched in to help along the way. Thanks to all of you for your hard work and willing spirits. You've brought this conference to life!

Conference Co-Chairs



Ashley Hoffman Kentucky Association for Environmental Education Communities Network

Jim Embry Sustainable

Conference Committees

Auction

Billie Hardin Henrietta Sheffel

Awards

Brenda Metcalf

Field Trips

Jim Embry Ashley Hoffman **Brittany Wray**

Program Production Kathy McGlauflin

Research Symposium Marcia McKenzie Olivia Aguilar

Scholarships

Becca Franzen Rochelle Gandour-Rood Svlvia Hadnot Jenny Hubbard-Sanchez **leanine Huss** Ruth Kermish-Allen Dottie Shuman Rachel Sowards Elena Takaki Alex Porpora James Vaught

Volunteers

Bruce Young

Wesley Bullock And our wonderful team of more than 75 onsite volunteers!

Strand Leaders

- **Building Leadership for Environmental Literacy** Dave Chase
- Connecting with Nature Jean Kayira
- Conservation and **Environmental Education** Michelle Eckman
- Educating for **Sustainable Communities** Lee Frankel-Goldwater
- Green Schools and Preparing for 21ST Century Careers Jennifer Ortega
- Linking Research and Practice to Increase Impact Justin Hougham Steve Kerlin

Young Professionals Initiative

Maya Alexander Mayesha Choudhury Lauren Gibson Olivia Griset Nina Hamilton Charissa Iones Lori Mann **Drew Price** Melissa Hopkins Taggart Elise Trelegan Anne Umali Danny Woolums

Conference Proposal Reviewers

Thank you to nearly 100 colleagues who diligently reviewed more than 600 proposals submitted for this year's conference, helping to shape the conference program. If you would like to volunteer to review proposals in 2020, watch for announcements in eeNEWS, NAAEE's email bulletin. We look forward to working with you to create another outstanding program in Tucson!

Conference Scholarships

NAAEE is proud to have provided funds to help more than 225 professionals and students attend the 2019 conference in Lexington. Our deepest thanks go to the following organizations, whose support made this possible. We share the important goal of making the conference, and the field of EE, more equitable and inclusive.









We are especially grateful to the many NAAEE members who contribute to scholarships through their William B. Stapp Scholarship Auction purchases and as part of their conference registration.

Cal Water H2O Challenge



NAAEE has joined with the California Water Service to create the 6th Annual Cal Water H2O Challenge, a project-based competition for schools seeking to enhance fourth, fifth, and sixth grade students' understanding of water-based science principles.

We are proud to recognize Emily Akimoto's fourthgrade class at Sierra View Elementary in Chico, California as the 2019 grand prize winner for their project titled "Protecting Paradise."

Emily's students felt a call-to-action after the Camp Fire devastated parts of the Chico community and neighboring towns including Paradise, California. The students researched and tested local watersheds, installed wattles and plants to preserve Butte Creek, and informed the local community on rebuilding efforts. The impact: cleaner water, fresh greenery, an informed community, and an outlet for student growth and remediation. Emily's class received a \$3,500 classroom grant and a science field trip to Yosemite National Park with NatureBridge.

The UL Innovative Education Award



In partnership with Underwriters Laboratories Inc. (UL), NAAEE announced the six recipients (pictured above) of the fifth annual UL Innovative Education Award. The award recognizes and supports nonprofits using science and technology as a pathway to engage students in addressing environmental concerns. Please join us in congratulating these extraordinary programs.

Grand Prize Winner:

\$100,000 Recognition Grant

Pine Jog Environmental Education Center by Florida Atlantic University

Pine Jog Environmental Education Center was one of the first environmental education centers in Florida and one of the oldest in the country. Dedicated to developing, researching, and disseminating highly effective educational programs and services for pre-K through post-secondary students that cultivate environmentally literate and engaged citizens, FAU Pine Jog offers a cadre of 14 programs emphasizing strong academic learning, creating lasting social relationships, and moving students of all ages along a progressive continuum toward E-STEM literacy.

Second Tier Winners

\$50,000 Recognition Grants

E4 STEM—Environmental Tribal Youth Camps

The E4 STEM—Environmental Tribal Youth Camps provide Native American youth in New Mexico the opportunity to engage with cultural leaders in environmental projects designed to increase their knowledge of both traditional and scientific knowledge. The camps cover environmental issues and how these issues impact tribal communities in particular. By making Western science relevant to Native American youth and by emphasizing existing traditional knowledge, youth become more engaged in learning E-STEM subjects to be better stewards of their ancestral lands.

CareerCLUE

Solar One's CareerCLUE is a unique summer youth employment program that blends for-credit academics, personal development, and engagement in environmental sustainability through career exploration and service learning. The program explores E-STEM through four units—Energy, Water, Materials Science, and Food—and is co-taught by a Solar One environmental educator and a licensed New York City science teacher. Through experiential learning, the program builds student knowledge and imparts the mix of skills necessary to thrive in the green careers of the 21st century.

Third Tier Winners

\$25,000 Recognition Grants

Maine Environmental Changemakers Network

The Maine Environmental Changemakers Network is a youth-led, statewide, intergenerational network that connects young Mainers who are passionate about the environment with peer and professional mentors, training, and the resources needed to implement environmental action in their communities. Youth and adults collaborate supporting the advancement of youth who are passionate about E-STEM, environmental education, and sustainable social change, building a hopeful community committed to mentorship, innovation, and the sharing of environmental ideas.

Wings Over Water by Montana Natural History Center

Wings Over Water (WOW) brings research into the hands of middle and high school students through the study of their local Ospreys. The program builds E-STEM expertise for teachers, who return to the classroom as mentors and research guides. Their students then begin a rich curriculum that crosscuts physics, biology, chemistry, math, engineering, conservation, and technology. Students lead the entire process of scientific discovery: asking and answering their own questions, presenting results, and taking action in their communities to solve problems and answer essential E-STEM questions.

Youth Energy Squad

The Youth Energy Squad (YES) grows the next generation of green leaders in metro Detroit by engaging young people in projects that make their homes, schools, and communities more sustainable for everyone. Each year, hundreds of YES students lead change through 60+ school green teams. These teams meet weekly to address a place-based sustainability issue central to their community and through this experience, students grow skills in E-STEM, hone their personal and professional leadership styles, and are exposed to green careers—all while making a tangible impact in metro Detroit.

For more information, visit **naaee.org/ ulinnovativeeducation**







LOCAL WILDLIFE

Mammoth Cave

Mammoth Cave, the world's longest cave, was first promoted in 1816, making it the second oldest tourist attraction in the United States. Niagara Falls, New York, is first.



Public Lands & Every Kid Outdoors

The Bureau of Land Management Supports Every Kid Outdoors



Calling all fourth graders! What do you know about America's federal lands and waters? You can find them almost everywhere! From Puerto Rico to Maine and Virginia to the Pacific Islands, some of America's most spectacular destinations await your discovery.

Beginning each September, if you are a US fourth grader you can download your own voucher to gain unlimited, free access to any federal lands or waters for a year!

Getting a pass is simple! Visit the "Get Your Pass" section of www.everykidoutdoors.gov, complete an online game, and download a personalized voucher to print and use at federal lands and waters locations.



KID OUTDOORS

As a fourth-grade educator, you can download an activity and print paper passes for each of your students.

www.everykidoutdoors.gov

Protecting Human Health and the Environment Through Education



Visit us at Booth #18 at Bluegrass Ballroom 1







EE 30 Under 30 Young Leaders Making a Difference

The Global Environmental Education Partnership, NAAEE, Wells Fargo, and US Forest Service are recognizing 30 young leaders from around the world as the top young changemakers in environmental education for 2019.

Since 2016, the EE 30 Under 30 program has highlighted the work of 120 young professionals using environmental education to forge a sustainable future. This incredible group consists of teachers, conservationists, researchers, and social entrepreneurs who are addressing issues that range from mitigating tensions between humans and wildlife, to mobilizing students to take climate action. Four of these young leaders will share their stories and perspectives on developing leadership in the field at the closing luncheon on Saturday, and additional honorees will present their work in Bright Spots throughout the conference.







Learn more about all of this year's honorees at naaee.org/ee30under30.

Anoka Primrose Abeyrathne, 28, Moratuwa, Sri Lanka Sara Alamo, 28, Córdoba, Argentina Nicole Andreou, 28, Copenhagen, Denmark Jasveen Brar, 24, Medicine Hat, Alberta, Canada Beatriz Cañas, 30, Chicago, Illinois, United States Dyson Chee, 17, Honolulu, Hawaii, United States Raquel Condori, 29, Puerto Maldonado, Peru Kim Alvin C. De Lara, 28, Pililla, Philippines Erinn Drage, 24, State College, Pennsylvania, United States

Emmanuel Ken Ekwerem, 26, Oji River, Nigeria Pangaea Finn, 14, Boise, Idaho, United States Lyndsey Franklin, 23, Lisle, Illinois, United States Niria Alicia Garcia, 27, Oakland, California, United States Alex Goetz, 27, Toledo, Ohio, United States Corrie Grosse, 29, St. Joseph, Minnesota, United States Veronica Lin, 25, Stanford, California, United States Rumbidzai Pamela Magwiro, 26, Victoria Falls, Zimbabwe Mariam Kabamba Merry, 30, Lubumbashi,

Democratic Republic of Congo
Ajay Mittal, 29, Kolkata, India
Charles Mugarura, 28, Kampala, Uganda
Alerick Pacay, 27, Guatemala City, Guatemala
Ananda Winny Mezha Puteri, 20, Masohi, Indonesia
Stephanie Quon, 18, Vancouver, British Columbia,
Canada

Sean Russell, 27, Englewood, Florida, United States Anna Tari, 30, Boston, Massachusetts, United States Vermon D. Timbas, 30, Quezon City, Philippines Kimi Waite, 30, Los Angeles, California, United States Quek Yew Aun, 27, Kuala Lumpur, Malaysia Adam Young, 29, Ottawa, Ontario, Canada Eduarda Zoghbi, 26, Brasília, Brazil



Keynote Speakers



The distinguished group of keynote speakers for our 2019 conference includes a leader who has helped protect more than one million acres of land, another who test rode a wooden bike on the PLT Canada Green Ride for Green Jobs, the recipient of a Community Star Award for volunteering and giving back to the community, the founder of the National Farm to School Network, a researcher who sees the lotus flower as a symbol of hope, and a fan of Peter Falk.

In keeping with our conference theme—*Educating for a Just and Sustainable Future*—each of these compelling speakers will help us think creatively about using the power of education to meet today's challenges and create a more sustainable future. They have inspired and empowered countless individuals, and we hope they will inspire and empower you too.

Wednesday



John Flicker
President, Prescott College
6:30 PM-8:30 PM, Bluegrass
Ballroom 2

John Flicker is the President of Prescott College in Prescott, Arizona, a position he has held since 2014.

Before Prescott College, he was president of the National Audubon Society in New York City for 15 years. During his tenure at Audubon, he was best known for creating a network of over 40 Audubon Nature Centers in communities across the country, with many of them located in low-income urban areas. He also led Audubon's efforts to protect critical habitat from the Everglades to the Arctic National Wildlife Refuge.

Prior to leading the Audubon Society, John worked with The Nature Conservancy for over 20 years in various positions around the country, including Midwest Regional Attorney, Great Plains Director, Florida State Director, General Counsel, and Executive Vice President in the Conservancy's Arlington Virginia Headquarters.

John is a former member of the board of directors of the Heinz Center for Science, Economics, and the Environment in Washington DC, and former founding co-chair of the Blue Sky Funders Forum, a foundation affinity organization dedicated to advancing environmental education. He is currently Chair of the Board of Directors of the George B. Storer Foundation in Jackson, Wyoming.

John grew up on a family dairy farm in Pierz, Minnesota, which his brother still operates. He completed his undergraduate studies at the University of Minnesota and received his Juris Doctorate from William Mitchell College of Law.

Thursday



Mona Chalabi
Data Editor, *The Guardian*11:30 AM-12:30 PM, Bluegrass

Mona Chalabi is a journalist who really loves numbers. She is the Data Editor of *The Guardian* where

she writes articles, produces documentaries, and illustrates, as well as animates, data. She is also a data journalist for *NPR*.

Ballroom 2

After analyzing statistics for the United Nations, Mona Chalabi saw how important data was, but also how easily it could be used by people with their own specific agendas. Since then, her work for organizations like Transparency International and *The Guardian* has had one goal: to make sure as many people as possible can find and question the data they need to make informed decisions about their lives. She gives speeches and teaches courses on data journalism, and when she can, she illustrates data. Her illustrations were commended by the Royal Statistical Society; they said, "Her deceptively simple graphs are fun and accessible."

Mona also helped create the Emmy-nominated fourpart video series "Vagina Dispatches" which explores the physical, social, and sometimes political dynamics that surround women's bodies. She also hosts Vice's TV program "The Business of Life," a new kind of talk show that breaks down the financial machinery behind some of the most important issues of our time. Mona has a master's degree in International Security from the Paris Institute of Political Studies and has worked for *FiveThirtyEight*, the Bank of England, the *Economist Intelligence Unit*, and the International Organization for Migration.

Mona lives in New York City. The only thing you need to know about her personal life is that she loves Peter Falk.



LOCAL CULTURE

Fort Knox

The United States Bullion Depository, often known as Fort Knox, is a fortified vault building located adjacent to the Fort Knox Army Post, two hours west of Lexington. It is operated by the Department of the Treasury and currently stores over half of the United States' gold reserves.

Friday











PLENARY SESSION

Kathy Abusow, Kevin Butt, Nikole Collins-Puri, and Simone Friedman Moderated by Anupama Joshi

Friday Flash Talks: Educating for a Just and Sustainable Future 11:30 AM-12:45 PM, Bluegrass Ballroom 2

From sustainability at Toyota to the connection between climate change and what we eat, from championing equity in STEM to fair access to economic opportunity for all girls, this series of flash talks will give you a sense of how five experts are thinking about how we can work together to educate for a more just and sustainable future.

Anupama Joshi joined Blue Sky Funders Forum as executive director in December 2018. She is an accomplished leader in the nonprofit and social sector in the United States and abroad. She was previously executive director of the National Farm to School Network, which she co-founded in 2007, building a movement to incorporate local procurement, gardens, and food and farm education in schools and early care sites across the United States. She has excelled in developing policies, programs, and partnerships; fundraising; and managing organizations through phases of growth and change. Anupama is a firm believer in the power of networks and collaboration to enable lasting change, and has embodied that throughout her career. She is co-author of Food *Justice* (MIT Press, 2010), developed "Evaluation for Transformation," a pioneering cross-sector framework for farm to school research and evaluation, and regularly speaks at national and international events. She has advised the United States Department of Agriculture on the Farm to School Census, and served on the board of directors for FoodCorps and the Community Alliance with Family Farmers. Anupama

currently serves on the board of directors for the Farmers Market Coalition and provides mentorship to emerging leaders through the Community Food Systems Mentorship Program. She is a mom, loves to travel and cook, and currently lives in Cary, North Carolina.

Kathy Abusow is President and CEO of SFI Inc., a nonprofit sustainability leader dedicated to future forests. Under Kathy's leadership, SFI has evolved into a solutions-oriented sustainability organization that advances sustainable forestry through its work across four key pillars: standards, conservation, community, and education. Kathy is committed to enhancing the societal benefits that come from sustainable forests. The creation of SFI's Education pillar and the acquisition of Project Learning Tree (PLT), an award-winning education program that educates teachers and youth about forests and the environment, is an important part of this strategy. Under Kathy's leadership, forests certified to the SFI Forest Management Standard have grown to more than 300 million acres. She has created or expanded a variety of initiatives such as the SFI Conservation and Community Grants Program, and has signed MOUs with Habitat for Humanity International and Habitat for Humanity Canada focused on building sustainable housing and supporting Habitat's Indigenous Housing Program. Kathy is also a founding member of Nature Canada's Women for Nature Initiative, the Habitat for Humanity of Greater Ottawa's Women Build Leadership Team, and the National Steering Committee for Gender Equity in Canada's Forest Sector. She has led, moderated, and spoken at well-respected international forums including the Greenbuild International Conference "Women in Green Power Breakfast in DC," the Economist's World Forest Summit in Stockholm, the World Business Council for Sustainable Development, Fortune Brainstorm Green, and at TEDxWilmington. Kathy has an undergraduate degree from McGill and a graduate degree from Harvard.

Kevin Butt is the Director of Environmental Sustainability for Toyota's North American Environmental Sustainability Programs. He is responsible for the development of Environmental Sustainability Programs and related Regulatory/ Legislative development for all of Toyota's North American operations, and has helped shape sustainability for one of the world's top automakers. Previously, Kevin served as the general manager/ chief environmental and safety officer for Toyota Motor Engineering & Manufacturing for all of Toyota's manufacturing operations. He also served as the

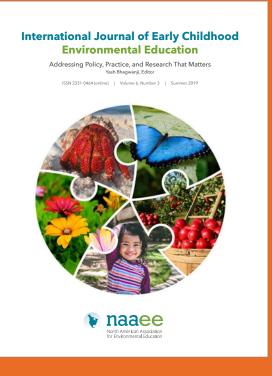
assistant general manager of body production engineering for Toyota Motor Manufacturing North America, Inc. Kevin serves on several boards including the National Wildlife Habitat Council, Kentucky Fish and Wildlife Foundation, World Wildlife Fund National Council, North American Great Plains Advisory Board, Yellowstone Park's Yellowstone Forever Board, and the National Environmental Education Foundation. He served on the Association of Fish & Wildlife Agencies' Blue Ribbon Panel on Sustaining America's Diverse Fish and Wildlife Resources, and was given the Toyota Community Star Award for volunteering and giving back to the community to a very high standard. Kevin has a Bachelors of Science degree in Environmental Science from Georgetown College.

Nikole Collins-Puri is a social justice visionary, strategist, advocate, and mentor who has committed her life to unleashing the potential of untapped communities. She's the CEO of Techbridge Girls, a nonprofit organization that excites, educates, and equips girls from low-income communities through STEM, empowering them to pursue STEM careers and achieve economic mobility and financial security as adults. Nikole is a master collaborator who is able to leverage her rich professional experiences in tech, philanthropy, and education to bring diverse groups of stakeholders together to urge social change in our communities. She's committed to removing barriers and increasing access and opportunities for all those who are often left behind but essential to the success and growth of our society. Prior to Techbridge Girls, Nikole worked at AT&T where she spearheaded their diversity and inclusion efforts, at the College Board where she advised states on their college completion strategy for Black and Latinx students, and at the Women's Foundation of California where she advanced women's economic security by supporting and awarding grants to visionary grassroots organizations. Nikole holds a BA in Political Science from the University of South Florida and an MPA from City University of New York.

Simone Friedman is the Head of Philanthropy and Impact Investment for EJF Philanthropies, managing grantmaking efforts across sectors, including those related to supporting impact campaigns for documentary films and nonfiction books. Simone is currently serving as the impact producer for the Eating Animals film, directed and produced by Christopher Quinn. She is also managing the impact campaign for Jonathan Safran Foer's new book, We Are the Weather: Saving the Planet Begins at Breakfast, published by Farrar, Straus and Giroux in the USA in September 2019. Prior to her involvement with EJF Philanthropies,

Simone founded and later sold an analytics company that used proprietary software to identify trends in patenting. Simone graduated summa cum laude from George Washington University, which she attended on an academic honor scholarship, and she holds a Master's of Urban and Environmental Planning degree, with a concentration in Policy Analysis, from the University of Virginia. Simone serves as a member of the board of Global Wildlife Conservation and is the vice chair of the board for Sixth & I Historic Synagogue in Washington, DC. She is an Honorary Conservation Fellow for the Zoological Society of London, and is active in several networks for philanthropists and impact investors.

The only academic journal devoted to early childhood environmental education is available exclusively from NAAEE. Download your free copy at naaee.org.





LOCAL CULTURE

Berea College, founded in 1855

Berea College is a private liberal arts work college in Berea, Kentucky. It is the first interracial and coeducational college in the South and charges no tuition; every admitted student is provided the equivalent of a four-year scholarship.

Saturday



PLENARY PANEL

Veronica Lin, Rumbidzai Magwiro, Alerick Pacay, Sean Russell Co-Moderated by Taiji Nelson and Danni Washington

EE 30 Under 30: Young Leaders Making a Difference 12:00 PM-2:30 PM, Bluegrass Ballroom 2

To close the conference on a high note, NAAEE has brought together four inspiring young leaders from our EE 30 Under 30 honorees to share their stories and perspectives on how to develop leadership in the field of environmental education.

Veronica Lin, 25, is a PhD candidate in Learning Sciences & Technology Design at the Stanford Graduate School of Education. Combining her interest in technology with her passion for working with kids, Veronica's research is focused on how we can use technology responsibly, ethically, and in engaging, interesting, and creative ways to engage young people in learning. Co-design, a practice that includes stakeholders in the design process, plays an important role in her efforts to connect computer science and environmental education. One of her current projects examines how augmented reality can be co-designed for redwood park settings to strengthen climate change education in an equitable and sustainable way.

Rumbidzai Magwiro, 26, is a Community Conservation Manager with the African Lion & Environmental Research Trust (ALERT) in Victoria Falls, Zimbabwe. Her role is to work with communities on conservation projects, and help them learn how to conserve their environment while benefiting from it in a sustainable manner. Working in an area where human-wildlife conflict is common, she also helps students in rural schools understand the importance of wildlife and how to protect themselves when living alongside wildlife. Growing up, Rumbidzai always wanted to have a career

in wildlife conservation and research, and has found her calling by combining these fields with conservation education to foster lasting change in the communities she works with.

Alerick Pacay, 27, is the founder and CEO of Semillas del Océano (SDO), meaning "Seeds of the Ocean," based in Guatemala. Born in a small village in northern Guatemala surrounded by rivers and mountains, Alerick grew up with a fascination for marine life through popular movies and documentaries. Since founding SDO, Alerick has led a wide range of programs that use education, science, and community action to promote sustainable use of the ocean and marine life. Their projects have included building exchange stores where students can exchange recyclable materials for food, and training teachers as "replicators of change" that can design and lead community-based environmental campaigns.

Sean Russell, 27, manages the EarthEcho Water Challenge at EarthEcho International, a global citizen science program that has engaged over 1.5 million participants from 146 countries, connecting young people around the world to their local waterways through water quality monitoring and equipping them with the tools to protect their water resources. Sean is also the founder and director of the Youth Ocean Conservation Summit, which empowers youth with knowledge and resources to launch solutionsoriented ocean conservation projects across the United States. He has committed his career to designing and leading initiatives to empower young environmental changemakers, with a focus on providing tools for education and community engagement.

Danni Washington is the first African American/ woman of color to host an American science TV show! That show, Xploration STATION: Nature Knows Best, is a STEM educational TV show syndicated nationwide on FOX and now also available on Amazon Prime. In 2017, Danni was selected as one of the TOP 10 young rising innovators and was profiled in CA Technologies #STEM10 initiative alongside Jaden Smith and other rising stars in the space. Most recently, Danni served as a spokesperson for the nation's largest celebration of STEM at the USA Science & Engineering Festival in Washington DC. She is a graduate of the University of Miami with a degree in Marine Science & Biology; she is also the co-founder of the nonprofit Big Blue & You, co-creator of Sea Youth Rise Up, a scuba diver, inspirational speaker, science communicator, digital influencer, and overall lover of the environment and ocean.

Taiji Nelson is a naturalist educator with the Pittsburgh Parks Conservancy. He is passionate about getting young people outside to explore and connect with nature in cities, and his education philosophy prioritizes firsthand experiences in nature and strong peer-mentor relationships. Taiji works primarily with middle and high school students, studying urban ecosystems and undertaking hands-on restoration projects to improve the health of parks. Originally from rural Pennsylvania, Taiji's experiences have highlighted the importance of community when learning, and have motivated him to design programs that engage students, parents, teachers, and mentors to form meaningful relationships with other natureminded people.



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Follow @TheNAAEE on Instagram for NAAEE2019 photos and videos!



Access our conference mobile app via your app store: Download "CrowdCompass AttendeeHub" and search for "NAAEE".





LOCAL CULTURE

Jean Ritchie

The dulcimer entered the urban northeast folk music revival scene largely due to Kentuckyborn musician Jean Ritchie, who performed and recorded extensively and published the first major instruction and repertoire book in 1963. Ritchie is regarded as "The Mother of Folk" with a career spanning over five decades.



Special Events

Wednesday

Opening Reception with Exhibits, Share Fair, and Authors' Corner

5:00 PM-6:30 PM, Bluegrass Ballroom 1, Bluegrass and Thoroughbred Lobbies

Welcome! Whether this is your first NAAEE conference or your thirty-first, it starts here! Meet new colleagues and greet returning ones as you enjoy substantial hors d'oeuvres and a cash bar at the opening reception of the conference. Our annual Exhibit Fair kicks off during the reception—your first opportunity to chat with exhibitors and explore wonderful resources and programs. A variety of nonprofit organizations will also share their inspiring efforts at this year's Share Fair, with tabletop displays highlighting their work in Kentucky and beyond. You can also meet a number of NAAEE members and other writers in the Authors' Corner. They will be happy to discuss, sign, and sell their newest publications, and chat about writing and publishing in the environmental education field.



The reception will also feature animal ambassadors from the Salato Wildlife Education Center in nearby Frankfort, Kentucky. NAAEE board and staff members will be there to greet you, and answer any questions about NAAEE and the 2019 conference. And it's a great time to begin bidding on your favorite items in the silent auction. Come connect with colleagues and begin to foster relationships that we hope will continue far beyond the conference.

Share Fair

- Bow Seat Ocean Awareness Programs
- Cecilia Berg Center for Environmental Education and Hefner Museum of Natural History
- · City of Eureka Parks and Recreation
- Community Nature Connection
- Florida Institute of Technology
- The GLOBE Program
- Greenville County Soil and Water Conservation District
- HHMI Tangled Bank Studios
- Hurricane Island Center for Science and Leadership
- Indiana Dunes
- International Wolf Center
- IslandWood
- National Geographic Society
- Ohio Water Education Program–Project WET
- Reynolda Gardens, Wake Forest University
- Southeastern Cave Conservancy, Inc.
- Stroud Water Research Center
- Sumak Kawsay In Situ Center for Environmental Formation
- The Wild Center
- University of Kentucky–Department of Landscape Architecture
- World Resources Institute

Authors' Corner

Patty Born
Louise Chawla
Jess Gold
Karen Lanier
Anita Sanchez
Kelly Smith Trimble
George Steele
Marc Stern
Paul Steury



"Making the Most of the Conference," a half-hour orientation for anyone new to the NAAEE conference, will be held at 4:45 PM in Thoroughbred 4.

Wednesday

Conference Opening Ceremony

6:30 PM-8:30 PM, Bluegrass Ballroom 2



Immediately following the reception, we'll officially get started, kicking off the opening ceremony with a lively rap by local artist, educator, and writer Trevor Claiborn (aka Farmer Brown), who creatively engages young people in urban agriculture. Executive Director ludy Braus and Board Chair Charlotte Clark will share opening remarks, including an introduction to the conference and an update on what's new at NAAEE. Then, our featured speaker, John Flicker, president of Prescott College and former CEO of the National Audubon Society and the former Executive Vice President of The Nature Conservancy, will take the stage for our opening keynote address. John is a lifelong conservationist, social justice advocate, and environmental education supporter, working to create a more just and sustainable future. At Audubon, he helped create a network of urban nature centers to ensure that all communities had access to the benefits of nature. And at Prescott, he works to ensure that Prescott College educates students of diverse ages and backgrounds to understand, thrive in, and enhance our world community and environment. He's committed to interdisciplinary learning and empowering the next generation to be leaders in addressing current and future environmental and social challenges.

The opening reception and opening ceremony are included with full conference registration with RSVP in advance. Additional tickets can be purchased as space allows; check for details at the registration desk.

Thursday

A Morning Welcome from the Kentucky Native American Heritage Commission's Helen Danser

7:45 AM-8:15 AM, Regency Ballroom 2



NAAEE is gathering this year on the ancestral lands of the Shawnee. Joining us today for a very special welcome is Helen Danser, Chair of the Kentucky Native American Heritage Commission. Helen has been involved in Native American Indian events in Kentucky since 1998. She is an enrolled and voting

member of the Piqua Shawnee Tribe of Alabama. She has represented Kentucky's Indigenous People at numerous presentations in schools, churches, and organizations, and has served with the Circle of Wisdom Unity Conference and the Kentucky Indigenous People, and has represented her tribe and the people of Kentucky at the National Congress of the American Indian for several years, in addition to the Governors' Interstate Indian Council.

Helen will share her thoughts on the original people of Kentucky, tribes in Kentucky today, historic sites in Kentucky and their protection, and issues that affect Kentucky Indigenous today. In addition, she will address implementation of the commission's mandate.





LOCAL WILDLIFE

Red Salamander

A streamside salamander typically found in or near springs, seepages, and cool clear brooks, plus the surrounding woodlands or swampy areas. It feeds on a variety of invertebrates, but especially earthworms.

Exhibit Fair Luncheon, Poster Sessions, and Affiliate Welcome

12:45 PM-2:15 PM, Bluegrass Ballroom 1, Bluegrass and Thoroughbred Lobbies

The Exhibit Fair will be open from Wednesday evening through Friday afternoon for you to explore innovative programs, dynamic practices, and effective products. And you can help us celebrate by joining us for this great buffet luncheon.

During this special event, you can chat with exhibitors eager to connect you with the latest and greatest in environmental education products and services. In addition, many of our colleagues will be in the Bluegrass and Thoroughbred Lobbies to share their poster presentations and discuss their work.

The NAAEE Affiliates will also be on hand to welcome you and share information about the many services they offer to their members on the state and provincial levels. Learn how the Affiliates are helping to develop state environmental learning plans, find out which states have environmental educator certification programs, and check out other professional development opportunities in your area.

The luncheon is also a great time to bid on fabulous finds in the silent auction or drop a couple of tickets into a raffle item bucket. Take advantage of this opportunity for networking and enjoying a good meal—it's included with your Thursday or full conference registration with an RSVP in advance. Additional tickets can be purchased as space allows; check for details at the registration desk. Exhibitors are listed on page 135.

HHMI Movie Night: *Our Gorongosa* 5:30 PM-7:00 PM, Bluegrass Ballroom 2



hhmi Tangled Bank Studios

Join HHMI Tangled Bank Studios for Movie Night, featuring *Our Gorongosa: A Park for the People.* The film explores a new vision for conservation in Mozambique that benefits both the animals in the national park and the people living around it, especially girls and women.

The film follows Dominique Gonçalves, a vibrant Mozambican ecologist who runs the Gorongosa elephant ecology project, as she shares the myriad ways Gorongosa is redefining the identity and purpose of an African national park. From her own work mitigating human/elephant conflict; to community clubs and school programs that empower girls to avoid teen marriage and pregnancy; to health clinics and nutrition training for expectant mothers and families; Dominique leads viewers on an emotional and eye-opening journey that will transform their understanding of what a national park can be. Enjoy refreshments before the film. This event is free and open to all, but advance registration is requested. Check for available space at the door. See the advertisement on page 21.

eeBLUE Social

5:45 PM-7:00 PM, Patterson Ballroom E-G

Join NOAA and NAAEE for an informal reception highlighting our eeBLUE partnership to advance ocean education and environmental literacy. Hors d'oeuvres and a cash bar. Everyone welcome.





Bourbon & Brew

7:00 PM-10:00 PM, Meet at the Registration Desk



What better way to meet new colleagues than to spend your open evening networking over a few drinks? Join Bourbon & Brew and visit three nearby Lexington nightspots to enjoy Kentucky bourbon, beer, a light dinner, and great conversation. The venues—Creaux, Saul Good, and Thirsty Fox—were selected for their local flavor. Meet at the Registration desk at 7:00 PM to check in and pick up your drink tickets. This is a walking event; the group will move together to each venue.

Friday

A GUIDED TRIP OF A LIFETIME

NAAEE Annual Auction

Three fun ways to win treasures in all price ranges!



Uganda Great Ape Safari NAAEE is partnering with GLOBIO to offer this amazing once in a lifetime opportunity to experience the gorillas and chimps of Uganda with GLOBIO director and award-winning great ape

film-maker Gerry Ellis as your guide.

EXPERIENCE GUADELOUPE

Live Auction

Friday night's gala

Featured items include a trip to Guadeloupe, handcrafted pottery, signed prints, bundles of huggable plush animals, surprise experiences, and lots more!



Silent Auction

Wednesday evening through Friday

New this year: easy online bidding from anywhere on the premises. Create your account at 32auctions.com/ NAAEEAuction2019. Get alerts when you're outbid to make sure yours is the final entry! Volunteers at the auction tables in the Bluegrass Lobby can help you bid on your smart phone or NAAEE's tablets.

Most items will be up for auction until the Friday night gala, but special sections will close each day, so check back often.

Bucket Raffle

Wednesday through Friday

Buy your \$1 bucket raffle tickets (15 for \$10, 50 for \$20) from the volunteers at the auction tables. Drop your ticket into the bucket for items ranging from books and T-shirts to free registration for NAAEE's 2020 conference and \$500 gift cards. Winning tickets will be drawn at the gala on Friday.





7:00 PM-9:30 PM, Patterson Ballroom



Don your Derby hat, fascinator, or bow tie for Bourbon and Blues, our last night together and a celebration of Lexington as the Horse Capital of the World.

The Tee Dee Young Band, a famous blues band from Lexington that has won several national blues band recognitions, will provide entertainment. While playing his own unique style of the blues, Tee Dee's dynamic stage presence, exciting harmony, and energy will put you in the mood for dancing! So wear your dancing shoes because it's going to be a party... Kentucky style!

Get your photo taken with the Big Lex, the iconic blue horse of Lexington, learn about famous African American jockeys from "Walking Talking History" books, decorate your own Derby hat or bow tie, and watch artist Enrique Gonzalez create a beautiful painting of horses that will be auctioned off later in the evening.

William B. Stapp Scholarship Auction



And don't forget to bring your wallet to bid on your favorite items in the energetic live auction, which features special treasures in all price ranges, including a fabulous trip to Guadeloupe (a small island in the Caribbean), amazing photos by the renowned Gerry Ellis, handcrafted pottery by NAAEE's own Martha Monroe, and more!

New this year will be the "Dash for Cash!" In arguably the most exciting three minutes of the conference, Board Chair Charlotte Clark and Board Secretary Jaime González will compete against conference co-chairs Ashley Hoffman and Jim Embry as they dash among the audience collecting as much cash as they can. Come see what fate awaits the losing pair!

The silent auction will culminate right before the live auction begins. Be there to post your final bid and snatch up a great variety of arts and crafts, jewelry, clothing, pottery, and much more.

