



Looking at the past with  
an eye on the future.

2016 Conference

**Earlham College and  
Cope Environmental Center**  
Richmond, Indiana  
*June 17-19, 2016*

[www.eeai.org](http://www.eeai.org)



## Board of directors

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## Mission

The mission of the Environmental Education Association of Indiana is to work cooperatively to promote opportunities that will educate, motivate, and inspire the citizens of Indiana to conserve natural resources and meet the needs of our society while maintaining a healthy environment now and in the future.

## Vision

The vision of the Environmental Education Association of Indiana is to be an environmentally literate citizenry of lifelong learners who are good stewards of our natural resources. The Environmental Education Association of Indiana (EEAI) is dedicated to promoting environmental education, EEA is not issue driven. EEA promotes networking and communication between groups and individuals in an effort to provide its members the opportunities to share their knowledge, skills and resources with others. We will work cooperatively to promote opportunities that will educate, motivate, and inspire citizens of Indiana to conserve natural resources and meet the needs of our society while maintaining a healthy environment now and in the future.

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# Schedule

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## Friday

- 9:00 – Pre-Conference Workshop: Children of Indiana Nature Park – Rm 211
- 12:00 – Lunch
- 12:30 – Registration begins
- 1:00 – Welcome – Rm 105
- 1:30 – History of EE in Indiana - Sam Carman and Warren Gartner – Rm 105
- 2:30 – Sessions
- 3:30 – Sessions
- 5:00 – Dinner
- 6:00 – Go to Cope Environmental Center
- 6:30 – Song-writing contest and social evening at Cope
- 10:00 - Back to Earlham

## Saturday

- 6:00 – Early morning hike or birding option
- 7:00 – Breakfast
- 8:00 - Go to Cope Environmental Center
- 8:30 - Open Chautauqua
- 9:00 – 20 minute presentations
- 10:40 - Free time to continue discussions
- 11:30 – Children of Indiana Nature Park Dedication
- 12:00 – Lunch
- 12:30 - Keynote - Mary McConnell
- 1:30 – Field sessions
- 5:00 – Tour of Living Building Challenge Project
- 6:00 – Dinner at Cope
- 7:00 – Awards & Keynote speakers, Shari Wagner & Rick Wilson
- 10:00 – Back to Earlham

## Sunday

- 6:00 – Inspirational Hike or birding option
- 7:00 – Breakfast
- 8:00 – Student debate – Rm 105
- 9:00 – Sessions
- 10:00 - Sessions
- 12:00 - Lunch
- 1:00 - Farewell
- 1:30 – EEAI board meeting

# Keynotes

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## Shari Wagner

Shari is Indiana's current Poet Laureate and the Poet-In-Residence at Fort Harrison State Park. Her poetry reflects her love of nature and the Hoosier landscape.

She will be collaborating with artist Rick Williams on a keynote presentation at our awards banquet on Saturday. She will also participate in the Chautauqua on Saturday morning.

Learn more about her poetry and accomplishments at [www.throughthesycamores.com](http://www.throughthesycamores.com).

## Rick Wilson

Rick is a Hoosier artist who has created an exhibit of 70 paintings celebrating the 100th anniversary of the state park system. The paintings document Indiana's 24 state parks and 8 reservoirs and will be on display at the Richmond Art Museum during our conference.



## Mary McConnell

Mary is the executive director of the Indiana TNC - <http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/indiana/index.htm>, will be the keynote speaker for the conference. The Nature Conservancy is involved in protecting natural areas all around the world, and has occasionally dabbled in education, but not to a great extent. This will be their biggest step into the environmental education world and it is very appropriate that we are there to share the expertise of environmental educators from across the state.

# Sessions

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## Friday 2:30

Rm 211A - Rich Nicholson - Planet Aquatic: The Ecology of Water

Rm 211B - Aubrey Blue - Celebrating Indiana's Land through Hands-On Curriculum

Rm 212 - John Foster - Helping Create Transformative Nature Experiences

Rm 214 - Mike Homoya - This Was Indiana: The Historic Hoosier Landscape Prior to 1816

## Friday 3:30

Rm 211A - Dawn Slack - Saving Wild

Rm 212 - Susy Hasecoster - Creating a Long-Term Teacher/Environmental Center Relationship

Rm 214 - Matt Jones - Crossroads of Nature: Indiana at the center of expansionism and the environment

## Saturday Chautauqua

Curt Burnette - Overview of the Limberlost State Historic Site

Terri Hebert, Jabin Burnworth - Environmental Literacy Plan for Indiana

Betsy Carpenter-Wilson, Debi Stout - GMOs, beyond the BS

Bethany Crocker, Megan Lamboley - 2017 Eco Science Fair

Matthew Jones - Characterize Your Cause: Hit Them Where They Live

Warren Gartner, Clint Kowalik - Sampler of the Division of Fish & Wildlife's education programs

