2013
42ND ANNUAL
CONFERENCE
&
10TH ANNUAL
RESEARCH
SYMPOSIUM
BALTIMORE

Celebrating the Power of Environmental Education

October 8 – 12

2013 CONFERENCE PROGRAM
Welcome to the 42nd Annual NAAEE International Conference!

On behalf of the board, staff, and conference planning team, welcome to the 42nd Annual NAAEE International Conference in Baltimore, Maryland. We’re thrilled you could be here and hope that you enjoy everything the conference and this lively city have to offer.

The theme for this year’s conference is “Celebrating the Power of Environmental Education.” Our strands focus on everything from sustainable communities to conservation and behavior change to connecting kids to nature, and more. Throughout the conference, you will have opportunities to attend workshops, field trips, and presentations centered on best practices in the field, and creating healthier communities and environments. Many focus on how the power of education can help address issues in stressed communities, including many local examples from right here in Baltimore.

This conference program guide is designed to help you navigate the conference—whether you’ve been coming for years or you’re a first timer. If you have any questions, please see one of the many volunteers, wearing the purple NAAEE t-shirts, or come to the registration area for personal assistance. We want to help you feel welcome and make the most of your time here. We encourage you to attend the opening reception and the plenary events scheduled throughout the week. We have a talented line-up of keynote speakers who will inspire and challenge you (see pages 34–38 for details), and we will use the plenary sessions to make special announcements—and maybe even give out a few special prizes!

Here are some highlights of the week:

- **The welcome reception** on Wednesday night at 5:00 and **conference opening**, with Stephen Ritz, our kick-off speaker and one of the most engaging educators in the country!
- A provocative **Research Symposium**, highlighting current research in the field (all day Tuesday and Wednesday)
- A variety of **workshops and field trips** on Wednesday and Saturday afternoon
- A special reception with **Governor Martin O’Malley** at the Maryland Science Center on Friday evening at 6:00 PM
- The reception is also the site of our **yearly auction, jam-packed with special deals**: it’s how we raise money for scholarships to the conference and help more people take part in NAAEE activities. This year we have some amazing items to bid on, including a **trip for two to the Galapagos** on the National Geographic Endeavour worth $11,000 thanks to a very generous donation by Lindblad Expeditions
- A special **panel focused on climate change** on Thursday afternoon with four terrific panelists representing diverse perspectives on the issues
- An inspiring **Awards Luncheon** on Saturday with Ovie Mughelli, former Baltimore Ravens football player and the founder of the Ovie Mughelli Foundation, which inspires kids to go green and become eco-champions
- The **Exhibit Opening** and the **Affiliates Welcome** on Friday
- **NAAEE’s annual business meeting** on Saturday afternoon, where you can learn more about the Association and have a chance to provide input to our strategic thinking
Thanks to everyone who has made this conference possible. We wouldn’t be here without the dedicated work of our wonderful committee chairs, the NAAEE board and staff, our amazing affiliate network, hundreds of volunteers, and so many other members and supporters. We also want to give a special thank you to our friends in Maryland, including Britt Slattery, Don Baugh, and Laura Collard and the Maryland Association for Environmental and Outdoor Education for all they’ve done to help make the conference successful.

A final thank you goes to all of you for attending. We know that with the economy and travel restrictions for so many, it’s getting harder to show up in real time. But we hope the trade-off is that you develop long-lasting personal and professional relationships, a sense of camaraderie with so many others who care about similar issues, and a chance to have deeper and more meaningful conversations. When you get an inspired and committed group together, magic happens—and we looking forward to having you help create that magic!

So thanks again for coming to Baltimore to help us celebrate the power of this field and for the work you do all year to help create a more sustainable world. And we hope you get a chance to recharge your spirit, learn, make connections, and leave Charm City with a renewed passion to continue your important work!

With warm regards from your conference leadership team:
# Table of Contents

**Welcome**  
Mayor's Welcome ................................................. 3  
Conference Sponsors ........................................... 4  
About NAAEE ................................................... 6

**NAAEE Conference 101**  
Conference Overview ........................................... 8  
Conference Basics:  
  Registration Hours ........................................... 12  
  Office Hours ................................................ 12  
  General Information ......................................... 13  
Conference Strands ............................................. 14  
Session Formats ............................................... 15  
Being in Baltimore  
  Nearby Restaurants ......................................... 17  
  Local Highlights ........................................... 19  
Activities at the National Aquarium ....................... 23

**NAAEE Partners and Supporters**  
EE Capacity at the Conference ................................. 26  
NAAEE & the Affiliates ......................................... 28  
CATS Meetings .................................................. 30  
Other Scheduled Meetings & Gatherings ..................... 31  
Volunteer Thank You ........................................... 32  
Scholarship Recipients ......................................... 33

**Special Sessions and Events**  
Keynote Speakers ................................................ 34  
Research Symposium .......................................... 39  
Conference Opening ........................................... 40  
Exhibit Fair Breakfast and Affiliates Welcome ............. 40  
Governor's Reception and Stapp Scholarship Auction .... 41  
Awards Luncheon .............................................. 42  
Authors' Corner ................................................ 42  
Young Professionals Events ................................... 43  
Exhibit Fair ....................................................... 46

**Daily Schedules**  
Tuesday Session Listings ....................................... 47  
Wednesday Session Listings ................................... 48  
Thursday Session Listings ..................................... 51  
Friday Session Listings ........................................ 52  
Saturday Session Listings ..................................... 108

**More About NAAEE**  
NAAEE Board and Staff ....................................... 122  
Past Conference Venues ..................................... 123  
The Affiliate Network ......................................... 124  
See You in Ottawa .............................................. 126  
Map of Convention Center ................................... 127
October 9, 2013

A message from Mayor Stephanie Rawlings-Blake:

On behalf of the citizens of Baltimore, it is my pleasure to welcome you to our great city for the 42nd annual conference of the North American Association for Environmental Education. I hope you enjoy your stay in Baltimore.

It is vital to our global community that we assume responsibility for sustainability and adopt practices that are considerate of the environment. I commend you for your commitment to environmental education, ensuring that current and future generations will have a greater respect for our natural riches.

My administration has set a goal to grow Baltimore by 10,000 families in the next decade. Here in Baltimore, we know that it takes change to grow. It is imperative that we transform our communities, creating a clean, healthy, and sustainable environment for current and future residents. Good luck as you collaborate to find innovative solutions to these and other challenges.

As mayor, I am delighted that NAAEE has chosen Baltimore as the location for your conference, and I personally invite you to explore our city on the harbor. Take time to discover Baltimore’s charming neighborhoods, world-class restaurants, and exciting shops and boutiques—and most important, meet the people who make this city unique!

You are our guests. Baltimore is ready to roll out the red carpet and provide you with a visit full of treasured memories. Best wishes for a great conference and a wonderful stay in Baltimore!

Sincerely,

Stephanie Rawlings-Blake
Mayor
City of Baltimore

phone: 410.396.3835  fax: 410.576.9425  e-mail: mayor@baltimorocity.gov
THANK YOU TO OUR 42ND ANNUAL SPONSORS!

PLATINUM

GOLD

SILVER

GREEN

BLUE
WORKING TOGETHER FOR HEALTHY, SUSTAINABLE SCHOOLS

MARCH 27-29
2014
SACRAMENTO, CA

category.greenschoolsnationalnetwork.org
There has never been a greater need for environmental education—or a greater opportunity. Our country is facing unprecedented environmental, social, and economic challenges—from the world’s changing climate and loss of species and habitats, to declines in civic engagement, decreasing access to nature, and other threats. 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.
NAAEE: Be the change

For more than four decades, NAAEE has been a leader in promoting excellence in environmental education throughout North America. NAAEE is the only national membership organization dedicated to strengthening environmental education and increasing the visibility and effectiveness of the field. With more than 16,000 members and supporters, including affiliations with 54 state and provincial environmental education organizations and members in 30 countries, NAAEE’s influence stretches across North America and around the world.

If you’ve been a member for a while, you might have noticed that NAAEE is going through some exciting changes. We are building on our 42-year foundation and looking ahead to shape our organization in a way that can better meet the environmental and social challenges of the next decade.

And for those of you who are new to NAAEE, here’s an overview of our key achievements to date:

- **Annual Conference:** NAAEE has convened an annual professional conference for environmental education professionals since 1971, averaging more than 900 participants. Our conferences are designed to promote innovation in the field, networking, new tools and resources, and dissemination of best practices.

- **Tools and Resources Promoting Effective Practice:** From its start, NAAEE has provided its members and supporters with access to high-quality professional resources. One of the most significant publications in the last decade has been the “Guidelines for Excellence” series, which help promote best practices in the field. (For more information, visit naaee.org.)

- **Leadership and Capacity Building:** NAAEE offers unique services in professional development and support, networking, and access to relevant research for both environmental educators and the organizations that train, employ, and support those educators. Through workshops and training, including support of certification, NAAEE has led efforts to professionalize the field.

- **Active Participation in the National Training Consortium since 1990:** As part of the National Environmental Education Act of 1990, the Office of Environmental Education in the U.S. Environmental Protection Agency awards a five-year national training grant to a consortium of organizations. Over the last 22 years, NAAEE has been an integral partner in each consortium and we are honored to be part of the current EECapacity project.

- **Advocating for Environmental Education:** NAAEE is a non-partisan organization that plays a leadership role in helping to raise the profile of environmental education at the national level and work with key partners to increase funding and support for the field.

- **Providing a Common Ground:** NAAEE has helped to promote the exchange of information and ideas among professionals from all backgrounds and sectors, including our Affiliates, funders, corporations, government agencies, and other NGOs and stakeholders.

We will keep you updated on our planning process and want to thank you all for your support of NAAEE and the field of environmental education. And we are just a phone call, email, Facebook post, blog, or tweet away—so let us know what you’re thinking as we work together to create our future.
# Conference Overview

Check special meetings and gatherings (pages 30–31 and 40–42) and daily schedules (starting on page 47) for detailed information.

## Exhibit Fair
- **Thursday, 12:00 PM–5:00 PM**
- **Friday, 8:30 AM–5:00 PM**
- **Saturday, 8:30 AM–12:00 PM**

<table>
<thead>
<tr>
<th>TIME</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
<th>SATURDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30</td>
<td></td>
<td>LOCAL OUTINGS BLACK TIP REEF EXHIBIT 7:30-8:15</td>
<td>LOCAL OUTINGS BLACK TIP REEF EXHIBIT 7:30-8:15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8:30</td>
<td>RESEARCH SYMPOSIUM 8:30-4:30</td>
<td>RESEARCH SYMPOSIUM 8:30-4:30</td>
<td>CONCURRENT SESSIONS 8:30-10:00</td>
<td>EXHIBIT FAIR CELEBRATION w/BUFFET BREAKFAST 8:30-10:00</td>
<td>CONCURRENT SESSIONS 8:30-10:00</td>
</tr>
<tr>
<td>9:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6:00</td>
<td>RESEARCH SYMPOSIUM RECEPTION 6:00-8:00</td>
<td>RESEARCH SYMPOSIUM RECEPTION 5:00-6:30</td>
<td></td>
<td>GOVERNOR’S RECEPTION AND STAFF AUCTION AT THE MARYLAND SCIENCE CENTER 6:00-8:30</td>
<td></td>
</tr>
<tr>
<td>6:30</td>
<td></td>
<td>OPENING CEREMONY 6:30-8:30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7:00</td>
<td></td>
<td>OPENING CEREMONY 6:30-8:30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7:30</td>
<td></td>
<td>KEYNOTE Stephen Ritz</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8:00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The most complete experience you can have

Galápagos 360º

+ Year-round, Friday or Saturday departures
+ Snorkel, hike, kayak, explore the undersea
+ Travel with our team of top experts
+ Pack your camera: a Lindblad Expeditions-National Geographic certified photo instructor always on board

Request a free brochure or DVD:
1.800.EXPEDITION
www.expeditions.com/gala360
or call your travel agent.
The US Forest Service Conservation Education program helps people of all ages understand and appreciate our country’s natural resources and how to conserve those resources for future generations. Through structured educational experiences and activities targeted to varying age groups and populations, conservation education enables people to realize how natural resources and ecosystems affect each other and how resources can be used wisely. Through conservation education, people develop the critical thinking skills they need to understand the complexities of ecological problems. It also encourages people to act on their own to conserve natural resources and use them in a responsible manner. Visit us at www.fs.usda.gov/conservationeducation.
ClimateChangeLIVE brings climate learning to classrooms and nonformal settings through:

- **WEBINARS** for teachers and nonformal educators. Get information, resources, tools, and skills to teach climate change.
- **WEBCASTS** on March 5 and 12, 2014 for middle and high school students. Save the dates!
- **RESOURCES** on the web site at http://ClimateChangeLIVE.org.