Every auction purchase helps support scholarships that enable students and other professionals a chance to attend the conference. The scholarship fund was established in honor of Dr. William Stapp (1930-2001), one of the founders of the field of environmental education. Bill was a huge supporter of NAAEE and introduced many of his students and colleagues to the association and the conference. Many "Stapplings" have gone on to fill leadership roles in the organization.

This action-packed, fun-filled evening is included with Friday or full conference registration with RSVP in advance. You'll need to show your name badge for entry. Additional tickets can be purchased as space allows; check for details at the registration desk.



LOCAL CULTURE

Bourbon

Bourbon is America's only native spirit and Kentucky is the birthplace of bourbon. Ninety-five percent of the world's supply is crafted here. What makes bourbon, bourbon? It must be made with a minimum of 51 percent corn, aged in charred new oak barrels, stored at no more than 125 proof, and bottled at no less than 80 proof.



Saturday



NAAEE Awards Luncheon & Closing Panel EE 30 Under 30: Young Leaders Making a Difference

Veronica Lin, Rumbidzai Magwiro, Alerick Pacay, Sean Russell. Co-Moderated by Taiji Nelson and Danni Washington

12:00 PM-2:30 PM, Bluegrass Ballroom



Join us as we recognize the NAAEE award recipients at the annual Awards Luncheon. We will honor individuals and organizations for their laudable work on behalf of the environment at the local, regional, national, and international levels. The awards ceremony includes presentation of the President's Award and NAAEE's highest honor, the Jeske Award.

Following the awards, four exceptional young leaders will share their stories and perspectives on how to develop leadership in the field of environmental education. Coming from Guatemala, the US, and Zimbabwe, the speakers are all members of NAAEE's EE 30 Under 30 Class of 2019, recognizing top young changemakers in EE.

Each year, EE 30 Under 30 shines a spotlight on the work of young professionals representing a wide range of backgrounds and disciplines, who are using EE to spark change in their communities and on the global stage to forge a sustainable future. The program is made possible by the Global Environmental Education Partnership, Wells Fargo, and the US Forest Service.

The Awards Luncheon is included with Saturday or full conference registration with RSVP in advance. Additional tickets can be purchased as space allows; check for details at the registration desk.







2019 NAAEE Annual Award Recipients

Please join us in extending warmest congratulations to the 2019 NAAEE award recipients, individuals, and organizations demonstrating exemplary leadership in our field.



The award ceremony includes presentation of the Walter E. Jeske Award, the highest honor NAAEE bestows. The award was established to honor Walt Jeske. Chief of the **Education and Publications Unit**

with the US Soil Conservation Service. Walt was a dedicated member of the NAAEE Board of Directors and an outstanding environmental educator. The award is given to recognize the highest level of service to NAAEE and leadership within the field of environmental education.

Who will it be? Tradition calls for each year's recipient to present the award in the following year and the keep the honoree secret until the unveiling at the Saturday awards luncheon.



At Leisure in Lexington

Get started early or close out your day with these special Lexington opportunities.

Thursday-Saturday

Morning Yoga: From Awareness to Action 7:30 AM-8:15 AM, Patterson Ballroom E-G

Wake to the new day with awareness of breath, movement, and alignment. Through this gentle practice, reconnect with your body and mind's ability to move intentionally throughout the actions of the day.

Thursday: Jenny Howard Owen is a certified and registered yoga teacher; *Friday and Saturday:* Pam Thomas is certified by and registered with the Yoga Alliance.



Thursday

Art and Nature 5:30 PM-7:30 PM, Lexington Public Library (140 E. Main St.)

Drop by the *Paint by Nature: Streetside* exhibit, a celebration of the beauty and benefits of using Kentucky native plants, featuring local artists. While you're there, design pollinator-friendly possibilities for your own yard using the Paint by Nature interactive game. Light snacks will be provided. **Free. No registration required.**

LexingtonKY.gov/PaintByNature

Horse Farm Tours—Discounts for NAAEE Interested in touring a Derby farm during your stay in Lexington? Horse Country is an organization of horse farms, equine medical clinics, and equine attractions dedicated to sharing the stories of Kentucky's Horse Country. Go to visithorsecountry.com to book a tour and use the promo code NAAEE19 for a 20% discount.

Friday

Coffee Tour

6:30 AM–8:15 AM, Meet at the registration desk Get to know Lexington with this guided walk around downtown. From historic buildings to art installations, learn about what makes Lexington unique while enjoying local coffee or tea.

Free. No registration required.
Self-guided tours available at:
LexingtonKY.gov/WalkingTour and
LexPubLib.org/WalkingTours

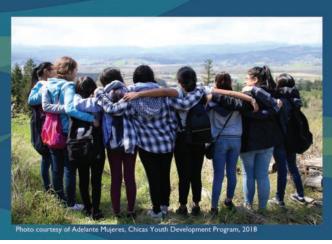


KNOW YOUR PLACE LOVE YOUR PLACE



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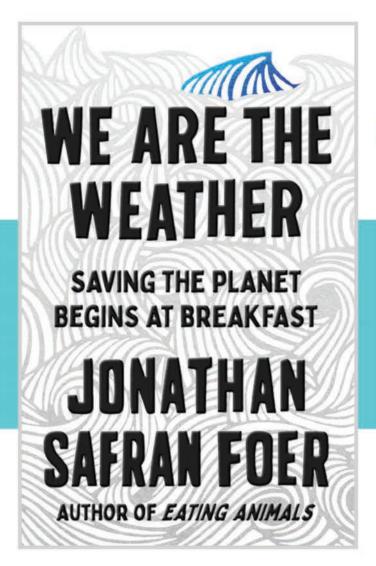


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What can we do to save our planet?



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"Read this book. Saving Planet Earth starts right here, right now." - Stella McCartney

Impact campaign for #WeAreTheWeather is underwritten by EJF Philanthropies





Monday

Monday 9:00 AM

Global Environmental Education Partnership (GEEP) Meeting

9:00 AM-5:00 PM, Thoroughbred 1 By invitation.

Monday 2:00 PM

EE Research Field Session

Working For/Towards Justice and Sustainability in EE Research

2:00 PM-5:00 PM, Meet at the Old Fayette County Courthouse, 215 W. Main Street

Jim Embry (Lexington resident, ee360 Community Fellow, and founder of the Sustainable Communities Network) and Olivia Aguilar (Associate Professor of Environmental Studies at Denison University) will guide participants through a walk of downtown Lexington visiting gardens and cultural heritage sites attending to issues of justice and sustainability. Local practitioners and researchers will join us along the way to encourage thoughtful dialogue around what it means to do research for and towards justice and sustainability. The workshop will culminate in a facilitated discussion that asks participants to identify the multiple ways and contexts in which we can attend to issues of justice and sustainability in EE research. (Pre-registration required.)

Monday 7:00 PM

Research Networking Dinner

7:00 PM-9:00 PM, Meet at Zim's Café, 215 W. Main Street, Suite 25

Join in on a casual evening of food, fun, and conversation focused on EE research at Zim's Café, a local favorite with a menu inspired by the bounty from Kentucky farms. Diners will include the Research Symposium Co-Chairs, featured panelists, and many other colleagues, friends, and mentors. (Pre-registration required.)

Tuesday

Tuesday 9:00 AM

Research Symposium

9:00 AM-4:30 PM

NAAEE's Annual Research Symposium brings together new and experienced researchers from around the globe to explore the current state and future directions of environmental education research and to advance the use of practices proven to be effective. The symposium fosters dialogue and collaboration among members of the EE research field, including researchers, policymakers, and practitioners at all stages of their careers. Participants can also meet with colleagues and mentors to discuss publishing and career advice, and issues and concerns in the world of research.

The 2019 symposium addresses the overall conference theme, *Educating for a Just and Sustainable Future*, and sessions are organized around two areas of discussion:

- 1) **EE Research Processes:** Sessions in this track will share knowledge and new directions in research processes, to build our capacity and expertise as a research field.
- 2) **EE Research Impacts:** These sessions facilitate collaborative conversations on, and contributions to, increasing impacts of our research field in relation to EE policy and practice, locally, nationally, and globally.

(Separate registration fee required.) Chair: Marcia McKenzie, University of Saskatchewan Co-Chair: Olivia Aguilar, Dennison University

Affiliate Steering Committee Training 9:00 AM-5:00 PM, Scott-Woodford By invitation.



Tuesday

Tuesday 1:00 PM

ee360 Community EE Fellows Leadership Workshop

1:00 PM–5:00 PM, Kentucky By invitation.

Tuesday 4:30 PM

Research Symposium Reception

4:30 PM-6:00 PM, Patterson Ballroom For Research Symposium participants only.

Key

- Building Leadership for Environmental Literacy
- Connecting with Nature
- Conservation and Environmental Education
- Educating for Sustainable Communities
- Green Schools and Preparing for 21ST Century Careers
- Linking Research and Practice to Increase Impact
- Equity and Inclusion
- YP Young Professionals
- NAAEE Affiliate Network
- **ee**360



LOCAL CULTURE

Thoroughbreds

The Thoroughbred as it is known today was developed in 17th- and 18th-century England, when native mares were crossbred with imported Eastern stallions of Arabian, Barb, and Turkoman breeding. All modern Thoroughbreds can trace their pedigrees to three stallions originally imported into England in the 17th and 18th centuries.

Wednesday

Wednesday 8:30 AM

Workshops

Note: Workshops require an additional registration fee. Onsite registration will be accepted as space allows; check at the registration desk. There are full day, morning, and afternoon options. Lunch is included with full day workshops.

Full Day Workshops

8:30 AM-4:30 PM

Affiliate Workshop: Systems Thinking and Strategic Planning

8:30 AM-4:30 PM, Hyatt Suites

The Affiliate Workshop is designed for staff and board members of NAAEE's 56 state, regional, and provincial environmental education associations. Share and learn from other affiliate leaders and content area experts in this unique professional development and networking opportunity. Let's build capacity, share successful practices, and learn innovative strategies.

Presenter(s): Adrian Ayson, eeMatters Consulting; Sarah Bodor, NAAEE (A)

The Road to NAAEE Higher Education Accreditation: A Map for Success

8:30 AM-4:30 PM, Elkhorn A

This workshop provides critical information for universities interested in becoming accredited through NAAEE's Distinguished College and University Program. It includes in-depth review of standards, strategies for incorporating them into curriculum, sample assessments, and models from faculty members who have completed applications. Bring your laptops and documents to begin the process. Presenter(s): Rebecca L. Franzen, University of Wisconsin-Stevens Point, Wisconsin Center for Environmental Education; Billy Bennett, Kentucky Environmental Education Council; Stewart Janes, Southern Oregon University; Dorothea Shuman, Montreat College; Melinda Wilder, Eastern Kentucky University; Patty Born, Hamline University School of Education 💍

Train-the-Trainer Workshop: NAAEE's Community **Engagement Guidelines for Excellence** 8:30 AM-4:30 PM, Heritage Ballroom 3

As environmental educators we work in and with communities ranging from workplace teams to neighborhood or regional partnerships. Participants in this all-day workshop receive training in the use of NAAEE's Community Engagement: Guidelines for Excellence and develop preliminary plans to provide Guidelines trainings in their respective regions and professional communities.

Presenter(s): Libby McCann, Antioch University New England; Jean Chimbirima Kayira, Antioch University New England; Luciana Ranelli, Teton Science Schools; Anne Umali, NAAEE; Bora Simmons, National Project for Excellence in Environmental Education 💍

Morning Workshops

8:30 AM-12:00 PM

Building Inclusion by Exploring White Fragility and Emotional Intelligence

8:30 AM-12:00 PM, Regency Ballroom 1

"White fragility," coined by Robyn DiAngelo, describes the discomfort expressed by white people when confronted by information about race. Defensive behaviors get triggered, including emotions like anger, fear, and guilt. Emotional intelligence is an essential practice in developing capacity to understand and manage these emotions in the pursuit of diversity, equity, and inclusion. Presenter(s): Traci Price, Center for Diversity to the Environment; Queta González, Center for Diversity & the Environment ტ 🛟

Designing for Change: Connecting Environmental **Education Research and Practice**

8:30 AM-12:00 PM, Regency Ballroom 2

Ever wondered what research suggests about the role of place in fostering environmental learning and action, or how citizen science might support community identity? Join us to explore strategies for integrating research findings into your programs using collaborative design-thinking activities. A train-the-trainer element helps you coach others to incorporate EE research in their practice, too. Presenter(s): Mele E.M. Wheaton, Stanford University; Stephanie Rafanelli, Stanford University; Emily Williams, Stanford University

Facilitating Professional Learning Using FieldScope and Citizen Science Data 8:30 AM-12:00 PM, Regency Ballroom 3

Explore free BSCS Science Learning resources that engage students in inquiry using FieldScope, a platform for citizen science data collection and analysis. We'll model short structured inquiries into large citizen science datasets and provide materials so you can facilitate professional learning for your colleagues. Bring a laptop if you can.

Presenter(s): Emily Harris, BSCS Science Learning; Audrey Mohan, BSCS Science Learning;

Where Civic Experience and Environmental **Education Connect**

8:30 AM-12:00 PM, Heritage Ballroom 1

Join Earth Force in an introductory workshop exploring the importance of civics in environmental education. We'll walk through our framework for youth-driven projects that incorporate democratic decision-making and local policy analysis. You'll receive resources and tools to start your journey and find where to find out more.

Presenter(s): Grace Scarsella, Earth Force; Justin Zakoren, Earth Force 🗘



Wednesday 8:30 AM

Field Trips



Berea College: Committed to Justice and Environmental Stewardship

8:30 AM-4:30 PM, Berea College, Berea

Berea College, the South's first interracial and coeducational college, has a #2 ranked student farm, more than 9,000 forested acres, and an Ecovillage. On this trip, coinciding with Berea's Mountain Day, participants will hike in the forest, learn about horse logging, tour the farm and Ecovillage, and watch local artisans at work—all on an extraordinary campus with a no-tuition promise for all students. Transportation and lunch included.

Bluegrass Adventure: Hike, Paddle, and Explore the Kentucky River Palisades

8:30 AM-4:30 PM, Raven Run Nature Sanctuary, Lexington

Join Lexington Parks and Recreation Natural Areas staff for an all-day Kentucky paddle and hike adventure! Participants will begin their day canoeing the beautiful Kentucky River Palisades and then enjoy a guided hike through the Raven Run Nature Sanctuary, a unique, 734-acre site located just outside of Lexington. Transportation, canoe rental, and lunch included.

Sustainable Lexington: Arboretum to Aquaponics 8:30 AM-1:30 PM, State Botanical Garden of Kentucky and Food Chain, Lexington

Participants will visit the Children's Garden and Home Demonstration Garden at the Arboretum, a 100-acre green space on the University of Kentucky campus. Then, at FoodChain, a nonprofit dedicated to sustainable food systems, the group will tour the commercial-scale indoor aquaponics farm, which grows tilapia and greens, and the Teaching and Processing Kitchen, which provides cooking classes for youth and families. Transportation included; lunch purchased on your own.

All field trips depart from the High Street Rotunda, Lexington Convention Center. Please arrive 15 minutes early for an on-time departure.

Wednesday 1:00 PM

Afternoon Workshops

1:00 PM-4:30 PM

Backyard Wilderness Bioblitz

1:00 PM-4:30 PM, Heritage Ballroom 1

Interested in getting your members outdoors in the name of citizen science and education? Join the Backyard Wilderness team from HHMI Tangled Bank Studios for this hands-on workshop on how to easily set up and run your very own community bioblitz with the help of iNaturalist. This workshop is sponsored by HHMI Tangled Bank Studios. Presenter(s): Taryn White, HHMI Tangled Bank Studios; Alex Duckles, HHMI Tangled Bank Studios

Behavior Change: Fostering Action for Sustainability

1:00 PM-4:30 PM, Heritage Ballroom 2

Raising awareness is a crucial part of fostering sustainable behavior. However, information isn't always enough to foster behavior change. During this interactive workshop, discover behavior change science and techniques to take your audiences beyond understanding. Participants will learn behavior change principles and receive a glossy workbook, leaving prepared and excited to put new ideas into action.

Presenter(s): Lauren Watkins, Impact by Design, Inc.

Introducing the Newly Revised K-12 Environmental Education: Guidelines for Excellence 1:00 PM-4:30 PM, Regency Ballroom 2

Dig into NAAEE's newly revised *K-12 Environmental Education: Guidelines for Excellence*, part of the Guidelines for Excellence series. Through a series of hands-on exercises, you'll become familiar with the environmental literacy framework and how you can use it for program improvement. These guidelines set expectations for learner performance and achievement in grades 4, 8, and 12.

Presenter(s): Bora Simmons, National Project for Excellence in Environmental Education

Skill Building for Equity and Inclusion in the **Conservation Field**

1:00 PM-4:30 PM, Regency Ballroom 1

This workshop builds the story of transformation towards a just and equitable conservation movement. Meeting people in their current reality, we build skills in inclusive communication techniques, approaching identities, addressing misconceptions, and tools for effective dialogue. Presentation concludes with two hands-on activities that apply content to real-life situations. Presenter(s): Tiffany Carey, National Wildlife

Federation; Jennifer Dowd, National Wildlife Federation

Wednesday 4:45 PM

Making the Most of the Conference 4:45 PM-5:15 PM, Thoroughbred 4

Young professionals and first-time conference participants are welcome to join this brief orientation to the NAAEE conference, including keys to selecting sessions of interest, scheduling, networking opportunities, and more.

Coordinator: Lori Mann, NAAEE





Proud to Support the 48th Annual NAAEE Conference



Wednesday 5:00 PM

Opening Reception with Exhibit Fair, Share Fair, and Authors' Corner

5:00 PM-6:30 PM, Bluegrass Lobby

Welcome! Whether this is your first NAAEE conference or your thirty-first, it starts here! Meet new colleagues and greet returning ones as you enjoy substantial hors d'oeuvres and a cash bar at the opening reception of the conference. Our annual Exhibit Fair kicks off during the reception—your first opportunity to chat with exhibitors and explore wonderful resources and programs. A variety of nonprofit organizations will also share their inspiring efforts at this year's Share Fair, with tabletop displays highlighting their work in Kentucky and beyond. And you can meet a number of NAAEE members and other writers in the Authors' Corner. They will be happy to discuss, sign, and sell their newest publications. Animal ambassadors from the Salato Wildlife Education Center will be there to greet you, too

See page 45 for more information.

Wednesday 6:30 PM

Conference Opening

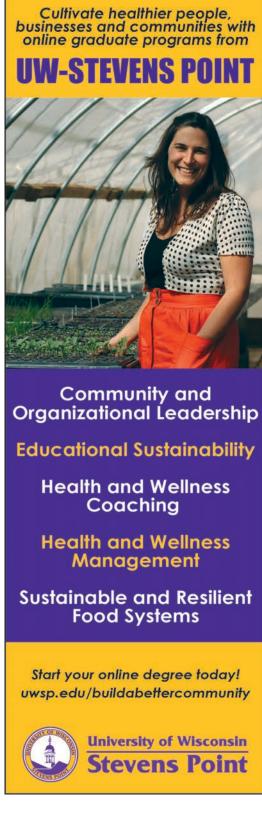
6:30 PM-8:30 PM, Bluegrass Ballroom 2

Immediately following the reception, we'll officially get started, kicking off with a lively rap by local artist, educator, and writer Trevor Claiborn (aka Farmer Brown), who creatively engages young people in urban agriculture. Executive Director Judy Braus and Board Chair Charlotte Clark will share opening remarks, including an introduction to the conference and an update on what's new at NAAEE. Then, our featured speaker, John Flicker, president of Prescott College, former CEO of the National Audubon Society, and former Executive Vice President of The Nature Conservancy, will take the stage for our opening keynote address. John is a lifelong conservationist, social justice advocate, and environmental education supporter, working to create a more just and sustainable future.

See pages 40 and 46 for more information.









NCF-ENVIROTHON



How do we balance quality of life and the quality of the environment?

Over 25,000 high school students across the United States, Canada and China embark on a journey each year to offer solutions to this critical question through the NCF-Envirothon.











The NCF-Envirothon is a hands-on environmental and natural resource problem-solving competition that builds leadership skills.

The program consists of in-class curriculum with applied outdoor field experiences, where students can learn natural resource management techniques from natural resource professionals.

State and provincial competition winners advance on to the annual NCF-Envirothon international competition for prizes and scholarships.







Follow us on social media @ncfenvirothon | www.envirothon.org



Thursday

Thursday 7:30 AM

Lexington at Leisure

Morning Yoga: From Awareness to Action 7:30 AM-8:15 AM, Patterson E-G

Wake to the new day with awareness of breath, movement, and alignment. Through this gentle practice, reconnect with your body and mind's ability to move intentionally throughout the actions of the day. Instructor Jenny Howard Owen is a certified and registered yoga teacher.

A Morning Welcome from the Kentucky **Native American Heritage Commission**

7:45 AM-8:15 AM, Regency Ballroom 2

NAAEE is gathering this year on the ancestral lands of the Shawnee. Joining us today for a very special welcome is Helen Danser, Chair of the Kentucky Native American Heritage Commission. Helen has been involved in Native American Indian events in Kentucky since 1998. She is an enrolled and voting member of the Piqua Shawnee Tribe of Alabama. Helen has represented Kentucky's Indigenous People at numerous presentations in schools, churches, and organizations, and has served with the Circle of Wisdom Unity Conference and the Kentucky Indigenous People. She has represented her tribe and the people of Kentucky at the National Congress of the American Indian and the Governors' Interstate Indian Council. She will share thoughts on the original people of Kentucky, current tribes, protection of historical sites in Kentucky, current issues, and the commission's mandate and implementation.

Presenter(s): Helen Danser, Kentucky Native American Heritage Commission

Key

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- Green Schools and Preparing for 21ST Century Careers
- Linking Research and Practice to Increase Impact
- Equity and Inclusion
- Young Professionals
- NAAEE Affiliate Network
- ee360



THE STATE PROMOTES FOR ALL

MISSION: TO PROMOTE LEARNING AND SKILLS FOR SUSTAINABLE

ENSURE A SUSTAINABLE AND

MORE, VISIT Keec.ky.gov



Thursday 8:30 AM

Meeting

8:30 AM-10:00 AM

Environmental Education Research Editors' Meeting 8:30 AM-10:00 AM, Mary Todd Lincoln By invitation.

Coordinator: Alan Reid, Monash University

Young Professionals Clinic

8:30 AM-9:10 AM

Whether you're a student, just getting started on your career path, or in your first professional position, this clinic will help build essential skills that will help you now and in the future. Choose from sessions in two tracks: job seekers and early career educators. See page 32 for more information.

Track 1: Sustaining an Effective Job Search 8:30 AM-9:10 AM, Patterson B

Too often, a job hunt involves hours of sifting through irrelevant posts on job search sites. This session will help you devise a more effective process, starting with strong application documents and culminating with strategies to better leverage your time, talents, and knowledge in discovering promising opportunities. Presenter(s): Michael Cronk, Transylvania

Track 2: Fundraising Essentials: Message, Momentum, and Mindset 8:30 AM-9:10 AM, Patterson C

Like it or not, every nonprofit employee is also a fundraiser and must build the relationships that enable their organizations to thrive. In this session, you'll learn how to craft fundraising messages and winning proposals, while creating the donor connections, forward energy, and rapport that make gifts happen.

Presenter(s): Lea Harvey, LLH Strategy Advisors, LLC; Krishna Roy, Consultant

Strand:

Trand:

University



LOCAL CULTURE

Abraham Lincoln

Abraham Lincoln was born on February 12, 1809, as the second child of Thomas Lincoln and Nancy Hanks Lincoln, in a one-room log cabin on Sinking Spring Farm near Hodgenville, Kentucky.

Symposium

8:30 AM-10:00 AM

Early Childhood Gardening: Nature-Based Learning to Inspire NextGen Conservationists 8:30 AM-10:00 AM, Kentucky

Early childhood gardening is a powerful vehicle for cost-effective, nature-based learning in underserved and vulnerable communities. Garden-based, healthpromoting (people and planet) education advances social equity, offers inclusive learning across the curriculum, and dynamic engagement with the fascinating processes of nature that seed a lifelong love for our shared world.

Presenter(s): Dilafruz R. Williams, Portland State University; Sheila Williams Ridge, University of Minnesota Lab School

Moderator: Robin Moore, NC State University

Strand:

Hands-On Presentations

8:30 AM-10:00 AM

Applications of Low-Cost Sensors for Air Quality Education

8:30 AM-10:00 AM, Regency Ballroom 1

Emerging air quality sensor technology is creating new educational opportunities. Sonoma Technology, Inc. developed the Kids Making Sense® curriculum that unites science, technology, engineering, and mathematics education with hands-on projects and low-cost sensors to teach students about air pollution and empower them to drive positive change in their communities.

Presenter(s): Hilary Minor, Sonoma Technology, Inc.; Olivia Ryder, Sonoma Technology, Inc.; Melissa Dunn, Sonoma Technology Strand:

Become a National Geographic Certified Educator 8:30 AM-10:00 AM, Heritage Ballroom 2

Become a National Geographic Certified Educator to find out how to transform students into explorers! This is a free professional development program that supports educators to teach students about the world and empower them to protect it. Phase 1 completed in this workshop, with Phases 2 and 3 available online.

Presenter(s): Rachael Rost, Topeka Zoo and Conservation Center; Mary Ford, National **Geographic Society**

Strand:

How to Assess Connection to Nature 8:30 AM-10:00 AM, Thoroughbred 4

Do you think your programs help learners become connected to nature? If you want to measure the type of connection you influence, come to this session. We'll use a new guide designed to help people like you! Participants will get a copy. Presenter(s): Martha C. Monroe, University of Florida; Gabby Salazar, University of Florida; Kristen Kunkle, NAAEE; Nicole Ardoin, Stanford University; Cathy Jordan, Children & Nature Network; Anna Lee, Stanford University

Strand:

Identifying and Correcting Common Outdoor Teaching Mistakes

8:30 AM-10:00 AM, Heritage Ballroom 1

This workshop will use a training video to identify over 35 common outdoor teaching mistakes. Solutions for each mistake will be provided and discussed. Knowing these mistakes and their solutions can be helpful for both formal and nonformal environmental educators.

Presenter(s): Brad Daniel, 2nd Nature TREC (Training, Research, Education, Consulting)

Strand: • W

Indigenous and Mainstream Science: Can We Learn with Both Eyes?

8:30 AM-10:00 AM, Heritage Ballroom 3

Diverse interests in the field of environmental science have grappled with the stark differences between mainstream quantitative science and qualitative indigenous science. This hands-on presentation is for practitioners who have questions about what this divergence means and could mean for environmental education, with attention to social justice and land education.

Presenter(s): Tommy Mackey, SUNY College of Environmental Science and Forestry; Annie Sorrell, SUNY College of Environmental Science and Forestry Strand: • 🔷

Youth Engagement for Sustainable Communities in a Changing Environment

8:30 AM-10:00 AM, Regency Ballroom 3

How can environmental educators build bridges between schools and rural and Indigenous communities to engage youth in efforts to respond and adapt to environmental change? Learn about training and supporting teachers to build community connections and engage students in community problem solving with a toolkit on AdaptAlaska.org. Presenter(s): Elizabeth Trowbridge, Center for Alaskan Coastal Studies

Strand: • 💠

Traditional Presentations

8:30 AM-9:10 AM

Left Inside: Environmental Education for **Incarcerated Youth**

8:30 AM-9:10 AM, Elkhorn A

An innovative program in Washington State is providing watershed education to incarcerated youth. These traditionally underserved students are particularly rewarding and impactful to include in existing programming. This presentation will highlight why more environmental educators should consider involving this special population in their programs.

Presenter(s): Rachel Stendahl, Educational Service District 113

Strand: 🔵 🛟

Making Your Affiliate Flourish: Fundraising and **Sponsorships**

8:30 AM-9:10 AM, Hyatt Suites

Having diversified funding helps to make your Affiliate more resilient. Join three Affiliate executive directors to learn about strategies you can use to raise funding from diverse sources for your Affiliate. Presenter(s): Laura Downey, Kansas Association for Conservation and Environmental Education; Ashley Hoffman, Kentucky Association for Environmental Education; Alex Porpora, Utah Society for **Environmental Education**

Strand:

(A)

Masonville Cove: Creating Community Connections Through Partnerships, Engagement, and Education 8:30 AM-9:10 AM, Thoroughbred 3

Non-traditional partners worked with a diverse community transforming a brownfield into the nation's first Urban Wildlife Refuge Partnership. Now environmental education programs at Masonville Cove support Baltimore Green Schools, provide equitable access to nature, and engage underserved residents and students to empower the next generation of community and environmental leaders.

Presenter(s): Katrina Jones, Maryland Port Administration; Curtis Bennett, National Aquarium

Strand: • 🛟

Preparing Professionals for Equitable, Inclusive, and Culturally Responsive Leadership 8:30 AM-9:10 AM, Elkhorn B

The Urban Environmental Education MAEd immerses students deeply within urban communities for 30+ weeks of participatory action research through their practicum. Highlighting three graduate projects that attend to the intersection of social justice and environmental leadership, workshop participants will understand the culturally responsive research that works to decolonize solution building.

Presenter(s): Cynthia Thomashow, Antioch University Seattle; Sue Byers, IslandWood | Antioch University Strand: ● ♣

Sparking Eco-Awareness with Water Quality Among Urban Fifth Graders

8:30 AM-9:10 AM, Berea

Through partnerships of John P. Parker School (Cincinnati) with the National Park Foundation, Greenacres Nature Preserve, the Wave Foundation, and the Foundation for Ohio River Education, fifthgrade students participated in a yearlong study of water quality. Explore the strategies used to promote eco-awareness from school staff, partnering agencies, and the students themselves.

Presenter(s): Kimberly Mack, Cincinnati Public Schools; Pamela Knox, John P. Parker School; Scott Wingate, Wave Foundation

Strand:

Strand:

Students as Citizen Scientists: Creating a Personal Watershed Story 8:30 AM-9:10 AM, Thoroughbred 5

Come learn how we have partnered with middle and high school teachers to engage students in schoolyard assessments with various citizen science projects (such as Adopt-A-Stream and Smithsonian Biosphere) and having students document their involvement in video or blog personal watershed stories. Leave with materials to use in your

Presenter(s): Lacey Denise Huffling, Georgia Southern University; Heather Scott, Georgia Southern University

Strand:

We're Updating and Revising—Environmental Education Materials: Guidelines for Excellence 8:30 AM-9:10 AM, Thoroughbred 2

NAAEE's Environmental Education Materials: Guidelines for Excellence, part of the Guidelines for Excellence series, provides a set of recommendations for developing and selecting EE instructional materials. We're in the process of updating them. Come and get a sneak peek!

Presenter(s): Bora Simmons, National Project for Excellence in Environmental Education; Jennifer Hubbard-Sanchez, Raven Run Nature Sanctuary; Kim Martinez, National Wildlife Federation Strand:

Young Professionals Clinic: Fundraising Essentials: Message, Momentum, and Mindset 8:30 AM-9:10 AM, Patterson C

Like it or not, every nonprofit employee is also a fundraiser and must build the relationships that enable their organizations to thrive. In this session, you'll learn how to craft fundraising messages and winning proposals, while creating the donor connections, forward energy, and rapport that make gifts happen.

Presenter(s): Lea Harvey, LLH Strategy Advisors, LLC; Krishna Roy, Consultant

Strand: • W

Young Professionals Clinic: Sustaining an Effective Job Search

8:30 AM-9:10 AM, Patterson B

Too often, a job hunt involves hours of sifting through irrelevant posts on job search sites. This session will help you devise a more effective process, starting with strong application documents and culminating with strategies to better leverage your time, talents, and knowledge, in discovering promising opportunities.

Presenter(s): Michael Cronk, Transylvania University Strand: • VP

LOCAL WILDLIFE

Black Bears

Powerful legs and large claws give black bears an incredible climbing ability. They can run at speeds approaching 35 mph for relatively short bursts. Regrowth of quality hardwood forest habitat in Kentucky has led to a comeback in numbers from a period of decline in the early 1900s.



Bright Spots

8:30 AM-9:10 AM

Learn about two or three successful and loosely related programs in each 40-minute session. Sessions are presented in the order listed.

GROUP A

8:30 AM-9:10 AM, Elkhorn C

Creating Virtual Stewards

With basic videoconferencing equipment, distance and funding shortages no longer keep students from their natural areas. Discover how Rocky Mountain National Park connects with underserved students, while helping them unearth relationships with their own backyard. Uncover how you can do the same, whether you're a content provider or teacher! Presenter(s): Kathryn Ferguson, Rocky Mountain National Park

Strand:

Environmental Education at Mammoth Cave National Park

Want to grow your EE program? Learn how Mammoth Cave National Park connected with over 57,000 students in 2018 and grew our program to include teacher workshops and virtual trips to Mammoth Cave. Participants will learn how we connect with teachers and students not only locally, but all across the United States.

Presenter(s): Jennifer Button Shackelford, National Park Service

Strand:

Using Virtual Reality to Inspire Learning About New Zealand's Marine Environment

BLAKE and NZ Geographic have partnered to develop a series of 360° videos that showcase the best and worst of New Zealand's marine environment. BLAKE has taken that content, supported by VR headsets, into Auckland schools to inspire and educate students about ocean health. This session shares learnings from that experience.

Presenter(s): James Gibson, Sir Peter Blake Trust Strand:

GROUP B

8:30 AM-9:10 AM, Elkhorn D

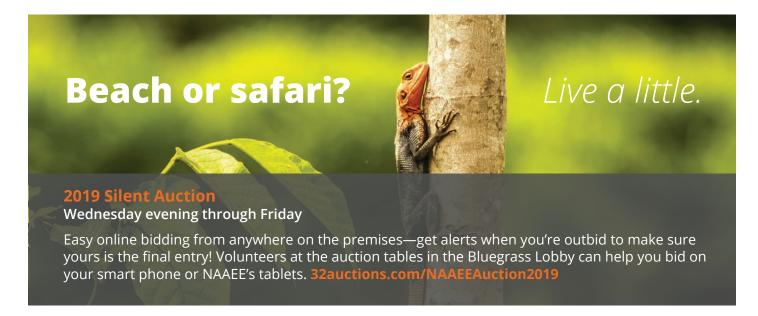
Connections Camp: We Connect Children to Nature Discover how community partnerships have been successfully engaging youth who might not be able to attend summer camps due to economic reasons in Connections Summer Camp. Youth learn to care for the environment, have respect for themselves, others, and their communities.

