Program of Events
2020 Annual Conference
April 2-5, 2020

The codes that follow each session description indicate which strand the session addresses as follows:

NH=Natural History;  TC=STEM and Careers;  SG—Strategic Growth;
PC=Population, Climate, and Outdoor Ed  IW=Inclusive World of EE

Graduate Credit and Contact Hours are Available!

Thursday, April 2, 2020

9:00 am – 4:00 pm  Ohio Student Wildlife Research Symposium
Join high school students and teachers from around Ohio as they present their wildlife and habitat research projects in this second annual research symposium for high school students. $35 for adults, $25 for students, includes lunch. Please see the agenda online at http://eeco.wildapricot.org

Friday, April 3, 2020

9:00 am—Noon  AM Workshops

W1—Using Project WET to Teach Climate Resiliency Curriculum with a Career Connection  $5  PC
Connections between freeze/thaw cycles, photosynthesis and the global carbon cycle will be explored. Environmental careers will also be discussed along with education ODE tracks students should take to earn a career in an environmental field. This session will also use the Career Environmental Bingo Activity showing participants what ODE education tracks to take to gain a successful career in the environmental field. Each Participant will receive the new climate change curriculum from Project WET along with a complete set of career bingo playing boards with instructions. Dennis Clement & Ryan Bourgart, Ohio EPA Office of EE.

9:00 am—noon

W2—Bringing Inquiry into your Lesson with QUEST  $5  NH/PC
Research has shown benefits of using inquiry as a mode of learning and exploring the world. However, the inquiry process can be intimidating. In this workshop, we will present a simple and effective approach to inquiry: the QUEST model, developed by Project Dragonfly. This model is easy to adapt to all scenarios; it has been used successfully with a wide range of students, from elementary to graduate levels, and in a wide variety of settings, from classrooms to zoos and nature centers. Workshop participants will design their own inquiry using the model, gaining practical experience they need to incorporate the QUEST model and inquiry into their own lessons. Amy Sullivan & Katie Feilan, Project Dragonfly.

9:00 am—4 pm  Friday Full Day Workshop & Field Trip

F1—Vernal Pool Education Ecology, Amphibians, Macroinvertebrates, and monitoring with iNaturalist  $5  NH
Experience the hidden wonders of vernal pools during this workshop in the morning followed by an afternoon field trip to Salamander Run Preserve. Those who discover the hidden wonders are often bedazzled by the intricate variety of life forms that reside in these temporary waters. Ohio Wetlands Association created the Ohio Vernal Pool Network (OVPN) to advance our understanding and appreciation of this mostly overlooked habitat. They created an education package to supplement our Hidden Wonders, Guide to the Animals & Plants of Vernal Pools. Includes lunch break at lodge. Ray Stewart, Ohio Wetlands Association and Stephanie McCabe, local naturalist.
1:00 pm—4:00 pm  Friday Afternoon Workshop

W3—Community Engagement: Guidelines for Excellence  $5  IW
Interested in making your environmental, natural resource and education work more effective? Come learn about best practices for engagement of community members through the NAAEE Guidelines for Excellence for Community Engagement. This workshop is designed to offer insights into joining forces with diverse partners to forge common purposes and collaborate toward shared outcomes. It will also outline steps for creating more inclusive working environments that support social equity, effective partnerships and coalitions, and long-term change. Angela Riviera, Hamilton County Recycling and Solid Waste District.  Indoors & Outdoors

1:00 pm—4:00 pm  Friday Afternoon Field Trip

FT-2—My Backyard Stream, a Citizen Science Program  $5  TC
An introduction to My Backyard Stream program and watershed education resources provided by Ohio University’s Voinovich School through a grant from American Electric Power Foundation. Presenters will discuss common issues facing Ohio waterways, and the corresponding lesson plans and materials found on watersheddata.com/education. Attendees will go outdoors to go through all the steps of My Backyard Stream and learn water testing techniques. Questions related to water quality and water quality testing will be addressed. Rubber/rain boots are recommended. Appropriate for middle and high school teachers (grades 7-12), environmental educators, and organizations. Jen Bowman and Bekkah Gresh, Ohio University Voinovich School of Leadership and Public Affairs.