**REGISTER** now for this **FREE** opportunity at ClimateChangeLIVE.org.

The FOCUS program uses the beauty of art and the wonder of science to make kids aware of the shared relationship between the health of each ecosystem and the health of the planet. FOCUS features mural painting events, a web portal where community and school groups can share their experiences, and tours of the Wyland Foundation’s Mobile Learning Center, a 1,000-square-foot, mobile water conservation exhibit designed to unfold at school playgrounds, community events, and large-scale festivals.

Visit the Wyland Foundation’s Mobile Learning Center in the Exhibit Hall to learn about FOCUS and the Foundation’s National “Water Is Life” Art Challenge.

Smokey Bear is America’s symbol for wildfire prevention. Woodsy Owl is America’s icon for conservation of the environment.

The National Symbols Program supports the national Smokey Bear and Woodsy Owl campaigns by developing educational and promotional products for educators, field practitioners, and partners. For information about Smokey Bear, Woodsy Owl, fire education and related products, visit http://www.symbols.gov.
The Basics

REGISTRATION HOURS

Tuesday  5:00 PM–6:30 PM
Wednesday  7:30 AM–7:00 PM
Thursday  7:30 AM–7:00 PM
Friday  7:30 AM–5:00 PM
Saturday  7:30 AM–2:00 PM

The registration desk is located in the Convention Center’s Charles Street lobby.

NAAEE OFFICE HOURS

Tuesday  2:00 PM–6:30 PM
Wednesday  7:30 AM–7:00 PM  (Closed 11:30 AM–1:30 PM)
Thursday  7:30 AM–5:00 PM  (Closed 11:30 AM–1:30 PM)
Friday  7:30 AM–5:00 PM  (Closed 11:30 AM–1:30 PM)
Saturday  8:00 AM–11:00 AM

The NAAEE office is located in the VIP Suite off the Charles Street lobby.
General Information

Auction Items
Please bring auction items to the NAAEE office, where volunteers will be ready to accept your donation. (If the office is not open, please leave donations at the registration desk.)

Bidding on silent auction items begins on Thursday at 12:00 PM in the Exhibit Hall. The live auction will be held and the silent auction will close during the Governor’s Reception at the Maryland Science Center on Friday evening.

Authors’ Corner
Authors will be available to sign and sell books at various times during the Exhibit Fair. See page 42 for the schedule.

Audio-Visual Equipment Problems
If presenters experience any audio-visual issues during your sessions, please ask the volunteer room monitor (if there is one) to report it to any staff member or the NAAEE office. Any staff member will help connect you with our audio-visual experts as quickly as possible.

Breakfast
Light breakfast items are available for purchase.
Thursday 7:00 AM–8:30 AM
3rd Floor Concessions Stand
Saturday 7:00 AM–8:30 AM
Exhibit Hall A Concessions Stand

Friday breakfast is included with conference registration; see Exhibit Fair Hours below for details.

Coffee Breaks
There will be 30-minute coffee breaks at 10:00 AM on Thursday (3rd floor lobby) and Saturday (Charles Street lobby).

Exhibit Fair Hours
Thursday 12:00 PM–5:00 PM
Friday 8:30 AM–5:00 PM
Saturday 8:00 AM–12:30 PM

We’ll celebrate the Exhibit Fair with a full buffet breakfast on Friday morning from 8:30 AM to 10:00 AM. This special event includes the Affiliates Welcome; come find out what’s happening with the NAAEE Affiliate in your state or province.

Field Trips
If you are registered for a field trip on Wednesday, please meet at the Charles Street entrance to the convention center.

Jobs and Resumes
Add your job listing or resume to the notebooks at the NAAEE booth in the Exhibit Hall. Stop by and look for job openings or great candidates any time during Exhibit Hall hours. We can also help facilitate informational interviews; ask at the booth.

Ticketed Events
These events are included with conference registration. Guest tickets are available for purchase.

Exhibit Fair Celebration, Friday, 8:30 AM–10:00 AM. Includes a full buffet breakfast and the Affiliates welcome. Additional tickets can be purchased in the NAAEE office until Wednesday at 11:30 AM.

Governor’s Reception and Stapp Scholarship Auction at the Maryland Science Center, Friday, 6:00 PM–8:30 PM. Includes Science Center admission, hors d’oeuvres and governor’s award presentation, and the silent and live auctions. Additional tickets can be purchased at the NAAEE office until Wednesday at 5:00 PM.

Awards Luncheon and Keynote with Ovie Mughelli, Saturday, 12:00 PM–2:00 PM. Additional tickets can be purchased in the NAAEE office until Thursday at 11:30 AM.

WiFi Access
Free WiFi is available in public areas of the hotel and convention center. We’re also providing WiFi access in all convention center meeting rooms. We hope you’ll take advantage of the access to send a few tweets using #NAAEE2013 to let folks know what you think of the conference!

Young Professionals
Several special activities are planned for those just entering the environmental education profession. See page 43 for a listing of opportunities to meet new colleagues and further develop relevant skills.
Conference Strands
Seven thematic strands characterize the 2013 NAAEE Conference. Each strand explores a different aspect of the field of environmental education.

Citizen Science & Public Participation in Scientific Research
Engaging members of the public in citizen science, volunteer monitoring, and other forms of organized scientific and environmental research
Strand Leaders: Anne Burnett and Sandi Funke

Connecting Kids and Nature
The benefits and challenges of connecting kids with nature and learning in the outdoors
Strand Leader: Tanya Oznowich

Conservation Education and Behavior Change
Achieving conservation goals through innovative education, communication, social marketing, and civic tourism strategies
Strand Leaders: Janet Ady and Drew Burnett

Greening Formal Education
Exemplary practices that enhance student achievement and service-learning, conserve natural resources on campus, engage PreK-20 students and teachers, prepare teachers and professors to integrate environmental concepts into their curriculum, and support national education trends
Strand Leaders: James McGirt and Al Strenstrup

Leadership and Innovation
Programs, projects, and research that exemplify excellence in environmental education and move the field forward in creative and proven ways
Strand Leader: Eddie Gonzalez

Sustainable Communities
The role of education in achieving environmental integrity, economic prosperity, and social equity
Strand Leader: Thomas Eatmon

Teaching about Environmental Issues
Innovative ways to teach about current environmental challenges such as climate change, water quality and quantity, food and agriculture, and biodiversity; educating for informed participation in key current environmental issues
Strand Leader: Kristen Poppleton

The Bay is surprisingly shallow. Its average depth, including all tidal tributaries, is about 21 feet. A person who is 6 feet tall could wade through more than 700,000 acres of the Bay and never get his or her hat wet.
Concurrent Session Formats

Conference participants will see a wide variety of session types listed in the conference program. NAAEE offers different formats in an effort to accommodate the maximum 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 start of the formal conference, and on Saturday afternoon. Participants can register for workshops at the conference 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 include a minimum of three panelists and a moderator, together representing a minimum of three different organizations.

**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 are informal presentations that emphasize spirited discussion between the presenter(s) and session attendees. Presenters start the discussion by sharing information about the program/question they wish to explore, and then open discussion for input and exchange of ideas. Seven or eight roundtable discussions occur simultaneously in one large room.

**Poster (40 minutes)**
Posters are 4-foot x 4-foot two-dimensional printed presentations illustrating research studies, programs, or other work. Posters are fixed to portable bulletin boards for conference participants to review at leisure. In addition, the conference program includes a set time for poster presenters to stand at their posters and interact with attendees.

**Bright Spots and Great Ideas (12 minutes)**
New this year, bright spots and great ideas are succinct talks that celebrate specific triumphs and showcase approaches that work! Each presenter has 12 minutes to highlight such things as important research findings, family programs, school programs, community partnerships, conservation achievements, expanded audiences, civic engagement, and more. Five or six great ideas, loosely related by strand, are presented back-to-back during a 90-minute session.

**Key to Session Listings**

Sessions are grouped by start time so you can readily see everything offered at any given time block. Listings are grouped by type of session, with start and end times clearly indicated in the headings.

Each listing provides the following information. Strands are indicated by colored dots; see page 14 for a list of color codes. The map on the inside back cover shows room locations in the Baltimore Convention Center.

**Session Title**
**Time, Location**
**Description**

**Presenter(s):**
**Strand:**

---

**DID YOU KNOW?**

State Flower: Black-eyed Susan
Access FREE content from the Australian Journal of Environmental Education for three months.*

To access simply add the code AJEE13 when prompted at: journals.cambridge.org/trial

*Access must be activated before 30th November 2013

“Where’s the after-party?”

Be sure to connect to NAAEE on Twitter and get the latest conference updates.

#NAAEE2013

Join our Facebook network and stay connected to trending EE information and events!

Search: NAAEE—North American Association for Environmental Education

IN EVERY WALK WITH NATURE ONE RECEIVES FAR MORE THAN HE SEEKS.
- JOHN MUIR
Being in Baltimore

Delightful, quirky neighborhoods.
World-class museums. Great seafood.
Rich history. That's Baltimore!

Nicknamed “Charm City,” Maryland’s biggest city is colorful and diverse. It’s located on the tidal portion of the Patapsco River, and Baltimore’s Inner Harbor is a gateway to the beautiful Chesapeake Bay. Noted among its historical and cultural contributions are writers Edgar Allan Poe and H.L. Mencken, musicians James “Eubie” Blake and Billie Holiday, the city’s role in the War of 1812, and Francis Scott Key’s writing of the “The Star-Spangled Banner.” We hope you take every advantage of our fabulous 2013 site; our local team recommends these area highlights.

In addition, Visit Baltimore! will be stationed in the lobby to help you discover the best of Baltimore.

Restaurants

Price Key:
$ <10  V – Vegetarian options
$$ 10-20 Ve – Vegan options
$$$ 15-25 GF – Gluten-Free options

Free Charm City Circulator Bus Routes:
Green 🌴 Orange 🌺 Purple 🌷

Luna Del Sea Steak and Seafood Bistro
$$ V Ve GF
300 W Pratt St. (410) 752-8383
Luna Del Sea offers casual outdoor dining and a menu that includes delicious appetizers, sandwiches, and pasta.
Walking Distance: 2 minutes

Kona Grill
$$ V Ve GF
1 E Pratt St. (410) 244-8994
Kona Grill, located in Baltimore’s Inner Harbor, serves fresh sushi, Hawaiian entrées and flatbread pizzas. Kona Grill’s lifestyle menu offers an array of vegetarian, vegan, and gluten-free dishes.
Walking Distance: 4 minutes

Pratt Street Ale House
$$ V GF
206 W Pratt St. (410) 244-8900
Located in an historic building, Pratt Street Ale House serves burgers, pizza and more.
Walking Distance: 1 minute

Frank and Nic’s West End
$$ V Ve GF
511 W Pratt St. (410) 685-6800
Frank and Nic’s West End is a casual restaurant and sports bar that serves sandwiches and other American dishes along with a vegetarian menu.
Walking Distance: 5 minutes

Amiccis
$$ V Ve GF
231 S High St. (410) 528-1096
Amiccis serves Italian-American cuisine in a casual environment located in Baltimore’s Little Italy.
Walking Distance: 19 minutes
Hard Rock Café
$$ V GF
601 E Pratt St. (410) 347-7625
Located in Baltimore’s Inner Harbor, Hard Rock Café offers an extensive menu of American cuisine.
Walking Distance: 12 minutes

The Corner Bistro & Winebar
$$ V GF
213 Penn St. (410) 727-1155
The Corner Bistro & Winebar is a classy place to enjoy a ciabatta or some bistro crab sliders.
Walking Distance: 9 minutes

B&O American Brasserie
$$ V GF
2 N Charles St. (443) 692-6172
B&O American Brasserie serves the finest seafood dishes and flatbread pizzas.
Walking Distance: 9 minutes

Supano’s Prime Steakhouse
$$ V GF
110 Water Street (410) 986-4445
Tucked into the aged brick and cobblestone facade of Water Street, Supano’s tried and true menu features prime steaks, chops and seafood, as well as hearty Italian classics.
Walking Distance: 15 minutes