Sarah Kempfer - Indiana Children and Nature Network (ICAN)

Melissa Moran, Laura Sertic, Alison Zajdel - Children of Indiana Nature Park

Ann Niednagel - Sampler of Outdoor Ann Public Urban School Lessons

Jim Poyser - At the Sweetspot of Eco-Stewardship and Civics

Shari Wagner - Writing Poems Inspired by Nature: Prompts a& Models

Darci Zolman - Life Actually

## Sunday 9:00

Rm 212 - Mary Cutler - The Nature of the Bicentennial: Looking Back, Looking Ahead

Rm 214 - Traci Lewis - Volunteers - Getting Them, Loving Them & Keeping Them

Joseph Moore Museum - Bill Buskirk - Passenger Pigeon

## **Sunday 10:00**

Rm 211A - Teena Ligman- Walk in the footprints of the buffalo – Indiana’s Buffalo Trace Educational Boxes

Rm 211B - Karen Mager - Connecting higher education with nature centers to monitor long-term environmental change

Rm 214 - Jabin Burnworth - EEAI and the Environmental Literacy Guide

# Presenters

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## **John Foster - Helping Create Transformative Nature Experiences**

Just having a beautiful nature center and lovely trails is not enough. This presentation will explore some of the barriers (and how to remove them) to creating experiences that let your visitors connect with nature.

## **Mike Homoya - This Was Indiana: The Historic Hoosier Landscape Prior to 1816**

During this year of Indiana's bicentennial it is appropriate to remember that prior to statehood Indiana was a land of vast forests, expansive wetlands, and prairie as far as the eye could see. Herds of bison traveled ancient paths, passenger pigeons darkened the skies, and wolves, bears and panthers roamed the land. All this we know from eyewitness accounts provided by early explorers, pioneers, and government surveyors. With their help Mike will take you to a time when Indiana possessed a grandeur we can only imagine.

## **Rich Nicholson - Planet Aquatic: The Ecology of Water**

Topics to be covered include the origins and distribution of Earth's water, basic water chemistry and properties, and an introduction to Aquatic Ecology. Wetlands, watersheds, Dead Zones, human water use, Lead and Copper monitoring, and climate change impact on the hydrologic cycle will be discussed. We will explore ways to teach about water contaminants and parameters on the parts per million scale, and learn the basics of macroinvertebrate ecology in stream and pond environments. Current projects available to Indiana educators (Project Wet, Hoosier Riverwatch) will be introduced. The importance and vulnerabilities of our essential water resources and their implication for all life on earth will be examined.

## **Dawn Slack - Saving Wild**

Extinction and Extirpation – natural processes that are reported to be in crisis mode on planet earth. What are the reasons for extinction and extirpations? What is a natural rate of these processes? How do we and can we recover from these processes? With extinction and extirpations at an all-time high (1,000 to 10,000 times the background rate) the future looks scary. Just this month, The “State of the World’s Plants” released documentation that 1 in 5 plants are estimated to be threatened with extinction. So what can we do? Much of biodiversity’s benefits occur at the local level therefore conserving our local species, local communities and local ecosystems are top priorities. Let’s discuss these questions, review some of the local conservation efforts in Indiana to

include the process of reintroduction and how important “localism” (your involvement) is and what you can do.

## **Susy Hasecoster - Creating a Long-Term Teacher/Environmental Center Relationship**

Learn how a simple question, “Could you help me with a unit on insects?” would lead to an 18-year relationship with a teacher and the Cope Environmental Center. Some of my students began with a pond study experience in fifth and sixth grade and went back as seniors completing their graduation projects. Others studied the ponds, planted trees, and removed invasive species, as part of our middle school curriculum and are now going to college in the fall as environmental science and geology majors. Some learned through service projects involving fundraising for the center – a 24-hour Rock-a-thon and a Bird-a-thon campout at Cope. Only our imaginations can tell us what we will do in the future!

You will receive pond-study guides and lessons plans for many of the activities.

## **Aubrey Blue - Celebrating Indiana's Land through Hands-On Curriculum**

Get familiar with the Children of Indiana Nature Park curriculum (A legacy project of the Indiana Bicentennial). Join us as we explore the hands-on activities for this exciting celebration! Become Earth's crust, mantle and core or participate in a living vs. non-living relay race. Spend time exploring the features of the new Children of Indiana Nature Park, including ways to claim deeds. Soils, habitats and rocks are the themes for today!