Presenter(s): Jennifer Elsworth, Metroparks Toledo Strand: • •

#MyScienceFuture Project: Promoting Nature Connections and Science Careers Through Art #MyScienceFuture is an original arts project that incorporates imaginative play, photography, and drawing into environmental education. Embedded within an ecology summer camp in rural Florida, children study portraits of scientists, dress up for scientist photo shoots, and write messages about their connections to nature and science.

Presenter(s): Dustin Angell, Archbold Biological Station

Strand:



Thursday 9:20 AM

Young Professionals Clinic

9:20 AM-10:00 AM

Whether you're a student, just getting started on your career path, or in your first professional position, this clinic will help build essential skills that will help you now and in the future. Choose from sessions in two tracks: job seekers and early career educators. See page 32 for more information.

Track 1: Need to Know Networking 9:20 AM-10:00 AM, Patterson B

This session covers the four "Need to Know Networking" tips. Networking is essential throughout our entire lives, with our careers and personally. This session will help overcome the jitters that often go with the thought of networking, as well as how to make the absolute most of every networking opportunity. Relevant to the conference, participants will be armed and ready with networking know-how!

Presenter(s): Terri Thompson, Terri Thompson Presents

Strand: • W

Track 2: Transformational Leadership 9:20 AM-10:00 AM, Patterson C

Using a transformational leadership model, we will explore how we want to show up as rising leaders in our organizations and the field of EE. Through facilitated activities we will experiment with tools that guide the cultivation of an abundance mindset moving us towards authentic leadership.

Presenter(s): Eileen Everett, Environmental Education Association of New Mexico: Olivia Griset.

Education Association of New Mexico; Olivia Griset, Maine Environmental Education Association; Charissa Jones, OSU Extension Service–Outdoor School

Strand: • YP



LOCAL CULTURE

Lexington

Lexington was founded by European settlers in 1775, 17 years before Kentucky became a state. William McConnell and a group of frontier explorers were camped at a natural spring when word came from nearby Fort Boonesborough that the first battle of the American Revolution had been fought in Lexington, Massachusetts. In honor of the battle the group named their site "Lexington."

Traditional Presentations

9:20 AM-10:00 AM

A Conversation on Higher Education Accreditation 9:20 AM-10:00 AM, Thoroughbred 5

Come and meet faculty representing programs that have earned NAAEE's Accreditation: Distinguished College and University Programs. Hear about their programs and network with other faculty interested in environmental education program development and assessment.

Presenter(s): Dorothea Shuman, Montreat College; Libby McCann, Antioch University New England; Billy Bennett, Kentucky Environmental Education Council; Patty Born, Hamline University School of Education; Melinda Wilder, Eastern Kentucky University; Rebecca Franzen, University of Wisconsin–Stevens Point, Wisconsin Center for Environmental Education; Stewart Janes, Southern Oregon University; Jean Chimbirima Kayira, Antioch University New England Strand:

Affiliates Bringing Back the BEETLES 9:20 AM-10:00 AM, Hyatt Suites

Are you looking to provide more high quality professional development for environmental educators through your Affiliate? BEETLES Professional Learning resources are designed to help leaders of outdoor science programs inspire instructional shifts and a learning community culture among their staff. Learn more about how you can drive excellence in EE and bring BEETLES resources to your state! Presenter(s): Laura Downey, Kansas Association for Conservation and Environmental Education; Ashley Hoffman, Kentucky Association for Environmental Education; Katie Navin, Colorado Alliance for Environmental Education Strand: (a) (a) (b)

Building Bridges with Communities: Alliance for Watershed Education Fellowship Program 9:20 AM-10:00 AM, Thoroughbred 3

Fellows serve as a bridge between the environmental education centers and their surrounding communities in the Delaware River watershed, connecting centers to new communities and diverse audiences, and connecting participants to nature. This case study investigates the Fellowship program at five of the Alliance for Watershed Education centers.

Presenter(s): Rachel Becker-Klein, Two Roads
Consulting; John Harrod, Delaware Nature Society;
Dakin Hewlett, Delaware Nature Society;
Chad Schwartz, Lehigh Gap Nature Center

Strand: • W

Creating the Next Generation of Environmental Stewards

9:20 AM-10:00 AM, Elkhorn A

The Missouri Botanical Garden engages teens in hands-on community action projects to address St. Louis's environmental challenges. This session will focus on two different programs that are designed to engage historically underrepresented communities: Outdoor Youth Corps (youth employment program) and Eco-Act (high school class implemented in partnership with area schools).

Presenter(s): Betsy Crites, Missouri Botanical Garden Strand: • 🔷

Drawdown EcoChallenge: Local Communities Activating Global Climate Solutions 9:20 AM-10:00 AM, Thoroughbred 2

Climate education and engagement can be a tall order. The issues are complex and highly politicized. Drawdown EcoChallenge is a fun and social way to cut through the noise and inspire your community to take measurable action on the top climate solutions. Discover how to activate your community with Drawdown.EcoChallenge.org.

Presenter(s): Lacy Cagle, EcoChallenge.org

Strand: • VP

SEED: Social-Emotional Environmental Education Discovery

9:20 AM-10:00 AM, Berea

Join us to learn about one nature center's EE approach that uses social-emotional learning. SEED includes video journaling (soon to be available on YouTube), classroom visits, field trips, and more! This presentation includes hands-on opportunities and will reveal how the project received both grant and federal Title funds totaling more than \$10,000.

Presenter(s): Jennifer Tariq, Douglas-Hart **Nature Center**

Strand: •

User Experience (UX) Bootcamp: Applying Design Tools to Environmental Education

9:20 AM-10:00 AM, Elkhorn B

Have you heard phrases like "user experience" and "design thinking," but aren't sure how they apply to educational materials? In this introductory session, we'll unpack how UX methodology can help foster conservation awareness. Through three case studies, we'll review basic design principles to help you create highly engaging materials.

Presenter(s): Christina Stefan, Consultant

Strand:

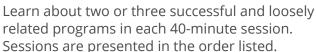
Youth as Allies and Partners for Action on Climate Change

9:20 AM-10:00 AM, Regency Ballroom 2

Seeing youth as allies for climate change solutions is critical to success. Learn strategies from Climate Generation and The Wild Center on how to build an inclusive youth climate program that engages and empowers youth, builds common ground, and advances a more resilient, just, and sustainable future. Presenter(s): Jen Kretser, The Wild Center Strand: • 🔷

Bright Spots

9:20 AM-10:00 AM



GROUP A

9:20 AM-10:00 AM, Elkhorn C

eeBLUE: Environmental Literacy for a Blue Planet Come learn about NAAEE and NOAA's new partnership, eeBLUE. Together, we're building capacity for environmental literacy by strengthening professional networks, disseminating best practices, and supporting high-quality STEM education. Presenter(s): Drew Price, NAAEE; Bronwen Rice, NOAA Strand:

eelNSPIRE: Sparking Innovation in Environmental Education

Come see why we call eelNSPIRE the North Star! NAAEE and USDA Forest Service have developed a webinar series offering professional development to Forest Service staff, partners, (and everyone!) to bring new ideas and thinking to the educators who provide the public with high-quality environmental education programs across the country.

Presenter(s): Heidi McAllister, US Forest Service; Drew Price, NAAEE; Anne Umali, NAAEE Strand:

NAAEE's Nationwide Effort to Strengthen the Field: ee360

Come learn about NAAEE's initiative to support innovative environmental education across the country. NAAEE, through a cooperative agreement with US EPA and seven partner organizations, is leading a nationwide effort to strengthen the field, support professional development, and build a more inclusive movement. Hear exciting highlights from the first three years of this collaborative effort. Presenter(s): Drew Price, NAAEE; Anne Umali, NAAEE;

Strand: • 🗘

Judy Braus, NAAEE

GROUP B

9:20 AM-10:00 AM, Elkhorn D

Understanding Sustainability Knowledge and **Habits Among University Students**

This research assesses trends in sustainability attitudes and knowledge in the student population at Georgia Southern. Students completed a survey focusing on topics such as biodiversity and energy. Sustainability programs were implemented to increase knowledge and promote positive attitudes. A post-survey was given to measure the effectiveness of each program.

Presenter(s): Bailey Chandler, Georgia Southern University

Strand: • W

Building Collaborations Between Informal Educators and College Classes: Best Practices Environmental educators with the Kentucky Division for Air Quality and University of Kentucky have built a multi-year collaborative partnership to educate undergraduates and to improve public communication about air quality. Students gain realworld experience working with a client to produce EE materials, which in turn are used by the agency. Presenter(s): Lauren Cagle, Department of Writing,

Rhetoric, and Digital Studies, University of Kentucky; Roberta M. Burnes, Kentucky Division for Air Quality Strand: • YP

Thursday 10:00 AM

Coffee Break

10:00 AM-10:30 AM, Bluegrass Ballroom 1



LOCAL WILDLIFE

Bobcat

Bobcats are one of the largest mammals in Kentucky. They prefer heavy forest with lots of underbrush and choose a fresh rest shelter each day, such as a thicket, hollow tree, or cliff recess. Bobcats hunt during all parts of the day, but mainly during sunrise and sunset.



Thursday 10:30 AM

Young Professionals Clinic

10:30 AM-11:10 AM

Whether you're a student, just getting started on your career path, or in your first professional position, this clinic will help build essential skills that will help you now and in the future. Choose from sessions in two tracks: job seekers and early career educators. See page 32 for more information.

Track 1: Nail It! Acing the Interview and **Getting Paid**

10:30 AM-11:10 AM, Patterson B

An effective application can land you an interview, but the interview gets you the job. Learn best practices for preparing for and executing an effective interview. Additionally, entering salary negotiations, upon receiving an offer, requires research to provide evidence for your demands; tips and strategies will be provided to assist your

Presenter(s): Michael Cronk, Transylvania University

Strand: • W

Track 2: Game-Changing Communication 10:30 AM-11:10 AM, Patterson C

Take a look at the often overlooked power of how body language, first impressions, and business attire communicate far more than our words. Communicating with co-workers, colleagues, bosses, and staff is essential to every step of the career journey, and this program covers the ten habits of exceptional communicators.

Presenter(s): Terri Thompson, Terri Thompson **Presents**

Strand:

V



- **Building Leadership for Environmental Literacy**
- Connecting with
- Conservation and **Environmental Education**
- Educating for Sustainable Communities
- **Green Schools and Preparing** for 21ST Century Careers

- Linking Research and Practice to Increase Impact
- Equity and Inclusion









Traditional Presentations

10:30 AM-11:10 AM

A Leg Up for Young Scholars 10:30 AM-11:10 AM, Elkhorn A

Come listen to young professionals talk about their work! NAAEE and the US Forest Service share a goal of increasing diversity within the field of environmental education. We support scholarships for young professionals seeking to advance their careers through workshops, trainings, and networking with professionals from diverse cultures and communities.

Presenter(s): Drew Price, NAAEE; Heidi McAllister, US Forest Service

Strand: • VP

Applying the Meaningful Watershed Education **Experience Approach in Support of Community** Resilience

10:30 AM-11:10 AM, Berea

Communities across the country are dealing with environmental issues and hazards due to extreme weather events, the impacts of climate change, as well as other social and environmental changes. In this session we will discuss the critical role environmental education plays in supporting individuals and community resilience as they deal with these challenges.

Presenter(s): Bart Merrick, NOAA; Elise Trelegan, NOAA

Strand:

Engaging with the US Forest Service's Youth **Engagement Programs**

10:30 AM-11:10 AM, Thoroughbred 3

Discover the forest and all that comes with the US Forest Service youth engagement efforts across the country. Participants will learn about the strategy for youth engagement, efforts to engage people of color and different socioeconomic communities, and provide time to identify partner opportunities with the Forest Service.

Presenter(s): Susan M. Cox, US Forest Service; Barbara McGuinness, USDA Forest Service; Lisa Myers, US Forest Service-Eastern Region

Strand: •

Flexing the Guidelines Trainer Bureau Model: A Pilot

10:30 AM-11:10 AM, Hyatt Suites

Many EE programs like PLT and WILD have state coordinators. What would that model look like if we applied it to the *Guidelines for Excellence*? This session will share how four states have been working together with ee360 funding to develop state hubs for dissemination and training Guidelines Bureau members.

Presenter(s): Renee Strnad, North Carolina State University; Lauren Pyle, Environmental Educators of North Carolina; Ashley Hoffman, Kentucky Association for Environmental Education; Katie Navin, Colorado Alliance for Environmental Education; Bora Simmons, National Project for Excellence in **Environmental Education**

Strand:

(A)

Living Building Challenge: The Highest Standard of Sustainability

10:30 AM-11:10 AM, Regency Ballroom 3

The Living Building Challenge is a more sustainable pathway for how we construct and live in buildings, a philosophy cloaked in a certification. Wolf Ridge Environmental Learning Center's MAC Lodge was the 45th such project in the world to construct to full certification. Learn from our experience.

Presenter(s): Peter Smerud, Wolf Ridge **Environmental Learning Center**

Strand:

Not Your Mama's EE: Project WILD Next Generation and NGSS

10:30 AM-11:10 AM, Heritage Ballroom 1

Join us to participate in a classic "freeze tag" simulation of predator/prev interactions to explore new STEM, outdoor, and career extensions in the Project WILD guide. Learn how one organization has woven WILD into their EE Units of Study, developed to help educators better meet the Next Generation Science Standards.

Presenter(s): Marc LeFebre, Association of Fish & Wildlife Agencies/Project WILD; Brittany Wray, Kentucky Association for Environmental Education; Kelly Elizabeth Reynolds, Association of Fish & Wildlife Agencies/Project WILD

Strand:

Olimpiadas del CASA: Puerto Rican Forests for Children with ADHD

10:30 AM-11:10 AM, Elkhorn B

Olimpiadas del CASA are activities in forests for children with Attention-Deficit/Hyperactivity Disorder (ADHD). Athletes, often boys, hiked trails, made friends, and practiced nature-related hobbies while parents reported changes in symptoms. Projects like these can increase ADHD toolkits for families, as well as opportunities in forests for all children.

Presenter(s): Dayamiris Candelario, Interamerican University; Marta Rivera, Interamerican University; Yaritza Bobonis-Vázquez, Interamerican University Strand: • •

Questioning Our Assumptions with Real Data: What Makes EE Better?

10:30 AM-11:10 AM, Heritage Ballroom 2

What approaches lead to better outcomes in EE? We will share the results from an unprecedented national study of EE for youth designed to identify what factors actually lead to better outcomes. We will conclude by providing practical lessons for those interested in improving environmental education and enhancing outcome achievement.

Presenter(s): Marc Stern, Virginia Tech; Robert Powell, Clemson University

Strand:

Slow and Steady Progress Towards an Inclusive Student Research Symposium

10:30 AM-11:10 AM, Thoroughbred 5

US Regional GLOBE Student Research Symposia provided 800+ students, most fully funded and from underserved and underrepresented groups, with the opportunity to share their GLOBE research projects with peers and STEM professionals. Presenters share the 2019 evaluation summary, the challenges in creating these equitable and welcoming events, and our solutions.

Presenter(s): Dixon Butler, Youth Learning as Citizen Environmental Scientists

Strand: • 🔷

Teaching Environmental Education to Pre-K Students in a Digital Age

10:30 AM-11:10 AM, Thoroughbred 4

Participate in lively discussion and explore strategies for engaging early childhood students in environmental education. This presentation will include innovative ideas for connecting technology to outdoor learning spaces, techniques for engaging students across economic and cultural boundaries, and strategies for connecting literacy and technology standards with nature.

Presenter(s): Juliann Dupuis, Notre Dame of Maryland University; Ashley Nicole Demski, Baltimore City Public Schools

Strand:

The Santa Barbara Zoo: Becoming a Certified Autism Center

10:30 AM-11:10 AM, Kentucky

Come learn how the Santa Barbara Zoo has implemented training for staff, designated quiet spaces, created sensory backpacks, and so much more to create a more inclusive culture and become the first zoo on the West Coast to become a certified Autism Center.

Presenter(s): JJ McLeod, Santa Barbara Zoo Strand: • 🛟

The Story of Us: Unifying a Diverse Field with a Shared Narrative

10:30 AM-11:10 AM, Thoroughbred 2

Through a collaborative, multi-year process, Blue Sky Funders Forum listened to stakeholders within and potential partners outside of our field, to develop "The Story of Us," a shared narrative centered on shared values for strong communities and an equitable society. Engage and access resources available through this campaign.

Presenter(s): Anupama Joshi, Blue Sky Funders Forum; Sarah Bodor, NAAEE; Nancy Bales, Gray Family Foundation

Strand:

Using Systems Thinking to Educate About Sustainability and Environmental Justice 10:30 AM-11:10 AM, Heritage Ballroom 3

Learn how to use systems thinking to help students understand the broad ideas of sustainability and environmental justice. Students explore nested systems from their values and beliefs, to their classroom, their school, and their community. Students also discover the method of taking action that best fits their interests and skills.

Presenter(s): Eleva Potter, Conserve School Strand:

Whole School Sustainability: STEM and Our **Environment**

10:30 AM-11:10 AM, Regency Ballroom 1

Whole school sustainability requires the seamless and purposeful integration of all three pillars of sustainability throughout school's culture, place, and programs. But this is easier said than done. In this session, discover how Fayette County Public Schools is merging student-driven sustainability, wellness, and building efficiency to powerfully serve the whole child and develop student leadership.

Presenter(s): Tresine Logsdon, Fayette County **Public Schools**

Strand:

WZAM3: Findings on the Confluence of Visitor and **Institutional Agendas**

10:30 AM-11:10 AM, Regency Ballroom 2

Key findings from the WZAM3 study will be shared, including how zoos and aquariums can build institutional capacity to learn about their role and how visitors' purposes and plans for the visit align with their intention. Parallels to other informal STEM education settings will be drawn.

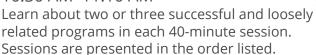
Presenter(s): Joe Heimlich, Lifelong Learning Group/ COSI; Kelly Riedinger, Oregon State University Center for Research on Lifelong STEM Learning; Rupu Gupta, New **Knowledge Organization**

Strand:

Thursday 10:30 AM

Bright Spots

10:30 AM-11:10 AM



GROUP A

10:30 AM-11:10 AM, Elkhorn C

Applying Research to Curriculum Design

Explore the before and after of the Environmental Volunteers' hands-on classroom activities. We have redesigned our lessons to incorporate teaching best practices identified by education research. This will be a brief overview of our process highlighting what has been most successful.

Presenter(s): Brittany Joy Sabol, Environmental

Volunteers Strand:

Best Methods for Best Practices in EE

Environmental educators are not removed from the world of teaching to meet grade level standards, but are we effective? In comparing two often used teaching methods we wanted to better understand how and what students are learning in the field by utilizing methods from the classroom.

Presenter(s): Michelle Pearce, Environmental Educators of North Carolina

Strand:

Environmental Literacy of Peruvian Middle School Students of Private and Public Schools

Lima, the capital of Peru, has been recognized as the most polluted city in Latin America. This study will determine the levels of environmental literacy, measuring awareness, knowledge, attitude, skills, and action through a descriptive-correlational design. Teachers and their fifth- and sixth-grade students in private and public schools provided the data. Presenter(s): Sandra Huaman-Pastorelli, Universidad de San Martin de Porres

Strand:

GROUP B

10:30 AM-11:10 AM, Elkhorn D

Air Pollution Impacts on Schoolchildren in a Coal Mining Area

The environments where children grow, play, and learn affect their health. Children that attend schools located around industrial areas are exposed to all sorts of pollutants. The health problems that result from this exposure make them absent from schools thereby leading to poor academic performance.

Presenter(s): Adejoke Olufemi, Tshwane University of Technology, Pretoria, South Africa; Andile Mji, Tshwane University of Technology, Pretoria, South Africa; Murembiwa Stanley Mukhola, Tshwane University of Technology, Pretoria, South Africa

Strand:

Hood 2 Farm

Hood 2 Farm: Global Green Gang is a hip hop-themed, community-focused education project designed to engage a diverse range of elementary schoolaged youth in natural science and environmental exploration through a merging of literature, audio-visual productions, community outreach, and eco-tourism. Presenter(s): Trevor Claiborn, Kentucky State University/

Farmer Brown Tha MC

Strand: • 🗘

Pedagogies of Perspective: Enacting Culturally Sustaining Practices in Nature Education

Authentic, culturally-sustaining pedagogies are critical for connecting marginalized youth to meaningful experiences in nature. Using a combination of interviews, observations, and longitudinal program evaluation analyses, this work explores the mechanisms through which instructors at a nature education program successfully avoid colorblind care and enact authentically caring, culturally-sustaining, practices with their students. Presenter(s): Juan Miguel Arias, Stanford University Strand:

Thursday 11:30 AM

Plenary Session

11:30 AM-12:30 PM, Bluegrass Ballroom 2

Mona Chalabi

Mona Chalabi is a journalist who really loves numbers. She is the Data Editor of *The Guardian* where she writes articles, produces documentaries, and illustrates, as well as animates, data. She is also a data journalist for NPR.

See page 41 for more information.

Thursday 12:30 PM

Exhibit Fair Luncheon

12:30 PM-2:15 PM

Poster Sessions and Affiliates' Welcome

1:00 PM-2:00 PM

Bluegrass Ballroom 1, Bluegrass and Thoroughbred Lobbies

Chat with exhibitors eager to connect you with the latest and greatest in environmental education products and services and visit with many of our colleagues, who will be sharing their poster presentations and discussing their work. Learn more about NAAEE's Affiliates and the many services they offer to their members on the state and provincial levels. And don't miss this opportunity to bid on fabulous finds in the silent auction or drop a couple of tickets into a raffle bucket. The luncheon is included with Thursday or full conference registration with an RSVP in advance.

See page 47 for more information. Exhibitors are listed on page 135.

Thursday 1:00 PM

Poster Presentations

1:00 PM-2:00 PM, Bluegrass and Thoroughbred Lobbies

1) A Canadian Perspective of Outdoor and Nature-Based Learning

Nature-based early childhood programs are rapidly gaining popularity in Canada. This mixed-methods survey study collected information on the number, type, pedagogies, and curricula content of these programs through a pan-Canadian online survey. Preliminary results will be shared in order to foster dialogue on outdoor education from an international perspective.

Presenter(s): Elizabeth Y. S. Boileau, Lakehead University; Debra Harwood, Brock University Strand: •

2) Agroforestry Education: Experiential Learning for Sustainable Agriculture Science

Agroforestry practices are critical to environmentally sustainable agriculture systems, but have been missing from K-12 land-based disciplines. Missouri's agricultural educators' curriculum implementation processes and teacher-learning contexts informed the University of Missouri Center for Agroforestry's efforts to produce a high school agroforestry curriculum and teacher professional development programs.

Presenter(s): Hannah Hemmelgarn, University of Missouri Center for Agroforestry Strand:

3) Analyzing Drawings and EEEBI to Determine Preservice Elementary Students Learning

Preservice students attended one- or two-day workshops at Mammoth Cave National Park. Based on their experiences, they documented their understanding of cave systems by drawing above- and below-ground connections on the first day of and following the workshop. The EE Efficacy Belief Instrument showed a reduced sense of efficacy after both one- and two-day trips.

Presenter(s): Jeanine Huss, Western Kentucky University; Michael McDonald, Western Kentucky University

4) BiomeSTL: The Case for Connectivity

How could one project propel an entire region to rethink its relationship with the living landscapes all around them? This narrative-driven poster shares a story about the power of partnerships, the importance of science and data, and the central role of citizens in sustaining healthy, thriving, livable communities for all.

Presenter(s): Sheila Voss, Missouri Botanical Garden Strand: • VP

5) Circle Acres: Environmental Justice in Austin Learn about a partnership between an urban wetlands restoration program and its local neighborhood providing empowering and environmental justice-oriented educational programs for students and other residents.

Presenter(s): Kevin Wickersham, Texas Association for Environmental Education

Strand:

6) Citizen Science and Community Engagement in El Yunque National Forest in Puerto Rico

This community engagement program, initiated in March 2019, based upon a successful 2018 model, shares the story of engaging eight communities surrounding El Yunque National Forest, through citizen science and conservation education programming. Goals include public participation in the implementation of the revised El Yunque forest management plan post-Hurricane Maria.

Presenter(s): Felipe Benitez, Corazón Latino; Abel Olivo, Corazón Latino

Strand:

7) Citizen Science and Environmental Education: A Framework to Inspire Stewardship

Citizen science and environmental education offer complementary approaches to move participants towards greater environmental literacy and potentially empowerment, yet little research has addressed this. This poster highlights a theoretical framework to identify appropriate learning outcomes for a citizen science project linked to EE activities, to inspire stewardship.

Presenter(s): Jessica Kaplan, West Virginia University; Dave Smaldone, West Virginia University; Megan Kruger, West Virginia University Research Corporation

Strand:

8) Classroom Activities Focusing on Uncharismatic Marine Species: Assessing Children's Attitudes
Children are often exposed to popular and charismatic species. While this exposure is important, raising awareness about the value of uncharismatic ones is just as essential. This research explores experiential learning through a series of activities and discussions focused on unique adaptations of marine invertebrates in order to foster appreciation.

New Haven Strand:

9) Conservation Districts: Connecting Students to Local Conservation Professionals

Presenter(s): Gianna Palladino, University of

Have you contacted your local Conservation District? Across the nation, our offices offer EE curriculum, place-based programs, and career-focused trainings for students and educators. Learn how to get involved with programs such as the national Envirothon competition, connect your students to conservation professionals, and access resources specific to your community.

Presenter(s): Susan Brown, Boone County Conservation District

Strand:

program.

10) Creating Brighter Futures: Integrating Adventure and STEM Education in West Virginia This presentation will introduce a theoretical framework and model of practice for adventure STEM programs through the environmental pilot program conducted by West Virginia University with rural youth. Attendees will walk away with a firm understanding of adventure STEM education and knowledge of where it can intersect with their

Presenter(s): Alice Morgan, West Virginia University Strand:

11) Creative Student Thinking and Problem Solving Through the AQ-IQ Contest

Students who participate in the North Carolina AQ-IQ Contest research an air quality problem and present a solution through a poster, video, game, or artistic project. North Carolina Air Awareness staff will share our best practices and difficulties in developing a statewide program and getting schools and students to participate.

Presenter(s): Keith Bamberger, NC Division of Air Quality

12) Design Thinking Our Way to a More **Sustainable City**

We use Stanford d.school's Design Thinking and the UN Sustainable Development Goals to frame deep learning opportunities, positioning learners as problem solvers in our urban, high opportunity community. The tenets of our model are widely replicable to foster engagement with underrepresented youth and the adults who serve them.

Presenter(s): Nakeia Wimberly, Paterson Public Schools; Elizabeth Nunez, Paterson Public Schools; Lakisha Kincherlow, Paterson Public Schools Strand:

13) Developing and Implementing a Conservation **Education Program in India**

Wild Shaale, a conservation education program, was developed with the goal of teaching children living in close proximity to India's protected areas about their local biodiversity. This poster will share lessons learned during the multi-stage development of a culturally relevant conservation education program in India's Western Ghats.

Presenter(s): Nitya Satheesh, University of Wisconsin-Madison

Strand:

14) Drinking Water Education: Potential Strategies for Promoting Health and Preventing Disease

Through promoting drinking water education, we can conclude that drinking low Oxidative-Redox Potential water may effectively promote health and prevent diseases by reducing the pollution in the water during its processing, production, and transportation and by producing hydrogen-rich water techniques. Presenter(s): Yung-Chiech Charles Yu, Environmental Protection Administration, Taiwan

Strand:





LOCAL CULTURE

The Judds

From Ashland, Kentucky, the Judds were an American country music duo composed of Naomi Judd and her daughter, Wynonna Judd. They are considered one of the most successful performers in country music history, having won five Grammy Awards and eight Country Music Association awards.

15) Effectiveness of an Iowa Outdoor Education **Program on Diverse Students**

Explore the effectiveness of a weeklong, immersionbased, outdoor education program by looking at the impacts on diverse sixth grade students from a public school. Results show changes in students' attitudes towards the outdoors, learning science, and sustainability after participating in the program. Presenter(s): Rebekah Stelzle, University of Iowa; Ted Neal, University of Iowa

Strand:

16) Empowering Youth with Digital Technology to Explore Local Environmental Issues

This poster focuses on Milwaukee Green STEM, which sponsors local community science events. Milwaukee Green STEM brings together people and organizations from all around Milwaukee to support student research and innovation. Environmental education organizations coordinate year-round to make their keynote event, Science Strikes Back, an all ages community science fair, successful. Presenter(s): Isabelle Herde, Upham Woods Outdoor Learning Center; R. Justin Hougham, University of Wisconsin-Madison; Tempestt Morgan, Upham **Woods Outdoor Learning Center**

Strand:

17) Engaging Teens in Project Drawdown and the Drawdown EcoChallenge

Examine strategies and receive curriculum resources for engaging youth in learning the solutions outlined in Paul Hawken's acclaimed book, Drawdown: The Most Comprehensive Plan Ever Proposed to Reverse Global Warming.

Presenter(s): Dana Haine, University of North Carolina-Chapel Hill Institute for the Environment Strand:

18) Environmental and Community Impacts by **Teen and Adult Partnerships**

Empowering diverse youth and adults towards environmental action is vital to building resilient communities. But to what degree do citizen environmental efforts in environmental action programs make a collective ecological and community impact? We quantified the impacts of 187 conservation efforts by intergenerational partnerships in University of Connecticut's Natural Resources Conservation Academy.

Presenter(s): Laura Cisneros, University of Connecticut

19) Environmental STEM Career Immersion Mentorship: Inspiring Achievement for At-Risk Youth

Throughout a five-week summer mentorship program, at-risk middle school girls explore the intersection of environmental issues and STEM careers. Participants meet female mentors working in STEM fields and gain hands-on experience with cutting-edge technology used in environmental research to expand their confidence and sense of self-representation in environmental STEM careers. Presenter(s): Amy Shea, Environmental Learning Center

Strand: • 🔷

20) Experiential Education: Tapping Maple Trees with Undergraduate Non-Science Majors

An experiential education curriculum that engages undergraduate non-science majors in tapping maple trees on an urban college campus helps students understand the natural world around them. Their science notebooks and artwork samples show the progression in their understanding of science. Presenter(s): Melissa Michael, University of Louisville Strand: •

21) Exploration and Implications of Environmental **Adult Education Participant Experiences**

Environmental adult education through professional development improves environmental literacy and promotes stewardship. Research findings revealed five themes past participants of a professional development shared as salient memories of their experience. The supporting elements of the themes could help with the development of future environmental adult education programs.

Presenter(s): Cindy Fitzwilliams-Heck, Ferris State University

Strand:

22) Exploring Constructs Associated with Humans' Relationships to the Natural World

Terms from different fields have been used to describe one's relationship with the natural environment, including topophilia, environmental sensitivity, significant life experiences, place attachment, and biophilia. This session will present a comparison of these terms, and explore their implications for theory, research, and practice in EE. Presenter(s): Danielle Pastor, Florida Institute of **Technology**

Strand:

23) Facilitating Disability Awareness and Accessibility in a Zoological Park

Community engaged research examined the organizational capacity, facilitators, and barriers to increasing access for visitors with disabilities at a zoological park. Following a needs assessment, staff training and visitor resources were developed to assist with this initiative. Experiences, lessons learned, and outcomes of the process will be shared. Presenter(s): Jordan McNeill, UNC Chapel Hill Strand: •

24) Finding the Intersections Between Culturally Sustaining Pedagogies and Environmental Education

A presentation of initial findings in the search for intersections between culturally sustaining pedagogies and environmental education. Three major place-based pedagogies are examined through the lens of culturally sustaining pedagogies as initially put forth by Dr. Django Paris and Dr. H. Samy Alim. Presenter(s): Kelly Smith, University of Arizona Strand:

25) Fostering Stewardship Through Professional Development

The Missouri Botanical Garden's EarthWays Center demonstrates how data, problem solving, and professional development can be used to engage learners and inspire impactful environmental action. This poster explores a waste reduction program that uses data to empower students and teachers with data to guide them in developing and implementing student-led environmental action projects. Presenter(s): Katherine Golden, Missouri Botanical

Garden Strand:

26) Gathering Climate and Tree-Ring Data with **Environmental Science Students**

Climate change topics for K-12 students can be difficult to discuss but are necessary components to environmental education. This session shows how to introduce students to tree-ring science, a tangible evidence of climate change that enhances environmental education and provides a pathway for students to become citizen scientists.

Presenter(s): Clay Tucker, Louisiana State University; Jill Trepanier, Louisiana State University

27) Global EE: The Good and the Better

Funded by the World Bank Connect4Climate Program, Earth Day Network conducted an assessment of global environmental education programs formally embedded into primary and secondary education school systems. Join us to learn results and best practices for successfully embedding EE into your classrooms.

Presenter(s): Tracey Ann Ritchie, Earth Day Network; Kira Heeschen, Earth Day Network

Strand:

28) Go Team! Exploring Community-Based Environmental Experiential Education Projects

Come explore with our team! Learn about the development of dynamic community-based education projects from the Bluegrass Community and Technical College faculty and students who are learning new methods, collecting data, and engaging volunteers in order to improve water quality in their community.

Presenter(s): Tracy Knowles, Bluegrass Community and Technical College

Strand: • W

29) Going Green While Teaching Green in Sustainable Outdoor Learning Stations

Considerations of how to create, manage, and sustain use of outdoor learning stations with sustainability and environmental responsibility, a best-practices approach is sometimes forgotten while engaging as many faces as possible in outdoor EE. We will share practices that minimize impacts during hands-on stream studies, heavy trail use, and more.

Presenter(s): Mandy Nix, Stroud Water Research Center; Tara Muenz, Stroud Water Research Center; Steve Kerlin, Stroud Water Research Center

Strand:



30) Groundswell Michigan: Ten Years of Impact and Outcomes

For 10 years, Groundswell Michigan, a 2018 ULIEA winner, has modeled and supported effective teaching pedagogy through community-based projects that address a real environmental need. Student engagement and learning through these projects has helped foster the next generation of environmental stewards. We will share results of our research and takeaways.

Presenter(s): Clayton Pelon, Grand Valley State University

Strand:

31) International Environmental Education Programs at Cornell University for Chinese Students

Youth Lead is a Chinese social enterprise in environmental education. In 2018, Youth Lead, in cooperation with Cornell University, organized summer and winter programs for Chinese students on environmental education. In this session, I would like to share the experience of organizing such international programs.

Presenter(s): Mi Yan, Cornell University

Strand:





LOCAL WILDLIFE

Narrow-winged Damselflies

Most of the damselflies encountered in Kentucky are Narrow-winged Damselflies. These small, fragile-looking damselflies are common near ponds and slow moving streams, and are named after their colors—common varieties include Violet Tails and Bluets.