Mr. Rain’s Fun House
$$ V
800 Key Hwy (410) 244-1900
Located in the American Visionary Art Museum, Mr. Rain’s Fun House offers a three-course meal that includes either a gourmet veggie sandwich or a burger served with salad, fries, and a dessert.
Walking Distance: 20 minutes

Rusty Scupper
$$$
402 Key Hwy (410) 727-3678
The Rusty Scupper offers authentic Maryland cuisine such as crab cakes, fresh oysters, and elegantly prepared shrimp, lobster, and beef dishes that accommodate all tastes.
Walking Distance: 19 minutes

DID YOU KNOW?
The Bay produces about 500 million pounds of seafood per year.
John Stevens
$$
1800 Thames St. Baltimore (410) 327-5561
Found in Fells Point, John Stevens Restaurant serves fresh, local seafood and other American favorites. Walking Distance: 34 minutes 🌐

Kali’s Mezze
$$ V Ve
1606 Thames Street (410) 563-7600
Baltimore’s premier Greek restaurant, Kali’s Mezze, offers market-fresh Mediterranean cuisine along with a delicious vegetarian menu. Walking Distance: 32 minutes 🌐

Thames Street Oyster House
$$$
1728 Thames St (443) 449-7726
Thames Street Oyster House serves traditional and modern Mid-Atlantic and New England Seafood. Walking Distance: 34 minutes 🌐

Pazo
$$ V Ve
1425 Aliceanna St (410) 534-7296
A Mediterranean mix of Spanish and Italian cuisine, Pazo serves tapas, Neapolitan pizza, grilled seafood, and ribeyes. Walking Distance: 27 minutes 🌐

City Café
$$ V Ve
1001 Cathedral St (410) 539-4252
Located in Baltimore’s historic Mount Vernon Cultural District, City Café offers an original menu of Mid-Atlantic American cuisine featuring seasonal and all-natural ingredients. Walking Distance: 24 minutes 🌐

Museums
American Visionary Art Museum
800 Key Hwy
Baltimore, MD 21230
The American Visionary Art Museum is America’s official national museum and education center for self-taught, intuitive artistry. Since its opening in 1995, the museum has sought to promote the recognition of intuitive, self-reliant, creative contribution as both an important historic and essential living piece of treasured human legacy. From carved roots to embroidered rags, tattoos to toothpicks, the visionary transforms dreams, loss, hopes, and ideals into powerful works of art. Walking Distance: 20 minutes

Babe Ruth Birthplace Museum
216 Emory St.
Baltimore, MD 21230
Learn about life during the first half of the 20th century through the eyes of the Ruth family. Understand how the fortunes of Baltimore City ebbed and flowed along with the course of its baseball and football teams. Experience segregation and the challenges of integration through the lens of Baltimore’s Negro League teams. Over the course of its 30-year history, the Babe Ruth Museum’s mission has evolved to not only feature the greatest baseball player ever, but also to present the rich and storied histories of Baltimore’s Orioles and Colts. Walking Distance: 8 minutes

Geppi’s Entertainment Museum
301 W Camden St.
Baltimore, MD 21201
Geppi’s Entertainment Museum is a journey through 250 years of American pop culture, located in historic Camden Station at Camden Yards, just a few blocks from the city’s famed Inner Harbor. The museum exhibits nearly 6,000 pop culture artifacts including comics, toys, dolls, games and memorabilia of every conceivable category. Journey from the late 1700s to the present day and revisit favorite characters like Superman, Spider-Man, Batman, Mickey Mouse, Barbie, G.I. Joe, and many more. Walking Distance: 3 minutes
The Baltimore Museum of Art
10 Art Museum Dr.
Baltimore, MD 21218
The Baltimore Museum of Art is home to an internationally renowned collection of 19th-century, modern, and contemporary art. Founded in 1914 with a single painting, the BMA today has 90,000 works of art—including the largest holding of works by Henri Matisse in the world. Throughout the Museum, visitors will find an outstanding selection of European and American fine and decorative arts, 15th- through 19th-century prints and drawings, contemporary art by established and emerging contemporary artists, and objects from Africa, Asia, the Ancient Americas, and Pacific Islands. Two beautifully landscaped gardens display an array of 20th-century sculpture that is an oasis in the city.
Walking Distance: 1 hour; Driving Distance: 12 minutes

Walters Art Museum
600 N Charles St.
Baltimore, MD 21201
The Walters Art Museum in Baltimore, Maryland is internationally renowned for its collection of art. The collection presents an overview of world art from pre-dynastic Egypt to 20th-century Europe, and counts among its many treasures Greek sculpture and Roman sarcophagi, medieval ivories and Old Master paintings, Art Nouveau jewelry, and 19th-century European and American masterpieces.
Walking Distance: 17 minutes

Entertainment

Inner Harbor Paddle Boats
301 E Pratt St.
Baltimore, MD 21202
Have fun and get a good workout by paddling around either in a regular paddle boat or in the more popular “Chessie” paddle boats.
Walking Distance: 10 minutes

Power Plant Live!
601 E Pratt St.
Baltimore, MD 21202
Power Plant Live! is Baltimore’s premier dining and entertainment destination located just one block from the World Famous Downtown Inner Harbor. Just a short walk from many downtown hotels, Pier Six Pavilion, Oriole Park at Camden Yards, Ravens M&T Bank Stadium, and other major attractions, Power Plant Live! is your one stop destination for dining, retail, and entertainment!
Walking Distance: 11 minutes

Top of the World Observation Level
401 E Pratt St. #2700
Baltimore, MD 21202
Top of the World is the perfect starting point for any visit to the city and provides a breathtaking view of Baltimore’s skyline, harbor and beyond. This city attraction featuring a spectacular 360-degree panoramic view of Baltimore has stationed binoculars and photo-map guides to help guests learn about local attractions, hotels, sites and neighborhoods. Top of the World has expansive windows that frame the Inner Harbor, the surrounding city and beyond to the Chesapeake Bay. Discover Baltimore’s history as guides reveal fascinating facts and personal reminiscences that make Baltimore come alive!
Walking Distance: 10 minutes
History

Baltimore National Heritage Area
Trails and Tours
401 Light St.
Baltimore, MD 21202
Discover Baltimore! Hear stories of America’s Charmed City, exploring landmarks associated with the War of 1812 as our nation defended itself; the Civil War, which tore apart the City and the nation; the industry and commerce in a port city; and the struggles and triumphs of the diverse peoples of America.
Walking Distance: 10 minutes

Fort McHenry
2400 E Fort Ave.
Baltimore, MD 21230
A famous point of interest best known for its role in the Battle of Baltimore, Fort McHenry, successfully staved off the British invasion of the fort by 1,000 Americans that inspired Francis Scott Key, a lawyer and amateur poet, to compose the Star Spangled Banner, originally entitled Defense of Fort McHenry.
Driving Distance: 10 minutes

Historic Ships
301 Pier 3
Baltimore, MD 21202
Historic Ships in Baltimore represent one of the most impressive collections of military vessels in the world. Located within easy walking distance of each other, the US Sloop-of-War Constellation, the US Submarine Torsk, the US Coast Guard Cutter Taney, and the Lightship Chesapeake exhibit life at sea from the mid-19th century to the mid-1980s. Also included in the collection is the Seven Foot Knoll Lighthouse, which marked the entrance to the Patapsco River and Baltimore Harbor for over 130 years.
Walking Distance: 10 minutes

Science

Maryland Science Center
601 Light St.
Baltimore, MD 21230
Serving more than half a million visitors per year, the Maryland Science Center is one of Baltimore Inner Harbor’s main attractions. With hands-on exhibits and spectacular displays in the wonderful world of science and technology, the Maryland Science Center is a great way to gain hands on experience and first-hand knowledge. At the Maryland Science Center you’ll find three floors of demonstrations to exercise your imagination and challenge your mind. The Governor’s Reception and NAAEE auction will be held at the Science Center on Friday evening.
Walking Distance: 15 minutes

National Aquarium
501 E Pratt St.
Baltimore, MD 21202
Opened in 1981, the National Aquarium is world famous and undoubtedly Maryland’s leading tourist attraction. Whether you’re an educator, a student or simply a visitor wanting to look at the magnificent exhibits, the National Aquarium in the Inner Harbor has a lot to offer. The mission of the National Aquarium is to “provide transforming experiences that encourage people to enjoy, respect, and protect the aquatic world.” And that is precisely what it does. View a life-size model of a Humpback Whale, see the concepts of surviving through adaptation come to life, visit a coral reef, and learn what jellies are telling us about the health of our oceans. NAAEE is offering two early morning visits to the Aquarium, as well as a Saturday afternoon workshop (registration required). Walking Distance: 11 minutes
Shopping

Harborplace
201 E Pratt St.
Baltimore, MD 21202
Walking Distance: 8 minutes

Inner Harbor
Pratt St.
Baltimore, MD 21202
Walking Distance: 10 minutes

Power Plant
601 E Pratt St.
Baltimore, MD 21202
Walking Distance: 12 minutes

Getting Around Town

Public Transportation
The Maryland Transit Administration (MTA) operates bus, Metro Subway, Light Rail, and MARC train services. For fares and schedules, call 888-218-2267 or 410-539-5000, or visit www.mtamaryland.com.

The Charm City Circulator is a free bus service with four routes that intersect downtown Baltimore and connect to other transit such as the Light Rail, MARC, Metro Subway, and Baltimore City Water Taxi.

Water Transit
Baltimore Water Taxi operates continuous service to more than 35 attractions. Call 800-658-8947 or visit www.baltimorewatertaxi.com.

Parking & Driving
For information on available parking in the downtown area, see http://baltimore.org/transportation/parkinginformation

DID YOU KNOW?

The American National Anthem memorializes one of the key moments in American history which took place in Baltimore during the War of 1812. When Francis Scott Key saw the American flag flying above Fort McHenry amidst the cannon fire during the Battle of Baltimore, he was inspired to write the historic poem “Defence of Fort McHenry” that would be put to music to become “The Star-Spangled Banner”. The song would become the official American National Anthem on March 3, 1931.
Visit the Black Tip Reef Exhibit

The National Aquarium invites conference participants to learn about our new exhibit Black Tip Reef. This morning program will allow participants to view the new exhibit as well as discover how it was created and learn about the education programs surrounding it.

Meet at the blue entrance sign in front of the Aquarium (no late entry)

THURSDAY
7:30 AM–8:15 AM

FRIDAY
7:30 AM–8:15 AM

Free
Sign-up required at the registration desk
Maximum: 10 people per day
Allow 15-20 minutes to walk from the Convention Center

Community Service Project

This year, we are assisting the National Aquarium with some “behind the scenes” work—the exact task to be determined by what is most needed at the time. Volunteers will experience one small aspect of the complex responsibility of caring for and maintaining the Aquarium’s exhibits. Participation is welcome, but space is limited. Please sign up at the registration desk so we know how many to expect.

FRIDAY
12:00 PM–2:30 PM

Meet at the NAAEE registration desk at 12:00. We will walk to the Aquarium as a group. Lunch will be provided as a thank you for your service.

Workshop at the National Aquarium

SATURDAY
See page 121 for details.
Advance registration and additional fee required.
A proud supporter of the
42nd NAAEE CONFERENCE
and
ENVIRONMENTAL EDUCATION

The Pisces Foundation supports environmental education because we believe it yields a range of important benefits to people and communities today—and is an indispensable building block of an environmentally sustainable future.

Pisces Foundation One Maritime Plaza, Suite 1545 San Francisco, CA 94111
Web: www.piscesfoundation.org Twitter: @piscesfnd
The District Administration Leadership Institute produces cutting-edge professional development events for K12 school district executives. The Institute’s flagship event, The Superintendents Summit, provides new leadership perspectives and solutions fine-tuned to the challenges and demands of K12 district administration, featuring a power-packed program combined with top-tier networking, and specialized interaction with innovative solutions providers.

The District Administration Leadership Institute thanks these leading K12 solution providers for their generous support of the Institute.

www.daleadershipinstitute.com
EECapacity at the Conference

How do we strengthen the field of environmental education in a world where more and more people live in cities? How can environmental education contribute to environmental health and the well being of all communities, including those impacted by poverty and by floods, drought, and other stresses and disasters related to climate change and other factors?