## **Matt Jones - Crossroads of Nature: Indiana at the center of expansionism and the environment**

Dr. Coldwater speaking on Geography; Ecology (habitat loss); Science; Transformation of the landscape; Water resources; and Personal development.

- Issues:
- Development
- Science
- Geography
- Sustainability
- Water Resources
- Education (w/at-risk youth message)
- 1814-1889 (active career: 1834-1879)
- Canals/Rivers/Settlement



## **Jabin Burnworth - EEAI and the Environmental Literacy Guide**

This session will discuss the history and the future of the Environmental Literacy Guide(ELG). Participants will hear gain an understanding of the formation of the ELG and will engage in ways to transform the ELG into an Environmental Literacy Plan for the state of Indiana.

## **Mary Cutler - The Nature of the Bicentennial: Looking Back, Looking Ahead**

Mary Cutler (Naturalist, Tippecanoe Co. Park & Rec. Dept.) shares a lesson she developed for 4th grade students to help them understand the story of "exploration, exploitation and expiation" of our natural resources over the last 200 years. Experience the hands-on components of the lesson, and receive handouts to take these elements back to your own classroom/informal teaching setting.

## **Teena Ligman - Walk in the footprints of the buffalo – Indiana’s Buffalo Trace Educational Boxes**

With funding from the National Park Service and the Indiana Humanities; the Forest Service and volunteers put together 70 educational boxes for 4th grade classrooms in southern Indiana. There are 14 classroom activities, each with hands-on components to teach students about bison, Native Americans, Indiana Rangers, early settlers, surveyors and more... Hold a buffalo horn or hoof in your hand and talk about the impact these animals had on history, or tap your feet to an original song about the Trace. These fun activities will have you wanting to learn more about this little known piece of Indiana history.

## **Karen Mager - Connecting higher education with nature centers to monitor long-term environmental change**

The focus of this session will be on 3 mutually beneficial ways in which nature centers could be connected to higher ed:

1. Field laboratories in classes
2. Research
3. Training naturalists/educators

## **Bill Buskirk - Passenger Pigeon**

America's most abundant bird - now extinct. Biology, history, and the cause(s) of its extinction.

## **Traci Lewis - Volunteers - Getting Them, Loving Them & Keeping Them**

Volunteers are necessary for any small non-profit to survive! Traci will talk about ways to effectively recruit, train, and retain great volunteers who not only add to the organization, but to their own lives as well through a great service experience!

# Chautauqua Presenters

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**Session title: Overview of the Limberlost State Historic Site and the Limberlost Territory Nature Preserves, and the programs and events offered**

**Name: Curt Burnette, Naturalist and Program Developer**

Organization: Limberlost State Historic Site

Session description: This will be a description of the facilities and properties of the Limberlost SHS and the Limberlost NP and a description of the programs, events, and opportunities offered to the public and schools.

**Session title: Environmental Literacy Plan for Indiana**

**Names: Jabin Burnworth**

Organization: Manchester Community Schools

Session description: Discussing EEAI's role in developing an Environmental Literacy Plan for the State of Indiana.

**Session title: GMOs, beyond the BS**

**Name Betsy Carpenter-Wilson & Debi Stout**

Organization Decatur Township School for Excellence

Table description: Come hear the GMO controversy boiled down to the heart of the issue. There is no settled science. We will cover important but often overlooked elements of this issue, then send you off with some ideas to engage your community around this topic.

**Session Title: 2017 Eco Science Fair**

**Names: Bethany Crocker & Megan Lamboley**

Organization: Indiana State Museum & Historic Sites

Session Description: Get details of how students can get involved in the only eco-focused science fair in Indiana!

**Session Title: Characterize Your Cause: Hit Them Where they Live**  
**Name: Matthew Jones**

Organization: Allen County Partnership for Water Quality

Session Description: Do you have a pressing environmental issue? How do you characterize your cause? Piquing interest of your targeted audience can be tricky. I will share tips on how you can get and keep attention on your issues.

**Session title: Sampler of the Division of Fish & Wildlife's education programs**

**Names: Warren Gartner, Clint Kowalik**

Organization: Indiana Division of Fish & Wildlife

Session description: Try out samples of activities from the Division of Fish & Wildlife's education programs and learn how you can get involved and receive these award winning activity guides.

**Session title: Indiana Children and Nature Network (ICAN) - working together to get kids outside**

**Names: Sarah Kempfer**

Organization: Indiana Children and Nature Network

Session description: Learn about the projects ICAN is involved in, bring your ideas for networking and collaborations, join in to grow the movement

**Session title: Children of Indiana Nature Park: An Invitation to Kids to Reconnect with Nature**

**Names: Melissa Moran, Laura Sertic, Alison Zajdel**

Organization: The Nature Conservancy in Indiana, Cope Environmental Center

Session description: Learn about how you can incorporate The Children of Indiana Nature Park into your local programs. Information will be shared about the website, how your kids can get their deeds, and invitations to "get outside" that will be routinely posted on the website.