- Building Leadership for Environmental Literacy
- Connecting with Nature
- Conservation and Environmental Education
- Educating for Sustainable Communities
- Green Schools and Preparing for 21ST Century Careers

- Linking Research and Practice to Increase Impact
- Equity and Inclusion
- YP Yo
- Young Professionals





32) Junior Nature Explorers: Cultivating the Next Generation of Conservation Stewards

We describe the development and implementation of an environmental stewardship program in preschool programs in the Midwest. The program was designed based on Head Start program domains and with a Learning Sciences focus keeping in mind the role of collaborative learning and role models and mentors. Presenter(s): Priyanka Parekh, Transylvania University; Rachel Patton

Strand:

33) Kentucky Master Naturalist Program

The University of Kentucky created a new Kentucky Master Naturalist program to develop a community of well-informed citizen-volunteers dedicated to the conservation and management of Kentucky's natural resources and areas. This session will discuss the program, showcase developed materials, and will provide participants with information on how to become involved in the program.

Presenter(s): Carmen Agouridis, University of Kentucky; Ellen Crocker, University of Kentucky Strand:

34) Latinx Youth's Experiences Across a Large-Scale Nature Education Partnership

This research presentation examines youth experiences across a large-scale nature education partnership designed to engage Latinx youth in nature experiences. We look at youth's experiences across the multiple programing contexts within the partnership and how they experienced the various undergirding values, goals, and pedagogical approaches of these programs.

Presenter(s): Kelsey Tayne, University of Colorado– Boulder

Strand: • 💠

35) Lexington Tree Week—Now! (October 12–19)

Tree Week celebrates and synthesizes the roles trees play through creative, informative, and funfilled activities for all ages. Dozens of community events create opportunities for engaging with (and under) Lexington's beautiful tree canopy. Lexington Tree Week, organized by the Urban Forest Initiative, coincides with NAAEE's 2019 Conference.

Presenter(s): Nicolas Williamson, University of Kentucky

Strand:

36) Library Outreach: Environmental Education That Meets Them Where They Are

By combining in-classroom outreach methods and outdoor programming with environmental education topics and concepts, Kenton County Public Library has found a successful formula for providing instruction-enhancing, fun, and engaging lessons that meet students where they are. Explore successful library programs which make nature connections with students both inside and outside.

Presenter(s): Jennifer Beach, Kenton County Public Library

Strand:

37) Marine Protected Area Educator Toolkit

Take a dive into the Marine Protected Area Educator (MPA) Toolkit, a collaborative effort to provide formal and informal educators, regardless of location, with the resources to connect students to ocean stewardship through research-driven field activities such as MPA Watch and classroom-based lessons such as turning kelp into gummy worms!

Presenter(s): Angela Kemsley, WILDCOAST

Strand:

38) Motivating Undergraduates to Mentor Underserved Middle School Students in STEM

Learn what motivates undergraduates to volunteer in their local communities. By understanding their motivations, volunteer programs can be marketed to target the interests of undergraduates. The presentation will look at volunteers in Positive Feedback, a grassroots science fair mentoring program started by undergraduate students at the University of Florida.

Presenter(s): Gabriela Sullivan, University of Florida Strand:



LOCAL CULTURE

Muhammad Ali "The Greatest"

Kentucky native, Muhammad Ali, born Cassius Marcellus Clay Jr, was an American professional boxer, activist, and philanthropist. He is widely regarded as one of the most significant and celebrated sports figures of the 20th century.



Muhammad Ali painting by John Stango

39) Out in the Field: University Student Attitudes and Interest in Environmental Education

How can we attract more STEM majors to environmental education careers? Come learn how field experiences at the National Aquarium and a local school system outdoor school affected the attitudes and interest of STEM majors enrolled in an upper level biology course.

Presenter(s): Sarah Haines, Towson University; Chelsea McClure, Towson University

Strand: O

40) Patterns That Shape UEE Practice and Policy in a Diverse City

In a world so rich in different EE aproaches, how do we know what can succeed where? Which approach can answer the needs of different communities? Urban patterns can help us forsee the EE needs in different parts of the city. Come explore a case study of Jerusalem.

Presenter(s): Naama Sadan, The Hebrew University in Jerusalem

Strand:

41) Positive Youth Development, Environmental Action, and Civic Engagement Implications

Explore positive youth development practices and outcomes in an environmental action program from the Saint Louis Zoo to promote civic engagement in youth and young adults! Research will be explored and resources will be given to help you implement or enhance your environmental action program with positive youth development practices.

Presenter(s): Christine Jie Li, University of Missouri; Sydney Barnason, University of Missouri–Columbia Strand:

42) Restoration Ecology: An Interdisciplinary and Hands-On Core Curriculum Option

Restoration ecology is interdisciplinary and presents inviting opportunities for students representing a wide range of academic interests. In addition, restoration ecology presents ready opportunities for relevant on-the-ground research to better understand environmental issues, as well as service-learning opportunities to directly effect conservation solutions.

Presenter(s): Kenton Sena, University of Kentucky Strand:

43) Restoring Native Orchids While Restoring Nature with Kids

FAU Pine Jog Environmental Education Center has successfully developed an educational component of the Florida Orchid Restoration program called OrKids. Students engage in learning about the importance of plants in native ecosystems while actively collecting data on orchids they grow in their schools' botany lab. Lessons learned will be shared. Presenter(s): Carmen Rodriguez, FAU Pine Jog Environmental Education Center; Mingkai Zheng, FAU Pine Jog Environmental Education Center; Lida Niu, FAU Pine Jog Environmental Education Center

44) Rock Out! Lessons in Stream Ecosystem Engineering Through the Rock Pack Experiment

The Rock Pack Experiment combines STEM topics of engineering, ecology, and mathematics in stream ecosystems through the world of the net-spinning caddisfly. Activities can be used indoors or outdoors to get students excited about insects and rocks in streams and to learn interdisciplinary science skills in a unique way!

Presenter(s): Tara Muenz, Stroud Water Research Center

Strand:

45) S.T.E.A.M. Unplugged

This field-based initiative provides participants with the opportunity to integrate science, technology, engineering, art, and math within the natural world. Utilizing Connecticut's natural resources as outdoor classrooms/labs the concept of "Nature Did It First" is explored. Site-based Investigations include field geology, salt/freshwater ecosystems, field/forest, energy transformation, and land art.

Presenter(s): Karen Christensen, Sacred Heart University

Strand:

46) School-Wide Inquiry from the View of a Butterfly Garden

Participate in lively discussion and activities as we explore strategies for engaging students in a citizen science project. This presentation will include innovative ideas for an inquiry-based project of creating a monarch butterfly garden, techniques for engaging students in cross-curricular activities, and involving the entire K-8 school community in natural school reform.

Presenter(s): Juliann Dupuis, Notre Dame of Maryland University; Tracey Tokarski, St. Joan of Arc Strand:

47) Self-Organized Summer Camps of a Campus Environmental Club for Different Audiences

Multiple summer camps are organized every year by this large campus environmental club to address different environmental topics for different audiences. The poster includes camp details, as well as observations, reflections, and discussions from the club members and a researcher.

Presenter(s): Yueyang Yu, Cornell University Strand: • YP

48) South Carolina 4-H Junior Naturalist: Impacts and Innovations

South Carolina 4-H Junior Naturalist is a nature-based and inclusive youth program that encourages environmental stewardship by providing place-based education about the natural world. Impacts included increased affinity for nature and feeling happy because of exploring and sensory experiences outside and with animals. Stewardship actions reported. Program evaluation leads to innovations. Presenter(s): Cathleen Reas, Montreat College Strand:

49) Sowing SEEDS—Improving Self-Efficacy in Science Education for Preservice TeachersSowing SEEDS (Science, Environmental Education, Discovery, and Synthesis) establishes two environmental education certification programs for preservice teachers focused on grades K–3 and 4–9, respectively. We cultivate effective science preservice educators who positively engage young minds through inquiry-based activities and create science educational kits for inservice teachers in any educational setting.

Presenter(s): Julia Robinson, Robert A. Hefner Museum of Natural History

Strand:

50) Supporting Ecological Justice and Sustainability in K–12 Schools and Communities

Teachers, students, and communities must work together for a just and sustainable future. This session highlights how place-based K-12 professional development makes this happen when teachers learn how to utilize place-based education in their classrooms and partner students with community members and organizations to address and solve local environmental issues.

Presenter(s): Erica Hamilton, Grand Valley State University

Strand: •

51) Teaching Science with Technology: Using EPA's EnviroAtlas in the Classroom

US EPA's EnviroAtlas provides a collection of web-based, interactive tools and resources for exploring ecosystem goods and services. This poster introduces a K–12 educational curriculum that has been designed for use with EnviroAtlas. The curriculum contains four lesson plan packages for grades K–adult. All lesson plans are standardsaligned and free.

Presenter(s): Jenna Hartley, NC State University and ORISE/US Environmental Protection Agency Strand:

52) Teaching Tough Topics with Tact

The National Center for Science Education Teacher Ambassador Program recruits and trains teachers who provide professional development for peers that inoculates students against misinformation while covering content areas where students and the public often harbor misconceptions. Jason Carter, an NCSE Teacher Ambassador will walk you through five lessons and demonstrate NCSE's no-conflict approach.

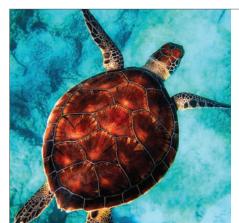
Presenter(s): Brad Hoge, National Center for Science Education; Jason Carter, Evergreen Community Charter School

Strand:

53) Teaching Tweens and Toddlers, and the Life Lessons Learned

Hear testimony from teens who worked to develop and deliver nature play activities to children attending field trips to the newly constructed nature play area and tree house at Dan Ryan Woods of the Forest Preserves of Cook County.

Presenter(s): Rebecca Moss, Forest Preserves of Cook County; Lisa Schwarz, Forest Preserves of Cook County





54) Tennessee 4-H Water Project: Wish You Were a Kid Again!

University of Tennessee Extension is developing a 4-H Project on water, through a former 4-H Agent who thinks out of the box. Hear about the funding, curriculum development, aligning with state 4-H programs, state educational standards, lesson plans and activities, piloting in 4-H Clubs, Farm Days, and 4-H Water Camp!

Presenter(s): Lena Beth Reynolds, University of Tennessee Extension

Strand:

55) The Impact of Nature Preschools on Young Children's Well-Being and Well-Becoming

Learn about a research line underway in nature preschools in Minnesota that is building a base of empirical evidence that can be used to advocate for aligning early learning practices with what is known regarding children's development and well-being, and by doing so, meaningfully contribute toward a more sustainable future.

Presenter(s): Julie Ernst, University of University of Minnesota–Duluth; Ashlyn Teather, University of Minnesota–Duluth

Strand:

56) The Ohio River Recreational Trail

The 250-mile Ohio River Recreational Trail goes from Portsmouth to Louisville, Kentucky. It uses the US National Park Service standards identified in the Rivers, Trails, and Conservation Assistance Program as a planning platform. The trail provides access and safety to the Ohio River and promotes recreation and education.

Presenter(s): David Wicks, River City Paddle Sports; Angela Page, Louisville Male High School

Strand:

57) The Role of Citizen Science in Community Engagement and Perceptions of Local Nature Centers

Citizen science has the potential to increase community engagement and positive perceptions of nature centers. Visitors of all ages can participate in authentic science that promotes conservation and ecological stewardship. Learn how a small nature center integrated citizen science into its education programs to engage the community in nature-based education.

Presenter(s): Danielle Kulina, Southern Illinois University–Edwardsville

Strand: 🕒 🛟

58) Urban Forest Stewardship Program for Inner-City Schools and Inner-City Youth

Awaken the senses and inspire curiosity in innercity students as they explore forested areas and the outdoors. Citizen science, tree ID, gardening, bird watching, stream clean-up, and more fun activities comprise the Urban Forest Stewardship program as inner city students learn ways to value, care for, and produce a healthy ecosystem.

Presenter(s): Zakiya Jackson, Detroit Public Schools Community District

Strand:

59) Using Nature Journals to Increase Students' Awareness of Local Biodiversity

Want to increase students' scientific observation and writing skills while encouraging them to explore and learn about local environments? Our presentation will highlight preliminary results from using nature journaling activities to develop students' awareness of local biodiversity and critical thinking skills, while sparking their interest in the world around them! Presenter(s): Sara Salisbury, Middle Tennessee State University

Strand: O

60) Citizen Science Air Quality Projects Review and Engagement Proposal

Citizen science projects are a dynamic way to engage students in scientific methods. Attempts to identify large-scale accessible projects focused on air quality were challenging, exposing a lack of programs in North America. The researcher seeks to engage educators in cost-efficient and accessible citizen science air quality studies.

Presenter(s): Nicole Lemmo, Florida Institute of Technology

Strand: •



LOCAL WILDLIFE

Goldenrod

Goldenrod is a perennial plant known for its healing properties. Fields of goldenrod bloom across Kentucky in late summer and early fall. This wild edible does not cause seasonal allergies as many tend to believe. Solidago gigantea species of goldenrod is the Kentucky state flower.



Thursday 2:15 PM

Environmental Education Evaluation Clinic

2:15 PM-3:45 PM, Patterson B

Interested in learning more about evaluation? Bring your questions to this interactive workshop! We will follow up on evaluation topics introduced throughout the conference (e.g., nature connection, culturally responsive evaluation, an online evaluation portal available soon), and answer any other questions you have about evaluation, including those specific to your program.

Coordinator: Kathryn Stevenson, North Carolina State University

Presenter(s): Karyl Askew, Program Evaluation Consultant; Rachel Becker-Klein, Two Roads Consulting; Steven Braun, eeRise; Dave Chase, DRC Consulting, LLC; Louise Chawla, University of Colorado-Boulder; Charlotte Clark, Duke University; Julie Ernst, University of Minnesota-Duluth; Ruth Kermish-Allen, Maine Mathematics and Science Alliance; Thomas Marcinkowski, Florida Institute of Technology; Kathleen O'Connor, NatureBridge; Robert Powell, Clemson University; Gabby Salazar, University of Florida; Marc Stern, Virginia Tech Strand:

Symposium

2:15 PM-3:45 PM

Moving the Needle: Promoting Equity with Systemically Integrated Environmental Education 2:15 PM-3:45 PM, Kentucky

Learn about the collaboration between the Pennsylvania Departments of Education and Environmental Protection to support school districts, communities, businesses, and non-governmental agencies within Pennsylvania's Environmental Justice Areas. The integration of environmental education, civics, and environmental justice themes promote an increasingly environmentally literate and active citizenry.

Presenter(s): Tamara Peffer, PA Department of Education; Allison Acevedo, PA Department of Environmental Protection; Ellen Schultz, Fairmount Water Works; Sarah Flaherty, PA Department of Education

Strand:

Strand:

Hands-On Presentations

2:15 PM-3:45 PM

Affiliate Network Open Space 2:15 PM-3:45 PM, Hyatt Suites

Join Affiliate leaders to discuss the challenges and successes that are most important to your Affiliate. In this open space session, you will have the opportunity to suggest and manage conversation topics and working sessions to answer the question, "How can we build the capacity of Affiliate organizations?" Strand:

A

Blending Knowledge: Broadening Our Perspectives on Science Learning

2:15 PM-3:45 PM, Heritage Ballroom 2

Making well-informed, evidence-based decisions to protect our coastal ecosystems relies on us being able to understand, appreciate, and use many types of knowledge simultaneously (e.g. Indigenous ways of knowing, scientific data collection, accidental/ unexpected observations). Join us on our journey as we reimagine what inclusive environmental education looks like.

Presenter(s): Stephanie Chong, Ocean Wise Education; Myia Antone, Ocean Wise Education Strand: •

Equitable and Inclusive Teaching in Practice 2:15 PM-3:45 PM, Regency Ballroom 1

Many educators want their teaching to be equitable, inclusive, and culturally responsive, but what does that look like? We'll model an engaging activity, unpack the characteristics that make it an equitable and inclusive learning experience, and discuss how the approaches can be woven throughout environmental education.

Presenter(s): Emilie Lygren, BEETLES Project, Lawrence Hall of Science; Jedda Foreman, Lawrence Hall of Science

Strand:

Four Environmental Ethical Principles to Engage and Sustain Student Thinking

2:15 PM-3:45 PM, Heritage Ballroom 3

Why should the teaching of ethical principles be limited to medical students? All students can learn how to think and act ethically. Four principles—precautionary principle, biodiversity, environmental justice, and sustainability—serve as guides to help students decide on a course of action. Participate in hands-on activities and thoughtful discussion.

Presenter(s): Elizabeth Spike, Fairfax County Public Schools

Strand: • 💠

Lessons from the Forest: How Great Preschools Place Nature at the Heart of the Curriculum 2:15 PM-3:45 PM, Heritage Ballroom 1

Nature-based learning is one of the fastest-growing approaches to early education. What do schools at the forefront of the movement—nature and forest schools—have in common, and what can they teach schools just starting to step outside? Explore a new guidebook from NAAEE's Natural Start Alliance developed with nature-based education leaders to ensure programs are safe, effective, and inclusive. Presenter(s): Christy Merrick, NAAEE

Strand:

Online Learning to Advance EE Practice: Cornell's **Experience and Research**

2:15 PM-3:45 PM, Regency Ballroom 3

Cornell University has developed and assessed multiple models for online professional development, including global online courses; camps for university environmental clubs; a global biosphere reserve plastics network; and climate fellowship. After short introductions, we will break into groups to explore strategies for online professional development locally and globally.

Presenter(s): Marianne Krasny, Cornell University; Alex Kudryavtsev, Cornell University; Yue Li, Cornell University; Anne K Armstrong, Cornell University; Yueyang Yu, Cornell University; Mi Yan, Cornell University

Strand:

Outdoor Nature Play and Environmental Learning with Loose Parts

2:15 PM-3:45 PM, Regency Ballroom 2

Participants will engage in shared stories and examples of playful inquiry with loose parts in an outdoor classroom and school garden. We'll share how our public school model allows for meaningful access to cross-curricular environmental learning that promotes a connection to place, socialemotional, and physical well-being in the K-7 sub/ urban, and rural contexts.

Presenter(s): Megan Zeni, School District #38, Richmond; Sarah Regan, Richmond School District, British Columbia

Strand:

Tools & Tips for Successful State and Federal **EE Advocacy**

2:15 PM-3:45 PM, Thoroughbred 4

NAAEE and partner organizations have developed new tools for helping educators advance state and federal policy for environmental literacy. In this interactive session, participants will receive training in how to use NAAEE's new guide, eeAdvocate, and hear from leaders about state policy models that are effectively getting more youth engaged in meaningful outdoor and environmental education.

Presenter(s): Sarah Bodor, NAAEE

Strand:

Traditional Presentations

2:15 PM-2:55 PM

#185DaysofWalks 2:15 PM-2:55 PM, Berea

What happens when you take 19 first and second grade children outdoors for a walk, every day, despite the other time commitments, despite the other priorities, and despite the weather, even when it's minus 40 degrees? Let me share our #185daysofwalks journey with you.

Presenter(s): Bela Luis, Seven Oaks School Division

Building Youth Power Through a Multi-Generational Collaborative Environmental Leadership Network 2:15 PM-2:55 PM, Thoroughbred 3

The Maine Environmental Changemakers Network connects youth from diverse backgrounds across Maine with the training, skills, resources, and the peer and professional mentors they need to lead forward environmental action in their home communities. Workshop participants will explore effective pathways to deepen youth engagement and foster authentic and collaborative leadership skills. Presenter(s): Olivia Griset, Maine Environmental Education Association; Nyaruot Nguany, Maine **Environmental Changemakers**

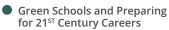
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Building Leadership for **Environmental Literacy**



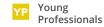






Linking Research and Practice to Increase Impact









Designing Inclusive Professional Development for Educators

2:15 PM-2:55 PM, Thoroughbred 2

Project Learning Tree uses the ADDIE model as an instructional design process for designing, delivering, and evaluating high-quality professional development. In this session, participants will examine the ADDIE model and instructional strategies specifically related to inclusive programming. (ADDIE components are Analyze, Design and Develop, Implement, and Evaluate.) Presenter(s): Ana Leirner, Project Learning Tree; Esther Cowles, Project Learning Tree Strand: • 🗘

Green Jobs: Exploring Forest Careers 2:15 PM-2:55 PM, Elkhorn A

Receive an introduction to Project Learning Tree's new green career resource for formal and nonformal educators working with young adults. Participants explore all content and its applications to youth development programs, such as Scouts and 4-H. Participants receive ready-to-use tools and supporting resources to enhance immediate use. Presenter(s): Rachel Lang, Sustainable Forestry Initiative; Renee Strnad, North Carolina State University

Strand: • W

Integrating Sustainable Living Education into the Classroom

2:15 PM-2:55 PM, Thoroughbred 5

Sustainable Classrooms integrates sustainable living into the classroom using standards-aligned curriculum, project-based learning, and student home investigations. Sustainability can be used to encourage social emotional learning, career exploration, three-dimensional learning, and community engagement. Attendees will explore applications of sustainability education that inspire students to become agents of change.

Presenter(s): Diana Andrew, Urban Green Lab

Strand:

Strand:

One Group of Adolescent Urban Children and Their Perceptions of Nature 2:15 PM-2:55 PM, Elkhorn B

This photo voice project seeks to understand how a group of urban high school students interpret nature within their Midwest neighborhoods. How do neighborhood green spaces affect students' sense of attachment to nature?

Presenter(s): Randall Gibson, University of Cincinnati

Strand: 🛑 🎲

Bright Spots

2:15 PM-2:55 PM



Learn about two or three successful and loosely related programs in each 40-minute session. Sessions are presented in the order listed.

GROUP A

EE 30 Under 30 Honorees 2:15 PM-2:55 PM, Elkhorn C

EE 30 Under 30: Spotlighting Leadership in **Environmental Education**

Join us to learn about NAAEE's annual initiative to spotlight and support youth leadership from around the world. The program recognizes exceptional leaders under the age of 30 who use environmental education in their work, and provides awardees with networking and professional opportunities through its growing global alumni community.

Presenter(s): Nina Hamilton, NAAEE

Strand: • W

In the Footsteps of Our Ancestors: Cross-Cultural **Conservation and Education**

The Canol Heritage Trail is a symbol of cultural strength and environmental stewardship in the remote Sahtú region of Canada. With culturally relevant environmental education in mind, come learn about the filming of a documentary project that went far beyond telling the story of a trail.

Presenter(s): Erinn Drage, Trails in Tandem

Strand: • W

Translating Science Talk for the Non-Science **Human Through Media**

Concerned that not possessing the right science "smarts" might limit your ability to have an impact on wildlife conservation? For me, it turned out to be a strength. In this session, I'll share practical advice from my experiences helping scientists translate and communicate their messages through film and media. Presenter(s): Alex Goetz, Running Wild Media

Strand: • W

Group B

2:15 PM-2:55 PM, Elkhorn D

Breaking Down Barriers in Environmental Education

"I learned that mud isn't scary!" Galveston Bay Foundation's education programs have a long history of engaging urban and low-economic youth. Participant surveys have resulted in detailed information regarding the barriers that students face when it comes to experiencing nature, and how the programs have helped them overcome these barriers.

Presenter(s): Cindy Wilems, Galveston Bay Foundation; Megan Imme, Galveston Bay Foundation Strand:

The Report Card Champion Program: Cultivating **Conservation Leadership**

The Report Card Champion Program is an advocacy program that gives participants the knowledge, skills, and resources needed to cultivate conservation action in their communities. It seeks to empower youth and community groups in the Houston-Galveston area to advocate and preserve Galveston Bay—a vital natural resource for our health and economy.

Presenter(s): T'Noya Thompson, Galveston Bay Foundation

Strand: • W

Roundtable Discussions

2:15 PM-2:55 PM, Thoroughbred 1

NAAEE Fundraising Coaching Table 1

How do I start conversations that lead to bigger gifts? How can I get my board members more engaged in fundraising? Is this project right for corporate or foundation support? Am I doing ANY of this right? Whether you're new to fundraising or a seasoned professional, bring your questions to NAAEE's fundraising roundtables. Space is limited; advance sign up at the Information Station required.

Presenter(s): Lea Harvey, LLH Strategy Advisors, LLC; Krishna Roy, Consultant

Strand:

Trand:

Alphabet Soup: Establishing Common Ground **Through Definitions**

Table 2

Come get acquainted and re-acquainted with terms commonly used within diversity, equity, and inclusion work—even diversity, equity, and inclusion as terms themselves. We'll discuss different meanings, questions, and applications while extending our learning about culture and inclusive education. Presenter(s): Luciana Ranelli, Teton Science Schools; Libby McCann, Antioch University New England; Jean Chimbirima Kayira, Antioch University New England; Anne Umali, NAAEE; Bora Simmons, National Project for Excellence in Environmental Education

Strand: • 🗘 🗘

Climate Literacy and Energy Awareness Network (CLEAN Network)

Table 3

The CLEAN Network brings together a community of educators and climate experts to provide a gateway to cutting-edge resources for climate education, climate literacy, and workforce development. Learn how you can join this community, develop new partnerships, make use of CLEAN resources, and get involved in making a difference.

Presenter(s): Frank Niepold III, NOAA; Kathryn Boyd, CIRES/University of Colorado; Roberta Burnes, Kentucky Division for Air Quality; Karen Hollweg, Fulbright Specialist; Jen Kretser, The Wild Center Strand:

From Womb to Tomb: Promoting Green Burials for Conservation and Education Table 4

Green burial (or natural burial) can reduce greenhouse gas emissions and other toxins, protect land as a conservation strategy, and promote a connection to the earth for the living. Environmental educators can work in communities to help people explore more sustainable and affordable choices around death and dying.

Presenter(s): Mallory McDuff, Warren Wilson College Strand:

Link Research to Practice and Increase Revenue with Logic Models

Table 5

Logic models are useful in the program design and evaluation process, facilitate the incorporation of research, and can increase revenue when included in grant proposals. Join this roundtable to share your experiences with logic models. An introduction to logic models with examples will be shared so newcomers can easily participate.

Presenter(s): Sue Magdziarz, John G. Shedd Aquarium Strand:

Stepping Away from the Savior Syndrome: **Outreach that Empowers**

Table 6

Together, let's examine what a true departure from Savior Syndrome would look like within the context of conservation education. This is just the beginning of a universally necessary dialogue about evolving the EE tools of engagement ranging from curriculum imagery to culturally relevant points of entry into an underrepresented community.

Presenter(s): Olivia Walton, University of New Haven Strand:

Thursday 3:05 PM

Traditional Presentations

3:05 PM-3:45 PM

iBountiful Harvest: Cultivating Youth Leaders Through Farming, Employment, and Education 3:05 PM-3:45 PM, Berea

Using food as a vehicle for personal growth and social change, the Youth Community Agriculture Program inspires young people to take an active role in their food system and create a healthier community. This presentation gives best practices and data to showcase a program growing a new generation of leaders.

Presenter(s): Erin Hargrove, The Food Literacy Project Strand:

Habitat: An Ecological Restoration Program in Puerto Rico

3:05 PM-3:45 PM, Elkhorn A

The islands of Puerto Rico experienced hurricanes Irma and María, our most devastating natural disasters in over 100 years. We faced challenges and opportunities across the devastated landscapes. To help restore vital ecosystems, we launched Habitat, a comprehensive long-term ecological restoration program that assists the rehabilitation of both our natural habitats and vulnerable communities.

Presenter(s): Therel Santos-Diaz, Para la Naturaleza

Strand: • 🔷

Influence of Field Experience on Teaching Self-Efficacy and Preservice Teacher Interest in EE 3:05 PM-3:45 PM, Thoroughbred 3

Our study examined how nonformal field experiences affect teaching self-efficacy and attitudes towards teaching science. Preservice teachers taught programming at the National Aquarium to middle level students from Baltimore City Schools. Results will be presented from pre/post surveys, interviews, and student work artifacts.

Presenter(s): Sarah Haines, Towson University; Chelsea McClure, Towson University

Strand:

Learn How to Explore Your World via National **Geographic Grants**

3:05 PM-3:45 PM, Thoroughbred 2

The National Geographic Society seeks educators to explore ideas that move us closer to a planet in balance. Come learn about our grant opportunities that are available to educators just like you. Let's go exploring!

Presenter(s): Rosemary Martin, National Geographic Society

Strand:

Opportunities for Critical Pedagogy in Place-Based Secondary Environmental Science 3:05 PM-3:45 PM, Elkhorn B

The presenters will share their collaboration as co-researchers and co-teachers in a high school environmental science class. With photographs and conversation about a native meadow installation in the school's courtyard, they will discuss opportunities and challenges in teaching environmental science that is culturally relevant for a diverse classroom of students.

Presenter(s): Carolyn Waters, Bellarmine University; Lauren Niemann, Jefferson County Public Schools Strand: • 💠

Wild Folk Forest School: Healing Community and Creative Play

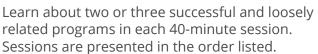
3:05 PM-3:45 PM, Thoroughbred 5

At Wild Folk, young people (7–15 years) are guided by their own sparked curiosity, beside human and more than human (forest community) mentors. This experiential, play-based, outdoor enrichment program is a healing force for diverse learners, not otherwise served by conventional pedagogies. Unstructured play is our key to unlocking intrinsically motivated learning.

Presenter(s): Hannah Hemmelgarn, Wild Folk Forest School

Bright Spots

3:05 PM-3:45 PM



GROUP A

3:05 PM-3:45 PM, Elkhorn C

Environmental Educators

A Community Action Program for Teen Volunteers We launched an Environmental Community Action Program as part of our teen junior docent program in 2018 at Squam Lakes Natural Science Center in New Hampshire. We will share lessons learned from the first year and changes made to improve the experience and project outcomes for 2019. Presenter(s): Carol Raymond, Squam Lakes Natural Science Center; Audrey Eisenhauer, New Hampshire

Strand:

Rocky Mountain Environmental Challenge—An Innovative Approach to Natural Hazard Education Learn how Northern Colorado classrooms have taken part in a competition-based education program that promotes student engagement with community natural hazard risks. Using Earth Force's Community Action and Problem-Solving Process, students explore, identify, research, and develop action plans addressing community natural hazards issues, to make their communities stronger and more resilient. Presenter(s): Justin Zakoren, Earth Force Strand:





LOCAL WILDLIFE

Viceroy Butterfly

The viceroy was named the state butterfly of Kentucky in 1990. It can be distinguished from the monarch by its smaller size and the black line that runs across the veins on the hindwing.

GROUP B

3:05 PM-3:45 PM, Elkhorn D

Eco-Schools USA: Preparing the Next Generation with Science + Action

In the next 50 years, rising generations are at risk for not knowing the world as we do; from sprawling national parks dense in trees to rushing rivers filled with wildlife, our world is changing. Through the NWF Eco-Schools USA program, students use science and action to develop real solutions.

Presenter(s): Kim Martinez, National Wildlife Federation; Mary Ann Settlemyre, Centreville Elementary School, Fairfax County Public Schools Strand:

High School Students Taking Leadership in Creating an Eco-School in China

We are a group of high school students who are now creating one of the first eco-schools in China entirely initiated and organized by high school students. We will share our solutions to prevailing problems existing in eco-schools like us and most of the ecoschools in China and the world.

Presenter(s): Yuehuai Gao, Sannew High School **Eco-Committee**

Strand:

YP

Leading Climate Change Education in Schools with Age Appropriate Action

New Brunswick released an Education Plan designed to improve environmental awareness and education for students in New Brunswick schools. Curriculum specialist, Geoff MacDonald (M.Ed, B.Ed, B.Sc), will share the Gaia project with others to gather feedback from other specialists in the field of climate change education.

Presenter(s): Geoff MacDonald, The Gaia Project Strand:



Prescott College

EXHIBIT FAIR BOOTH #36

Thursday 4:00 PM

Symposium

4:00 PM-5:30 PM

Best Practices for Engaging Young People in Environmental Citizenship

4:00 PM-5:30 PM, Kentucky

What practices enable young people to step into roles of leadership in environmental problem solving? Learn about outcomes from curricula that helped students have productive climate change conversations with their parents in a politically conservative state, educate local officials about marine debris, and design environmental service projects for their underrepresented community. Presenter(s): Danielle Alexis Lawson, North Carolina State University; Jenna Hartley, North Carolina State University and ORISE/US Environmental Protection Agency; Julie Byle, University of Colorado-Boulder Moderator: Louise Chawla, University of Colorado-Boulder

Strand: •

Hands-On Presentations

4:00 PM-5:30 PM

Building Organizational Capacity for Improvement 4:00 PM-5:30 PM, Heritage Ballroom 2

Improving organizations is a surprisingly challenging undertaking. Even when we know what we want to be different, it can be immensely difficult to implement the change we seek. This workshop outlines a process for organization leaders to "get better at getting better" by systematically assessing seven research-based capacities for improvement. Presenter(s): Jedda Foreman, Lawrence Hall of Science; Emilie Lygren, BEETLES Project, Lawrence Hall of Science

Strand:

Cultivating Outdoor Leadership Through Storytelling: A Relational Public Narrative Introduction 4:00 PM-5:30 PM, Heritage Ballroom 3

Unexamined cultural and personal narratives erode our capacities for connection with nature and silence diverse voices. Participants will learn and practice identifying and interrupting harmful narratives and replacing them with values-driven leadership stories that foster healthy group cultures and support work across boundaries of racial, economic, gender/sexuality, and power disparities.

Presenter(s): Darren Gruetze, The Student Conservation Association

Strand:

Engaging Underrepresented Communities Through the National Geographic Geo-Inquiry Process 4:00 PM-5:30 PM, Regency Ballroom 3

National Geographic invites you to explore how you can empower underrepresented youth to think like explorers and become advocates for change in their communities and beyond through an integrated, project-based, critical thinking skills-in-action process. Participants will engage in the process and gain access to resources.

Presenter(s): Fay Gore, National Geographic Society; Mary Ford, National Geographic Society Strand:

Learn About NAAEE's New EE Evaluation Portal! 4:00 PM-5:30 PM, Thoroughbred 4

Meet Meera the Meerkat, your guide on your EE evaluation journey! NAAEE, with Duke University, is developing the online EE Evaluation Portal, which will include resources to help practitioners, funders, evaluators, and researchers learn to improve their EE programs. We'll share thoughts on how this resource might be used, and we're eager to hear what you'd like on this work-in-progress website.