The Expanding Capacity in Environmental Education Project—EECapacity—provides opportunities for professionals and volunteers to join in discussions about our environment and our communities, share success stories of where environmental education has made a difference, and learn about successful practices from across the globe. We believe that by providing these opportunities for individuals working in environmental education, youth and community development, resource management, and related fields, we will be able to build on and expand the critical role environmental education plays in fostering healthy environments and communities.

Funded by a generous grant from the U.S. Environmental Protection Agency, EECapacity creates multiple opportunities for people to come together to learn, share, and grow. Our community of learners includes professionals working in nature centers; leaders in community gardening, “friends of parks” organizations, and other “civic ecology” practices; zoo, aquarium, museum, and botanic garden educators; teachers and university faculty; and individuals working in community and faith-based organizations, larger non-profits, government, and business. What binds us together is our commitment to helping all people—from preschoolers to senior citizens, those living in rural areas, suburbs, and densely populated inner cities, recently returned military veterans and their families, those jobless and those employed, and so many others—experience and steward nature, and work together to create a more sustainable future.

To learn more about EECapacity’s work, we invite you to participate in one or more of these sessions.

For more information about EECapacity visit: www.eecapacity.net

EECapacity Sessions

**TUESDAY**

EECapacity National Training Workshop Introduction
6:30 PM–8:00 PM, Room 301 (by invitation)

**WEDNESDAY**

EECapacity National Training Workshop, 8:30 AM–12:00 PM, Room 310 (by invitation)

NAAEE Affiliate Workshop
8:30 AM–4:30 PM, Room 309
(by invitation, additional fee)

Refining Civic Ecology Hypotheses through Narrative Collaborative Inquiry,
NAAEE Research Symposium,
9:00 AM–9:30 AM, Sheraton Inner Harbor, Sassafras Room (additional fee)
Worlds Collide on Community-Based EE: Practitioner and Researcher Perspectives, NAAEE Research Symposium
10:15 AM–11:15 AM, Sheraton Inner Harbor, Loch Raven Room (additional fee)

Development of Professional Networks to Foster Innovation in Environmental Education, NAAEE Research Symposium
10:15 AM–11:15 AM, Sheraton Inner Harbor, Loch Raven Room (additional fee)

Unpacking Useful Tools and Techniques that Foster Innovation in EE
1:00 PM–4:30 PM, Room 310 (additional fee)

Educating for Informed Participation in the Move Toward Environmental Sustainability, NAAEE Research Symposium
2:00 PM–3:00 PM, Sheraton Inner Harbor, Loch Raven Room (additional fee)

THURSDAY

Community EE: Guidelines to Practice
8:30 AM–10:00 AM, Room 301

Impact of Infusing EE into a Teacher Preparation Program
10:30 AM–11:10 AM, Room 310

EECapacity: Update on EPA’s National Environmental Education Training Program
10:30 AM–11:10 AM, Room 312

EECapacity Field Lab in Baltimore
12:30 PM–4:30 PM, Meet at Charles Street Entrance on Pratt Street (by invitation)

EE’s Role: Helping Returning Military Combatants and Their Families Heal
2:15 PM–3:45 PM, Room 314

EECapacity State Consortia: Successes and Challenges of Collaborative Networking
2:15 PM–2:55 PM, Room 312

Certification 101: Exploring the Design and Development of a New Certification Program
2:15 PM–3:45 PM, Room 319

Professional Learning Communities: What Works in Online Collaborative Learning
4:00 PM–4:40 PM, Room 310

Starting Off Right: Early Childhood Environmental Education
4:00 PM–4:40 PM, Room 319

FRIDAY

Creating an Online Community to Support Environmental Issues in Diverse Curricula
10:00 AM–10:40 AM, Room 312

Developing the Certificate of Distinction in EE: Discussion and Feedback
10:00 AM–10:40 AM, Room 319

Promoting Excellence in Environmental Education
1:45 PM–3:15 PM, Room 315

EE in Our Education Preparation Program
1:45 PM–3:15 PM, Room 316

Transforming Student World Views through Nonformal EE at a Historically Black University
1:45 PM–3:15 PM, Room 316

Integrating EE into the World of Pedagogy
1:45 PM–3:15 PM, Room 316

Beyond “Translation”: Making EE Research Useful to Educators
3:30 PM–4:10 PM, Room 312

Environmental Curriculum and Technology Tools: Together They Make a Difference
3:30 PM–5:00 PM, Room 314

NCATE Environmental Education Standards: An Opportunity for Input
4:20 PM–5:00 PM, Room 319

Recipe for Success: Cooking up a Certification Program from Scratch
4:20 PM–5:00 PM, Room 312

SATURDAY

EECapacity National Training Workshop Wrap-Up
9:20 AM–12:00 PM, Room 319 (by invitation)

Assessment and Evaluation for EE Certification Programs
10:30 AM–11:10 AM, Room 312

Universities Cooperate to Institutionalize New EE Courses for Teachers
10:30 AM–11:10 AM, Room 317
NAAEE and the Affiliates: A Force for Nature

NAAEE’s Affiliate Network is a powerful collective for environmental education and capacity building in the field. The Network represents 54 organizations, each affiliated with NAAEE, that work together to support environmental education professionals throughout the United States, Canada, and Mexico. Since the partnership began in 1998, NAAEE and the affiliates have created a more unified voice for EE on all levels, promoting collaborative learning, professional development, and resource development.

Throughout the conference, there are a number of sessions that focus on strengthening affiliate organizations, sharing best practices, and building capacity at all levels of the field. Check out these sessions to learn more.

Sessions of Interest for Affiliates

WEDNESDAY

Affiliate Workshop
8:30 AM–4:30 PM, Room 309

THURSDAY

Environmental Literacy Plans: Open Space Learning, Sharing, and Networking Session
8:30 AM-10:00 AM, Room 319

Certification 101: Exploring the Design and Development of a New Certification Program
2:15 PM–3:45 PM, Room 312

EE Capacity State Consortia: Successes and Challenges of Collaborative Networking
2:15 PM–2:55 PM, Room 312

Environmental Literacy Creates Opportunities for Regional Collaboration and Capacity Building
4:00 PM–4:40 PM, Room 310

FRIDAY

Best Practices of Nonprofit Boards
10:00 AM–10:40 AM, Room 315

Interested in Becoming a Certified Environmental Educator? What You Need to Know
1:45 PM–2:25 PM, Room 310

Promoting Excellence in Environmental Education
1:45 PM–2:25 PM, Room 315

The No Child Left Inside Act: Systemic EE in K-12 Schools
2:35 PM–3:15 PM, Room 317

Cross-Country Collaboration
3:30 PM–5:00 PM, Room 322

Tailoring Your Message: Effective Advocacy Through Persuasive Communication
3:30 PM–5:00 PM, Room 303

Recipe for Success: Cooking Up a Certification Program from Scratch
4:20 PM–5:10 PM, Room 312

SATURDAY

Coalition-Building to Support Environmental Literacy Plan Development, Adoption, and Implementation
9:20 AM–10:00 AM, Room 318

Assessment and Evaluation for EE Certification Programs
10:30 AM–11:10 AM, Room 312

The Oregon Environmental Literacy Plan: From Inception to Implementation
11:20 AM–12:00 PM, Room 312

DID YOU KNOW?

On April 24, 2008, Smith Island cake was designated as the official dessert of the state of Maryland, an 8 to 15 thin layered cake filled with creme and frosting.
High-quality professional development

Curriculum materials that support the Guidelines for Excellence

Environmental service-learning

Advocates for an environmentally literate citizenry

PROJECT LEARNING TREE and NAAEE Partners in Environmental Literacy

Leaders in Environmental Education
CATS Meetings

What the heck are CATS…and why are they so important? Committees, Advisory Boards, Task Forces and Special Interest Groups (also known as CATS) provide a great chance for each of us to play a more active role in building the NAAEE community and advancing the field of EE.

Special Interest Groups (SIGs) are open to all members: you’re encouraged to attend a SIG meeting to learn more about how NAAEE members are working on specific areas of interest to the association. NAAEE will also discuss SIGs during the annual business meeting on Saturday afternoon.

CATS MEETINGS AT THE CONFERENCE

Accreditation Advisory Board and Accreditation Review Panel
Friday, 12:30 PM–1:30 PM, Room 304
Working meeting for members of the Accreditation Advisory Board and Accreditation Review Panel
Chair: Tom Marcinkowski

Advocacy Committee
Thursday, 1:00 PM–2:00 PM, Room 301
The NAAEE Advocacy Committee coordinates the advocacy function for NAAEE, activating members, board, staff, other committees, commissions, and councils, and outside stakeholders to work towards increasingly favorable legislative and regulatory environments, and governmental funding for environmental education on all levels. Open to all.
Co-Chairs: Traci Price, Brock Adler

Diversity Committee Meeting
Thursday, 1:00 PM–2:00 PM, Room 303
Join us for the annual gathering of the Diversity Committee and meet members from across North America. This meeting will outline short and long term strategies and open dialogue about how to effectively broaden participation in NAAEE from diverse communities, ethnicities, and cultural backgrounds. Open to all.
Chair: Flisa M. Stevenson

Preservice Advisory Board Meeting
Thursday, 1:00 PM–2:00 PM, Room 306
We will be discussing the work of the Preservice Advisory Board and welcome all who are interested in learning more about our ongoing initiatives to increase EE in Educator Preparation Programs. Come learn how our work can support you, your institution, and your preservice teachers. Open to all.
Chair: Courtney Crim

Professional Development and Teacher Education Special Interest Group
Friday, 12:30 PM–1:30 PM, Room 305
Come meet others interested in professional development and teacher education and learn what exciting things we are planning for the upcoming year. Open to all.
Co-Chairs: Teresa Schretter Coker, Molina Walters

Sustainability Education Special Interest Group
Thursday, 1:00 PM–2:00 PM, Room 304
Meet the Co-Chairs and members of the Sustainability Education Interest Group and learn about how you can get involved in the group’s activities. Open to all.
Chair: Thomas D. Eatmon

Urban Special Interest Group
Friday, 12:30 PM–1:30 PM, Room 301
Join other environmental educators interested in building capacity around working in urban communities. This meeting will outline resources, strategies, and open dialogue about what works and what is needed to effectively educate in urban settings. Open to all.
Chair: Akiima Price

DID YOU KNOW?
The first telegraph line was erected between Baltimore and Washington DC in 1844.
Other Scheduled Meetings & Gatherings

Early Childhood Environmental Educators' Gathering
Thursday, 7:30 AM–8:15 AM
3rd Floor Concessions Stand
Interested in chatting with others in early childhood environmental education? Want to know how you can become involved in NAAEE’s new Natural Start Alliance? Pick up breakfast (on your own) and join us for informal and energizing conversation at the “Reserved for ECEE” tables.
Coordinators: Christy Merrick, Betty Olivolo

EE Certification/Accreditation Focus Group
Thursday, 12:30 PM–2:00 PM, Room 302
By invitation.

EPA National Environmental Education Advisory Council Listening Session
Thursday, 3:05 PM–3:45 PM, Room 322
The National Environmental Education Advisory Council (NEEAC) is creating a report for the EPA Administrator and Congress on EPA’s future vision of EE. We will give an overview of the NEEAC process and ask participants for input on EE successes, improvements, and national initiatives.
Coordinator: Kelly Keena

Future Directions for NAAEE
Thursday, 4:00 PM–4:40 PM, Room 321
Share your ideas about NAAEE’s future. Craig Freshley, president of Good Group Decisions, and Judy Braus, Executive Director of NAAEE, will facilitate a discussion about NAAEE’s strategic planning process and get your thoughts about how to make NAAEE the strongest and most relevant organization possible.
Coordinators: Craig Freshley, Noah Manduke, Judy Braus

Guidelines Trainers’ Bureau Meeting
Wednesday, 4:45 PM–5:30 PM, Room 306
Members of the Guidelines Trainers’ Bureau will meet to recap the year’s efforts and hear about the latest training activities. By invitation.

Minority Academic Institutions Partners Meeting
Friday, 9:00 AM–9:45 AM, Room 303
By invitation.