4:15 pm—5:45 pm  Friday Late Afternoon Field Trip

F3—Fossil Field trip; The Rocks of Hueston Woods and the Stories they Tell of Our Marine Past  $5  NH
More than twice as long ago as when the first dinosaurs roamed the Earth, southwestern Ohio was located about 25 degrees south of the equator and lay beneath a warm shallow sea. Within this sea lived an amazingly diverse collection of invertebrate animals, and the rocks of Hueston Woods are literally bursting with their fossils. Participants will be allowed to keep their fossil finds as we surface collect at one of the park’s designated collecting sites. Geologists from Miami University will be on hand to identify fossils and answer questions about the area’s geological history.

4:00 pm—6:00 pm  Optional Activities

Check into your room, go for a hike or enjoy some of the lodge’s amenities. Drop off your silent auction items.

6:00 pm—7:00 pm  Friday Night Welcome Dinner

Join us on Friday Evening as we officially kick-off the 2019 EECO Annual Conference. We’ll inform you on some of the latest successes of EECO and introduce the Board of Directors and Regional Directors.

7:00 pm—8:30 pm  Open Space

Have you ever had a topic that you would like to discuss at an EECO Conference? Great! Bring your topic ideas and your expertise to the EECO Open Space! During the Open Space we will have attendees put up topics they would like to discuss around Environmental Education, Outdoor Education, and Nonprofit/small organizations. Once the topics have been specified we will break up into small groups to discuss the topics. If the group you start out in is not your cup of tea please feel free to join another group, or feel free to float to various groups. We are excited to see what “Aha” moments are formed from this Friday evening activity. Lead by Jim Viles of Greenacres Foundation.

9:00 pm—10:00 pm  Night Hike (Weather Permitting)
Saturday, April 4, 2020
Concurrent Sessions, Keynotes, Exhibits

7:00 am—8:00 pm Bird Hike tentative

8:00 am—9:00 am Breakfast—Join your EECO Regions and network while enjoying your breakfast

9:00 pm—9:15 am Welcome and Conference Opening—Brenda Metcalf, EECO Executive Director

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**EECO Kids Conference 2020**

On Saturday, while you are attending EECO conference sessions, your child/children can, too! EECO is offering a Mini Conference for kids! Kids will **LEARN** about Environmental Education and gain an appreciation for nature and environmental stewardship. Like our adult attendees, they will **CONNECT** with new friends in a positive and supportive setting. This is a fabulous opportunity to enjoy the conference and begin a family tradition for your children to **GROW** into our future EECO Leaders, all while enjoying the amenities of the state park! Ages 6 and up are welcome!

$15 fee per child will be charged for the full 4 session kids conference. This is payable at the registration table. Lunch is not provided. Children’s meal tickets will be available at the registration table.

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9:30 am—10:30 am Concurrent Session 1

**A1—Double Session: Bird Banding**

Learn about the complex and fascinating world of birds as you learn the bird banding technique. There is nothing like the excitement of tracing a banded bird’s migration! Families welcome. Dave Russell, Miami University

**A2—Double Session: Phenology: Using Phenology and Citizen Science to Investigate Climate Change**

Learn how to use phenology and citizen science to explore climate change. Educators will learn how to collect various data, use visualization tools, and explore ideas to integrate these activities into the arts, social studies, and science curriculum. With these tools, students can use evidence-based reasoning to develop their own conclusions. Katie Feilan and Amy Sullivan, Project Dragonfly

**A3—Experience Project Learning Tree’s Teaching With i-TREE!**

With i – TREE hands-on activity lessons, middle and high school students discover and analyze many ecosystem services that trees provide and calculate the dollar value of these benefits using a readily accessible, state-of-the-art online tool. Sue Wintering and Stephanie Foster-Miller, Project Learning Tree

**A4—Peer-to-Peer Messaging: An Effective Tool for Environmental Outreach**

Keep Cincinnati Beautiful’s Education Program engages school age children employing a variety of outreach methods. They will discuss 3 ways in which they utilize peer-to-peer messaging to advance their mission and inspire stewardship. This strategy promotes student personal growth by improving communication skills and encouraging ownership of their learning. Kara Luggen, KCB

**A5—“Who Works for Water? for Wildlife? for the Forest?”**

Sample three career-focused activities from Project WET, Project WILD, and Project Learning Tree to teach interview skills and showcase a variety of careers in water treatment, wildlife management and forestry. Carolyn Watkins with Ohio EPA, and Jen Dennison with ODNR Division of Wildlife.

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10:30 am—10:45 am Morning Break / Visit the Silent Auction
**Silent Auction**

The silent auction raises money to help EECO grow. The silent auction will be in the Council Fire Room and will be open on Friday and Saturday. Hours will be posted at the conference.