Presenter(s): Charlotte Clark, Duke University; Noelle Wyman Roth, Duke University; Liz DeMattia, Duke University; Bill Finnegan, Tamarack Media Strand:

Moving Participants up the Power Ladder: Community Engagement and EE 4:00 PM-5:30 PM, Regency Ballroom 1

Inclusive EE involves meeting people where they are, but working with communities can be tough due to limited time and capacity. Learn how Riveredge Nature Center made a shift from service provider to community partner through enhanced community engagement efforts. Practice strategies to strengthen your organization's connection to the community. Presenter(s): Carly Hintz, Riveredge Nature Center Strand:

Resource Watch: Exploring Real-World Data in the Classroom and Beyond

4:00 PM-5:30 PM, Regency Ballroom 2

Resource Watch is an open data library featuring 260+ data sets on climate change, energy, water, biodiversity, oceans, food, forests, and much more. Come view a demo of the platform and learn how Resource Watch and NAAEE partnered to leverage real-world data for environmental education in the classroom.

Presenter(s): Corey Filiault, WRI Strand:

Traditional Presentations

4:00 PM-4:40 PM

Creating a Framework to Assess Student Environmental Literacy 4:00 PM-4:40 PM. Berea

Learn how a collaboration between three organizations turned a big idea into a blueprint to develop a tool to assess K-12 student environmental literacy. Consider how a similar process and assessment might impact your own organization. Presenter(s): Jeanine Silversmith, RIEEA; Kelly Shea, University of Rhode Island; Kristen Scopinich, Mass Audubon; Jennifer Klein, Mass Audubon; Amanda Siebert-Evenstone, Epistemic Analytics Strand: ●

Cultural Worldview and Gender Disparities in Undergraduate Climate Science Misconceptions 4:00 PM-4:40 PM, Thoroughbred 3

This session explores the relationship between cultural worldview and the occurrence of climate science misconceptions among undergraduates. Establishing a link between cultural cognition theory and conceptual change theory helps practitioners anticipate when a learner exhibits ideologically motivated reasoning. Gender disparities in climate science knowledge are revealed among undergraduates.

Presenter(s): Jennifer da Rosa, Johns Hopkins University

Strand:

EPA Environmental Education Grants Program 4:00 PM-4:40 PM, Thoroughbred 2

US EPA's Environmental Education Grants Program seeks proposals from eligible applicants to support EE projects that promote environmental awareness and stewardship and help provide people with the knowledge and skills to take responsible actions to protect the environment. EPA will provide an overview of the program and information on applying for grants.

Presenter(s): Ginger Potter, US EPA

Strand:

Exploring the Status and Needs of the Affiliate Network

4:00 PM-4:40 PM, Hyatt Suites

Where are the best opportunities for collaboration within the Affiliate Network? Join other Affiliate leaders and our new Affiliate Network Coordinator to learn more about the data collected from the Affiliate Survey, discuss opportunities, and share needs with the new coordinator.

Living Buildings and Living Community: An EE Sustainability Challenge 4:00 PM-4:40 PM, Elkhorn A

At the historic River Bend Farm in southern Maine, The Ecology School (TES) is creating one of the greenest, residential environmental learning centers in the country. Pursuing Living Building Challenge and Living Community Challenge certifications, TES is integrating green buildings, agroecology farm production, and conservation research to provide community-driven sustainability education.

Presenter(s): Drew Dumsch, The Ecology School Strand:

Using the Guidelines for Excellence in College Classrooms

4:00 PM-4:40 PM, Thoroughbred 5

Whether introducing environmental education or discussing program planning, the NAAEE Guidelines for Excellence are a great springboard for classroom discussions and activities. This session will share ways that the Guidelines have been used in some college courses, and leave plenty of time for brainstorming how to use these resources more. Presenter(s): Renee Strnad, North Carolina State University; Jennifer Marie Ortega, Humboldt State University

Strand: • 🗘



LOCAL CULTURE

Derby Pie

Derby pie is a chocolate and walnut tart in a pie shell with a pastry dough crust. It is made with walnuts and chocolate chips. The pie was created in the Melrose Inn of Prospect, Kentucky, by George Kern with the help of his parents, Walter and Leaudra.



What's in a Word? LGBTQ+ Inclusive Language in Environmental Education

4:00 PM-4:40 PM, Heritage Ballroom 1

Inclusion of marginalized groups in environmental education requires change from the ground up. In this discussion-based presentation, discover ways your organization can make your educational programming more welcoming for LGBTQ+ participants through shifts in language. Participants will have a chance to evaluate their own content for ways to improve their inclusiveness.

Presenter(s): Aarin Wilde, Foss Waterway Seaport; Rochelle Gandour-Rood, Tacoma Water; Charissa Jones, OSU Extension Service-Outdoor School; Jenna Mendenhall, Oregon Environmental Literacy Program Strand:

Bright Spots

4:00 PM-4:40 PM

Learn about two or three successful and loosely related programs in each 40-minute session. Sessions are presented in the order listed.

GROUP A

Strand: or

EE 30 Under 30 Honorees 4:00 PM-4:40 PM, Elkhorn C

Aquaponics E-STEAM Education for Underprivileged Youth

Discover how aquaponics can promote E-STEAM education and increase food access for at-risk youth in low-income, under-performing school districts and juvenile detention facilities. By building these facilities on-site and linking to a NGSS/Common Core curriculum, youth engage in hands-on learning and build valuable science and career skills.

Presenter(s): Michele Madison, Farming The Future Strand:

One Goal, Many Solutions: Education in Hawai'i to #BeatPlasticPollution

In a world where plastic pollution is knocking on all of our doors, it is critical that everyone is engaged. Project O.C.E.A.N. is an initiative in Hawai'i that encourages people of all ages, especially disempowered youth, to #BeatPlasticPollution. Presenter(s): Dyson Chee, Project O.C.E.A.N. Hawai'i

Project EARTH: Environmental Advocacy and Recycling Through Exchange

This session highlights a project that raises awareness about plastic pollution by encouraging students to recycle plastic bottles in exchange for school supplies in Niogan Elementary School in the Philippines. The project benefits parents and pupils from low-income families, addressing environmental issues while helping families achieve economic and environmental sustainability.

Presenter(s): Kim Alvin De Lara, Department of Education-Niogan Elementary School

Strand: • YP

GROUP B

4:00 PM-4:40 PM, Elkhorn D

EE as a Catalyst for Change in Elementary Schools Experts predict a gap in STEM workers prepared to deal with complex environmental issues. It's critical that informal learning centers increase capacity to work with schools. Riverbend's Philadelphia Children Access Nature program is a catalyst for change, using comprehensive support and aquaponics in the classroom.

Presenter(s): Erin McCool, Riverbend Strand:

Make Your Own Watershed-Specific Macroinvertebrate Poster

Aquatic macroinvertebrate keys tend to be rather generic. I've created a template to make watershed-specific identification posters and pollution indices. Come get your copy and we'll go step-by-step through creation of a tool for the critters in your watershed.

Presenter(s): Donny Roush, Denver Public Works Strand:

Schoolyard Pollinator Investigations Using Science and Engineering Practices

Elementary students benefit from using schoolyard settings to replicate science and engineering practices. Student-generated questions and authentic investigation settings invited fourth graders into the community of science, and provided meaningful learning experiences. The study analyzed whole-class discussion, peer-to-peer interactions, and written artifacts to understand fourth graders' engagement in the science and engineering practices.

Presenter(s): Mary Hedenstrom, University of Minnesota

Roundtable Discussions

4:00 PM-4:40 PM, Thoroughbred 1

NAAEE Fundraising Coaching Table 1

How do I start conversations that lead to bigger gifts? How can I get my board members more engaged in fundraising? Is this project right for corporate or foundation support? Am I doing ANY of this right? Whether you're new to fundraising or a seasoned professional, bring your questions to NAAEE's fundraising roundtables. Space is limited; advance sign up at the Information Station required. Presenter(s): Lea Harvey, LLH Strategy Advisors, LLC;

Krishna Roy, Consultant

Strand:

Trand:

Bridging Formal and Informal Education in a Summer Science-Literacy Program Table 2

How do we bridge formal and informal education? How are they best used together? This session highlights the development, delivery, and outcomes of an environmental education summer program that bridges formal and informal education by creating partnerships and enhancing early childhood environmental education for marginalized students. Presenter(s): Maryam Ghadiri, University of Davis Strand:

eeWORKS: Linking Community, Citizen Science, and Environmental Education

Table 3

Community and citizen science (CCS) can provide pathways for people to investigate and learn about environmental topics while simultaneously contributing to scientific research and conservation. In this presentation, we will share findings from a systematic research literature review that shed light on best practices for designing CCS for environmental education.

Presenter(s): Christopher Jadallah, University of California–Davis, School of Education; Amanda Lindell, University of California–Davis Strand: ●

Sense of Wonder: Nature Journaling Table 4

Through the use of Natural Journals, rekindle your sense of wonder by making your own nature journal. Join us to share and learn innovated ways to reconnect with nature by using trade books, technology, art, writing, and nature quotes during this hands-on journaling activity.

Presenter(s): Molina Walters, Arizona State University Strand:

Updated and Revised—*K-12 Environmental Education: Guidelines for Excellence*Table 5

NAAEE's K-12 Environmental Education: Guidelines for Excellence, part of the Guidelines for Excellence series, describes a framework and a set of student performance indicators for environmental literacy that are benchmarked at 4th, 8th, and 12th grades. We recently completed the updating process. Come take a look!

Presenter(s): Bora Simmons, National Project for Excellence in Environmental Education; Billy Bennett, Kentucky Environmental Education Council

Strand: 🗨 🗘





LOCAL WILDLIFE

Gray Bat

The gray bat is a species of microbat endemic to North America. Once flourishing in caves all over the southeastern United States, gray bat populations are in serious decline due to human disturbance. Gray bats are cave dependent and prefer deep, cool caves with multiple entrances, good airflow, and roost in large colonies to reduce the cost of temperature regulation.

- Building Leadership for Environmental Literacy
- Connecting with Nature
- Conservation and Environmental Education
- Educating for Sustainable Communities
- Green Schools and Preparing for 21ST Century Careers

- Linking Research and Practice to Increase Impact
- Equity and Inclusion
- YP Young Professionals
- A NAAEE Affiliate Network



Thursday 4:50 PM

Meeting

4:50 PM-5:30 PM

Queer Environmental Educators Network (QEEN) Gathering

4:50 PM-5:30 PM, Heritage Ballroom 1

Join us for the first-ever gathering of QEEN, the Queer Environmental Educators Network, for LGBTQ+ identified educators.

Coordinators: Rochelle Gandour-Rood, Tacoma Water; Charissa Jones, Oregon State University Extension Service-Outdoor School; Aarin Wilde, Foss Waterway Seaport

Traditional Presentations

4:50 PM-5:30 PM

Affiliate Heads Together 4:50 PM-5:30 PM, Hyatt Suites

Heads Together is a powerful team-to-team problem solving activity in which Affiliate teams are paired with one another to gain and provide insights in the challenges they each face. Bring a challenge with you and we will pair you with another Affiliate team to brainstorm, share, and learn.

Do Changing Attitudes to Teaching Science Affect Environmental Worldview?

4:50 PM-5:30 PM, Berea

This talk will examine the effect of science methods courses on environmental worldview and attitudes towards teaching science. Although the instructor is a passionate environmental educator, abundant data indicate only science attitudes changed, so we'll consider why along with the benefits and challenges of doing your own action research.

Presenter(s): Bryan Nichols, Florida Atlantic University Strand: ●

Initiating Community Engagement Using Asset Mapping

4:50 PM-5:30 PM, Thoroughbred 3

The community asset mapping process from NAAEE's *Community Engagement Guidelines for Excellence* was used in a workshop designed to discover connections between community members from a variety of nonprofit and for-profit organizations. Ultimately, this developed the core of a community engagement team that continues to promote EE.

Presenter(s): Jeanine Huss, Western Kentucky University; Terry Wilson, Western Kentucky University

Strand:

International Collaboration Matters 2: Studying EE Researchers Across Nations

4:50 PM-5:30 PM, Thoroughbred 5

In response to the spirited discussions during the 2018 NAAEE Conference, we decided to hold another session concerning issues of designing an international survey. A group of Japanese, Taiwanese, and Korean researchers is going to highlight potentialities and issues of developing a survey questionnaire that would capture researchers' involvements with the Sustainable Development Goals.

Presenter(s): Kimiharu To, Aomori University; Shinichi Furihata, Tokyo University of Agriculture and Technology

Not an Afterthought: Reaching Diverse Audiences with After-School Programs 4:50 PM-5:30 PM, Elkhorn A

Our after-school outreach programs were developed intentionally to reach beyond our park and create a personal experience with nature for children across Atlanta. We will discuss the successes and challenges we have encountered in developing our programs to work at any school site and ensure all can participate. Presenter(s): Lauren Reynolds, Blue Heron Nature Preserve; Nicole Thurston, Blue Heron Nature Preserve

Strand: • 🔷

Research Accelerators: Inquiry Focused Outreach to Drive Community Science

4:50 PM-5:30 PM, Elkhorn B

This session will discuss the Research Accelerators, a team of educators who mentor students building individual research projects rooted in the outdoors in Milwaukee, Wisconsin emphasizing engagement with water. The Research Accelerators increase access to environmental education for diverse students in urban settings through place-based, community-oriented programming using digital field technology with youth.

Presenter(s): Isabelle Herde, Upham Woods Outdoor Learning Center; R. Justin Hougham, University of Wisconsin-Madison; Tempestt Morgan, Upham Woods Outdoor Learning Center

Strand: •

Youth Summits: Inspiring Stewardship and Civic Engagement

4:50 PM-5:30 PM, Thoroughbred 2

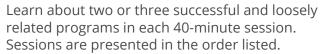
Youth summits are popping up across the world to convene young voices and inspire change. What makes these programs effective at supporting stewardship and civic engagement? Explore how the Wild Center's Youth Climate Summit model provides a platform for practical replication through a casestudy of the Youth Environmental Action Summit. Presenter(s): Elise Trelegan, NOAA; Aurelio Giannitti, Ward Museum, Salisbury University; Jen Kretser, The Wild Center

Strand:

🔾

Bright Spots

4:50 PM-5:30 PM



GROUP A 4:50 PM-5:30 PM, Elkhorn C

Kinderforest! ...and Other Outcomes of Developing Local Partnership

Dig into the power of partnership to level the load and increase capacity to reach learners deeply. This relationship between a nature center and a neighboring rural, low-income public school is utilizing place-based pedagogy and student-directed learning to grow students academically, socially, emotionally, and physically.

Presenter(s): Tom Hartzell, Goshen College Strand:

A Toolkit for Starting an Early Childhood Nature-Based School

Do you dream about starting an early childhood nature-based school, like a nature preschool or forest kindergarten? Join us to explore a toolkit that will help you with the necessary steps in making this dream a reality, including topics such as licensing, business planning, partnerships, and the challenges you may face.

Presenter(s): Erin Saunders, Thorne Nature Experience Strand: • 🗘

Group B 4:50 PM-5:30 PM, Elkhorn D

Digging Deeper: How an App Can Teach Sustainable Decision Making

As the world's population grows, food scarcity and the need for sustainable land management will become more prevalent. Come learn how an app can teach students to analyze a landscape to determine if an area should be farmed, grazed, left alone, etc. from a new NGSS-aligned, hands-on education module.

Presenter(s): Ryan Nathanial-Thomas Pemberton, Asombro Institute for Science Education

Strand: • 🗘

The Digital Naturalist Journal Project: Science + Storytelling

A curricular approach to sciencetelling: using scientific data to tell stories. This modern take on Darwin's naturalist notebook encourages students to make sense of their world through observation, data collection, and digital storytelling.

Presenter(s): Shari Carswell, Katy ISD; Kourtney Tams, St. Edward's University

Strand:

The NCF-Envirothon: Educating the Next Generation of Leaders

How do we balance quality of life and quality of the environment? Annually, over 25,000 high school students across the United States, Canada, and China embark on a journey to solutions to this critical question through the National Conservation Foundation-Envirothon. Learn how the program educates the next generation of leaders.

Presenter(s): Jennifer Brooks, NCF-Envirothon Strand: • •





Roundtable Discussions

4:50 PM-5:30 PM, Thoroughbred 1

EE Certification: The Benefits of Being Certified 4:50 PM-5:30 PM, Thoroughbred 1

Whether you are new to the field or have years of experience, EE certification programs can help you grow as an environmental educator and develop your professional credentials. Find out more about certification, talk with certified environmental educators, and explore opportunities available across the country. Presenter(s): LoriAnne Barnett, Arizona Association for Environmental Education; Sarah Haines, Towson University; Anne Umali, NAAEE; Bruce K. Young, NAAEE Strand: • 🗘

Environmental Service Learning: A Strategy for **Educational and Conservation Change** 4:50 PM-5:30 PM, Thoroughbred 1

Quality Environmental Service Learning (ESL) is a transformative education strategy with tangible conservation impacts. Participants are empowered, develop skills, and authentically collaborate with their community to address specific environmental issues. A draft model for developing, implementing, and enhancing ESL for greater educational and conservation outcomes and impacts will be presented and discussed.

Presenter(s): Steven Braun, eeRise; Thomas J. Marcinkowski, Florida Institute of Technology Strand: •

Supporting Youth in Creating Institutional Change for Sustainability 4:50 PM-5:30 PM, Thoroughbred 1

In this roundtable we will explore how educators and researchers can engage and support young people in contributing to institutional- and systems-level transformation towards more just and sustainable futures. The presenter and participants will share experiences, ideas, and questions related to supporting youth in taking institutional action. Presenter(s): Kelsey Tayne, University of Colorado-

Boulder Strand:

Welcoming Visitors of All Abilities: Strategies for Access and Inclusion

4:50 PM-5:30 PM, Thoroughbred 1

From sensory-friendly days, to early open events, to multimodal and interactive exhibit design, environmental education centers are doing more than ever before to welcome individuals with a variety of special needs. Together we will review success stories and learning experiences to inform future initiatives to increase access and meaningful inclusion. Presenter(s): Jordan McNeill, University of North Carolina-Chapel Hill Strand: • 🕩

Thursday 5:30 PM

Receptions

5:30 PM-7:00 PM

HHMI Movie Night: Our Gorongosa

5:30 PM-7:00 PM, Bluegrass Ballroom 2

Join HHMI Tangled Bank Studios for Movie Night, featuring Our Gorongosa: A Park for the People. The film explores a new vision for conservation in Mozambique that benefits both the animals in the national park and the people living around it, especially girls and women. The film follows Dominique Gonçalves, a vibrant Mozambican ecologist who runs the Gorongosa elephant ecology project, as she shares the myriad ways Gorongosa is redefining the identity and purpose of an African national park. From her own work mitigating human/elephant conflict, to community clubs and school programs that empower girls to avoid teen marriage and pregnancy, to health clinics and nutrition training for expectant mothers and families, Dominique leads viewers on an emotional and eye-opening journey that will transform their understanding of what a national park can be. Enjoy refreshments before the film. This event is free and open to all, but advance registration is requested. Check for available space at the door. See the advertisement on page 21.

eeBLUE Social

5:30 PM-7:00 PM, Patterson E-G

Join NOAA and NAAEE for an informal reception highlighting our eeBLUE partnership to advance ocean education and environmental literacy.

Art and Nature

5:30 PM-7:30 PM, Lexington Public Library, 140 E. Main Street

Drop by the Paint by Nature: Streetside exhibit, a celebration of the beauty and benefits of using Kentucky native plants, featuring local artists. While you're there, design pollinator-friendly possibilities for your own yard using the Paint by Nature interactive game. Light snacks will be provided. Free. No registration required.

Informal Gatherings

7:00 PM-10:00 PM

Young Professional Networking Dinner & Drinks 7:00 PM-

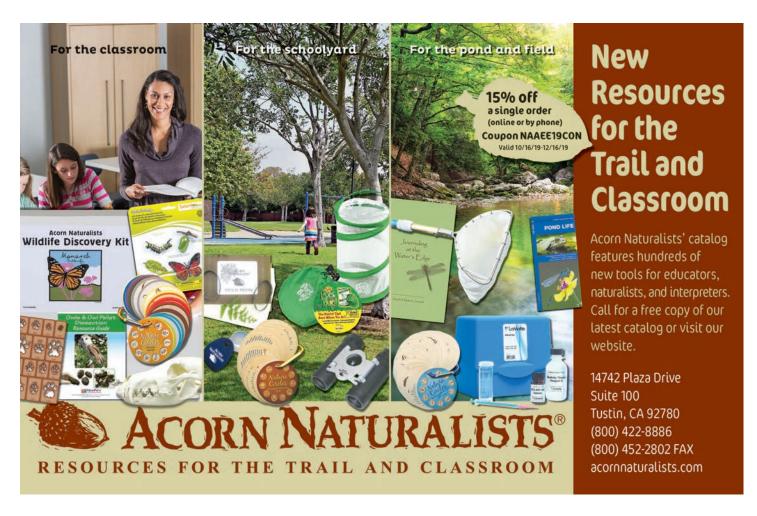
HopCat Lexington, 410 W. Short Street

Network with other young professionals over drinks and dinner at HopCat Lexington, a top beer bar with famous fries! Meet at the restaurant. Coordinated by Elise Trelegan and Danny Woolums

Bourbon & Brew

7:00 PM-10:00 PM, Meet at the Registration Desk

What better way to meet new colleagues than to spend your open evening networking over a few drinks? Join Bourbon & Brew and visit three nearby Lexington nightspots to enjoy Kentucky bourbon, beer, a light dinner, and great conversation. The venues—Creaux, Saul Good, and Thirsty Fox—were selected for their local flavor. Meet at the registration desk at 7:00 PM to check in and pick up your drink tickets. This is a walking event; the group will move together to each venue. Advance registration is required; this event is sold out.





NOAA Office of Education

Explore our scholarships, funding opportunities, and learning resources at the NOAA Education Resource Portal:







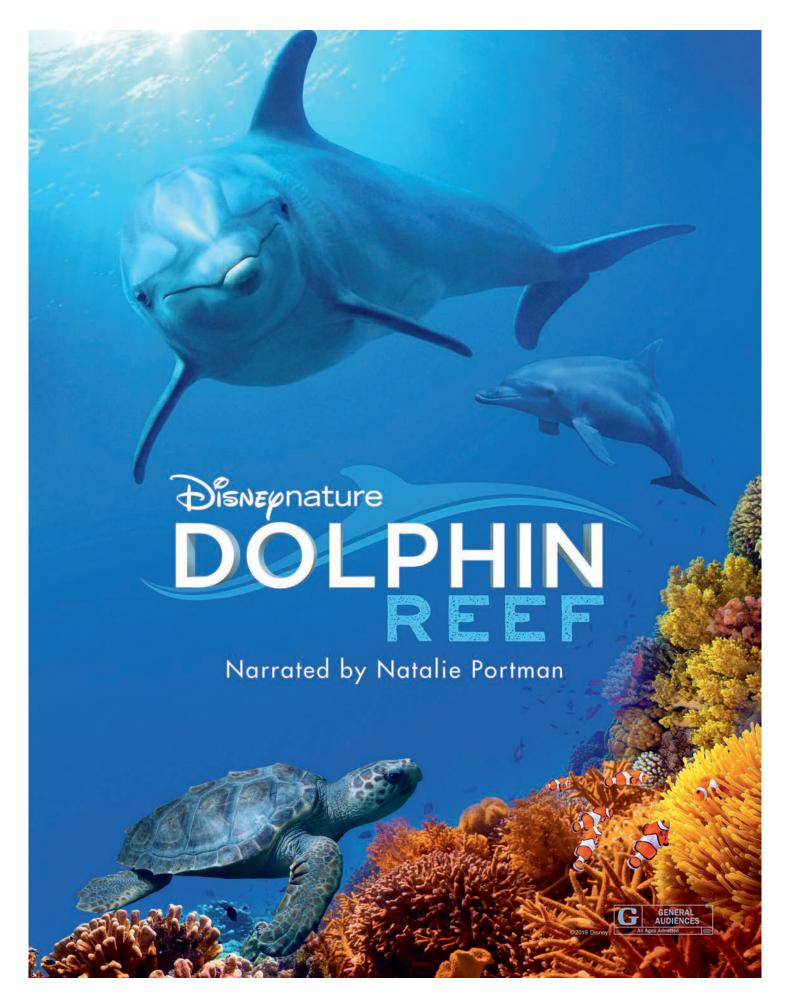






NOAA Office of Education and NAAEE are partnering to increase environmental and science literacy among NOAA's partners and external networks. Learn more at eeblue.org







Friday

Lexington at Leisure

registration required.

Coffee Tour

6:30 AM–8:15 AM, Meet at the registration desk Get to know Lexington with this guided walk around downtown. From historic buildings to art installations, learn about what makes Lexington unique while enjoying local coffee or tea. Free. No

Morning Yoga: From Awareness to Action 7:30 AM-8:15 AM, Patterson E-G

Wake to the new day with awareness of breath, movement, and alignment. Through this gentle practice, reconnect with your body and mind's ability to move intentionally throughout the actions of the day. Instructor Pam Thomas is certified by and registered with the Yoga Alliance.

Friday 8:30 AM

Symposium

8:30 AM-4:00 PM

Integrating Archaeology and Environmental Education to Strengthen Cultural Understanding 8:30 AM-10:00 AM, Kentucky

Archaeologists study human adaptation to the natural world, the importance of the environment to past peoples, and how human activity is influenced by place, all of which intersect with EE. Archaeology educators will discuss how EE impacts their programming and partnerships and how to continue to integrate the two fields.

Presenter(s): Derrick Baldwin, Bureau of Land Management; A. Henderson, Kentucky Archaeological Survey; Jeanne Moe, Bureau of Land Management; William Quackenbush, Ho-Chunk Nation of Wisconsin; Elizabeth Reetz, University of Iowa Office of the State Archaeologist Moderator: Janet Carrier Ady, Bureau of Land

Management Strand:

Key

- Building Leadership for Environmental Literacy
- Connecting with Nature
- Conservation and Environmental Education
- Educating for Sustainable Communities
- Green Schools and Preparing for 21ST Century Careers
- Linking Research and Practice to Increase Impact
- Equity and Inclusion
- YP Young Professionals
- A NAAEE Affiliate Network
- ee360

Hands-On Presentations

8:30 AM-10:00 AM

Bridging the Gap Between Environmental Justice and Environmental Education

8:30 AM-10:00 AM, Heritage Ballroom 1

Ecosystem health and the health of communities are inextricably linked. It is often minority populations that carry the impacts of the weightiest environmental problems. In this session we will discuss justice, equity, diversity, and inclusion in EE and the social justice strategies needed as we work towards an equitable future.

Presenter(s): C. Parker McMullen Bushman, Butterfly Pavilion

Strand:

Strand:

Clams Don't Bite! Watershed Education and Service Learning Using Oysters

8:30 AM-10:00 AM, Regency Ballroom 1

Join us to learn about a watershed education program that integrates the study of filter feeding bivalves such as clams, oysters, and mussels; handson water quality measurements using "cookbook" water quality kits; and field-based service learning through the restoration of oyster reefs.

Presenter(s): Tina Miller-Way, Dauphin Island Sea Lab Strand:

Ecology Guide Development Program as Path to Community Empowerment and Equitable Access to Nature

8:30 AM-10:00 AM, Thoroughbred 4

Families in Nature is empowering leaders from under resourced and underrepresented communities to take families out into nature through our Guide Development Program and our Ecologist School curriculum, an informal interdisciplinary hands-on science program. Come learn about the Ecologist School and how we are building the next generation of conservation leaders.

Presenter(s): Heather Kuhlken, Families in Nature Strand: ● ♣

Engaging New Audiences with Public Lands Through Photography

8:30 AM-10:00 AM, Regency Ballroom 2

Learn how Parks in Focus and some of its National Park Service partners use digital photography to engage underserved and underrepresented communities with our public lands. Experience activities in their curriculum and leave with resources and inspiration to expand your environmental education toolkit. No photography experience or camera required.

Presenter(s): Bret Muter, Udall Foundation, Parks in Focus Program; Veronica Greear, National Park Service

Strand:

Interactive Session on Social and Emotional Learning in Residential EE

8:30 AM-10:00 AM, Heritage Ballroom 2

In this interactive session, we will share the process and products of a yearlong partnership of eleven residential EE organizations that focused on social and emotional learning (SEL) and was informed by research. Participants will engage in hands-on activities typical of an EE program, intentionally structured to maximize SEL outcomes.

Presenter(s): Kathleen O'Connor, NatureBridge; Estrella Risinger, California Association for Environmental & Outdoor Education; Emily Williams, Stanford University

Strand:

Social Media, Technology, and EE: Turning Likes into Love of Nature

8:30 AM-10:00 AM, Heritage Ballroom 3

Social media is an important topic not only because of its impacts to the outdoors, but also because of the opportunity it presents to engage youth. Participate in discussions surrounding intentional social media use and receive curriculum to engage youth in Leave No Trace through this hyper-relevant and accessible medium.

Presenter(s): Julia Oleksiak, Leave No Trace Center for Outdoor Ethics

Strand: 🛑 🛟 🚾

Traditional Presentations

8:30 AM-9:10 AM

Avoid Eco-Fatigue: Balanced Climate Change Education

8:30 AM-9:10 AM, Elkhorn A

The doom and gloom of climate change is a turnoff for many students and educators. How can we educate without instilling debilitating fear? Gain insight with tangible examples of how to offer a more balanced picture.

Presenter(s): Emily Carreiro, New England Environmental Education Alliance

Strand:

City Kids in the Backcountry: Critical Approaches to Wilderness Education

8:30 AM-9:10 AM, Thoroughbred 2

In North America, wilderness is enmeshed in white and wealthy expressions of environmentalism. This presents pedagogical challenges for all backcountry educators, but especially those of us who work with poor youth and youth of color. This presentation offers theory and research around constructing validating and anti-oppressive wilderness experiences for adolescents.

Presenter(s): Tommy Mackey, SUNY College of Environmental Science and Forestry

Strand: •

Creating and Evaluating Collective Outcomes for EE 8:30 AM-9:10 AM, Berea

How can we tell our story more effectively to advance environmental education? Which measures speak the loudest? Join us to discuss what we've learned from practitioners, funders, researchers, and national experts to help create and evaluate collective outcomes in Colorado.

Presenter(s): Katie Navin, Colorado Alliance for Environmental Education

Educating for a Green Economy 8:30 AM-9:10 AM, Elkhorn B

Educating for a Green Economy identifies the various opportunities for students to develop skills needed for innovative green jobs to accelerate Washington State's transition toward a more sustainable future. Join the Pacific Education Institute and E3 Washington to learn more about aligning natural resource and educational professionals to support student success. Presenter(s): Kathryn Kurtz, Pacific Education Institute:

Strand:

Inviting Nature Back: From School Gardens to **Energy Companies**

8:30 AM-9:10 AM, Thoroughbred 5

Columbia Gas recognizes the need to invite nature back—not only into schools with nature programs and outdoor classrooms, but also on managed landscapes. Their novel program promotes pollinator habitat in school gardens and across their network of gas pipelines, connecting people and nature in a variety of ways.

Presenter(s): John Steelman, Grow With Trees Company

Strand: • W

NAAEE's EE Policy Briefing 8:30 AM-9:10 AM, Thoroughbred 3

In our annual environmental education policy briefing, NAAEE staff and volunteers will share information on federal and state policy priorities during the 116th Congress. In addition to updates on how the federal budget affects EE and how you can be a more informed advocate, we'll look at new and emerging opportunities in infrastructure, climate education, and more.

Presenter(s): Sarah Bodor, NAAEE; Brock Morris Adler, **Environmental Educator**

Strand:

Strategic Planning for Affiliates 8:30 AM-9:10 AM, Hyatt Suites

Come learn about the strategic planning processes that the Environmental Educators of North Carolina and the Environmental Education Association of New Mexico recently completed. Explore how to engage your stakeholders and reflect upon where your Affiliate has been to define where you can go in the future.

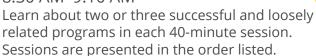
Presenter(s): Lauren Pyle, Environmental Educators of North Carolina; Eileen Everett, Environmental **Education Association of New Mexico**

Strand:

A

Bright Spots

8:30 AM-9:10 AM



GROUP A

EE 30 Under 30 Honorees 8:30 AM-9:10 AM, Elkhorn C

Empowering Students Through Connections with Global and Local Experts

Amazing things happen when people with different areas of expertise, like educators and scientists, collaborate. Come learn how students are empowered to work alongside real scientists and National Geographic Explorers to design realistic solutions to make the world a better place. Together, we're more awesome!

Presenter(s): Kimi Waite, California Global Education Project & National Geographic Education

Strand: • W

Ocean Bridge: Changing Minds to Turn Tides

Ocean Bridge, a national partner in the Canada Service Corps, engages youth across Canada to co-create service projects on ocean literacy, health, and ocean conservation. This session will highlight the importance of collaboration, storytelling, and the power of youth, and will focus on tools such as community and capacity building.

Presenter(s): Jasveen Brar, Ocean Wise

Strand: • W

Wild Live: Bringing Wildlife Conservation into Classrooms Across Western Canada

Northwest Wildlife Preservation Society teaches thousands of young people across western Canada about wildlife and conservation. Learn how unique programs and collaborations connect the public with one of the most biodiverse regions in North America, using technology to bring one of nature's greatest events into the classroom, live!

Presenter(s): Connel Bradwell, Northwest Wildlife **Preservation Society**

Strand: • W

GROUP B 8:30 AM-9:10 AM, Elkhorn D

Connecting Underserved Youth to National Parks The National Park Foundation supports the mission of connecting youth to our national parks. In this presentation we reflect on the effective practices we have observed through years evaluating youth programming and consider how best to measure the success of future program models.

Presenter(s): Alexander Terango, National Park Foundation

Strand:

Engaging Latino Communities in Conservation Topics

The Forest Health, Human Health program is an initiative in Maryland, Virginia, and Washington, DC to engage diverse and under-resourced Latino families. We provide activities and information on the topics of sustainable urban/rural forest management, citizen science, pollinator conservation, nature viewing, forest health/human health relationships, and youth leadership.

Presenter(s): Felipe Benitez, Corazón Latino; Abel Olivo, Corazón Latino

Environmental Formation Through Scientific Tourism in the Ecuadorian Amazon

Sumak Kawsay In Situ (SKIS) is a center for environmental education located in the upper Amazon of Ecuador. We combine established research projects with local and international tourism to engage visitors in systematic methods of environmental learning, while concurrently developing regionally relevant, significant, and shared scientific knowledge.

Presenter(s): Alex Bentley, Sumak Kawsay In Situ Center for Environmental Formation

Strand:



LOCAL CULTURE

Isaac Burns Murphy

Isaac Burns Murphy was an African-American Hall of Fame jockey, winner of three Kentucky Derbies and considered one of the greatest riders in American Thoroughbred horse



racing history. As part of Tree Week, NAAEE's community service project participants will plant trees at the recently established Isaac Murphy Memorial Art Garden. The park honors the contributions of African-Americans in the horse racing industry.