NAAEE Business Meeting: Future Directions
Saturday, 2:30 PM–3:30 PM, Room 302
We welcome your input! Join NAAEE’s President, Executive Director, board, and staff for a discussion on the current state of the organization and future directions for NAAEE. Topics will include strategic planning, special interest groups, financial report, and your questions.
Coordinators: Jose Marcos-Iga, Judy Braus

NOAA B-WET Program Meeting
Thursday, 6:00 PM–8:30 PM, Sheraton Inner Harbor, Potomac Room
By invitation.
Coordinators: Bronwen Rice, Sepp Haukebo

Southeastern Environmental Education Alliance Meeting
Friday, 12:15 PM–1:30 PM, Room 303
Members of SEEA and other affiliates in the southeastern United States will meet to discuss current activities.

University of Michigan Gathering
Friday, 12:00 PM–1:30 PM
Pratt Street Ale House, 206 W. Pratt Street
The University of Michigan’s School of Natural Resources and Environment invites all alumni, faculty and staff to a lunch hosted by Professor Michaela Zint.

DID YOU KNOW?

The Bay and its tidal tributaries have 11,684 miles of shoreline—more than the entire U.S. west coast.
This conference wouldn’t have been possible without the dedication of every person on this list, as well as all of 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

Laurie Jenkins
Montgomery County Public Schools

Kim Martinez
National Wildlife Federation

Elena Takaki
National Geographic

Conference Committees

Affiliate Welcome
Brenda Metcalf

Auction
Lisa Jones
Liz Millhollen
Coreen Weilminster

Authors’ Corner and Bookstore
Grace Manubay
Jenny Rigby
Marty Rigby

Careers and Young Professionals
Zoë Unruh

Field Trips
Laura Collard
David Christopher
Grace Manubay
Maryland Association for Environmental & Outdoor Education

Local Arrangements
Josh Falk
JoAnn Roberts

Program Production
Julie Ardoin
Ruth Mann

Publicity and Outreach
Carolyn Moffo

Research Symposium
Charlotte Clark, Co-chair
Bob Coulter, Co-chair
Erin Kelly

Scholarships
Kelley Dennings
Cindy Etgen

Strand Leaders
- Citizen Science & Public Participation in Scientific Research:
  Anne Burnett and Sandi Funke
- Connecting Kids and Nature:
  Tanya Oznovich
- Conservation Education and Behavior Change:
  Janet Ady and Drew Burnett
- Greening Formal Education:
  James McGirt and Al Stenstrup
- Leadership and Innovation:
  Eddie Gonzalez
- Sustainable Communities:
  Thomas Eatmon
- Teaching About Environmental Issues:
  Kristen Poppleton

Technology
Rob Stewart

Volunteers
Diane Lill
More than 100 onsite volunteers

Conference Proposal Reviewers
Thank you to 130 colleagues who took the time to diligently review more than 650 proposals submitted for this year’s conference. If you would like to volunteer to review the 2014 proposals, please visit the NAAEE website in November to log in and register. We look forward to working with you for Ottawa!
Conference Scholarships

NAAEE is proud to have provided funds to help enable nearly 150 professionals and students attend the 2013 conference in Baltimore. Our thanks to the following organizations, whose support made this possible.

- Chesapeake Bay Trust
- Columbia Sportswear
- EECapacity
- US EPA

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

The Environmental Education Scholarship for Academic Study is awarded to a college or university student in each year’s conference host state. Recipients are selected based on their understanding of and commitment to environmental education and their potential for future contributions to the field. This year, NAAEE recognizes University of Maryland student Brittany Marsden.

The Columbia Sportswear Teacher/Administrator Scholarship recognizes a teacher’s achievement in environmental education in the classroom and the administrator who supported his or her endeavors. This year’s recipients are 10th-11th grade teacher Carter Cox and Principal Matt Christison of Centennial High School in Calgary, Alberta.

Just a few of our 2013 conference scholarship recipients!

NAAEE would also like to thank the Baltimore Convention Center, Visit Baltimore!, and the Sheraton Inner Harbor for their help in shaping this year’s conference.

Help preserve America’s history, culture and majestic landscapes.

Support your national parks today and guarantee their future for generations to come.

Our warmest thanks to the 5th graders from John Eager Howard Elementary School for creating wonderful centerpieces for our tables and to students from Bates Middle School in Annapolis for bringing music to our Thursday morning coffee break.

Yosemite National Park

NATIONAL PARK FOUNDATION
www.nationalparks.org

33
The impressive group of keynote speakers for the 2013 conference includes a teacher who has nurtured more than 30,000 pounds of vegetables, a Peace Corps volunteer in Morocco, a mountaineer who climbed to 20,000 feet in Nepal, and a prize winner for mobilizing hundreds of chefs to stop serving swordfish.

In keeping with our conference theme—Celebrating the Power of Environmental Education—each of our compelling speakers is an experienced and powerful force for social and environmental change, and each has a track record that is guaranteed to inspire you. You will not want to miss anyone in this illustrious lineup.

WEDNESDAY

STEPHEN RITZ
Seeding the Future: Helping Students and Communities Thrive
6:30 PM–8:30 PM
Room 307

Stephen Ritz is a South Bronx teacher and administrator who believes that students shouldn’t have to leave their community to live, learn, and earn in a better one. Stephen’s Bronx classroom features an indoor edible wall that routinely generates enough produce to feed 450 students healthy meals and trains the youngest nationally certified workforce in America. Moving generations of students to unimagined personal and academic successes while reclaiming and rebuilding the Bronx, he has moved daily attendance from 40 percent to 93 percent and has helped create and fund 2,200 youth jobs.

Stephen captured the U.S. EPA Award for transforming mindsets and landscapes in New York City, recently won the ABC Above and Beyond Award and the 2012 Chevrolet National Green Educator Award, and helped earn his school the first-ever Citywide Award of Excellence from the NYC Strategic Alliance for Health. He attributes these results directly to growing vegetables in school.

Stephen is working on embedding the concepts of sustainability and environmental justice into K-12 programming and beyond. Dedicated to harvesting hope and cultivating minds, Stephen dreams of opening a nationally replicable Career Technical Education public school in the poorest congressional district in America.

THURSDAY

KRISTEN GRIMM
Communicating the Power of EE
11:30 AM–12:30 PM
Room 307

Kristen Grimm is the founder and president of Spitfire Strategies, one of the country’s leading public relations firms dedicated to working exclusively with nonprofits and foundations to create positive social change. Clients of the firm include the David and Lucille Packard Foundation, the William and Flora Hewlett Foundation, the Ford Foundation, Brookings Institution, Surdna Foundation, and Community Catalyst. Kristen has developed numerous resources for the field including the Smart Chart 3.0, Discovering the Activation Point, the Just Enough Planning Guide and Big Ideas to Big Change.

Prior to launching Spitfire, Kristen worked as a fellow at the Vietnam Veterans of America Foundation (VVAF). Before her fellowship, she was the president and chief operating officer of Fenton Communications, where she wrote NOW HEAR THIS: The Nine Laws of Successful Advocacy Communications.

Kristen has a B.A. from Smith College. She currently serves on the boards of Grist magazine, the National Academy for State Health Policy, and Alaska Wilderness League.
CLIMATE CHANGE PANEL:
KEYA CHATTERJEE, GERALD DURLEY, CECILIA V. ESTOLANO, and WILLIAM SPITZER

Moderator: JOE HEIMLICH

Perspectives on Empowering Communities
5:00 PM–6:30 PM
Room 307

Keya Chatterjee is Senior Director for Renewable Energy and Footprint Outreach at the World Wildlife Fund (WWF) in the United States and author of the book The Zero Footprint Baby: How to Save the Planet While Raising a Healthy Baby. Her work focuses on building a movement in support of climate action in the United States, and promoting sustainable choices. Keya’s commentary on climate change policy and sustainability issues has been quoted in dozens of media outlets including USA Today, the New York Times, Fox News, the Associated Press, the Washington Post, and NBC Nightly News.

Keya also serves on the board of the Washington Area Bicycling Association (WABA). Prior to joining WWF, Keya served as a Climate Change Specialist at USAID. Keya also worked at NASA Headquarters in their Earth Science Enterprise, working to communicate data and research results on climate change. Keya started her career as a Presidential Management Fellow in the US government, and was a Peace Corps Volunteer in a national park in Morocco from 1998 to 2000.

Gerald Durley is a man of many accomplishments. He was one of the first Peace Corp Volunteers to serve in Nigeria, West Africa. He was a basketball star in college. He has a master’s degree in Community Mental Health (one of the first in the country), a Ph.D. in Urban Education and Psychology from University of Massachusetts, and a Master of Divinity Degree from Howard University. He has been the Executive Director of Head Start Programs in Georgia, a faculty member at Morehouse School of Medicine, the Senior Pastor of the historic Providence Missionary Baptist Church of Atlanta, and a board member of Interfaith Power and Light. Throughout his career, he has also been intensely involved in the struggle for human dignity, community justice, education, and environmental protection.

Gerald has been a leader in speaking out about the importance of addressing climate change and working across faiths and disciplines to get more people to understand, care, and act. He has testified before U.S. EPA, served on the Conservation Fund’s National Forum on Children, and appears in the film, The Great Warming, where he discusses climate change with urban youth. Gerald has also been an outspoken advocate for communicating across faiths, working with Muslims, Christians, and Jews to better understand the differences and similarities among people, cultures, and beliefs.
Cecilia V. Estolano is an expert in sustainable economic development and urban revitalization. She is co-founder of Estolano LeSar Perez Advisors LLC (ELP Advisors), which provides consulting services to public agencies, foundations, business associations, and other stakeholders seeking to grow thriving, healthy, and vibrant communities. Cecilia previously served as Chief Executive Officer of the Community Redevelopment Agency of the City of Los Angeles (CRA/LA), the largest redevelopment agency in California. Cecilia redefined the role of CRA/LA, shepherded CRA/LA’s adoption of landmark policies on the promotion of Healthy Neighborhoods, and created a $42 million Land Acquisition Fund to jumpstart development in underserved markets like South Los Angeles. She conceived of Los Angeles’ CleanTech Corridor and was an early driver behind the creation of Clean Tech Los Angeles.

Cecilia served on the California Coastal Commission, as a Senior Policy Advisor with the U.S. EPA, and as Environmental Policy Advisor to Los Angeles Mayor Tom Bradley. She was also a panelist at the recent White House Summit on Climate Change and Energy.

William Spitzer is the Vice President for Programs, Exhibits, and Planning at the New England Aquarium in Boston, MA. He is responsible for the development of mission-driven exhibits and programs, including oversight of exhibit design and animal husbandry as well as volunteer and education programs. He has served as Principal Investigator for a number of informal science education projects funded by the National Science Foundation.

Prior to coming to the New England Aquarium in 1996, Billy gained seven years of experience at TERC, an educational research and development firm in Cambridge, MA. There, he directed research and development in science education. For several years, he directed the LabNet project, an electronic community that served over 1,500 science teachers with forums for professional discussion, resource sharing, and collaborative projects. Billy holds a Ph.D. in Oceanography from MIT and the Woods Hole Oceanographic Institution and a B.A. in Chemistry and Physics from Harvard University.

Joe Heimlich, Ohio State University professor and Senior Research Associate with Lifelong Learning Group, is an award-winning leader in environmental education and free-choice learning. He has been working in the field for more than 30 years. He is the author of more than a hundred academic journal articles, chapters, and books, and has written over 250 popular publications. Joe is widely known for his methodological work in the evaluation of free-choice learning and has been a keynote speaker and presenter at conferences around the world.

---

To find out about our scholarships, funding opportunities, and learning resources, please visit the NOAA Education Resource Portal: www.education.noaa.gov
FRIDAY

INTERNATIONAL PANEL:
MAHESH PRADHAN and KEITH A. WHEELER
Moderator: KARTIKEYA V. SARABHAI
A Global Look at Environmental Education and Sustainability
11:00 AM–12:00 PM
Room 307

Mahesh Pradhan is Chief of the Environmental Education and Training Unit of the United Nations Environment Programme (UNEP), and is based at UNEP's headquarters in Nairobi, Kenya.

Since 2011, Mahesh has overseen UNEP’s engagement with the higher education sector through establishment of the Global Universities Partnership on Environment and Sustainability. He served as UNEP’s focal point for the Higher Education Sustainability Initiative—launched on the margins of the Rio+20 Summit—and is responsible for coordinating UNEP’s response to the UN Decade of Education for Sustainable Development, 2005-14. He oversees UNEP’s strategic partnership with Tongji University through the joint Institute of Environment for Sustainable Development located in Shanghai, China. He is also actively involved in several regional networks, including Mainstreaming Environment and Sustainability in African Universities, the Latin America and the Caribbean Environmental Training Network, and Asia and the Pacific Regional University Consortium on Environment for Sustainable Development.