*All bids end at 6 pm on Saturday.*

If you would like to donate to the silent auction, we will really appreciate it.

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**10:45 am—11:45 am  Concurrent Session 2**

**B1—Bird Banding (Continued)**

**B2—Double Session: Phenology: Part 2—Phenology in the Classroom**  
We will provide lesson plans and strategies to incorporate the USA National Phenology Network’s citizen science program, Nature’s Notebook in K-12 classrooms. *Suellen Albert with Hamilton City Schools and Adriane Ruther with Talawanda City Schools.*

**B3—GREEN JOBS: Exploring Forestry Careers!**

The future is “green”!! Project Learning Tree’s GREEN JOBS module lessons help educators use activities and supporting STEM resources to engage learners in actively exploring green careers, focusing on many forest-related green jobs. *Sue Wintering and Jamie Dahl, Project Learning Tree*

**B4—If You Plant It They Will Come**

At Butterfly Ridge, through strategic planting, habitat alteration, and structured data collection, we have quadrupled the size of our resident butterfly population. Our ideas can easily be replicated in the schoolyard, park, or residential lot. Come steal our ideas.  *Chris & Kris Kline, Butterfly Ridge, Butterfly Conservation Center. Chris & Kris Kline, Butterfly Ridge, Butterfly Conservation Center.*

**B5—Incorporating Ohio’s Learning Standards for Science**

The revised standards have an increased emphasis on the Nature of Science, outdoor instruction and student-centered learning. Investigate how the standards support instruction in both formal and informal educational settings. *Lydia Hunter, Ohio Dept. of Education.*

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**12:00pm—2:00pm  Lunch, Business Meeting, & Keynote Speaker**

Join us for a lunch and find out what EECO's been up to in the past year. This will include an opportunity to meet your current Board of Directors and review the annual budget.

**Keynote: Chris Myers, How Environmental Educators Will Save the World**

At the onset of the 2020’s, environmental educators are on the rise. In this presentation, Chris Myers will share stories from across Project *Dragonfly*’s global network of conservation organizations, communities, instructors, and students to showcase how educators are forging new approaches to healthy coexistence at a scale, pace, and level of ingenuity necessary to face the complex ecological crises of our time.

Chris Myers is a professor in the Department of Biology at Miami University. Along with Lynne Born Myers, they founded Project *Dragonfly*, a participatory education initiative that began with a national science magazine for young investigators and an Emmy-Award winning PBS television series. Project Dragonfly now operates the nation’s largest graduate degree programs devoted to community engagement in science and conservation. Chris received his Ph.D. in ecology and evolutionary biology from Vanderbilt, served as a Luce Scholar in Borneo, a Fulbright Scholar in Thailand, and taught environmental education at Yale.
2:15pm—3:15pm      Concurrent Session 3

C1—Uses of a High School Land Lab          PC
Students at Talawanda High School use their Land Lab to perform water quality studies on-site as part of the high school science curriculum. We will compare water samples from Acton Lake using Vernier probes and dissection scopes.  
Adriane Rutherford and Sara Morris, Talawanda High School.  
Indoors & Outdoors

C2—Critters on Camera                      TC
Blend biology, technology, geography, and math to present wildlife research as an interdisciplinary program using wildlife cameras, aka trail cameras. Adam Zorn, U of Mt. Union, Huston-Brumbaugh Nature Center.  
Indoors & Outdoors

C3—Nature Based Learning for Students with Autism.            IG
Learn how Licking County Soil & Water collaborated and assisted The Learning Spectrum in creating a WILD School Site rain garden, rain barrels, working farm, and curriculum for the district. Michelle Illing with Licking Soil and Water Conservation District and Amy Hurst L4L Farm
Indoors

C4—Educating Tomorrows Conservationists Through Observation and Inquiry    NH
Today’s younger generation have rarely experienced our SW Ohio forests without honeysuckle. For them, the overgrown understory is “normal”. How do we change their perspective through observation, inquiry and engagement? Donna McCollum and Randy Evans, Three Valley Conservation Trust.  
Indoors & Outdoors

3:15 am—3:30 pm       Afternoon Break / Visit the Silent Auction

3:30pm—4:30pm        Concurrent Session 4

D1—Teaching the Human Dimensions of Climate Change          PC
Discover innovative lessons to connect climate change with population trends and human activity. Engage in a global simulation and learn to help students interpret real-world data sets. Cathy Knoop, Population Education.  
Indoors