Friday 9:20 AM

Traditional Presentations

9:20 AM-10:00 AM

AmeriCorps: Expanding Environmental Literacy **Through National Service** 9:20 AM-10:00 AM, Berea

Increase the capacity of multiple agencies within your state to provide quality environmental education by developing an environmental stewardship-focused AmeriCorps program. This session will explore ways that your state could benefit from using AmeriCorps members to increase the environmental education capacity of a wide range of EE providers.

Presenter(s): Billy Bennett, Kentucky Environmental Education Council; Ashley Hoffman, Kentucky Association for Environmental Education; Ashley Mike, Kentucky Environmental Education Council Strand:

Trand:

Developing Stewardship Through Exploration 9:20 AM-10:00 AM, Thoroughbred 2

Join four National Geographic and Lindblad Expeditions Grosvenor Teacher Fellows to hear about their field experiences in Galapagos and Antarctica as well as how they brought it to their educational arenas. Experience classroom activities they created based on their experiences and how it has transformed their teaching and students.

Presenter(s): Becky Schnekser, Cape Henry Collegiate; Katherine Golden, Missouri Botanical Garden Moderator: Fay Gore, National Geographic Society Strand:

Early Childhood Education in the Anthropocene Age: **Business as Usual?**

9:20 AM-10:00 AM, Elkhorn B

This session argues that early childhood education cannot remain "as is" any longer. The state of early childhood education is discussed as a backdrop in highlighting needed changes. Recommendations for physical and psychological environments that counter current trends are discussed.

Presenter(s): Yash Bhagwanji, Florida Atlantic University

Governance: Boards Making a Difference 9:20 AM-10:00 AM, Hyatt Suites

A check-in on the qualities and features of highperforming nonprofits, especially those run by "working" boards: well-drafted bylaws, critical regulatory compliance, sound board policies, and innovative governance models.

Presenter(s): Adrian Ayson, eeMatters Consulting; Alex Porpora, Utah Society for Environmental Education; LoriAnne Barnett, Arizona Association for Environmental Education; Laura Collard, Maryland Association for Environmental and Outdoor Education Strand: • 🗘

Nature Centers: Relevant in the Age of Climate Change?

9:20 AM-10:00 AM, Thoroughbred 5

What is the role of nature centers in the age of climate change? This session is designed for nature center staff who are interested in collectively problem solving how we can play a critical role in mobilizing people to take action on climate change at the community scale.

Presenter(s): Kristen Scopinich, Mass Audubon; Michelle Eckman, Connecticut Audubon Society Strand:

Watershed Education: The Good, the Bad, and

9:20 AM-10:00 AM, Regency Ballroom 3

Come listen to ecologists present on more than a decade's worth of environmental education programs. While we have had a great success over the years, we have had our share of failures as well. Learn about the good, the bad, and the meh of program planning.

Presenter(s): Danielle Wynne, Stormwater Planning Strand:

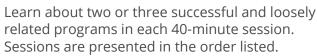
What Are We Learning About Deliberating **Environmental Issues?**

9:20 AM-10:00 AM, Thoroughbred 3

What do community members gain from participating in deliberative forums? As part of NAAEE's partnership with the Kettering Foundation, we've been holding deliberative forums, focusing on climate change and local water issues, across the country. Come hear what we've been learning about forum participants' motivations, expectations, and sense of efficacy. Presenter(s): Christine Jie Li, University of Missouri; Martha Monroe, University of Florida; Ileana Marin, Kettering Foundation; Bora Simmons, National Project for Excellence in Environmental Education Strand:

Bright Spots

9:20 AM-10:00 AM



GROUP A

9:20 AM-10:00 AM, Elkhorn C

Growing Green Teachers: Environmental Sustainability Education at the College of New Jersey

Five years ago, The College of New Jersey created a minor in Environmental Sustainability Education (ESE). Since then, our program has grown to include grant-supported research and programs, local and international partnerships, professional development for practicing teachers, and hosting state-wide ESE conferences. We will present our progress and future plans.

Presenter(s): Louise Ammentorp, The College of New Iersev

Strand:

Increasing Preservice Teachers' Mastery and Self-Efficacy in Technology Integration Using EE The increasing focus on E-STEM/E-STEAM efforts

places emphasis on the need to expose teacher candidates to both the importance of integrating EE into the curriculum and also technology integration best practices. Hear our findings on using EE curricula to increase teacher candidates' technology integration mastery and creating integrated lessons/activities.

Presenter(s): Brenda Weiser, University of Houston-Clear Lake

Strand:

Preservice Teachers Learning to Teach Through Hydroponic Gardening

In this session, we will share ways that teaching and learning with hydroponic gardens has supported and strengthened the Environmental Sustainability Education initiative at The College of New Jersey. We will discuss our partnerships with schools and the integration of hydroponic gardens in our coursework with preservice teachers.

Presenter(s): Louise Ammentorp, The College of New Iersev

GROUP B

9:20 AM-10:00 AM, Elkhorn D

An Introduction to Climate Change Communication for Environmental Educators

Why is climate change controversial? What tools can we draw on from research to guide us as we weave climate change into programming? This session addresses the communication barriers to and opportunities inherent in teaching about climate change.

Presenter(s): Anne Armstrong, Cornell University Strand: ●

Global Goals & You: Digging into the United Nations SDGs

Thanks to a historic United Nations summit in 2015, all people of the planet now share a common set of global goals to be achieved by 2030. Underlying every goal? A healthy, vibrant, biodiverse living world. Participants will dig into the Sustainable Development Goals in an interactive, dialogue-provoking way suitable for multiple audiences.

Presenter(s): Sheila Voss, Missouri Botanical Garden; Betsy Crites, Missouri Botanical Garden Strand: ●

Learning from Nature: STEAM Investigations for the Elementary Classroom

Knowledge of biological systems can connect the practical application of designing products, addressing environmental concerns, and demystifying science to spark the imagination of young learners. Technologies inspired by nature (biomimicry) and the design of safer products and processes (green chemistry) provide an avenue to teach STEAM concepts in a dynamic manner.

Presenter(s): Alyson VanAlphen, Beyond Benign Strand: ●

Roundtable Discussions

9:20 AM-10:00 AM, Thoroughbred 1

NAAEE Fundraising Coaching Table 1

How do I start conversations that lead to bigger gifts? How can I get my board members more engaged in fundraising? Is this project right for corporate or foundation support? Am I doing ANY of this right? Whether you're new to fundraising or a seasoned professional, bring your questions to NAAEE's fundraising roundtables. Space is limited; advance sign up at the Information Station required. Presenter(s): Lea Harvey, LLH Strategy Advisors, LLC; Krishna Roy, Consultant

Strand: • 🚾

Challenge Yourself and Your Community: Participant Observations of Drawdown EcoChallenge

Table 2

What is your role as an EE professional in creating new patterns of behavior? How do you best fulfill this role? Join our discussion about the Drawdown EcoChallenge—a 21-day engagement program focused on greenhouse gas reductions, hear EE colleagues' experiences with the Challenge, and consider its relevance for your programs.

Presenter(s): Marc LeFebre, Association of Fish & Wildlife Agencies/Project WILD; Kelly Elizabeth Reynolds, Association of Fish & Wildlife Agencies/Project WILD; Karen S. Hollweg, Fulbright Specialist Strand:

Contributions of EE and Service Learning to Environmental Service Learning Table 3

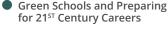
Environmental Service Learning (ESL) has emerged as a promising area of theory, research, and practice, with contributions from the fields of EE and service learning. In this roundtable, participants will review and discuss contributions from these two fields, both shared and unique, to an evolving conception of ESL. Presenter(s): Thomas Marcinkowski, Florida Institute of Technology; Steven Braun, eeRise Strand:





Conservation and Environmental Education

Educating for Sustainable Communities



Linking Research and Practice to Increase Impact







Diversity, Equity, and Inclusion: Strengths & **Growing Edges at Multiple Scales** Table 4

Environmental organizations are leaning into diversity, equity, and inclusion (DEI), changing the course of our collective work to be more inclusive. Come to this session to consider your organizational DEI strengths and growing edges, and gather resources to inform future efforts. Some foundational understanding of DEI themes is value-added. Presenter(s): Luciana Ranelli, Teton Science Schools; Libby McCann, Antioch University New England; Jean Chimbirima Kayira, Antioch University New England; Anne Umali, NAAEE

Strand:

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Exploring EE Through the Lens of the Sustainable **Development Goals**

Table 5

The 17 Sustainable Development Goals (SDGs) provide a comprehensive framework and pathway towards sustainability. This interactive session will explore the SDGs as a tool for making connections and exploring our existing EE programs (many of which are likely addressing multiple SDGs). Presenter(s): Melissa Hopkins Taggart, NAAEE; Kehkashan Basu, Green Hope Foundation

Strand: • W

Friday 10:00 AM

Coffee Break

10:00 AM-10:30 AM, Bluegrass Ballroom 1

Friday 10:30 AM

Meeting

10:30 AM-11:10 AM

Environmental Professionals of Color Annual Meeting

10:30 AM-11:10 AM, Thoroughbred 4

The Environmental Professionals of Color (EPOC) annual business meeting is open to EPOC members and potential members. Join us as we co-create a space to talk about what's on our minds, our challenges and successes, our hopes, and ways we can support one another.

Coordinator: Queta González, Center for Diversity & the Environment 💨

Traditional Presentations

10:30 AM-11:10 AM

A National-Scale Community of Practice for Nature's Notebook Citizen Science 10:30 AM-11:10 AM, Berea

Learn about a model for engaging a geographically diverse Community of Practice (a group sharing a passion and a desire to improve), with the outcome of co-created curricular materials for long-term phenology monitoring using Nature's Notebook Citizen Science Program. Help us with suggestions on how to increase efficacy and participation. Presenter(s): LoriAnne Barnett, Arizona Association

for Environmental Education

Strand:

Addressing Climate Change Through EE 10:30 AM-11:10 AM, Kentucky

The United Nations Framework Convention on Climate Change emphasizes EE as a driver for mitigation and adaptation through ACE or Action for Climate Empowerment. This session will discuss ways to impact the ACE work program for 2020–2030. The Centre for Environment Education will present case studies on EE's crucial role in addressing climate change, followed by recommendations for the work program.

Presenter(s): Kartikeya Sarabhai

Strand:

Creating and Fostering "Super Citizens" Through **Environmental Academies** 10:30 AM-11:10 AM, Elkhorn A

How do you grow local environmental "super citizens"? Give them the knowledge and tools they need to grow their impact. Lexington offers free training through the Citizens' Environmental Academy and Teachers' Environmental Academy, designed to educate the public on a variety of issues related to the city's Department of Environmental Quality and Public Works.

Presenter(s): Angela Poe, City of Lexington, KY; Chrissie Tune, Lexington-Fayette Urban County Government; Danny Woolums, Bluegrass Greensource; Pattie Stivender, Bluegrass Greensource

Design Your Outdoor Classroom for All 10:30 AM-11:10 AM, Thoroughbred 5

We will discuss the process for planning and implementing inclusive and accessible outdoor learning environments for preK–12, the whos, hows, whys, and whats of starting an outdoor classroom at your school. From curriculum and autism to financing, the whole community is important. Presenter(s): Edward Melvin, SHP

Strand:

Diving into the Digital World of Online Learning 10:30 AM-11:10 AM, Elkhorn B

Ocean Wise will lead a discussion on activating ocean education through online learning environments. Through innovative digital, social, and video conferencing initiatives guided by the seven Ocean Literacy Principles, discover how connecting with geographically diverse communities can provide opportunities for protecting our oceans.

Presenter(s): Stephanie Chong, Ocean Wise; Myia Antone, Ocean Wise

Strand: • 💠

EE Certification and NAAEE Accreditation: Here's What's New!

10:30 AM-11:10 AM, Hyatt Suites

Learn about NAAEE's revised requirements and simplified application process for accreditation of EE Certification programs, along with new benefits of becoming accredited. In addition, provide input and help us further develop the new blueprint for creating new certification programs.

Presenter(s): Lori Mann, NAAEE; Anne Umali, NAAEE

Strand: • 🗘

Integrating Scientific Literacy in Environmental Education

10:30 AM-11:10 AM, Regency Ballroom 1

Pseudoscience, conspiracy theories, and/or inability to determine "good" versus "bad" experimental design are hurdles that environmental educators must overcome to engage a diverse audience in learning. In this session, learn how a community college tackled the problem by creating a new general education science literacy class.

Presenter(s): Justin Weiss, Maysville Community and Technical College

Strand: o

Lessons from an Environmental Education "State of the State" Initiative

10:30 AM-11:10 AM, Heritage Ballroom 2

Maine conducted a "state of the state" initiative for environmental education in both formal and informal learning contexts. This session will share findings from our state that help to inform needs for the field moving forward and lessons learned for those interested in conducting similar initiatives in their states.

Presenter(s): Alexandria Brasili, Maine Mathematics and Science Alliance; Ruth Kermish-Allen, Maine Mathematics and Science Alliance

Making Meaning of Citizen Science Data 10:30 AM-11:10 AM, Heritage Ballroom 1

Strand:

How can we facilitate meaningful environmental learning using citizen science data? We will unpack an example lesson and share free resources that engage students in asking and answering questions of citizen science data using FieldScope, a platform for data collection and analysis. Bring a laptop if you can. Presenter(s): Emily Harris, BSCS Science Learning; Audrey Mohan, BSCS Science Learning; Sean O'Connor, BSCS Science Learning Strand:

Naming and Framing Environmental Issues for Public Deliberation

10:30 AM-11:10 AM, Thoroughbred 2

How can you structure conversations that facilitate productive, public deliberation about controversial issues? How can you capture what it is that people hold dear and how they talk about issues in every day life? Come hear how the Kettering Foundation, NAAEE, and partners have been applying an "issue framing" process to a variety of environmental concerns, including climate change and water. Presenter(s): Ileana Marin, Kettering Foundation; Sarah R Johnson, Wild Rose Education; Natalie Cooper, University of Florida; Bora Simmons, National Project for Excellence in Environmental Education Strand:

Partnering for K–12 Environmental Literacy 10:30 AM–11:10 AM, Thoroughbred 3

NAAEE, Project Learning Tree, and Upstream Alliance have partnered to support school administrators in the integration of environmental education throughout their school districts. Districts often need partners to help them with their environmental literacy goals. Come find out how you can work more effectively with school systems and share your own success stories. Presenter(s): Sarah Bodor, NAAEE; Esther Cowles, Project Learning Tree

Teaching Citizen Science Protocol for Conservation Monitoring to Underrepresented Students 10:30 AM-11:10 AM, Heritage Ballroom 3

The Caribbean experienced two Category 5 hurricanes in 2017. Our school then embarked on a citizen science project with Harvard University and Virgin Islands National Park to create a STEM network and career pathways for underrepresented students. Our model can be transferred to other communities building STEM engagement, practices, and resilience. Presenter(s): Melissa Rian Wilson, Gifft Hill School Strand: ●

Using a Collaborative Framework to Implement Stormwater-Focused Behavior Change Campaigns 10:30 AM-11:10 AM, Regency Ballroom 3

Learn how Stormwater Outreach for Regional Municipalities (STORM) uses a collaborative approach to build capacity among jurisdictions in Western Washington and help them meet federal and state required education and outreach standards. See a framework for how regional municipalities can collaborate on equitable environmental education programs using social marketing principles.

Presenter(s): Katherine Straus, Surface Water Division, City of Federal Way

Strand:

Women at Risk Using Agriculture and Environmental Justice to Build Sustainable Communities

10:30 AM-11:10 AM, Regency Ballroom 2

What role can at-risk women have in building just and sustainable communities? In this session participants will learn how teen mothers and women healing from domestic violence and addiction are serving as agents of change toward sustainability in their communities. Participants will be asked to share examples from their communities.

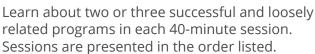
Presenter(s): Jim Embry, Sustainable Communities Network

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Strand:

Bright Spots

10:30 AM-11:10 AM



GROUP A

10:30 AM-11:10 AM, Elkhorn C

Connecting People of Faith Through Environmental Education

Faith communities involvement in environmental work has great potential in making significant improvements to the state of the natural world. Resources are needed to engage faith-based audiences that encourage environmental literacy and stewardship. This session will explore a conceptual framework for creating environmental education curriculum resources for faith-based audiences. Presenter(s): Amanda Lanier, Reynolda Gardens of Wake Forest University

Strand: • 💠

Learning from Local Communities: How Nature Connections Matter in Conservation

There is little doubt our daily decisions are influenced by personal values. Local community members can hold knowledge, values, and positive connections to important natural places. Join a discussion of how connections to nature research in several global communities can include marginalized voices and support pro-environmental actions in conservation. Presenter(s): Jill Korach, Miami University Strand:

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Sadhu for Green: Discovering Environmental Connections in the Khmer Community

Stephanie Ung, ee360 Community EE Fellow, shares about "Sadhu for Green," a movement created in collaboration with Venerable Prenz Sa-Ngoun, a young Khmer Buddhist monk. Together, they are building environmental literacy for the Khmer community through intergenerational workshops on relevant environmental topics, urban and outdoor field trips, and community celebrations.

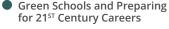
Presenter(s): Stephanie Ung, Seattle Parks & Recreation







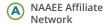




Linking Research and Practice to Increase Impact







GROUP B

10:30 AM-11:10 AM, Elkhorn D

Asset-Based Communities and Timebanking

Timebanking can be used in environmental education as a community engagement strategy that enacts assets and leverages today's technology. While volunteering may provide an altruistic boost, timebanking offers something of reciprocal value. Timebanking also helps us rethink what society may have not traditionally valued and broadens the definition of environmentalism.

Presenter(s): Amaris Alanis Ribeiro, North Park Village **Nature Center**

Strand: • 🗘 🚾

Encouraging Systems-Level Thinking via Ecosystem Games

Games that model ecosystems provide an enjoyable way for students to become more comfortable thinking at the systems level, a necessary skill for understanding environmental problems and solutions. Attendees will receive a list of ecosystem games, details for several games, and suggestions for adapting them to other systems.

Presenter(s): Jennifer Lyon Adler, Maysville Community and Technical College

Strand:

Greening School Communities in Our Nation's Capital with the DC Sustainable Energy Utility

The DC Sustainable Energy Utility administers the DC Sustainable Energy Trust Fund collected on utility bills of DC residents and businesses. DC schools veteran Cory Chimka leverages partnerships with a focus on creating more comfortable and efficient learning environments and a pathway to green jobs.

Presenter(s): Cory Chimka, District of Columbia Sustainable Energy Utility

Strand:

Y

Roundtable Discussions

10:30 AM-11:10 AM, Thoroughbred 1

NAAEE Fundraising Coaching Table 1

How do I start conversations that lead to bigger gifts? How can I get my board members more engaged in fundraising? Is this project right for corporate or foundation support? Am I doing ANY of this right? Whether you're new to fundraising or a seasoned professional, bring your questions to NAAEE's fundraising roundtables. Space is limited; advance sign up at the Information Station required. Presenter(s): Lea Harvey, LLH Strategy Advisors, LLC; Krishna Roy, Consultant

Strand: • W

EE Case Studies to Teach and Inspire

This interactive discussion will explore how case studies can be used to teach and to demonstrate effective practice in EE. Participants will be encouraged to analyze their own EE programs through a case study approach, and to discuss lessons learned. This discussion will help shape an e-book being developed by the Global Environmental Education Partnership.

Presenter(s): Alex Kudryavtsev, Cornell University; Melissa Hopkins Taggart, NAAEE

Strand: • W

Gardens as Strategic Spaces for Environmental Education: Epistemology, Connection, and Justice Table 3

Gardens have a growing importance in urban areas nowadays. They serve as spaces for recreation, education, and reconnection with nature. It is important to examine the educational and environmental roles of these spaces considering their colonial history and potential to serve as conducive spaces for inclusion and transpersonal more-thanhuman relationships.

Presenter(s): Esther do Lago e Pretti, Arizona State University

Strand: • 🔷



Learning About Diversity, Equity, and Inclusion Through an Online Course

Table 4

This roundtable will share assignments, readings, and discussion activities used in an online course for undergraduate students on diversity, equity, and inclusion in natural resource settings. Discuss techniques for engaging students and encouraging growth. Swap resources and ideas appropriate for higher education and professional development settings.

Presenter(s): Kendra Liddicoat, University of Wisconsin-Stevens Point

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The Value of Statewide EE Surveys: Wisconsin and Pennsylvania Examples Table 5

Recent (2019) statewide EE surveys in Wisconsin and Pennsylvania will prompt discussions about survey design, topics, methods for sharing results, and purposeful use of results as data-driven research to address the ever changing landscape of EE, professional development, and collective efforts of EE organizations to better serve our audiences. Presenter(s): Steve Kerlin, Stroud Water Research Center; R. Justin Hougham, University of Wisconsin-Madison

Strand: • W

Friday 11:30 AM

Plenary Session

11:30 AM-12:45 PM, Bluegrass Ballroom 2

Friday Flash Talks: Educating for a Just and Sustainable Future

Kathy Abusow, Kevin Butt, Nikole Collins-Puri, and Simone Friedman Moderated by Anupama Joshi

Friday 12:45 PM

Lunch On Your Own

12:45 PM-2:15 PM

Concessions are available for quick purchase in the Bluegrass Lobby before eePRO Group meetings.

Community Service Project

12:45 PM-2:45 PM, Meet at the High Street Rotunda

Volunteer for NAAEE's annual community service project, this year in association with Lexington's Tree Week. Help plant trees at the recently established Isaac Murphy Memorial Art Garden, a park honoring the contributions of African-Americans in the horse racing industry. Sign up at the Information Station. Transportation and box lunch provided. See page 27 for more information.

Friday 1:15 PM

eePRO Group Meetings

1:15 PM-2:00 PM

Whether you're a current member or want to develop new networking opportunities, bring your lunch and join one of NAAEE's eePRO Group meetings. See page 25 for more information. "Grab and go" lunch is available for purchase at the concession stand in the Bluegrass Lobby at the convention center.

Advocacy, Policy, and Civic Engagement, **Thoroughbred 1**

Climate Change Education, Regency Ballroom 1 Connecting to Nature, Heritage Ballroom 3 Conservation and Behavior Change,

Heritage Ballroom 3

Data Literacy, Heritage Ballroom 2 E-STEM Education, Thoroughbred 1 Early Childhood EE, Thoroughbred 4 Equity and Inclusion, Heritage Ballroom 1 Global EE, Thoroughbred 1 Guidelines for Excellence, Regency Ballroom 2 Higher Education, Regency Ballroom 3

Friday 2:15 PM

Symposium

2:15 PM-3:45 PM

Establishing a Foundation for Action: Outcomes That Predict Committed Stewardship

2:15 PM-3:45 PM, Kentucky

How can environmental education researchers and practitioners provide key experiences that predict a lifelong commitment to engage with nature and care for the natural world? This symposium shows how to identify and assess intermediate outcomes that provide pathways to this goal, including social identities, place identities, and connection to nature. Presenter(s): Louise Chawla, University of Colorado Boulder; Steven Jackson, North Carolina State University; Anne Armstrong, Cornell University Moderator: Yue Li, Cornell University Strand:

Hands-On Presentations

2:15 PM-3:45 PM

Affiliate Committee Working Session 2:15 PM-3:45 PM, Hyatt Suites

Are you a part of an Affiliate Committee or interested in getting involved? Learn about the opportunities and join a group to move forward network efforts on communication and marketing; equity, diversity, and inclusion; building an Affiliate toolkit; awards and recognition; professional development; joint fundraising; or advocacy. Committees meet virtually for the rest of the year.

Strand:

A

Caterpillars Count! Engaging Visitors in Monitoring the Phenology of Bird Food

2:15 PM-3:45 PM, Regency Ballroom 1

The potential for birds to become mismatched with food sources on which they depend is a real consequence of climate change. Join the Caterpillars Count! network and learn how to engage visitors in hands-on science learning, contributing valuable information to research linking birds to their arthropod food sources on trees.

Presenter(s): Sarah Yelton, UNC Institute for the **Environment**

Strand:

Designing Meaningful Tasks to Assess Environmental Literacy

2:15 PM-3:45 PM, Thoroughbred 4

Assessing environmental literacy is difficult, and most assessments are not engaging or differentiated. A RAFT task (Tomlinson, 2003) provides students with choices, sparks creativity, and can elicit students' knowledge, attitudes, and skills. Come try out some EE RAFT tasks, reflect on student work, and brainstorm RAFT ideas with colleagues. Presenter(s): Eileen Merritt, Arizona State University

Exploring Worldviews and Environmental Education Practice

2:15 PM-3:45 PM, Heritage Ballroom 1

To be effective environmental educators, we must understand how people think and what motivates them to hold certain positions. Join us as we explore commonly held worldviews and environmental worldviews. We will examine our own beliefs and biases and how to more effectively communicate with diverse worldview audiences.

Presenter(s): Brad Daniel, 2nd Nature TREC (Training, Research, Education, Consulting); Holly Denham, Environmental Education Alliance of Georgia; W Faircloth, Montreat College

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Queer 101: Allyship and Intersectionality 2:15 PM-3:45 PM, Heritage Ballroom 2

What does it mean to be an ally? What does it take to use your power and privilege to support those with less power and privilege? Through a series of exercises and discussions, we'll share best practices for engaging in effective allyship with the queer community.

Presenter(s): Charissa Jones, OSU Extension Service-Outdoor School; Rochelle Gandour-Rood, Tacoma Water; Jenna Mendenhall, Oregon Environmental Literacy Program

Strand: • W

Rooted in Relationships: Co-Designed Programming **Expands Reach to Underserved Teens** 2:15 PM-3:45 PM, Heritage Ballroom 3

Pacific Science Center is expanding access to teens underserved in STEM programming through partnerships with large educational institutions and community-based organizations. We'll share results of our accompanying research and provide facilitated conversation time for participants to brainstorm potential community connections and leave with strategies to implement in their own programs. Presenter(s): Lisa Keith, Pacific Science Center/Mercer Slough Environmental Education Center; Ian Schooley, Pacific Science Center Strand: •

Traditional Presentations

2:15 PM-2:55 PM

Connecting Diverse Communities with Nature 2:15 PM-2:55 PM, Thoroughbred 2

This presentation will highlight current community health and nature work in collaboration with the Forest Service and non-traditional partners, connecting medical communities, including underserved patients and their families, as well as health care providers and staff, to their local parks and green spaces for increased health benefits. Presenter(s): Felipe Benitez, Corazón Latino; Abel Olivo, Corazón Latino Strand: •

Doing Community Science: An Egalitarian

Community Action Partnership Model 2:15 PM-2:55 PM, Berea

Explore how urban youth are using science to address local environmental issues through partnerships with local STEM professionals. Through discussion and activities, learn characteristics of successful community action projects with urban youth of color, and practices that nurture commitments, and connection to the environment and community in the urban ecology.

Presenter(s): Erin Gallay, University of Wisconsin-Madison; Connie Flanagan, University of Wisconsin-Madison

Strand: • 🕩

Reframing Standards to Pursue Environmental Justice: Lessons from Community Education 2:15 PM-2:55 PM, Thoroughbred 3

Communities predominately of color and low socioeconomic status face disproportionally severe industrialized environmental risk and often lack efficacy to confront it. Community-based education programs increasingly address these concerns, offering models proven to empower. Their work provides important guidance for those seeking to further environmental justice via public school learning.

Presenter(s): Kevin Wickersham, Texas Association for Environmental Education

Strand:

School Pollinator Garden Project 2:15 PM-2:55 PM, Elkhorn A

This session showcases the results of a year-long project to establish pollinator gardens and provide relevant educational resources for 20 schools in Central Kentucky. We will illustrate the importance of community collaboration to create a powerful partnership that builds capacity to achieve community wide support for the Pollinator Protection Plan. Presenter(s): Jim Embry, Sustainable Communities Network; John Steelman, Grow With Trees Company

Shaping Little Ecological Worldviews: Exploring **Ecological Identity in Early Childhood** 2:15 PM-2:55 PM, Thoroughbred 5

Ecological worldviews, deep mental patterns, and habitual ways of looking at our relationship to the natural world, can be influenced through environmental education. Children draw closer to nature through nature play. This narrative case study describes the ways in which children at forest schools demonstrate development of an ecological identity. Presenter(s): Victoria Brusaferro, Wild Haven Forest Immersion Program; Sarah Haines, Towson University Strand:

Using eeRESEARCH to Bridge the Research to **Practice Gap**

2:15 PM-2:55 PM, Elkhorn B

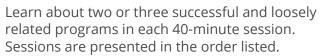
Curious about how you could apply research to improve your work? This session will explore the features and content of eeRESEARCH, a joint project of NAAEE and the Children & Nature Network. This session will include a demonstration and scavenger hunt to introduce participants to thousands of easilydigestible summaries on connecting children to nature and environmental education.

Presenter(s): Charlotte Clark, Duke University; Noelle Wyman Roth, Duke University

Strand: • 🗘

Bright Spots

2:15 PM-2:55 PM



GROUP A

2:15 PM-2:55 PM, Elkhorn C

Creativity in Conservation: Saving Our Ocean Through Art

Teens worldwide are using their creative voices to inspire awareness and action for our blue planet. Hear how Bow Seat's Ocean Awareness Contest provides a space for youth—10,000 and counting—to artistically explore environmental issues, and to amplify their voices to advance dialogue and participation in ocean conservation.

Presenter(s): Alyssa Irizarry, Bow Seat Ocean Awareness Programs

Strand:

Data Jam: Cultivating Data Literacy with Creative Communication and Art

Long-Term Ecological Research (LTER) sites across the United States are engaging students with local science and strengthening data literacy using art and creative communication. This innovative model has been expanded into multiple forms to meet Next Generation Science Standards for K–12 students in diverse classroom and informal settings.

Presenter(s): Ryan Nathanial-Thomas Pemberton, Asombro Institute for Science Education; Michelle Forster, Cary Institute of Ecosystem Studies

Strand:

Power of Words: How to Launch a Conservation Storytelling Contest

From Lonesome George to rangers in Africa, storytelling is commonly used to connect audiences of all ages to conservation. This session will focus on how to launch a successful conservation writing contest that allows people to use their voices to speak up for voiceless species around the world. Presenter(s): Rachael Rost, Topeka Zoo and Conservation Center

Strand:

GROUP B

2:15 PM-2:55 PM, Elkhorn D

Hurricane Island's Sustainability Through Engagement with Place (STEP) Teacher Cohort

The Hurricane Island Center for Science and Leadership is convening a teacher cohort to comprehensively address barriers to place-based learning and empower educators and students to become changemakers and leaders. Cohort projects will be student driven and address sustainability through the lens of one or more of the UN Sustainable Development Goals.

Presenter(s): Jennifer Page, Hurricane Island Center for Science and Leadership

Strand: • 🗘

Inspiring Action and Collaboration: Conservation Education for Adult Learners

Inspired adults can transform local communities toward positive ecological and social change. We will discuss how Project Dragonfly's inclusive participatory approaches and authentic real-world experiences have expanded the definition of adult education and contributed to the conservation goals of many organizations including nonprofits, local farms, and even a past nuclear facility. Presenter(s): Jill Korach, Miami University; Karen Plucinski, Miami University–Project Dragonfly, Department of Biology

Strand:

Permaculture Education and Policy to Address SDGs and Climate Action

This session highlights Uganda-based efforts to incorporate permaculture education into policy and climate change adaptation strategies. This bottom-up approach can effectively empower individuals to be catalysts for positive change in their own communities, address social, ecological, and economic needs as set out in the Sustainable Development Goals, and help spur climate action. Presenter(s): Charles Mugarura, Broadfield Enterprises Uganda (BEU)

Strand: • W

Roundtable Discussions

2:15 PM-2:55 PM, Thoroughbred 1

Connecting with Nature As a Mindfulness Practice to De-Stress Educators

Table 1

Teaching is one of the most demanding and stressful professions. Why does this matter and how might we combat it even before it begins? This session brings together faculty from across the United States to share practices occurring within teacher preparatory programs as they intentionally connect nature to mindful practices.

Presenter(s): Terri Hebert, Indiana University South Bend; Kimberly Yates, Northern Kentucky University; Molina Walters, Arizona State University; Rebecca Franzen, University of Wisconsin–Stevens Point, Wisconsin Center for Environmental Education; Fletcher Brown, University of Montana Strand:

Creating Meaningful Experiences for Diverse Audiences in National Parks Table 2

The National Park Foundation supports new interpretive approaches to engage underserved audiences, share meaningful history, and remove barriers of participation in national parks. In this session we will explore recent activities including fellowships to enhance LGBTQ+, civil rights, and labor history, and the impact of 4th grade teacher reinterpretation of a National Historic Site.

Presenter(s): Karen Lee, National Park Foundation; Alexander Terango, National Park Foundation Strand:

Empower Youth Through Social Enterprise, Sustainability, and Collaboration Table 3

Learn how ee360 fellows from the Chicago Eco House, Get Down Farm, and EcoRise collaborated to implement a place-based social enterprise model as an environmental education strategy to help youth solve real-world challenges in disadvantaged communities in Chicago and Detroit.

Presenter(s): Abby Randall, EcoRise; Quilen Blackwell, Chicago Eco House; Anita Singh, Keep Growing Detroit Strand:

Pathways to Advance Green Schools Table 4

Join the discussion with Missouri Green Schools leadership about how to increase participation in Green Ribbon Schools through statewide feeder programs. We will discuss challenges and opportunities that exist to attract and support schools as they progress along the green spectrum, especially underrepresented rural and urban core schools. Presenter(s): Lesli Moylan, Missouri Environmental Education Association; Hope Gribble, U.S. Green Building Council-Missouri Gateway Chapter Strand:

Questions About Conducting Ethically Inclusive Research for Sustainable Communities Table 5

Contextualized in a regional Australian research setting, participants in this session will be invited into a spirited conversation in which they are encouraged to grapple with critical questions about researchers' ethical, epistemological, methodological, and representational responsibilities when undertaking sustainability education research in marginalized rural communities.

Friday 3:05 PM

Traditional Presentations

3:05 PM-3:45 PM

Collective Evaluation Tools for Large-Scale Programs 3:05 PM-3:45 PM, Regency Ballroom 2

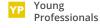
Programs offered regionally or nationally sometimes experience difficulties with connecting survey tools, data analysis, and programmatic evaluations. This session will cover innovative examples (one national and the other regional) on how we created collective evaluations. We will cover the process and the tools used to accomplish our goals.