Prior to this, Mahesh was based at UNEP’s Regional Office for Asia and the Pacific in Bangkok, Thailand. He served as head of the regional and sub-regional cooperation component, and coordinated the nexus issue of environmental education, whereby several sub-regional environmental education and training action plans were formulated.

Keith A. Wheeler has over 35 years of experience in the fields of sustainability, conservation, technology, education, and the environment. As Chairman and CEO of ZedX Inc., Keith provides overall leadership and strategy development focusing on sustainable agriculture and environmental resource management. He is also president of IUCN-US and emeritus chairman of IUCN’s Commission on Education and Communication.

Keith served as founding partner of Worldviews LLC, an international sustainability and CSR consultancy with clients that include General Motors and the U.S. Department of Energy. As co-founder of the Foundation for Our Future, he created a non-governmental R&D organization focused on sustainable development knowledge management, organizational change management, and capacity development. Keith also served as president of CFix LLC, a conservation carbon sequestration fund in South America, and was the first executive director for the Global Rivers Environmental Education Network (GREEN), with programs in 135 nations worldwide.

Keith was appointed to President Clinton’s Council for Sustainable Development Public Linkage and Education Task Force, served as co-chair of the White House Conference on Partnerships for Education about the Environment, and was co-chair of a White House initiative to establish a national framework for education and capacity development for sustainability.

He has authored numerous publications, including a book titled Education for Sustainability: a Paradigm for Hope.

Kartikeya V. Sarabhai is a leader in environmental education in India and worldwide. He founded India’s Center for Environment Education in 1984. Now, with more than 400 professional staff, CEE reaches into every school system in India and advises every state government on greening the curriculum. In addition to his work in education, Kartikeya has established several organizations that connect social and environmental development. He is a sought after speaker, presenter, and thinker, and has won numerous awards for his work.
SATURDAY

OVIE MUGHELLI

Our Future is Green
12:00 PM–2:00 PM
Room 307

Ovie Mughelli, currently Sports Analyst for CBS Atlanta, played 10 years in the NFL as a starting Pro Bowl fullback for the Atlanta Falcons and the Baltimore Ravens. Ovie was among the biggest fullbacks to play the game, known for being a power blocker, for being able to pick up blitzes, and as one of the best special team minds in the game.

Making his mark off the field, Ovie is also heavily involved with his community, especially through his award-winning Ovie Mughelli Foundation, which empowers youth to take ownership and pride in their lives and the roles they play in society. The Foundation emphasizes assisting quality programs that educate youth on the environment.

Named a Top 5 Eco Athlete by Planet Green, Ovie Mughelli is passionate about both sustainability practices and physical activity. He brings these passions together through programs that include sustainable youth environmental education clubs, a green speakers series, and a model eco-field. Ovie believes that if you empower kids by educating them about the environment, you give them a platform to transform their households, their neighborhoods, their communities, and the world.

DID YOU KNOW?

The Chesapeake region is home to at least 29 species of waterfowl. Nearly one million waterfowl winter on the Bay—approximately one-third of the Atlantic coast’s migratory population. The birds stop to feed and rest on the Bay during their annual migration along the Atlantic Flyway.

The Chesapeake Bay Trust is honored to have supported environmental education in Maryland and throughout the Chesapeake Bay region for nearly thirty years.

Find out more at cbtrust.org.
10th Annual Research Symposium

NAAEE’s annual Research Symposium brings together more than 100 new and experienced researchers from North America and beyond to explore the current state and future directions of environmental education research and to advance effective practices. This year’s symposium will facilitate discussion about ongoing research, foster dialogue about research-community partnerships, and provide opportunities for graduate students to develop the skills needed to become professional researchers.

While geared to the academic community, all environmental education practitioners are encouraged to attend to enhance their understanding of research’s essential role in the field of environmental education and its implications for our work.

KEYNOTE SPEAKER

ELLEN MCCALLIE
Reflecting on Our Careers: Circuitous Paths to Successful Careers
9:15 AM–10:30 AM
Harborview Ballroom

Ellen McCallie, PhD, is a program director in the Division of Research on Learning at the National Science Foundation. Originally trained as a tropical ecologist, Ellen has worked across the field of informal science education, in botanical gardens, natural history museums, science television, museum administration, and a national center. In the midst of these endeavors—and mid-career—Ellen returned to graduate school to study science education.

For years people have had two reactions to Ellen McCallie’s career path. One was, “Given the random things you’ve done, why would anyone hire you?” The second was, “Wow, we need someone with the breadth and depth of your experience. When can you start?” This session reflects on choosing a seemingly circuitous career path and the decisions we make along the way—and why. The workshop format means that while Ellen’s experiences may start the conversation, your career trajectory and next adventures are at the heart of this session.

Accepting Manuscripts on Early Childhood EE

The International Journal of Early Childhood Environmental Education (IJECEE) is accepting manuscripts pertinent to the education of young children (birth to 8 years).

We invite book reviews, educational approaches, evaluation studies, program descriptions, research investigations, and theoretical perspectives. Young children’s caregivers and the communities, institutions, and systems in which the children live are important focal points, and we seek implications for environmental education policy.

Published by NAAEE, IJECEE is a free online peer-reviewed journal designed to promote thoughtful sharing of information to support effective practice, research, and policy around the world. For more information about the submission protocol, please see www.naaee.net/publications/IJECEE.
Join us for a warm and welcoming opening reception and evening program.

Meet and Greet: Opening Reception
5:00 PM–6:30 PM
Charles Street Lobby

People worth meeting: It all starts right here with you. If you are new to NAAEE or experiencing the complexity of the conference for the first time, come get help navigating the many layers of the conference. Meet NAAEE Board members and find new friends to help you explore what the conference program has to offer. Learn about keynote speakers, conference themes, the exhibit fair, the scholarship auction, and the opportunity to join committees and special interest groups!

During the reception, you can also enjoy this year’s Share Fair. At this informal event, you can explore program information and tabletop displays from a variety of nonprofit organizations.

Come break the ice and meet some new members in a fun and playful activity hosted by the NAAEE Diversity Committee. You can win prizes for making new connections! During the conference, share a meal, discuss ideas, exchange business cards, and begin to foster relationships that may continue far beyond the conference. Also, we encourage you to share your conference experiences on Twitter and Facebook with our members and partners across the globe. We are all connected!

Light hors d’oeuvres and cash bar.

Conference Opening
6:30 PM–8:30 PM
Room 307

After the reception, we’ll officially kick off the conference with opening comments from Executive Director Judy Braus and Board President Pepe Marcos-Iga. And then, join us for keynote Stephen Ritz, an exceptional classroom teacher whose extended student and community family in the Bronx has grown over 30,000 pounds of vegetables while generating extraordinary academic performance. The first of several outstanding and engaging keynote presentations, Stephen will get us started on a high note. Come see why his January 2012 TEDxTALK trended on Twitter nationally and received a standing ovation.

FRIDAY

Exhibit Fair Celebration Breakfast
8:30 AM–10:00 AM
Exhibit Hall A

Celebrate the Exhibit Fair with a great buffet breakfast. Chat with our exhibitors, who are eager to connect you with the latest and greatest in environmental education products and services. Bid on a fabulous find in the silent auction, check out the conference bookstore (and join us in thanking Acorn Naturalists for providing this service to NAAEE), and visit the wonderful Wyland Mobile Learning Experience. For more on exhibits, see page 46.

The NAAEE Affiliates will also be in the Exhibit Hall 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 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.

Breakfast is included with registration.
Governor’s Reception and Stapp Scholarship Auction:
An Evening at the Maryland Science Center
6:00 PM–8:30 PM
Maryland Science Center

Join us in honoring Maryland Governor Martin O’Malley, who will be presented with a special award for his outstanding leadership in environmental education. The governor will be on hand to greet NAAEE members and share a few words about environmental education efforts he has championed.

Then get ready to bid on your favorite items in the live auction, including an amazing trip for two to the Galapagos donated by Lindblad Cruises, a signed and numbered lithograph by the renowned marine life artist, Wyland, and an original photograph by wildlife photographer Gerry Ellis. You’ll find treasures in all price ranges up for sale.

The silent auction will culminate at the reception as well. Be there to slip in your final bid just under the wire and snatch up a great variety of books (many signed by the authors), crafts, jewelry, backpacks, binoculars, T-shirts, gift certificates, tickets, and much more.

And with all this activity, don’t forget to explore the magnificent Maryland Science Center—Maryland’s oldest scientific institution and one of the oldest such institutions in the United States. With new displays and exhibits enjoyed for generations, there’s a tremendous amount to see and do: Lie on a bed of nails, enjoy a symphony of body digestion noises, stand in a dinosaur footprint, and experiment with Newton’s principles of physical science. And that’s just a start!

This action-packed, fun-filled evening is included with registration. Additional tickets can be purchased for guests as space allows. (Check for details at the NAAEE office.) Substantial hors d’oeuvres and cash bar. One drink ticket included.

Every auction purchase helps to support conference scholarships. 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 to the association and the conference. Many “Stapplings” have gone on to hold leadership positions in the organization.

Note: The Maryland Science Center is about ¾ mile from the Convention Center. It is about a 15-minute walk.

If you need assistance getting to the Maryland Science Center, please notify the registration desk by 3:00 PM on Friday.

A few deep troughs run along much of the Bay’s length. Some of these troughs are as much as 174 feet deep. The troughs are believed to be remnants of the ancient Susquehanna River.
NAAEE Awards Luncheon
12:00 PM–2:00 PM, Room 307

Help us recognize 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, our final speaker will leave us on a high note. Ovie Mughelli, currently Sports Analyst for CBS Atlanta, played 10 years in the NFL as a starting Pro Bowl fullback for the Atlanta Falcons and the Baltimore Ravens. With his passion for both sustainability practices and physical activity, you’ll find out why Planet Green named Ovie a Top 5 Eco Athlete.

The Awards Luncheon is included with conference registration. Additional tickets can be purchased for guests as space allows. (Check for details at the NAAEE office.)

Conference Closing
5:30 PM–7:00 PM, Room 310

This casual gathering is the last conference opportunity to enjoy networking with colleagues—new and long lasting. Join us for light hors d’oeuvres and warm conversation as we say farewell until Ottawa in 2014.

Authors’ Corner

The Authors’ Corner features NAAEE members and other writers who are available to discuss and sign their newest publications. Chat with the authors about writing and publishing for the environmental education field. New this year, authors will be on hand throughout the conference during exhibit hall hours.

At press time, scheduled authors include:

THURSDAY
12:30 PM

Herb Broda
• Schoolyard-Enhanced Learning: Using the Outdoors as an Instructional Tool
• Moving the Classroom Outdoors: Schoolyard-Enhance Learning in Action

Jeffery Weatherford
• The Carolina Parakeet: America’s Lost Parrot in Art and Memory
• A Bat Cave: An Abecedarian Bedtime Chronicle

2:30 PM

Lynne Cherry
• The Armadillo from Amarillo
• Flute’s Journey
• The Great Kapok Tree
• How Do We Know What We Know About Our Changing Climate
• How Groundhog’s Garden Grew
• Longing for a Local Lunch DVD
• Making a Difference in the World
• A River Ran Wild
• Young Voices for the Planet DVD

Rick Reynolds
• The EverGreen Twins Activity Book: 40+ Eco-Activities, Games and Outdoor Adventures (Second Edition)
FRIDAY
8:30 AM–10:00 AM
Jennifer Chambers
• Watershed Adventures of a Water Bottle
Sarah Haines
• Inside-Out: Environmental Science in the Classroom and the Field

10:40 AM–1:30 PM
Priscilla Cummings
Picture Books:
• Beddy Bye in the Bay
• Chesapeake ABC
• Meet Chadwick and his Chesapeake Friends
• Santa Claws, the Christmas Crab
Novels:
• The Journey Back
• Red Kayak
Kelly Johnson
• Wings, Worms, and Wonder

3:15 PM–5:00 PM
Richard R. Jurin
• Environmental Communication: Principles and Skills for Natural Resource Professionals, Scientists, and Engineers, 2nd Edition
• Principles of Sustainable Living: A New Vision of Health, Happiness and Prosperity
Linda Rhoads
• Adventure: The Value of Risk in Children’s Play

Calling All Young Professionals
Looking for a way to get your foot in the EE door? Not sure how to market yourself in the EE field? Want to meet others like yourself?