D2—Brookville's Biodiversity: A Problem Based Learning Experience    PC
The Brookville Biodiversity Project provides the opportunity for seventh graders students to work collaboratively in small groups to investigate and solve the question: What is Brookville's biodiversity and how can you improve it? The goal of this project is to increase student awareness and knowledge of their local environment, to make informed decisions, and take action to improve their community. Ann Drake, Brookville Intermediate School.  
Indoors

D3—Building and Using Microcosms in the Classroom      NH
Learn about local pond ecosystems and build a microcosm of a pond ecosystem for classroom use to explain ecosystem structure, succession and human impact. Linda Sigismondi, University of Rio Grande.  
Indoors

D4—Believe in Ohio: STEM/Entrepreneurship with an Environmental Twist    TC
Participants will learn about the free Believe in Ohio STEM and Entrepreneurship program for high school students and develop a STEM Commercialization Plan to bring an environmental product to market. Sheila Cubick, Ohio Academy of Science.  
Indoors

4:00 pm—6:00 pm       Networking, Silent Auction
This is your chance to chat with new and old friends, and get your bids in on all the fantastic silent auction items.

5:00 pm –6:00 pm    Environmental Education Certification Poster Session
Check out all of the hard work accomplished by the EE Certification class during their poster session.

6:00 pm —9:00 pm     Awards Banquet and Live Auction
Join us as we close out the conference with a dinner buffet and stay to congratulate this year’s award recipients. We will also have some fantastic items for you to bid on at the Live Auction. All proceeds go to the EECO Endowment Fund.
We hope you find this conference to be an exciting and beneficial professional development opportunity.

If you have any questions about the program, the registration process, or any other topics or issues, please contact Brenda Metcalf, EECO Executive Director, at 740-653-2649 or director@eeco-online.org.

You can also contact Lynn White, Conference Co-Chair, at 513-785-6666 or whitelr@butlercountyohio.org for assistance.

We look forward to seeing you at Hueston Woods State Park!

**Sunday, April 5, 2020**

7:00 am—8:00 pm Bird Hike tentative

8:00 am—9:00 am Breakfast

**Field Trip**

9:00 am—3:00 pm

ET-1—EECO April Tour to Cincinnati

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### EECO April Tour

Cincinnati Urban Oasis

Before heading home after the EECO Conference, join the EECO Tour on Sunday as we tour several great Cincinnati sites. We'll spend the morning visiting Fernald Preserve to see how a cold war weapons complex has converted into a wildlife preserve. In the afternoon, we will head into Cincy for a wild tour. The tour is separate from the EECO Conference. Cost to attend is $25. Boxed lunch is available for $15.

*College credit is available for participants who attend three EECO Tours.*

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We look forward to seeing you at Hueston Woods State Park!
2020 Annual EECO Conference Registration  
April 2-5, 2020  
Hueston Woods State Park  
Early Bird Deadline: March 4, 2019  
Register online at http://eeco.wildapricot.org/

**Registration Details (please print)**

Name: (last)        (first)  
Name as it should appear on name tag:  
Do you have an Ohio EE certification (Yes or No)  
Organization  
Address  
City    State    Zip Code    County  
Phone ( )      Cell ( )        Email  
Emergency contact (name)      Phone ( )  

___ I will bring a silent auction item  
Special Needs ______________________________(mobility, vegetarian, food allergies, etc.)

Presenters: _____ I plan to attend the full conference ($25 discount)  
_____ I plan to attend my presentation session only

Join or renew your EECO Membership and save money on your conference registration!

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<th>$35 Individual</th>
<th>$20 Student/Senior</th>
<th>$50 Professional</th>
<th>$70 Non-Profit</th>
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<td>$180 Early Bird/$205 Regular</td>
<td>$110 Early Bird/$125 Regular</td>
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<td>Student (Must show ID upon arrival)</td>
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See additional information on the next page to join one of EECO’s special interest sections.

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<thead>
<tr>
<th>Please indicate registration choices</th>
<th>Full Conference (Includes Fri dinner, all Sat meals, Sun breakfast)</th>
<th>Saturday Only (Includes all Sat meals)</th>
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___ My child/children plans to attend the Saturday Children’s Conference.  
_____ Number of children planning to attend.

**Field Trips and Workshops**

Note: No lunch provided on Friday. Participants can order from the lodge restaurant, pre-purchase a box lunch for $15, or pack a lunch.