Presenter(s): Kenneth Rainer, University of Florida Strand: • VP

 Building Leadership for Environmental Literacy Connecting with Nature Conservation and Environmental Education Educating for Sustainable Communities Green Schools and Preparing for 21ST Century Careers











Earth Day 2020: The Power of the Teach-In 3:05 PM-3:45 PM, Elkhorn A

Teach-ins were an important tool to mobilize citizens for first Earth Day in 1970. For the 50th anniversary in 2020, we are calling on educators around the world to host teach-ins on locally important environmental issues. Come get resources and ideas on how to integrate environmental education and civic action. Presenter(s): Tracey Ann Ritchie, Earth Day Network; Kira Heeschen, Earth Day Network

Strand:

Ecological Literacy and Transformation in a Global Agricultural Learning Network 3:05 PM-3:45 PM, Berea

This session explores how an environmental learning network might contribute to transformative, equityoriented shifts towards sustainability. Participants will examine a case study of the Savory Global Network, whose purpose is to foster the wide-scale adoption of holistic management, a mode of applied sustainability education and rangeland management.

Presenter(s): Lee Frankel-Goldwater, University of Colorado-Boulder

Strand:

Green Amendments for the Generations: Recognizing and Protecting Inalienable **Environmental Rights**

3:05 PM-3:45 PM, Thoroughbred 2

While we have many rights in this nation, environmental rights are not among them. It's time to empower communities to secure their environmental rights: to turn from a system of laws that accommodate pollution, to a system that prevents degradation through the passage of constitutional Green Amendments.

Presenter(s): Maya van Rossum, Green Amendments for the Generations & Delaware Riverkeeper Network

Strand:

Strand:

Not Just a Sustainable Future: Education and the Global Wealth Gap

3:05 PM-3:45 PM, Elkhorn B

This session argues that education is necessary but insufficient for creating a just and sustainable future because of the wealth gap between the global North and South. Three factors are assessed to make this argument: lack of access to resources, the South-to-North brain drain, and nation-specific government policy.

Presenter(s): Anthony Kola-Olusanya, Osun State University; Patricia Glazebrook, Washington State University

Strand:

Outdoor School for All! Diverse Programming and Impacts in Oregon

3:05 PM-3:45 PM, Thoroughbred 3

Oregon's legislative charge, providing Outdoor School for All began in 2017. Every fifth- or sixth-grade student in Oregon will ultimately attend—eighty percent attended in 2018/19. Who is missing and why? How does outdoor school vary statewide? What are the common outcomes across diverse programs serving diverse audiences?

Presenter(s): Steven Braun, eeRise; Nancy Bales, Gray Family Foundation

Strand:

Research and Practice: Living in and Linking Two Worlds

3:05 PM-3:45 PM, Thoroughbred 5

Worlds collided for the presenter when she chose to move from an academic position into a role as director of a small science museum. Using this unique insight, the presenter will highlight ways in which academics can approach and work with small museums, and vice versa in order to develop lasting, positive collaborations.

Presenter(s): Shelby Gull Laird, NC Museum of Natural Sciences at Whiteville

Strand:

Strand:

Bright Spots

3:05 PM-3:45 PM

Learn about two or three successful and loosely related programs in each 40-minute session. Sessions are presented in the order listed.

GROUP A

EE 30 Under 30 Honorees 3:05 PM-3:45 PM, Elkhorn C

Developing Culturally Relevant Environmental Education Curricula

Out-of-school time EE programs allow students to connect and reconnect to their environments. This session looks closely at practices that foster student autonomy in the classroom, and how we can use these programs to further racial equity efforts by being critical of what and how we teach.

Presenter(s): Beatriz Cañas, Chicago Botanic Garden Strand: • VP

Fostering a Diverse Learning Community Through Mentorship and Meaningful Work

Educators who recognize teens as whole people—not just learners—create space for students to explore connections between their interests and identities. Learn how a strong emphasis on mutual trust, respect, and familiarity can foster community and discover common ground between people with diverse backgrounds, abilities, and perspectives.

Presenter(s): Taiji Nelson, Pittsburgh Parks Conservancy

Strand: O

What bell hooks Taught Me About Black People and Nature

In Belonging: A Culture of Place, bell hooks, author and feminist, explores the intricate nature of her childhood growing up in Kentucky and personal connection with the land and Earth. This session highlights how Black and non-Black people can learn from her reflections to live in harmony with the land.

Presenter(s): Dejah Powell, Cornell University Strand:

GROUP B

3:05 PM-3:45 PM, Elkhorn D

Environmental Education Plus Citizen Science: A Path to Stewardship?

Citizen science and environmental education offer complementary approaches to move participants towards greater environmental literacy and potentially empowerment, yet few examples exist. This presentation will highlight a CS project that was developed using programmatic EE elements to strategically move participants from awareness to stewardship.

Presenter(s): Megan Kruger, West Virginia University Research Corporation

Strand:

Shell Day and Community Approaches to Ocean and Coastal Acidification

Project Shell Day is an effort in the northeastern United States to establish coordinated monitoring networks that engage citizen science approaches and community water-quality monitoring organizations. This work aims to raise awareness about the local opportunities to mitigate and adapt to coastal acidification.

Presenter(s): Parker Gassett, University of Maine Strand: • 🐧

Wetland Centres of Excellence: A Tool for DUC to Reach Its Conservation Goals

Ducks Unlimited Canada (DUC) has developed a network of Wetland Centres of Excellence across Canada whose activities have a direct impact on helping DUC reach its conservation goals. Find out how youth and communities become engaged and play a major role in wetland conservation.

Presenter(s): Mariane Bolla, Ducks Unlimited Canada Strand:

Roundtable Discussions

3:05 PM-3:45 PM, Thoroughbred 1

NAAEE Fundraising Coaching Table 1

How do I start conversations that lead to bigger gifts? How can I get my board members more engaged in fundraising? Is this project right for corporate or foundation support? Am I doing ANY of this right? Whether you're new to fundraising or a seasoned professional, bring your questions to NAAEE's fundraising roundtables. Space is limited; advance sign up at the Information Station required.

Presenter(s): Lea Harvey, LLH Strategy Advisors, LLC; Krishna Roy, Consultant

Strand:

Y

Saving the Birds and the Bees with Safe Sex Table 2

The Center for Biological Diversity discusses human population growth and its impact on the environment. We will facilitate a discussion about how to integrate this topic into environmental education using a human rights and environmental justice lens. We will share resources and seek input from the audience regarding our program.

Presenter(s): Sarah Baillie, Center for Biological Diversity; Kelley Dennings, Social Marketing Association of North America

Strand: • 🔷

Staff Training That Matters Table 3

How can grassroots organizations build the environmental literacy of their education staff, while helping staff feel invested and connected with the organization? Discuss the impacts of educator-led trainings, and explore how organizations can further this inclusive model of professional development to encourage staff to build leadership skills in environmental education.

Presenter(s): Lauren Reynolds, Blue Heron Nature Preserve; Nicole Thurston, Blue Heron Nature Preserve

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Strand:

The Importance of Youth Voice in Education Table 4

Join Earth Force in discussing the importance of youth voice in education. We'll be giving an overview of relevant scientific literature, classroom integration techniques, and experiences in creating democratic classrooms/youth-driven experiences.

Presenter(s): Grace Scarsella, Earth Force; Justin Zakoren, Earth Force

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Friday 4:00 PM

Traditional Presentations

4:00 PM-4:40 PM

Calling for Collective Action: Communicating EE Through the Arts

4:00 PM-4:40 PM, Elkhorn A

Is reading and responding to text enough, or do students need to communicate environmental issues in ways that evoke deep emotional connections to nature? Youth, and adults, can maximize impact by going beyond cognitive skills of speaking and writing to convey concepts by integrating artistic means that elicit collective action.

Presenter(s): Kay Hensler Phelps, Fort Lewis College Strand: ● ♠

Child-Animal Encounters: Promoting Respect, Care, and Compassion

4:00 PM-4:40 PM, Thoroughbred 4

Animals feature prominently in the lives of children. What type of messaging are educators sending to children when they guide encounters with animals? Are children truly learning to care and respect the more-than-human world or are we further disconnecting children from nature and unknowingly promoting the idea of human exceptionalism? Presenter(s): Elizabeth Y. S. Boileau, Lakehead University; Patty Born, Hamline University School of Education

Strand:

Fill Your Dance Card!

4:00 PM-4:40 PM, Hyatt Suites

Are there other Affiliate leaders you haven't had a chance to talk with yet? Now's your opportunity! Take advantage of this time and space to set up individual or team meetings to discuss your successes and challenges.

From Urban to Rural and Back Again: Blazing the Path for EE Careers

4:00 PM-4:40 PM. Elkhorn B

This session will showcase our experiences designing and implementing EE programming that inspires growth, professional development, and career pathways of future environmental educators. We will highlight two initiatives that span urban and rural environments featuring Slippery Rock University, Pittsburgh Public Schools, and Phipps Conservatory, drawing from faculty, student, and practitioner perspectives.

Presenter(s): Rebecca Thomas, Slippery Rock University; Shawn Davis, Slippery Rock University; Christine Walsh, Slippery Rock University; Linda Zane, Slippery Rock University; Heather Shannon, Phipps Conservatory; Paul Hedzik, Robert A. Macoskey Center; Sadie McNulty, Macoskey Center; Erin Mackenstein, Slippery Rock University

Strand:

V

Garbage and Greenways: Industry and Nature CAN Coexist

4:00 PM-4:40 PM, Thoroughbred 2

At the Solid Waste Authority of Palm Beach County, we are proving that industry and nature can coexist! During this presentation, participants will learn why the SWA Greenway Trail System was created and how we connect place-based environmental education with solid waste management and the importance of conserving natural resources.

Presenter(s): Dawn Perez, Solid Waste Authority of Palm Beach County; Mary Wozny, Solid Waste Authority of Palm Beach County Strand:

Promoting Energy Literacy Among Educators to Prepare Students for Green Careers 4:00 PM-4:40 PM, Thoroughbred 3

Learn about the NC Energy Literacy Fellows
Program, a long-duration professional development
experience for educators that combines STEM-based
investigations with place-based explorations of energy
production and research facilities to promote the
knowledge and skills that will be needed to build a
diverse and innovative green workforce.

Presenter(s): Dana Haine, University of North Carolina–Chapel Hill Institute for the Environment

Strand:

Radio Killed the Video Star: Outreach to Better Serve Latino Communities

4:00 PM-4:40 PM, Thoroughbred 5

Lexington is a diverse city with a rising Spanishspeaking population. In an effort to increase our outreach, we returned to the classic form of entertainment—radio! Presenters will talk about how we incorporate all things green in our show, Lexington en Verde, aired through Lexington Community Radio.

Presenter(s): Angela Poe, City of Lexington, KY Strand: - 💮

The Effect of Differentiated Instruction Training on Education Trainees

4:00 PM-4:40 PM, Heritage Ballroom 1

The Education Traineeship at Hawk Mountain Sanctuary incorporates the teaching and modeling of diverse teaching strategies that relate to how students understand and process information differently. Reflective journaling, identity maps, weekly seminars, personal interviews, and teacher feedback surveys of trainee facilitated programs are used to assess the program's effectiveness.

Presenter(s): Erin Brown, Kutztown University

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Trand:

The Impact of Field Internships for Urban **Teenage Girls**

4:00 PM-4:40 PM, Heritage Ballroom 3

There is nothing like going out to the field to explore a career. Hear from two of our urban high school girls how a week of fossil hunting or wetland studies, with scientists that look like them, was the perfect hook to see the reality of what scientists do.

Presenter(s): Betsy Payne, Academy of Natural Sciences of Drexel University; Arianna Alfaro, Women in Natural Sciences; Lynn Larabi, Women In Natural Sciences of Drexel University

Strand:

Trillium Sustainability Workshop: Incorporating **EE Across the Curriculum**

4:00 PM-4:40 PM, Heritage Ballroom 2

Offered annually, Trillium has evolved from a training opportunity to an inter-institutional and interdisciplinary learning network. Our goal is to share lessons learned and inspire others to create similar workshops and networks to support formal and nonformal EE in new and diverse spaces.

Presenter(s): Noelle Wyman Roth, Duke University; Charlotte Clark, Duke University

Strand:

Water, Wind, and Fire: How to Rock Community & Citizen Science

4:00 PM-4:40 PM, Berea

Community and citizen science is a meaningful way to engage learners while enhancing the scientific community's understanding of the natural world. Hear about three projects focused on air quality, climate change, and water quality, then learn time and money saving tips for your own community and citizen science projects.

Presenter(s): Nina Suzuki, University of California-Davis; Elizabeth Spike, Fairfax County Public Schools Strand:

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Bright Spots

4:00 PM-4:40 PM



Learn about two or three successful and loosely related programs in each 40-minute session. Sessions are presented in the order listed.

GROUP A

4:00 PM-4:40 PM, Elkhorn C

Chaperones: Field Trip Friends

The education team at Rocky Mountain National Park relies on the help of chaperones for every field trip. Chaperones can really make or break the day. Using audience-centered polls, real-life examples, and facilitated group work we will explore how to turn chaperones into your best field trip friends. Presenter(s): Katie Phillips, Rocky Mountain

National Park

Strand:

The Every Student Succeeds Act and Environmental **Education in North Carolina**

Building from the resources provided by NAAEE, environmental education partners in North Carolina joined together to create a document for NC education leaders explaining how the Every Student Succeeds Act can fund environmental education. We'll talk about our partnership process, outreach campaign, and lessons learned in this presentation. Presenter(s): Lauren Pyle, Environmental Educators of North Carolina

Strand:

Improving Communities and Promoting Behavior Change with Demonstration Gardens

The University of Florida/IFAS Florida-Friendly Landscaping program in Marion County strives to promote water conservation through sustainable landscaping practices, but not everyone has the time or ability to attend classroom presentations. By developing demonstration gardens, communities improve and underserved audiences gain access to EE, but how can behavior change impacts be evaluated?

Presenter(s): Amanda Marek, UF/IFAS Extension Service Marion County

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GROUP B 4:00 PM-4:40 PM, Elkhorn D

The Power of Partners: Building Engagement with Strategic Community Partners

How to build trust, interest, and action in diverse communities. Learn about the development of organizational practices to increase awareness and address issues around diversity, equity, and inclusion. Build genuine partnerships to increase trust and engagement in communities of color. Presenter(s): Katie Wright, Conservancy for Cuyahoga Valley National Park; Jesus Sanchez, Conservancy for Cuyahoga Valley National Park Strand:

Utilizing Advisory Councils to Develop Equitable and Inclusive Experiences

Employing a thematic advisory council as a strategy can lead to inclusive environmental education experiences that accurately represent the needs of the community. This presentation will highlight four different successful thematic advisory councils developed by the Wildlife Conservation Society Education Department and will include recommendations for developing your own.

Presenter(s): Michelle Beach, Wildlife Conservation Society–Central Park Zoo

Strand: • 🚾

LOCAL CULTURE

Bourbon Barrels

By law, a barrel can be used just one time to distill bourbon in the United States, despite the fact that these well-crafted barrels have a "lifespan" of up to 60 years. Used bourbon barrels are used for distilling other beverages and are used throughout the world to add unique flavor to Scotch, aged rum, and even tequila.

Friday 5:00 PM

Meetings & Receptions

5:00 PM-6:00 PM

EE 30 Under 30 Reception 5:00 PM-6:00 PM, Thoroughbred 1 By invitation.

University of Michigan School for Environment and Sustainability Gathering 5:00 PM-6:00 PM, Regency Ballroom 3

University of Michigan SEAS alumni are invited to attend a casual reception with light refreshments before the Friday evening celebration. This is a great opportunity to connect and catch up with fellow alumni. Current and prospective students are welcome.

Southeastern Environmental Education Alliance 5:00 PM-6:00 PM, Regency Ballroom 1

Members of the southeast state Affiliates will meet to discuss current activities and opportunities for collaboration. Member states include Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee.

Coordinator: Ashley Hoffman, Kentucky Association for Environmental Education

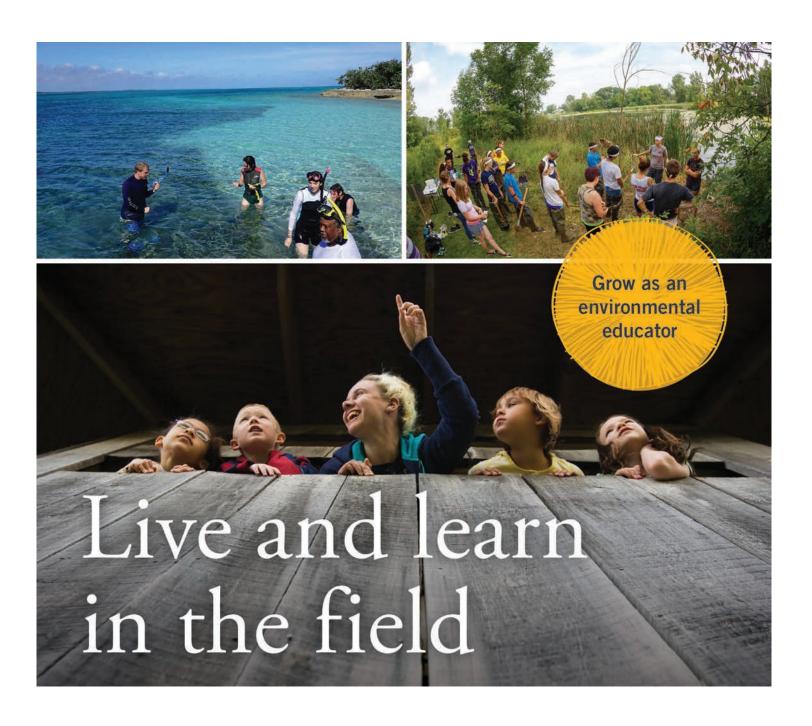
Friday 7:00 PM

Bourbon and Blues Celebration and William B. Stapp Scholarship Auction

7:00 PM-9:30 PM, Patterson Ballroom

Don your Derby hat, fascinator, or bow tie and help us celebrate Lexington, the Horse Capital of the World. Enjoy Kentucky-themed hors d'oeuvres and music by the fabulous Tee Dee Young Band. You can also learn about famous African American jockeys and watch as artist Enrique Gonzalez creates a beautiful painting of a horse that will be auctioned off later in evening. Come prepared to bid on a treasure trove of auction items, including crafts, books, jewelry, photographs, and a once-in-a-lifetime Uganda great ape safari. And choose your team in the all-new Dash for Cash—arguably the three most exciting minutes of NAAEE2019!

See pages 48–49 for more information.



Master of Arts in Environmental Education

This 11-month program integrates ecological learning and pedagogical skills through immersive courses, a teaching practicum with professional mentorship, and exploring The Bahamas in February.







Saturday

Saturday 7:30 AM

Lexington at Leisure

Morning Yoga: From Awareness to Action (3) 7:30 AM-8:15 AM, Patterson E-G

Wake to the new day with awareness of breath, movement, and alignment. Through this gentle practice, reconnect with your body and mind's ability to move intentionally throughout the actions of the day. Instructor Pam Thomas is certified by and registered with the Yoga Alliance.

Saturday 8:30 AM

Symposium

8:30 AM-4:00 PM

Washington ClimeTime: Climate Science Justice Learning in Action

8:30 AM-10:00 AM, Kentucky

Climate science education has gone statewide! Washington is the first state in the nation to engage in a coordinated and funded effort to foster teacher professional learning around climate science. Come and explore examples of what the work looks like and how it got off the ground.

Presenter(s): Kathryn Kurtz, Pacific Education

Institute; Brad Street, IslandWood

Moderator: Elizabeth Schmitz. Office of the

Superintendent of Public Instruction

Strand: •





LOCAL WILDLIFE

Tulip Poplar

The tulip poplar was designated the official state tree of

Kentucky in 1994. It is the tallest eastern hardwood and produces large, fragrant, tulip-like flowers in the spring.

Key

- Building Leadership for Environmental Literacy
- Connecting with Nature
- Conservation and Environmental Education
- Educating for Sustainable Communities
- Green Schools and Preparing for 21ST Century Careers
- Linking Research and Practice to Increase Impact
- Equity and Inclusion
- YP Young Professionals
- A NAAEE Affiliate Network
- ee360

Hands-On Presentations

8:30 AM-10:00 AM

Elephant Reproduction: Hormones, Sex, and Conservation

8:30 AM-10:00 AM, Thoroughbred 4

Join San Diego Zoo Institute for Conservation Research educators to explore the science of hormones in African elephant conservation. Learn about free professional development opportunities with the largest zoo-based multidisciplinary research effort in the world, and leave with curricula to bring the science of saving species into your classroom! Presenter(s): Maggie Reinbold, San Diego Zoo Global Strand:

Social Justice in Focus: An EfS Community of Practice

8:30 AM-10:00 AM, Heritage Ballroom 1

Join us for an interactive presentation about an Education for Sustainability community of practice focused on social justice. This forum emerged from a shared need to tackle our discomfort in addressing identity, power, and privilege in learning environments. Come engage in the complexity of building safe spaces for courageous conversations! Presenter(s): Aimee Arandia Østensen, Shelburne Farms; Paul Bocko, Antioch University New England Strand: •

Sustainable STEAM

8:30 AM-10:00 AM, Heritage Ballroom 2

Joe Lee Johnson Elementary and EcoRise will present best practices for integrating STEAM and sustainability through a fast-paced, hands-on session. Learn how to leverage your school building, data collection tools, technology, and community support to empower students to tackle real-world sustainability challenges and foster a passion for STEAM.

Presenter(s): Abby Randall, EcoRise

Strand:

Teaching the Human Dimensions of Climate Change 8:30 AM-10:00 AM, Heritage Ballroom 3

Discover innovative and hands-on activities to connect climate change with the history of population growth, industrialization, current energy use, and projected risks to vulnerable communities around the globe. Engage in a group simulation modeling comparative resource use and vulnerabilities to sea level rise, extreme weather, and changes in food production.

Presenter(s): Scott Townsend, Eastern Kentucky University

Strand:

Traditional Presentations

8:30 AM-9:10 AM

Affiliates and Advocacy

8:30 AM-9:10 AM, Hyatt Suites

Ready to implement some advocacy work into your Affiliate program but not sure where to start? Connect with Affiliates and NAAEE staff to learn about best practices in Affiliate advocacy and success stories around local and national advocacy efforts.

Presenter(s): Sarah Bodor, NAAEE; Laura Collard, Maryland Association for Environmental and Outdoor Education; Alex Porpora, Utah Society for Environmental Education

Strand:

A

Engaging Citizen Scientists to Understand Changes in Lake Water Storage

8:30 AM-9:10 AM, Elkhorn A

The Lake Observations by Citizen Scientists & Satellites project engages citizen scientists in monitoring how the amount of water in lakes changes over time. We'll discuss strategies for engaging citizen scientists, explore their motivations, and share findings about their ability to provide accurate data.

Presenter(s): Sarah Yelton, UNC Institute for the **Environment**

Strand:

Forming Your "Team Justice" with Service, Diversity, and Inclusion

8:30 AM-9:10 AM. Berea

A successful model to address social responsibility can occur by forming a "team justice" to better connect schools with regional environmental, equity, and diversity interests. This session guides the participants in moving from a solo silo model to a team model to build stronger and longer lasting community partnerships.

Presenter(s): Brian P Kane, St. Stephen's and St. Agnes School

Strand:

Nature Hop: Connecting Urban Residents with Local Nature

8:30 AM-9:10 AM, Elkhorn B

Lexington is a typical urban environment in many ways, but nature is always close at hand—whether a farm, park, water quality lot, or greenway. Inspired by Berlin's Long Day of Urban Nature, Nature Hop is a one-day event that connects Lexington residents with the nature near them.

Presenter(s): Chrissie Tune, Lexington–Fayette Urban County Government; Joseph Brenzel, Lexington-Fayette Urban County Government; Angela Poe, City of Lexington, KY

Strand:

Scholars, Stewards, Volunteers: Environmental **Education Meets Public School Curriculum** 8:30 AM-9:10 AM, Thoroughbred 3

The Environmental Institute at Ivy Academy has blazed a trail for an impactful intersection of experiential and public education. Learn how this USDE Green Ribbon School carved a path to programming that focuses on academic scholarship, environmental stewardship, and community volunteering to educate individual students and impact whole communities.

Presenter(s): Ansley Eichhorn, Ivy Academy **Environmental Charter School**

Strand:

Saturday 9:20 AM

Meeting

9:20 AM-10:00 AM

NAAEE Business Meeting 9:20 AM-10:00 AM, Elkhorn B

Join NAAEE's board chair, executive director, board members, and staff for a discussion on the current state of the organization and future directions for NAAEE. Topics will include strategic planning, a financial report, and your questions. We welcome your input!

Coordinators: Judy Braus, NAAEE; Charlotte Clark, Duke University

Traditional Presentations

9:20 AM-10:00 AM

Building Momentum with Green Ribbon Schools: Case Studies of K-12 Schools 9:20 AM-10:00 AM, Elkhorn A

This session will give a brief overview of the Green Ribbon School award and share case studies of K–12 schools that have successfully completed the process. The presentation summary will focus on how other programs can take this information to build momentum toward creating their own green schools. Presenter(s): Linda Plevyak, University of Cincinnati; Randall Gibson, University of Cincinnati Strand: ●

Connecting Rural Families to Local Science Issues Through a Water-Quality Workshop 9:20 AM-10:00 AM, Berea

This research project investigates how scientist-led programs for rural families in libraries and museums make local science issues visible and relevant to families. Specifically, this study provides findings related to how scientists (STEM professionals) can be positioned to facilitate families' personally-relevant connections to water quality issues during groundwater-themed science workshops. Presenter(s): Lucy McClain, Shaver's Creek Environmental Center-Penn State University Strand:

Impact: Creating a Generation of Change 9:20 AM-10:00 AM, Thoroughbred 2

Join the San Antonio Water System in an exploration of their highly successful high school program called Impact. Learn how this 20-year project-based program has helped to evolve a culture of water conservation in the city and continues to contribute to a sustainable future for San Antonio.

Presenter(s): Lynne Christopher, San Antonio Water System

Strand:

Introduction to Crowdfunding: Using Your Team to Fundraise

9:20 AM-10:00 AM, Hyatt Suites

Thinking about launching a new crowdfunding campaign or looking to amp up your previous campaign strategies? Come learn from EENC! We raised almost \$37K in six weeks last year through peer-to-peer campaigns. We'll share our lessons learned, and tips and tricks to help you raise funds for critical programs.

Presenter(s): Lauren Pyle, Environmental Educators of North Carolina

Life in the Licking River: 4-H Water Quality Study 9:20 AM-10:00 AM, Thoroughbred 3

Not your typical water quality study, 4-H partners with our local middle school and 3M Company to provide an experience that makes the connection between nature, science, communications, and purpose. This program addresses the quality of our local water source and encourages students to communicate results and action plans to community leaders! Presenter(s): Mike Meyer, University of Kentucky Cooperative Extension; Eric Comley, University of Kentucky

Strand:

Success, Shortcomings, and Future of the Swarovski Waterschool USA Program 9:20 AM-10:00 AM, Thoroughbred 5

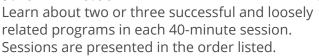
The Swarovski Waterschool Mississippi River program had both success and shortcomings in its initial two-year launch. Come learn about what worked well and the changes we're making as we move into the next three-year phase. Participate in a discussion on best practices for continued engagement in watershed education.

Presenter(s): Tiffany Atkinson, National Great Rivers Research and Education Center; Corrinne O'Brien, National Great Rivers Research and Education Center Strand:

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Bright Spots

9:20 PM-10:00 PM



GROUP A

EE 30 Under 30 Honorees 9:20 AM-10:00 AM, Elkhorn C

Let Youth Lead: Lessons from a By-Youth, For-Youth Grant Program

So many of us care about cultivating youth leadership, but it can be difficult to know where to begin. This presentation provides specific tips on letting youth lead based on ten years of success with the Carmel Green Teen Micro-Grant Program, a youth-run program that supports youth-led environmental projects.

Presenter(s): Lauren Gibson, NOAA Office of Education

Strand: • V

Pathway to Solutions: Engaging Youth in Climate Action in Brazil

Learn about the successful "Pathway to Solutions" methodology, which was developed by Engajamundo, a Brazilian youth-led NGO that uses advocacy, activism, and capacity building to implement the Sustainable Development Goals. See how this approach engages young people to drive social and environmental change in their communities by building leadership in schools.

Presenter(s): Eduarda Zoghbi, Columbia University Strand: • Y

Transformational Change: Redefining Our Movement for Sustainability

Young people today are acting on a wide range of environmental issues and connecting the dots to build a sustainable future. Reflecting on the Scouts for Sustainability Program in Canada, this session will show a movement led by youth for youth, highlighting the importance of partnerships, networks, and shared advocacy.

Presenter(s): Adam Young, Canadian Network for Environmental Education & Communication–EECOM Strand:

GROUP B 9:20 AM-10:00 AM, Elkhorn D

Exploring Literacy in School Gardens

Do you have a school or community garden that you want to use to get students interested in writing and curious about the natural world? Learn about tools and techniques for how to use nature journaling to engage students in describing what they notice in the world around them.

Presenter(s): Julia Colbert, Arizona State University; Eileen Merritt, Arizona State University Strand:

Field to Fork Club: Cook, Eat, Grow!

The Food Literacy Project's Field to Fork Club empowers some of the youngest members of our city to transform themselves, their families, and their communities by connecting them to a lifestyle full of healthy and delicious food, endless garden fun, and the skills to back up both!

Presenter(s): Daniela Bartlett Asenjo, The Food Literacy Project

Strand: • 💠

School Gardens for Food Equity

More than 1.4 million people in Los Angeles live with food insecurity. MUSE School sixth graders tackle this environmental justice issue by growing produce for a local food pantry in their school garden. Participants will leave this talk with a framework for implementing similar programs in their own communities.

Presenter(s): Rick Perillo, MUSE School

Strand: • 💠

Saturday 10:00 AM

Coffee Break

10:00 AM-10:30 AM, Bluegrass Lobby



Saturday 10:30 AM

Symposium

10:30 AM-12:00 PM

School of the Wild: Connecting All Students to the Wild

10:30 AM-12:00 PM, Kentucky

For 20 years, School of the Wild has provided weeklong wildlife experiences for students in the lowa City Community School District. Join our panel to hear how we went from an exploratory pilot to a district-wide program serving all students. Let our team's experience help you grow your programs. Presenter(s): David Conrads, University of Iowa Recreational Services; Ted Neal, University of Iowa; Rebekah Stelzle, University of Iowa Moderator: Jay Gorsh, University of Iowa Strand:

Hands-On Presentations

10:30 AM-12:00 PM

A River of Words in My Backyard Stream 10:30 AM-12:00 PM, Heritage Ballroom 1

Many of Kentucky's 90,000+ miles of streams are considered backyard streams that are subject to "urban stream syndrome." We will use hands-on explorations and creative discussions to learn key concepts related to stream systems and successful backyard stream management. Participants will leave the workshop with resources to share with high school, college, and adult audiences. Presenter(s): Carmen Agouridis, University of Kentucky; Amanda Gumbert, University of Kentucky Cooperative Extension Service Strand:

Mountains to Main Street: Engaging Community Influencers as Ambassadors

10:30 AM-12:00 PM, Heritage Ballroom 3

Mountains to Main Street Ambassador Program is a unique partnership between Grand Teton National Park and Groundwork USA. A weeklong workshop trains emerging professionals to channel enthusiasm into a community engagement strategy. You'll hear about the program and then work with the planning tool to think about your own work.

Presenter(s): Megan Kohli, Grand Teton National Park; Tanner Yess, Groundwork USA

Strand:

Strand:

The Alaka`ina Digital Bus: Mobile STEM and Hawaiian Knowledge Classrooms

10:30 AM-12:00 PM, Heritage Ballroom 2

The Alaka`ina Digital Bus integrates STEM with traditional knowledge into projects for public schools on Maui and Moloka`i. Through the use of our mobile classrooms we bring students into the field to establish the importance of science and culture while connecting them to nature and their environment. Presenter(s): Dav Yuan, Alaka`ina Maui Digital Bus; Shannon Lima, Alakaʻina Molokaʻi Digital Bus Strand:

The Great Elephant Census Modeling Activity 10:30 AM-12:00 PM, Thoroughbred 4

Ready to count elephants? Assessing biodiversity starts with counting populations. The Great Elephant Census Modeling Activity from HHMI BioInteractive demonstrates how counts are done in the field and allows students to model the methods used by real scientists. Educators are provided with free resources and ideas emphasizing the importance of preserving biodiversity and conserving species.

Presenter(s): Laura Dinerman, Sherwood High School, Montgomery County, Maryland

Strand: •

Meeting

10:30 AM-11:10 AM

NAAEE 2020: Share Your Ideas! 10:30 AM-11:10 AM, Mary Todd Lincoln

How can we improve on this year? We'd love to hear your thoughts. Come share your ideas and suggestions for our 49th annual conference, scheduled for October 13–17 in Tucson, Arizona.

Coordinator: Lori Mann, NAAEE

Traditional Presentations

10:30 AM-11:10 AM

Bridging the Gap: Different Perspectives on Equity and Inclusion

10:30 AM-11:10 AM, Thoroughbred 2

Equity and inclusion is a "hot topic" in environmental education, yet there is little common understanding of what it looks like in practice. This presentation will showcase the perspectives of organizational leaders and educators of color, identify patterns, and share insights on how to bridge the gap.

Presenter(s): Jedda Foreman, Lawrence Hall of Science; Emilie Lygren, BEETLES Project, Lawrence Hall of Science; Rena Fidelia Payan, Youth Outside Strand: •

Climate Hope: Optimism and Solutions Around Climate Change

10:30 AM-11:10 AM, Thoroughbred 3

Let's inspire people to take action on climate through a focus on solutions and hope, rather than data and fear. Come get a dose of optimism as we talk about the climate solutions happening around the world that provide the sense of empowerment and agency we need to tackle the climate issue.

Presenter(s): Adam Ratner, The Marine Mammal Center

Strand:

Designing Curriculum to Engage Young People in Environmental Dialogue

10:30 AM-11:10 AM, Thoroughbred 5

The presenters will outline a curricular method for including underrepresented voices in environmental discourse and provide an example of its use. By sharing photographs and student quotes, this presentation will build upon use of photovoice in various settings.

Presenter(s): Carolyn Waters, Bellarmine University Strand:

EE Associations: Making the Most of Membership 10:30 AM-11:10 AM, Hyatt Suites

How effective is your membership program? Join us to learn about new membership strategies and directions from NAAEE and our Kentucky and Colorado Affiliates. Discuss membership trends and brainstorm ideas to help generate revenue and increase member engagement.