Join us in a series of opportunities designed to strengthen your connections and beef up your toolbox.

Resume Writing, Interview Skills, and LinkedIn Thursday, 1:00 PM–2:00 PM, Room 305
Spend the lunch hour learning how to best market yourself on paper, in person, and online. Bring your resume and a computer if you have one.

Grant Writing 101
Friday, 12:30 PM–1:30 PM, Room 302
In the non-profit world, everyone wants a capable grant writer. That could be you! Learn some tips from seasoned experts about how to find sources and craft your grant.

Meet Other Young Professionals
Thursday, 7:00 PM
Charles Street Entrance on Pratt Street
Explore Baltimore’s Inner Harbor and grab a cheap dinner with other young professionals attending the conference. Because let’s be honest, who doesn’t like cheap eats and new friends?

Connect with a Mentor
Thursday, Friday, and Saturday, scheduled during coffee and lunch breaks
Connect with a seasoned EE professional to learn about their path to success, get tips on how to move forward in the EE field, and swap stories from the field. Peruse the biographical blurbs at the NAAEE booth in the exhibit hall, choose a mentor that suits your interests, and sign up for a time to sit and chat. On Thursday morning, you can sign up for a mentor meeting at the registration desk. Sign ups will move to the exhibit hall at noon.

DID YOU KNOW?
Maryland’s Mount Clare Station, built in Baltimore in 1830, was the first railroad station in the US.
New Resources for the Trail and Classroom

Acorn Naturalists offers NEW tools for environmental educators, naturalists, and interpreters. We also offer over 600 skull, track, and scat replicas and many other unique resources for environmental and outdoor educators.

180 South Prospect, Suite 230
Tustin, CA 92780
(800) 422-8886
(800) 452-2802 FAX
acornnaturalists.com

Welcome to NAAEE! Please come visit us in the exhibit hall!

Join us April 13-19, 2014 for National Environmental Education Week. We’re “Engineering a Sustainable World” with K-12 resources to support Greening STEM year-round.
Going Green

Green Initiatives

Visit Baltimore, the Maryland Office of Tourism Development, the Baltimore Convention Center (BCC), and hospitality businesses are working closely with meeting professionals to provide greener experiences. From the BCC to the Maryland Green Travel program, there are a number of initiatives in place to help offset our carbon footprint and foster green meetings.

The BCC has “gone green” on a number of fronts. Here are just a few examples:

- Lighting and motion sensors in meeting rooms
- Meeting room tables made from 30% recycled products
- Caterer buys locally whenever possible
- Solid Waste Reduction System transforms solid catering waste into a soil amendment product that is used for the upkeep of grounds and flowerbeds
- Green roof planted with drought-resistant vegetation

For more information, see www.bcccenter.org/downloads/files/bcc_green_initiatives.pdf

In addition to selecting a green facility, NAAEE has taken many steps to reduce the environmental impact of our conference. These include:

- Printing conference materials on FSC paper with soy-based inks
- Working with the convention center’s caterer to maximize the use of locally sourced food (already their practice)
- Requesting registration for meals included with your conference registration to reduce food waste
- Providing information to encourage public transportation and selecting hotels and event venues within easy walking distance of the convention center
- Offering the option to purchase verified emission reductions (VERs) to balance the carbon dioxide emissions associated with traveling to the conference and using resources at the convention center and hotels. We are working with Renewable Choice Energy, which supports a variety of domestic and international carbon projects that conform to leading standards. (You can still purchase VERs at the NAAEE office if you did not do so with your conference registration. Renewable Choice Energy suggests a rate of $10/person to balance the impacts of conference travel.)

A Gift That Lives On

Have you ever wished you could support the work of NAAEE in a more meaningful way, but could not afford it or weren’t sure how to do it?

One of the easiest ways you can help is to put NAAEE into your will or living trust. Called a charitable bequest, this type of gift can offer benefits to you and to NAAEE. If you’re interested, just let us know. We can provide official language to share with you and your attorney.
2013 Exhibitors

Exhibit Fair | Thursday 12:30 PM–5:00 PM | Friday 8:30 AM–5:00 PM | Saturday 8:30 AM–12:00 PM

Acorn Naturalists, 401, 403
Alaska Pacific University, 213
Alaska Wilderness League, 302
Aldo Leopold Foundation, 404
American Public Gardens Association, 413
Antioch University New England, 406
Botanical Beauties and Beasts, 207
Bronx Green Machine, 314
Can Manufacturers Institute, 313
Climate Change is Elementary, 408
Cornell Lab of Ornithology, 405
Mark Cottman Gallery, 215
Council for Environmental Education, 201
eCYBERMISSION, 205
Equal Exchange, 503
ESRI, 308
From the Bow Seat, 412
Green Schools Alliance, 505
Green Schools National Network, 203
Hanna Instruments, 407
IFAW, 407
Keep America Beautiful, 303
Maryland Association for Environmental and Outdoor Education, 506
Merry Lea Environmental Learning Center of Goshen College, 501
Montreat University, 309
NAAEE, 500, 502
NAAEE Affiliate Network, 508
NASA Innovations in Climate Education (NICE), 208
National Association of State Foresters, 307
National Geographic, 304, 306
National Project for Excellence in Environmental Education, 504
NOAA, 402
Nutrients for Life, 209
Ottawa Tourism, 513
PASCO Scientific, 512
Prescott College, 204
Project Learning Tree, 300
Project WET, 200
Spy on a Bird, 312
Three Stone Steps, 206
TurfMutt, 305
U.S. Environmental Protection Agency, 202
United Nations Environment Programme, 507
U.S. Forest Service, 301, 400
Wild Lens, 509

Wyland Mobile Learning Experience

Auction

Wyland Mobile Learning Experience

208 209 308 309 408 409 508 509
206 207 306 307 406 407 506 507
204 205 304 305 404 405 504 505
202 203 302 303 402 403 502 503
200 201 300 301 400 401 500 501

DID YOU KNOW?

According to the Brooking Institution, almost a quarter of the jobs in the Baltimore regions are STEM positions – making it 8th out of 100 US cities for concentration of STEM jobs.
Tuesday 8:30 AM
Research Symposium
8:30 AM–4:30 PM
Sheraton Inner Harbor, Harborview

NAAEE’s annual Research Symposium brings together more than 100 new and experienced researchers from North America and beyond to explore the current state and future directions of environmental education research and to advance effective practices. This year’s symposium will facilitate discussion about ongoing research, foster dialogue about research-community partnerships, and provide opportunities for graduate students to develop the skills needed to become professional researchers.

Tuesday 6:00 PM
Research Symposium Reception
6:00 PM–8:00 PM
Sheraton Inner Harbor, Potomac Room

For Research Symposium participants only.

Tuesday 6:30 PM
EECapacity National Training Workshop Introduction
6:30 PM–8:00 PM, Room 301

By invitation.

All events take place at the Baltimore Convention Center unless otherwise noted.

Be sure to visit the Wyland Mobile Learning Experience (MLE)

The Wyland Foundation is dedicated to inspiring a student’s curiosity of the natural world through arts & science. By using art as a gateway to science learning, we encourage children to become creative, solution-oriented stewards of our planet as a whole. The Foundation’s MLE programs fill the gap in community services, field trips, art, and science activities that have resulted from the poor economic conditions of the past several years. One of our most innovative tools, our Clean Water Mobile Learning Experience, provides a state of the art science “classroom” that travels all over the country with state of the art interactive exhibits.
Wednesday 8:30 AM

Full-Day Workshops

8:30 AM–4:30 PM

Note: Advanced registration and an additional fee are required for all workshops.

Research Symposium continues
8:30 AM–4:30 PM
Sheraton Inner Harbor, Harborview

NAAEE Affiliate Workshop
8:30 AM–4:30 PM, Room 309

Introduction to Education for Sustainability (EfS)
8:30 AM–4:30 PM, Room 302

Writers Workshop
8:30 AM–4:30 PM
Sheraton Inner Harbor, Board Room
By invitation.

Morning Workshops

8:30 AM–12:30 PM

Note: Advanced registration and an additional fee are required for all workshops.

Integrating Social Justice and Environmental Education: A Simulation for Educators
8:30 AM–12:00 PM, Room 303

Driven to Discover: Citizen Science Sparks Independent Scientific Investigations
8:30 AM–12:00 PM, Room 304

EECapacity National Training Workshop
8:30 AM–12:00 PM, Room 310
By invitation.

Field Trips

8:30 AM–4:30 PM
(Specific times as indicated)

Note: Advanced registration and an additional fee are required for all field trips.

Bike Tour of School Gardens in the Nation’s Capital
8:30 AM–4:30 PM
Meet bus at Charles St entrance on Pratt St

Creek Snorkeling Adventure
9:00 AM–3:00 PM
Meet van at Charles St entrance on Pratt St

Nature Play Yards for Young Children
9:00 AM–4:00 PM
Meet bus at Charles St entrance on Pratt St

Urban Adventure on the Anacostia River
8:30 AM–2:30 PM
Meet bus at Charles St entrance on Pratt St

All events take place at the Baltimore Convention Center unless otherwise noted.
Wednesday 12:00 PM
Lunch
12:00 PM-1:00 PM
Sheraton Inner Harbor, Morton’s Restaurant
Lunch is included with the Research Symposium and all full-day workshops. Service is available throughout the hour. (Lunch is not provided with half-day workshops.)

Wednesday 1:00 PM
Afternoon Workshops
1:00 PM-4:30 PM
Note: Advanced registration and an additional fee are required for all workshops.

Climate and the Carbon Cycle: Digging into the Details
1:00 PM-4:30 PM, Room 303

Students Lead the Way Toward an Environmentally Active Citizenry!
1:00 PM-4:30 PM, Room 304

Unpacking Useful Tools and Techniques that Foster Innovation in EE
1:00 PM-4:30 PM, Room 310

Wednesday 4:45 PM
Guidelines Trainers’ Bureau Meeting
4:45 PM-5:30 PM, Room 306
Members of the Guidelines Trainers’ Bureau will meet to recap the year’s efforts and hear about the latest training activities. By invitation.

Wednesday 5:00 PM
Meet and Greet: Opening Reception
5:00 PM-6:30 PM, Charles Street Lobby
People worth meeting: It all starts right here with you. If you are new to NAAEE or experiencing the complexity of the conference for the first time, come get help navigating the many layers of the conference. Meet NAAEE Board members and find new friends to help you explore what the conference program has to offer. Learn about keynote speakers, conference themes, the exhibit fair, scholarship auction, and the opportunity to join committees and special interest groups!

During the reception, you can also enjoy this year’s Share Fair. At this informal event, you can explore program information and tabletop displays from a variety of nonprofit organizations.

Come break the ice and meet some new members in a fun and playful activity hosted by the NAAEE Diversity Committee. You can win prizes for making new connections! During the conference, share a meal, discuss ideas, exchange business cards, and begin to foster relationships that may continue far beyond the conference. Also, we encourage you to share your conference experiences on Twitter (#NAAEE2013) and Facebook with our members and partners across the globe. We are all connected!

Light hors d’oeuvres and cash bar.

Many hands make light work.

THANK YOU TO OUR AMAZING VOLUNTEERS.
Wednesday 6:30 PM
Conference Opening and Keynote Address
6:30 PM–8:30 PM, Room 307-308

After the reception, we’ll officially kick off the conference with a welcome to Baltimore from our three conference co-chairs: Laurie Jenkins, Kim Martinez, and Elena Takaki. Executive Director Judy Braus and Board President Pepe Marcos-Iga will also offer opening comments. And then, join us for the first of several engaging and thought-provoking keynotes with Stephen Ritz, an exceptional classroom teacher whose extended student and community family in the Bronx has grown over 30,000 pounds of vegetables while generating extraordinary academic performance.

Stephen Ritz is a South Bronx teacher and administrator who believes that students shouldn’t have to leave their community to live, learn, and earn in a better one. Stephen’s Bronx classroom features an indoor edible wall that routinely generates enough produce to feed 450 students healthy meals and trains the youngest nationally certified workforce in America. Moving generations of students to unimagined personal and academic successes while reclaiming and rebuilding the Bronx, he has moved daily attendance from 40 percent to 93 percent and has helped create and fund 2,200 youth jobs.