**Session title: Sampler of Outdoor Ann public urban school lessons**

**Name: Ann Niednagel**

Session description: As Outdoor Ann I visit Indianapolis Public Schools monthly with a variety of lessons. Learn more about the lessons I use and the structure for the lessons that are designed to coincide with what the teacher is already teaching in the classroom.

**Session title: At the Sweetspot of Eco-Stewardship and Civics**

**Name: Jim Poyser**

Organization: Earth Charter Indiana

Session description: Jim specializes in getting youth working on environmental stewardship actions by creating civic initiatives that provide lasting change. STEM and problem-based learning combine, along with the lost art of being an engaged citizen.

**Session title: Writing Poems Inspired by Nature: Prompts & Models**

**Name: Shari Wagner**

Organization: Indiana Poet Laureate

Session description: Talk with Shari about the strategies she uses to help students of any age create poems inspired by the natural world.  
Write a free verse poem celebrating one of the objects on her table!

**Session title: Life Actually**

**Name: Darci Zolman**

Organization: Kosciusko County SWCD

Session description: Healthy soil is not only living, it is life-giving! Our knowledge of soil biology continues to grow. Learn what's new on this topic! BONUS – For those interested in Indiana Envirothon, information will also be available on this fabulous event for high school students.

# Field Sessions

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## Whitewater River Gorge

Please join Earlham geology professor Meg Smith on a walking tour through the Whitewater River Gorge near downtown Richmond. This walk will allow us to examine Richmond's Ordovician fossiliferous bedrock as well as the influence of Pleistocene glaciation on Richmond's landscape. We will also examine the impact of the bedrock and surficial geology on Richmond's water resources. The walk is mostly flat and gently-paced over paved trail with opportunity to explore the river off the trail as well.

## Mary Gray Bird Sanctuary

The Mary Gray Bird Sanctuary (MGBS) is a 700-acre nature preserve owned and operated by the Indiana Audubon Society, Inc. The majority of the property consists of forests maintained in order to provide the best habitat possible for resident and migrant species of birds as well as other wildlife native to Indiana. There are also four ponds, seasonal wetland, and a prairie, designed to diversify the property that was historically a climax beech/maple forest. Hiking trails meander the eastern portion of the property.

Current research efforts include; the bird banding monitoring the avian populations and sustainability (MAPS), banding migrant and resident Ruby-throated Hummingbirds, butterfly and bird counts, and a longitudinal study monitoring turtle populations. MGBS welcomes school groups for educational outings and is open to initiating longitudinal environmental and other scientific studies that could use an outdoor laboratory such as Mary Gray.

The fieldtrip for the EEAI meeting will introduce visitors to the property, take a hike on one of the most popular trails, and then provide the opportunity to observe the banding of Ruby-throated Hummingbirds. Amy Wilms banded 351 Ruby-throated Hummingbirds at MGBS last season and is looking forward to find which of the 3-4 gram birds return this season after flying approximately 4,000 miles over the winter.

## A Hike in the Woods with Bill Buskirk

How a knowledge of tree species lets you read the forest, understand its present, reconstruct its past and project its future. Join Bill as he takes you on a journey through Wildman's Woods, an Earlham property within walking distance of Cope.

## **Organic Farming - "Health from the Ground Up"**

Learn about organic farming and what it takes to make organic milk at Wayne County's first organic dairy farm (certified 2006).

See the animals, do some chores, take a pasture walk and taste organic dairy products.

## **Conference Committee**

Darci Zolman  
Alison Zajdel  
Jim Poyser  
Ann Niednagel  
Melissa Moran  
Paul McAfee

### **Bookstore**

Muscatatuck is back again with eight tables of books and other items. You will be impressed with the selection and will find things that are difficult to find anywhere else. Be sure to bring extra cash

### **Silent Auction**

Be sure to bring extra cash or a checkbook to participate in the silent auction. You may bring something for the auction if you wish. All proceeds will go to the EEAI conference scholarship fund.

### **Song Contest**

We now have an annual tradition, the song contest, where anyone and everyone gets a chance to show off their cleverness and talent and win big prizes. Well, the prizes aren't so big, and it's all in good fun. You can even recite a poem that you've written.

Try to incorporate the theme of the conference into your work, although it's not absolutely critical.

### **Trade A Mug**

Bring a mug to trade.