Presenter(s): Katie Navin, Colorado Alliance for Environmental Education; Sarah Bodor, NAAEE; Ashley Hoffman, Kentucky Association for Environmental Education

Strand:

A

EE21: Opportunities for Evidence-Based, Networked Learning in EE

10:30 AM-11:10 AM, Elkhorn A

Does your organization seek to learn and improve programs? We propose an innovative way to accomplish this goal. We discuss the development of a learning network based on shared evaluation tools through which organizations can evaluate their own programs and learn from each other to enhance their performance.

Presenter(s): Robert Powell, Clemson University; Marc Stern, Virginia Tech; Troy Frensley, University of North Carolina at Wilmington

Strand:

George Washington Carver and African American Environmental Thought for a Just and Sustainable Future

10:30 AM-11:10 AM, Berea

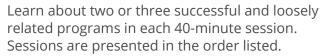
We will explore the historical contributions of African American environmental thought with a focus on George Washington Carver, and then connect his ideas with current thinking and practice by African Americans today. Through an examination of current initiatives, we will share how environmental literacy and justice are linked inseparably to food and social justice.

Presenter(s): Jim Embry, Sustainable Communities Network; Trevor Claiborn, Kentucky State University/ Farmer Brown Tha MC

Strand: • 🔷

Bright Spots

10:30 AM-11:10 AM



GROUP A

EE 30 Under 30 Honorees 10:30 AM-11:10 AM, Elkhorn C

Growin' Money: A Practical and Sustainable Community-Led Conservation Enterprise

Can you imagine a self-sustaining enterprise led by community members, educating the next generation while also generating thousands of dollars? Come learn how you can do the same from a successful Forbes 30 Under 30-featured enterprise from Sri Lanka!

Presenter(s): Anoka Primrose Abeyrathne, SustainSolutions.Org/UN Habitat YAB

Strand: • 🚾

Sustainable Reforestation by Congolese Youth to Combat Climate Change

The Democratic Republic of the Congo owns half of Africa's forest and water reserves. However, widespread deforestation and heavy metal pollution affect both people and the climate. See how we are combatting these issues by engaging students in reforestation, teaching future generations how to protect and restore the forest.

Presenter(s): Mariam Kabamba Merry, Congo Environnement et Nature

Strand: O

Using Creativity to Localize the Sustainable **Development Goals (SDGs)**

The SDGs give a clear roadmap for solutions to the world's most pressing challenges, however an implementation gap remains, especially at a grassroots level. Green Hope Foundation will share its success stories in "localizing the SDGs," using creativity and innovation that aid in the engagement of vulnerable and marginalized communities.

Presenter(s): Kehkashan Basu, Green Hope Foundation

Strand: • W

GROUP B

10:30 AM-11:10 AM, Elkhorn D

ABCs of Partnerships: Audiences Broadened by Collaboration

Many hands make light work and many partners make a larger impact. Using examples from a variety of projects and programs, we will discuss the who, when, and why of collaboration. Included will be approaches for building bridges between conservation educators and practitioners in rural, suburban, urban, and cross-cultural environments. Presenter(s): Tanya Taylor, Franklin County Metro Parks; Amy Tressler, Franklin Soil and Water **Conservation District**

Strand:

Creating Collaborative Communities Through Environmental Action

This workshop will engage participants with tried and tested staff development strategies and share directions for capacity building that provide teachers and schools with the ability to help students negotiate their own learning and develop voice and agency in assuming responsibility to reclaim local environments.

Presenter(s): Colleen McVeigh, Field Museum of **Natural History**

Strand: •

Strand:

Utilizing Stakeholder Input to Maximize **Environmental Education Effectiveness**

Increased pressure from state testing has created barriers to gaining district wide support and participation for in-class environmental education programming. This session explores the key factors we have uncovered in cultivating strong school-based partnerships that allow for measured effectiveness for in-school environmental education programs. Presenter(s): Erin Shultz, WAVE Foundation

Saturday 11:20 AM

Traditional Presentations

11:20 AM-12:00 PM

Connecting Underrepresented Communities to Nature

11:20 AM-12:00 PM, Thoroughbred 2

Families in Nature is an environmental education NGO that includes families from all ethnic, educational, and economic backgrounds. We would like to help participants learn how to invite and include underrepresented participants into their programs to create a diverse community of people who learn, play, and volunteer together in nature. Presenter(s): Heather Kuhlken, Families in Nature Strand: 🛑 🌗

Expanding Your Toolkit: Teaching for All Learners in the Outdoors

11:20 AM-12:00 PM, Elkhorn A

The faces, experiences, and abilities of your visitors are changing. Are you stumped by how to create activities that are great for all learners? Join this session to discover and apply instructional strategies for English Learners and students receiving Special Education services to your teaching in the outdoor classroom.

Presenter(s): Erin Anderson, Audubon Center of the North Woods, Charter School Division; Jess Haas, Montana Outdoor Science School

Strand: • 🔷

Minimizing School Waste 11:20 AM-12:00 PM, Elkhorn D

Come explore simple ways for your school to work together to decrease landfill waste, energy waste, and water waste. From young learners to middle schoolers, your school can work together through guided inquiry activities and integrated curriculum extensions to create a more sustainable school using many tools you already have.

Presenter(s): Laura Johnson, Saul Mirowitz Jewish Community School; Felicia Flynn, Saul Mirowitz Jewish Community School

Strand:

Mobilizing the World's Largest Untapped Natural Resource: Our Students

11:20 AM-12:00 PM, Berea

Our children spend 14,000 hours sitting in school. Imagine if every campus acted as an incubator for social change and teachers dedicated their classrooms to solving real-world problems. EcoRise shares resources and strategies to mobilize and fund youth-driven solutions for a sustainable world. Presenter(s): Abby Randall, EcoRise Strand:

Saving Grasslands with Citizen Science and Civic Ecology

11:20 AM-12:00 PM, Thoroughbred 3

The Southeastern Grasslands Initiative engages local community members in the identification and restoration of native grasslands, from wide plains to narrow roadsides. Employing iNaturalist makes participation available to diverse audiences in locations across the southeastern United States. Discover how to include your classroom or community group.

Presenter(s): Michelle Rogers, Austin Peay State University; Donna Short, Austin Peay State University; Philip Short, Austin Peay State University; Chelsea Blumbergs, Austin Peay State University Strand:

Secondary Teachers' Implementation of a Model-Based Climate Curriculum Unit 11:20 AM-12:00 PM, Thoroughbred 5

We share results of qualitative analysis of two secondary sciences teachers' implementation of a new, NSF-funded, global climate model-based curriculum in ninth grade geoscience classrooms. Our findings show that these two implementation teachers differed among three primary themes: (1) student autonomy, (2) lesson adaptation, and (3) maintaining congruence among classes.

Presenter(s): Kimberly Carroll Steward, University of Nebraska–Lincoln

Strand: •



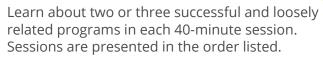
Talking About EE: Crafting Messaging with Affiliates 11:20 AM-12:00 PM, Hyatt Suites

How do we engage in conversations about environmental literacy with those who don't already see the value and benefits of EE? Explore strategies and tactics for discussing EE and the Affiliate Network with those who do not self-identify as environmental educators, including decision makers such as school administrators and policy makers.

Presenter(s): Renee Strnad, North Carolina State University; Laura Downey, Kansas Association for Conservation and Environmental Education; Olivia Griset, Maine Environmental Education Association; Eileen Everett, Environmental Education Association of New Mexico; Katie Navin, Colorado Alliance for Environmental Education

Bright Spots

11:20 AM-12:00 PM



GROUP A 11:20 AM-12:00 PM, Elkhorn C

Collaborative Education Program Design for Environmental Civic Action

How can we promote environmental civic action in non-Western countries? We analyzed factors influencing civic action and attempted to use the results for designing an environmental education program. We will discuss how to design programs in collaboration with researchers and teachers to promote EE for civic action.

Presenter(s): Tomoko Mori, National Institute for Environmental Studies, Japan

Strand:

Environmental Education in Bahamian Primary Schools: Bridging Community and Conservation My research within the Bahamas focuses on the effects of implementing environmental education at the primary school level in an empowering and culturally relevant manner. The data demonstrates the student's ability to disseminate environmental knowledge across the island, a Caribbean example of children becoming environmental ambassadors bridging community and conservation.

Presenter(s): Olivia Walton, University of New Haven Strand:

Strategies for Educating Being Watershed Wise with Impact

An educator from the internationally recognized San Antonio River Authority will share fun and effective strategies for moving children and citizens from diverse backgrounds into taking action for healthy creeks and rivers. Learn mindfulness techniques and other tools for maximum impact watershed education.

Presenter(s): Minna Paul, SARA

Strand: o

Saturday 12:00 PM

NAAEE Awards Luncheon & Closing Panel 12:00 PM-2:30 PM, Bluegrass Ballroom 2

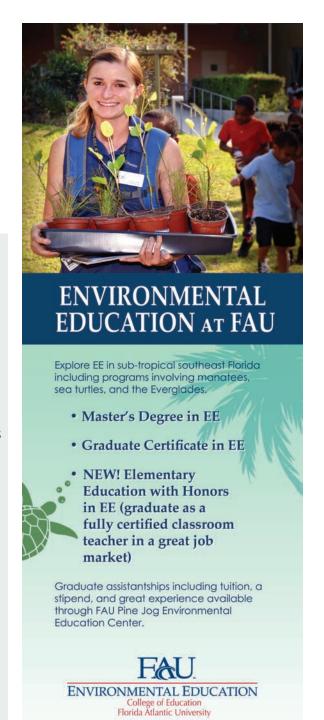
The conference culminates with our annual awards luncheon; join us in congratulating the 2019 NAAEE award recipients, individuals and organizations demonstrating exemplary leadership in our field. Included is the presentation of the Walter E. Jeske Award, considered the organization's highest honor.

EE 30 Under 30: Young Leaders Making a Difference

Veronica Lin, Rumbidzai Magwiro, Alerick Pacay, Sean Russell Co-Moderated by Taiji Nelson and Danni Washington

Following the ceremony, we'll close the conference on a high note as four inspiring EE 30 Under 30 honorees share their stories and perspectives on how to develop leadership in the field of environmental education.

See pages 43-44 for more information.





Reduce Your Impact

NAAEE is working with Schneider Electric to reduce the environmental impact of our conference. You can purchase verified emission reductions (VERs) at the registration desk to help balance the carbon dioxide emissions associated with your travel to the conference and use of resources during your stay in Lexington. Schneider Electric supports a variety of domestic and international carbon projects that conform to leading standards.

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SUSTAINABLE

FORESTRY INITIATIVE

Life Is On

Schneider



PROJECT LEARNING TREE

HAS REACHED 138 MILLION

- STUDENTS THROUGH

765,000 EDUCATORS

SINCE ITS FOUNDING

Together with the Sustainable Forestry Initiative, we are furthering our commitment to getting kids outside, connecting youth to forests, and building sustainable communities.

- Come to one of our sessions and hear from our CEO on
 Oct 18 Educating for a Just and Sustainable Future
- Visit our booth in the exhibit hall.
- Learn more: plt.org & sfiprogram.org







PLT is an initiative of SFI.

Past Conference Venues

1972 Hot Springs, Arkansas 1973 St Louis, Missouri

1974 San Francisco, California

1975 New Orleans, Louisiana

1976 Atlanta, Georgia

1977 Estes Park, Colorado

1978 Chicago, Illinois

1979 Blacksburg, Virginia

1980 Albuquerque, New Mexico

1981 Kentucky Dam Village State Park, Kentucky

1982 Silver Bay, New York

1983 Ypsilanti, Michigan

1984 Lake Louise, Alberta 1985 Chevy Chase, Maryland

1986 Eugene, Oregon

1987 Quebec City, Quebec

1988 Orlando, Florida

1989 Estes Park, Colorado

1990 San Antonio, Texas

1991 St. Paul, Minnesota

1992 Toronto, Ontario

1993 Big Sky, Montana

1994 Cancun, Quintana Roo

1995 Portland, Maine

1996 Burlingame, California

1997 Vancouver, British Columbia

1998 Atlanta, Georgia

1999 Cincinnati, Ohio

2000 South Padre Island, Texas

2001 Little Rock, Arkansas

2002 Boston, Massachusetts

2003 Anchorage, Alaska

2004 Biloxi, Mississippi

North American Association for Environmental Education

2005 Albuquerque, New Mexico

2006 St. Paul, Minnesota

2007 Virginia Beach, Virginia

2008 Wichita, Kansas

2009 Portland, Oregon

2010 Buffalo-Niagara, New York

2011 Raleigh-Durham,

North Carolina

2012 Oakland, California

2013 Baltimore, Maryland

2014 Ottawa, Ontario

2015 San Diego, California

2016 Madison, Wisconson

2017 San Juan, Puerto Rico

(virtual)

2018 Spokane, Washington

2019 Lexington, Kentucky



Getting Around Town



Lexington has been dubbed the Horse Capital of the World, the Best Place in America to Grab a Drink, and the site of an exploding culinary revolution. You can drive just ten minutes outside of the downtown area and find yourself in the heart of Horse Country, with rolling hills, fence-lined pastures, and Thoroughbred farms. You'll also find bourbon distilleries, and a multitude of cultural and historic experiences. Explore and enjoy while you're in town!

Places to Eat & Drink

Alfalfa

Fresh, locally sourced, and veg-friendly for nearly 40 years, Alfalfa cares about their ingredients and it shows, claiming "local before local was cool." 141 East Main Street, Lexington (859) 253-0014 alfalfarestaurant.com

Corto Lima

cortolima.com

Latin-inspired cuisine focusing on affordability, quality ingredients, and a creative menu. Specialty cocktail menu claims Lexington's best margaritas and Latin classics.

101 West Short Street, Lexington (859) 317-8796

Creaux

A New Orleans inspired cocktail bar and bistro, you can always count on a good time. With live music every Thursday, Friday, and Saturday, the party never stops.

310 West Short Street Lexington (859) 469-8960 creauxlex.com

Doodles Breakfast and Lunch

Locally owned, locally sources breakfast and lunch, "comfort food with a conscience." 262 North Limestone, Lexington (859) 317-8507 doodleslex.com

Good Food Co-op

Health-conscious co-op with local produce, meats & bakery items, plus prepared eats & a juice bar. Founded in 1972, owned by 8,500 members, sources items from 250+ Kentucky producers. 455D Southland Drive, Lexington (859) 278-1813 goodfoods.coop

HopCat Lexington

Burgers, comfort food entrees, lunch specials, and plenty of craft beer and whiskey. Locally famous fries! 410 West Short Street, Lexington (859) 286-6847 hopcat.com

Lexington Farmers' Market

On Saturdays at Cheapside Park. Shop for fruits and vegetables, herbs, flowers, jams and jellies, honey, Kentucky specialties, and more. 249 West Main Street, Lexington (859) 608-2655 lexingtonfarmersmarket.com/

Pies & Pints

Casual pizza and beer, specialty pies. 401 West Main Street, Suite 106, Lexington (859) 231-7437 piesandpints.net

Saul Good Restaurant and Pub

"From scratch" salads, warm sandwiches, gourmet burger, hand tossed pizzas, and a signature chocolate bar.
123 North Broadway, Lexington
(859) 252-4663
saulgoodpub.com

Smithtown Seafood

A farm-to-table restaurant favoring Kentucky favorites located in the Bread Box on West Sixth Street. Everything on the menu made from scratch, with, wherever possible, locally raised ingredients. 501 West Sixth Street, Lexington (859) 303-4100 smithtownseafood.com

Stella's Kentucky Deli

Serves high quality foods that emphasize the superior flavors and textures of fresh, local ingredients—sandwiches, salads, soups, and desserts all made in house.

143 Jefferson Street, Lexington (859) 255-3354 stellaskentuckydeli.com

Sunrise Bakery

From three generations of bakers, delicious buttery croissants and freshly baked pastries.

111 West Main Street, Lexington
(859) 255-0304
valotta.com

Third Street Stuff & Coffee

Serving locally roasted and fair trade certified organic coffee and espresso with sandwiches. 257 North Limestone, Lexington (859) 255-5301 thirdststuff.com

Vinaigrette Salad Kitchen

Serves fresh, healthy salads, prepared in front of you, and house-made soups. A light but satisfying meal with tons of flavor.

113 North Broadway Lexington
(859) 569-4040
vinaigrettesaladkitchen.com

West Sixth Brewing

westsixth.com

Located in a 100-year-old building called the Bread Box, they brew, can, and bottle their beer out of this location.
501 West Sixth Street, Lexington (859) 705-0915

Zim's Cafe

Zim's Cafe honors great-grandpa Zim, who fed his family with vegetables from his garden. Serves a menu inspired by the bounty from Kentucky farms. 215 West Main Street, Suite 25, Lexington (859) 783-3690 zimscafe.com

Places to Visit



The Arboretum, State Botanical Garden of Kentucky The Arboretum, State Botanical Garden of Kentucky is a 100-acre greenspace located on the campus of the University of Kentucky. It houses three main features: the Walk Across Kentucky, the Home Demonstration Garden, and the Kentucky Children's Garden. The Walk Across Kentucky is a two-mile paved loop featuring wild-collected native plants from the seven physiographic regions of Kentucky. University of Kentucky, 500 Alumni Drive, Lexington (859) 257-6955 arboretum.ca.uky.edu

Ashland: The Henry Clay Estate

Ashland has three tours that guests can enjoy: Signature Tour, Women's Voices Tour, and Art & Grounds Tour. Outdoor options are plentiful with a self-guided tour of the outbuildings, formal



garden, and walking trails available. The grounds are free to visit year-round, but you can take the new Art & Grounds tour if you'd like a guided grounds experience.

120 Sycamore Road, Lexington (859) 266-8581 henryclay.org

Aviation Museum of Kentucky

Located at the Bluegrass Airport, the Aviation Museum of Kentucky in Lexington is designed to educate about the aviation industry and inspire those interested in pursuing a career in aviation. Various aircraft and traveing exhibits are on display throughout the year. The museum houses the Kentucky Aviation Hall of Fame, recognizing the accomplishments of Kentuckians. 4029 Airport Road, Lexington (859) 231-1219 aviationky.org

The Isaac Murphy Memorial Art Garden

The Isaac Murphy Memorial Art Garden is the first park in the United States to honor the earliest African American professional athletes—the Thoroughbred jockey. Fittingly, the garden is located on land once owned by Isaac Murphy, the first three-time Kentucky Derby champion, in the predominately African American East End of Lexington.

E 3rd Street at Midland Avenue, Lexington bgcf.org/engage/community/ MurphyMemorialArtGarden

Keeneland Race Course

With its tranquil setting and lovely stone fences and buildings, this national historic landmark is one of the most genteel and beautiful racetracks in the



world. Founded in 1936, Keeneland's mission is to continually invest in the industry and to preserve the tradition of Thoroughbred racing. Visitors are welcome year round. Live Thoroughbred racing takes place October 4-26.

4201 Versailles Road, Lexington (859) 254-3412 keeneland.com



The Kentucky Bourbon Trail

The Kentucky Bourbon Trail highlights the 16 signature distilleries at the helm of Kentucky's worldfamous bourbon culture. Visit distilleries, historic sites, and other Bluegrass places with a bourbon connection and meet modern-day Kentuckians and Kentucky families who continue the state's most spirited tradition. The Bourbon Trail's stop in Lexington is Town Branch Distillery and Lexington Brewing Co., home of the Kentucky Ale family of craft brews and the only location on the Bourbon Trail where you can sample both beer and bourbon. Experience a behind-the-scenes look at beer and spirits production and sample products. Lexington Brewing & Distilling Company 401 Cross Street, Lexington (859) 255-2337 Lexingtonbrewingco.com visitlex.com/idea-guide/bourbon-distilleries/

Kentucky Horse Park

A working horse farm and educational theme park, the Kentucky Horse Park opened in 1978. Tickets include admission to the world-renowned International Museum of the Horse, an affiliate of the Smithsonian Institution, the American Saddlebred Museum—the Showplace for Saddlebreds, and beautiful grounds year-round. 4089 Iron Works Pike, Lexington (859) 259-4200 kyhorsepark.com

Lucia's World Emporium

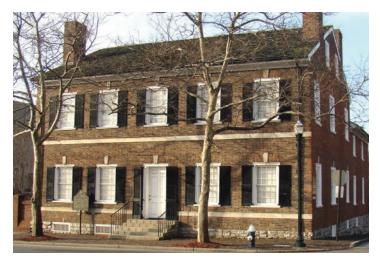
Lucia's World Emporium offers an eclectic array of unique fair trade jewelry, accessories, gifts, home décor, and artwork handcrafted by artisans from around the world.

328 N. Ashland Avenue, Lexington (859) 523-1529 luciasworldemporium.com

Mammoth Cave

Mammoth Cave National Park, the world's longest known cave system, is a UNESCO World Heritage site and the core area of an international biosphere reserve. The surface encompasses about 80 square miles; no one knows how big the underside is. More than 365 miles of the five-level cave system have been mapped, and new caves are continually being discovered. Mammoth Cave is located approximately two hours from Lexington.

Mammoth Cave, KY (270) 758-2180 nps.gov/maca/planyourvisit/index.htm



Mary Todd Lincoln House

The Mary Todd Lincoln House was the family home of the wife of 16th president, Abraham Lincoln. Mrs. Lincoln was sophisticated, educated, and versed in politics. On the surface, her success in the White House seemed assured, yet few women in American history have endured as much controversy and tragedy. Tour her childhood home to explore the full story.

578 W Main Street, Lexington (859) 233-9999 mtlhouse.org



Raven Run Nature Sanctuary

(859) 272-6105 ravenrun.org

Raven Run is a unique, 734-acre nature sanctuary dedicated to preserving the natural beauty of the Kentucky River Palisades and early Kentucky history. The sanctuary is a City of Lexington park and is free of charge. More than 10 miles of hiking trails provide access to streams, meadows, and woodlands characteristic of the area as well as numerous 19th century remnants of early settlers. Raven Run is home to 600 species of plants and 200 species of birds throughout the year.

3885 Raven Run Way, Lexington

Salato Wildlife Education Center

Located on the 262-acre complex of the Kentucky Department of Fish and Wildlife Resources Headquarters, Salato Wildlife Education Center has a variety of interesting and educational exhibits relating to Kentucky geography and wildlife. There are numerous mounted birds, as well as live deer, wild turkey, snakes, and fish.

1 Sportsman's Lane, Frankfort (502) 564-7863

fw.ky.gov/Education/Pages/Salato-Wildlife-Education-Center.aspx



Shaker Village of Pleasant Hill

With 34 original 19th century Shaker structures, Shaker Hill of Pleasant Hill is the largest National Historic Landmark in Kentucky. Surrounded by 3,000 acres of conserved farmland, native prairies, forest, and wetlands, the site demonstrates a commitment to community, sustainability, and ingenuity in the spirit of the Kentucky Shakers. Less than 40 minutes from Lexington, Shaker Village is an historic centre, farm, preserve, river, and stable.

3501 Lexington Road, Harrodsburg

(859) 734-5411 shakervillageky.org



Wild Fig Books and Coffee

This cooperatively owned, radical bookstore, coffee shop, and community event space has a variety of offerings, from co-working space to food specials, open

mic nights, poetry readings, Drag Queen Storytimes, small concerts, and, of course, books! 726 N. Limestone, Lexington (859) 739-3207 wildfigbooksandcoffee.com



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Fellow

Neelab Nazari

Interns

Jonathan Arentsen Sabrina Hunte Elena Otero

NAAEE Affiliate Network

From Alberta, Canada to Coyoacán, Mexico

naaee **Affiliate**

- Environmental Education Association of Alabama
- Alberta Council for Environmental Education
- Alaska Natural Resources and Outdoor **Education Association**
- Arizona Association for Environmental Education
- Arkansas Environmental Education Association
- California Association for Environmental and Outdoor Education
- Canadian Network for Environmental Education and Communication (EECOM) /Le réseau canadien • Environmental Education Association of pour d'éducation et de communication relatives à l'environnement
- Colorado Alliance for Environmental Education
- Connecticut Outdoor and Environmental Education
 North Dakota Coalition for Conservation and Association
- Delaware Association for Environmental Education Environmental Education Council of Ohio
- District of Columbia Environmental Education Consortium
- League of Environmental Educators in Florida
- Environmental Education Alliance of Georgia
- Hawaii Environmental Education Alliance
- Idaho Environmental Education Association
- Environmental Education Association of Illinois
- Environmental Education Association of Indiana
- Iowa Conservation Education Coalition
- Kansas Association for Conservation and **Environmental Education**
- Kentucky Association for Environmental Education Southeastern Environmental Education Alliance
- Louisiana Environmental Education Association
- Maine Environmental Education Association
- Maryland Association for Environmental & Outdoor Education
- Massachusetts Environmental Education Society
- · Mexico Centro de Información y Communicación Ambiental de Norte América
- · Michigan Alliance for Environmental and **Outdoor Education**

- Minnesota Association for Environmental Education
- Mississippi Environmental Education Alliance
- Missouri Environmental Education Association
- Montana Environmental Education Association
- Nebraska Alliance for Conservation and **Environmental Education**
- New England Environmental Education Alliance
- New Hampshire Environmental Educators
- Alliance for New Jersey Environmental Education
- **New Mexico**
- New York State Outdoor Education Association
- Environmental Educators of North Carolina
- **Environmental Education**
- Oklahoma Association for Environmental Education
- Environmental Education Association of Oregon
- Pennsylvania Association of Environmental
- Rhode Island Environmental Education Association
- Saskatchewan Outdoor and Environmental **Education Association**
- Environmental Education Association of South Carolina
- Environment Education Connections of South Dakota
- Tennessee Environmental Education Association
- Texas Association for Environmental Education
- Utah Society for Environmental Education
- Vermont Statewide Environmental **Education Programs**
- Virginia Association for Environmental Education
- E3 Washington
- West Virginia Environmental Education Association
- Wisconsin Association for Environmental Education
- Wyoming Association for Environmental Education

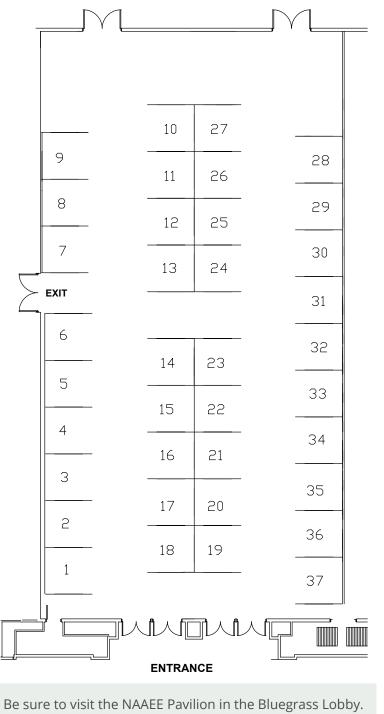


Exhibitors

Exhibit Fair Hours

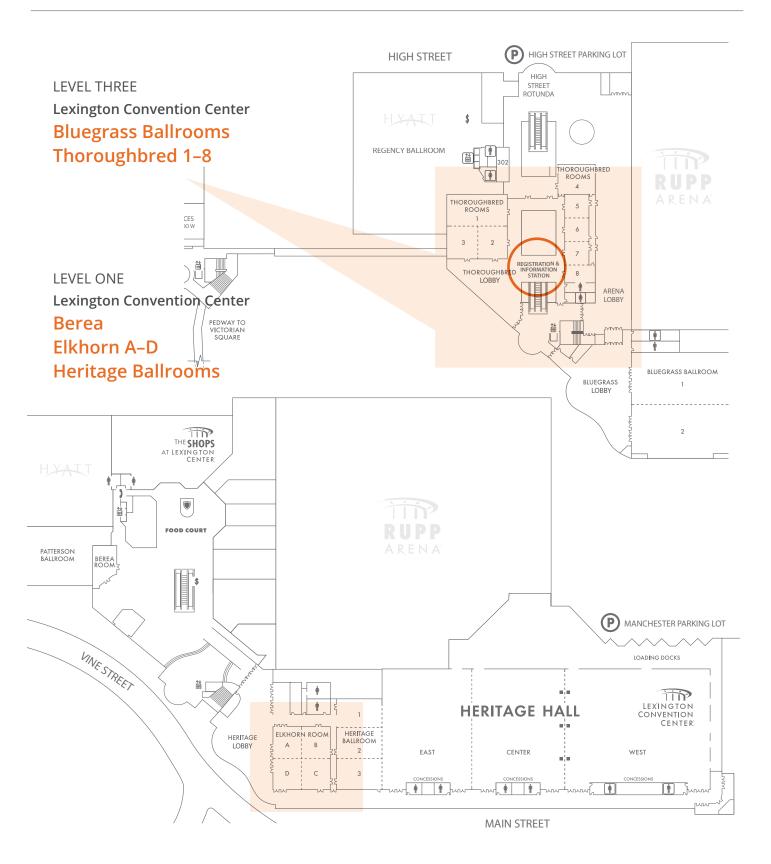
Wednesday, 5:00 PM-6:30 PM | Thursday, 9:00 AM-5:00 PM | Friday, 9:00 AM-2:30 PM Bluegrass Ballroom 1

Antioch University New England Association of Fish & Wildlife Agencies/	26
Project WILD	7
Arizona State University	27
Bluegrass Green Source	34
Centers for Disease Control and Prevention	29
Cornell University	9
Costa Rica Rainforest Experience	32
Eastern Kentucky PRIDE	8
EcoChallenge.org	5
EPA Taiwan	17
Florida Atlantic University	6
House Stories	14
Kentucky Association for Environmental	
Education	19
Kentucky Community and Technical	
College System	21
Laser Classroom	16
Louisville Nature Center	11
Merry Lea Environmental Learning Center	
of Goshen College	28
Michigan Department of Natural Resources	4
Murray State University	31
National Geographic Society	2
NCF-Envirothon	12
NOAA	1
Nutrients for Life Foundation	13
Ohio River Foundation	35
The Ohio State University	24
PhbeaD	3
Project Learning Tree	20
Prescott College	36
Slippery Rock University	22
Ten Thousand Villages of Greater Cincinnati	25
Tracy Farmer Institute for Sustainability and	
the Environment	15
US Environmental Protection Agency	18
US Forest Service	37
University of Wisconsin–Stevens Point	33
Vernier Software & Technology	23
We Care Solar	10
Wildlife Acoustics	30





Venue Maps



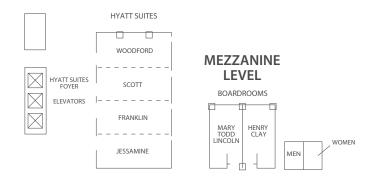


MEZZANINE LEVEL

Hyatt Regency Lexington

Hyatt Suites

Mary Todd Lincoln

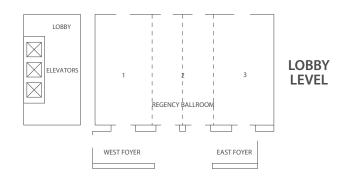




LOBBY LEVEL

Hyatt Regency Lexington

Regency Ballrooms



LOWER LEVEL B

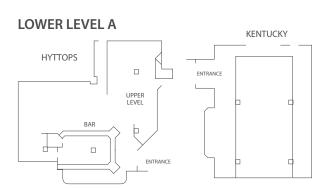
LOWER LEVELS

Hyatt Regency Lexington

Hyttops

Kentucky

Patterson Ballroom



SERVICE SERVICE EMERGENCY EXIT A B C D PATTERSON BALLROOM G G F G SERVICE SERVICE SERVICE

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TUCSON2020

naaee.org

From bluegrass fields to saguaro forests

"Tucson had opened my eyes to the world and given me ... a taste for the sensory extravagance of red hot chiles and five-alarm sunsets."

—BARBARA KINGSOLVER



Beginning with the 2019/2020 school year, all K-12 schools can earn recognition by meeting four goals:

- · Establish a Tree Campus Team
- Create an Education Plan
- Lead a Hands-On Experience
- · Hold an Arbor Day Observance

Tree Campus K-12 provides access to resources and a simple framework for using campus and community trees as a learning tool. If your school already has a "green team," celebrates Arbor Day, or covers tree-centric curriculum at any level, you are already on the path to earning recognition.

"Prior to participating in Tree Campus K–12, students were unaware of the value urban trees provide to the overall environment. Instructionally, it was a fantastic opportunity to incorporate STEM skills for an authentic scientific purpose."

- Science Teacher,

Palo Verde Magnet High School, AZ

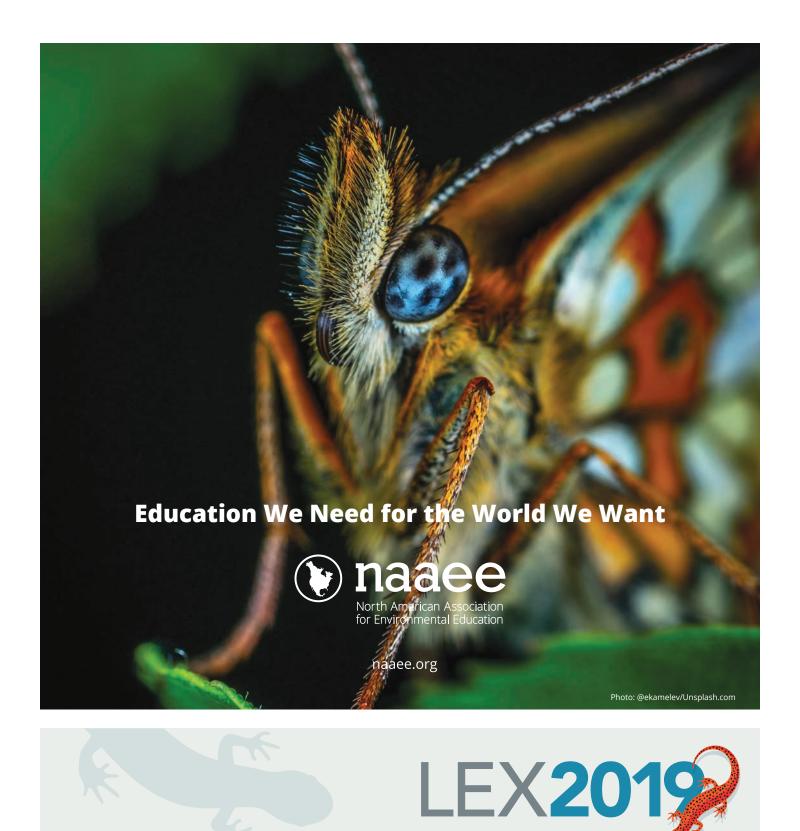
"Students have helped to create plans that revolve around the goals of Tree Campus K–12, and it's because they understand caring for trees and planting a tree can better our environment."

- Agriculture Teacher, Freeport High School, IL

Check out free resources at treecampusk12.org and begin your journey today to earn recognition this year.









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