**Friday Field Trips**

___ FT-1—(full day) Ohio’s Vernal Pools —$5  
___ FT-2—(pm) My backyard stream, citizen science—$5  
___ FT-3—(late pm) Rocks /Fossils of Hueston Woods—$5  

**Friday Workshops**

___ W1—(am) Project WET to teach climate resiliency!—$5  
___ W2—(am) Bringing Inquiry into lesson with QUEST -$5  
___ W3—(pm) Community Engagement: Guidelines for Excellence—$5  

**Sunday Field Trips**

Lunch and transportation are not provided, please plan accordingly.  
___ ET-1—Cincy Urban Oasis EECO Tour $25

**Saturday Concurrent Sessions**—Circle one choice in each column

<table>
<thead>
<tr>
<th>Session 1 9:30 am</th>
<th>Session 2 10:45 am</th>
<th>Session 3 2:15 pm</th>
<th>Session 4 3:30 pm</th>
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<tbody>
<tr>
<td>A1—Bird Banding (Double Session)</td>
<td>B1— Bird Banding (cont.)</td>
<td>C1— Land Lab &amp; Water Quality</td>
<td>D1— Human Dimension of Climate Change</td>
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<tr>
<td>A2—Phenology (Double Session)</td>
<td>B2—Phenology in Classroom (Cont)</td>
<td>C2—Critters on Camera</td>
<td>D2—Brookville’s Biodiversity</td>
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<tr>
<td>A3— teaching with iTree</td>
<td>B3— Exploring Forestry Careers</td>
<td>C3—Nature based learning—Autism</td>
<td>D3—Building Microcosms</td>
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<tr>
<td>A4— Peer to Peer Messaging</td>
<td>B4—If you plant it they will come</td>
<td>C4—Observation &amp; Inquiry</td>
<td>D4— Believe in Ohio: STEM</td>
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Total Registration Costs

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<td>Friday Field Trip/Workshop</td>
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<td>Friday Boxed Lunch</td>
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<td>EECO Special Section Fee(s)</td>
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<td>EECO Membership</td>
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<td>Additional donation to EECO Endowment Fund</td>
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<td><strong>Total</strong></td>
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Register online at [http://eeco.wildapricot.org](http://eeco.wildapricot.org) with a credit card or make checks payable to EECO and mail with this completed form to:

Brenda Metcalf  
EECO Executive Director  
PO Box 1004  
Lancaster, OH 43130  
(740) 653-2649

If you wish to bring a guest who will be attending meals, contact Brenda directly to have them registered at a reduced rate.

Please select all meals you will be attending:
- [ ] Friday Dinner  
- [ ] Saturday Breakfast  
- [ ] Saturday Lunch  
- [ ] Saturday Awards Banquet  
- [ ] Sunday Breakfast

**Early Bird Registration Deadline March 4, 2020**

______I am interested in receiving Graduate Credit from Ashland University. The cost is $210 for one credit hour. Please contact Linda Pettit EECO Region 1 Director, at linda-pettit@franklinswcd.org

Certificates with contact hours are available upon request.

Lodging Information – Hueston Woods State Park Lodge

5201 Lodge Rd, College Corner, OH 45003


- Room Rates for Queen, King: $116.00 per night per room
- Cabin rate is $172 per night per cabin

Room Block will be held until March 2, 2020

Join one of EECO’s special interest sections!

EECO offers special interest sections to its members to promote networking among peers and groups with similar interests. EECO members may join one section at no additional cost to regular membership dues. Each additional section joined is $5 per section. Please check which section(s) you would like to join.

- [ ] Business, Industry and Trade Associations
- [ ] Environmental Education and Outdoor Education Organizations
- [ ] Higher Education
- [ ] Environmental and Community-based Organizations
- [ ] Government Agency
- [ ] Preschool, Elementary and Secondary Education

Cancellation Policy

All participant cancellations require written notice (U. S. Mail or electronic) to be sent to Brenda Metcalf, EECO Executive Director, P.O. Box 1004, Lancaster, Ohio 43130-1004, director@eeco-online.org and will be refunded according to the following schedule:

- full refund - at least 30 days before the conference  
- 50% - at least 16 days before the conference  
- no refunds within 15 days of the conference

Please read and sign the notice below:

I am aware of the risks inherent in these activities and assume all responsibility to myself whatever the cause. I agree to hold EECO, all conference personnel, and all participating agencies/organizations harmless for any injury that I may sustain in the course of participating in the conference.