Stephen captured the U.S. EPA Award for transforming mindsets and landscapes in New York City, recently won the ABC Above and Beyond Award and the 2012 Chevrolet National Green Educator Award, and helped earn his school the first-ever Citywide Award of Excellence from the NYC Strategic Alliance for Health. He attributes these results directly to growing vegetables in school.

DID YOU KNOW?

Thurgood Marshall, grandson to a slave, was born in Baltimore in 1908 and rose to become the 96th Supreme Court Justice in 1965.
Thursday 7:30 AM

Special Sessions
7:30 AM–8:15 AM

Black Tip Reef at the National Aquarium
7:30 AM–8:15 AM, Meet at blue entrance sign in front of Aquarium
Early birds are invited to learn about the National Aquarium’s new Black Tip Reef exhibit. This morning program will give participants the chance to see the new exhibit, discover how it was created, and learn about related education programs. Sign up at the registration desk. (Note: The Aquarium is about a 15-minute walk from the convention center.)

Early Childhood Environmental Educators’ Gathering
7:30 AM–8:15 AM
3rd Floor Concessions Stand
Interested in chatting with others in early childhood environmental education? Want to know how you can become involved in NAAEE’s new Natural Start Alliance? Pick up breakfast (on your own) and join us for informal and energizing conversation at the “Reserved for ECEE” tables.
Coordinators: Christy Merrick, Betty Olivolo

Thursday 8:30 AM

The following sessions all start at 8:30 AM. End times vary with the type of session as indicated.

Symposia
8:30 AM–10:00 AM

Energy Development, Education, and Creating Conditions for a Sustainable Future
8:30 AM–10:00 AM, Room 314
Complex human communities would cease to exist without energy. Carbon-based energy sources are problematic. The emergence of fracking as an issue offers a “teachable moment” for building energy understandings related to environmental sustainability, economic development, social justice, and educational dynamics.
Moderator: Don Duggan-Haas (PRI & its Museum of the Earth)
Presenter(s): Kenneth Klemow (Wilkes University), Joseph Henderson (University of Rochester), Sarah Stapleton (Michigan State University)
Strand:

Environmental Literacy Plans: Open Space Learning, Sharing, and Networking Session
8:30 AM–10:00 AM, Room 319
Environmental Literacy Plans are a collaborative effort. Join us in an Open Space format to capitalize on experiences of states across the country. Open discussion will generate ideas and solutions for pressing environmental literacy opportunities and challenges in your state.
Presenter(s): Traci Price (Gray Family Foundation), Brock Adler (n/a), Renee Strand (North Carolina State University)
Strand:

All events take place at the Baltimore Convention Center unless otherwise noted.
**Hands-on Presentations**  
8:30 AM–10:00 AM

**Bridging Indoor and Outdoor Learning with National Geographic FieldScope**  
8:30 AM–10:00 AM, **Room 302**
Engage students in citizen science and connect them with communities using new tools including the web-based GIS platform, FieldScope. Explore opportunities and experience FieldScope with example projects from the Chesapeake Bay watershed and national projects including Project BudBurst and BioBlitz.

**Presenter(s):** Sean O’Connor (National Geographic Society), Elena Takaki (National Geographic Society)

**Strand:** Community EE: Guidelines to Practice

8:30 AM–10:00 AM, **Room 301**
Walk through the newly drafted Community EE Guidelines and discuss steps for working with communities facing multiple challenges. Participants will play the simulation, “Promising Practice,” which presents scenarios, based on your work, for planning environmental actions in communities under stress.

**Presenter(s):** Akiima Price (Akiima Price Consulting)

**Green & Healthy Schools Wisconsin**  
8:30 AM–10:00 AM, **Room 311**
Green & Healthy Schools Wisconsin serves as the comprehensive sustainability and environmental education program for PreK-12 schools in the state. Learn how this recently redesigned, innovative program is transforming student learning and how it can be replicated in your state.

**Presenter(s):** Jeremy Solin (LEAF/Wisconsin Center for Environmental Education), Kendra Liddicoat (University of Wisconsin–Stevens Point), Katie Boseo (University of Wisconsin–Stevens Point), Jessica Tomaszewski (College of Natural Resources–Continuing Education)

**Strand:**

---

**“I Have a Hippopotamus!” Preparing Effective Early Childhood Environmental Educators**  
8:30 AM–10:00 AM, **Room 305**
Learn how our early childhood teacher education program, including courses, objectives, pedagogy, materials, and experiences are relevant to EE. We identify how these methods meet guidelines and standards for teacher preparation in EE, excellence in early childhood EE, and state-level early learning guidelines focusing on nature.

**Presenter(s):** Jenny Leeper Miller (UNL Ruth Staple Child Development Laboratory), Erin Hamel (University of Nebraska–Lincoln), Julia Torquati (University of Nebraska–Lincoln)

**Strand:**

**I Love Rocks: Using Children’s Natural Interest to Explore Earth Materials**  
8:30 AM–10:00 AM, **Room 306**
Kids love rocks and so will you. So come dig in and muddy your day. The activities of this session will keep you busy and involved with rocks and soils. Every activity can be used with kids—tomorrow.

**Coordinator(s):** Bob Williams (University of Texas at Austin)

**Presenter(s):** Mary Hobbs (University of Texas at Austin)

**Strand:**

**Querying Rich Regional Geospatial Earth System Data for Environmental Education**  
8:30 AM–10:00 AM, **Room 303**
This session will introduce Data-enhanced Investigations for Climate Change Education (dicce.sri.com), a free resource for formal and informal study of NASA Earth observation data. Participants will be given guided practice designing inquiry activities with the data for their instructional programs.

**Presenter(s):** Daniel Zalles (SRI International)

**Strand:**

---

**Citizen Science & Public Participation in Scientific Research**  
**Connecting Kids and Nature**  
**Conservation Education and Behavior Change**  
**Greening Formal Education**  
**Leadership and Innovation**  
**Sustainable Communities**  
**Teaching about Environmental Issues**
Spirituality in EE Revisited: Lessons from the TorahTrek Guides Track
8:30 AM-10:00 AM, Room 304
The TorahTrek Guides Track blends Jewish spiritual practice, vision quests, mindfulness, wilderness experience, and core concepts of environmental education. It provides an innovative blueprint for how other programs can embrace a pluralistic and holistic approach to environmental education.
Presenter(s): Samuel Wasserman-Singer (University of Wyoming)
Strand: Bright Spots and Great Ideas
8:30 AM-10:00 AM
Throughout the conference, you can learn about five or six successful and loosely related programs in each 90-minute group of Bright Spots and Great Ideas. Each presentation is 12 minutes long, and sessions are presented in the order listed.

GROUP A
8:30 AM-10:00 AM, Room 315

Bridging Art and Science for Watershed Education
Learn about FOCUS (Forests, Oceans, Climate and US), a joint educational venture of the Wyland Foundation, Forest Service, and NOAA; Wyland’s Mobile Learning Experience (MLE); and how schools and others use MLE to begin exploring their watershed or supplement their curriculum.
Presenter(s): Barbara McGuinness (USDA Forest Service), Susan Cox (US Forest Service)
Strand: Carbon Awareness Partnership (CAP): A Multitiered Carbon Cycling Education Program
Research has shown that students at varying education levels lack critical knowledge concerning carbon cycling and the consequences of increasing carbon emissions. The Carbon Awareness Partnership works to increase education on carbon cycling, photosynthesis, respiration, fossil fuel burning, and sustainability.
Presenter(s): Eric Hall (Virginia Commonwealth University), Anne Wright (Virginia Commonwealth University)
Strand: When an Environmental Issue is Resolved: The Case of ‘Ozone Layer Depletion’
This presentation will share my experience in teaching ozone layer depletion with preservice teachers. Reviewing the practices of EE critically with focus on an environmental issue that is (being) resolved, this presentation may lead to discussions on teaching environmental issues.
Presenter(s): Chankook Kim (Korea National University of Education)

GROUP B
8:30 AM-10:00 AM, Room 316

Not Your Grandmother’s Librarian: Inspiring Websites for Environmental Education
Embrace the 21st century by combining online and print resources to develop programs and lessons for immersing kids in the environment. See an inspirational demonstration of how to combine a few amazing websites with books to refresh your curriculum.
Presenter(s): Pam Hosimer (University of Maryland Extension Master Gardener)

Improving Climate Literacy with New Media and the Green Ninja
Learn about a NASA funded project to improve climate literacy through development of an online resource center for teachers that includes educator-tested lesson plans, connections to NASA data and images, and videos featuring the Green Ninja, a climate-action superhero.
Presenter(s): Ellen Metzger (San Jose State University)
Strand: Placing Energy in Place
This presentation will share the impact of the development of spatial understandings and connections to place on the development of students’ understanding of energy and its use, empowering students to enter into a sustainable relationship with the world around them.
Presenter(s): Michael Jabot (SUNY Fredonia), Amy Lauer (Fredonia Central Schools), Greg Lauer (Fredonia Central Schools)

Placing Energy in Place
This presentation will share the impact of the development of spatial understandings and connections to place on the development of students’ understanding of energy and its use, empowering students to enter into a sustainable relationship with the world around them.
Presenter(s): Michael Jabot (SUNY Fredonia), Amy Lauer (Fredonia Central Schools), Greg Lauer (Fredonia Central Schools)
Strand: Placing Energy in Place
This presentation will share the impact of the development of spatial understandings and connections to place on the development of students’ understanding of energy and its use, empowering students to enter into a sustainable relationship with the world around them.
Presenter(s): Michael Jabot (SUNY Fredonia), Amy Lauer (Fredonia Central Schools), Greg Lauer (Fredonia Central Schools)

Placing Energy in Place
This presentation will share the impact of the development of spatial understandings and connections to place on the development of students’ understanding of energy and its use, empowering students to enter into a sustainable relationship with the world around them.
Presenter(s): Michael Jabot (SUNY Fredonia), Amy Lauer (Fredonia Central Schools), Greg Lauer (Fredonia Central Schools)

Placing Energy in Place
This presentation will share the impact of the development of spatial understandings and connections to place on the development of students’ understanding of energy and its use, empowering students to enter into a sustainable relationship with the world around them.
Presenter(s): Michael Jabot (SUNY Fredonia), Amy Lauer (Fredonia Central Schools), Greg Lauer (Fredonia Central Schools)
GROUP B, continued
8:30 AM–10:00 AM, Room 316

Visualize the Stewardship Schools Program
Come see a 3-D model of the Stewardship Schools Program which engages educators, natural resources professionals, and the greater community to create systemic change using natural resources throughout grade levels and subject areas as a foundation for teaching and learning.
Presenter(s): LeeAnn Mikkelson (Oregon Natural Resources Education Program)
Strand: ●

Watts Branch STREAM in D.C.
Students from Northeast Washington, D.C. will share their work in the Watts Branch STREAM program. They will discuss their leadership role in developing and supporting the use of a recently restored urban stream as an educational and community resource.
Presenter(s): Kurt Moser (Earth Force)
Strand: ●

What Would Architects of the “Toyota Way” Say About EE?
Explore how the seminal business philosophies of Drs. Deming and Goldratt can be applied to the EE Industry, providing a fascinating window into why aligning program goals with student achievement can radically increase donor and school engagement.
Presenter(s): Eaton Dunkelberger (Sierra Nevada Journeys)
Strand: ●

Young Stewards Recognizing Nature’s Wisdom While Working for Our Planet
The S.O.S., an environmental education project focused on endangered species and their habitats, guides students as they study their local environment and share their discoveries in creative and scientific ways. Presented by the founder of the Project, a WWMC “superstar.”
Presenter(s): Nilgun Erentay (Erentay Education Consulting)
Strand: ●

Traditional Presentations
8:30 AM–9:10 AM

A Citizen Science Success Story: CoCoRaHs—The Rain Gauge Network
8:30 AM–9:10 AM, Room 312
The Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) is citizen science at work. Thousands of volunteers actively measure and track precipitation online at www.cocorahs.org. This presentation addresses the challenges of recruiting, training, retaining, and engaging volunteers nationwide while maintaining research-quality data.
Presenter(s): Noah Newman (CoCoRaHS), Henry Reges (CoCoRaHS)
Strand: ●

Growing Beyond Competence: Facilitating Continuous Growth Among Educators
8:30 AM–9:10 AM, Room 317
The growth curve of educators often levels off in a plateau of competence. Pushing beyond this comfortable place requires overcoming the fears and biases that make learning from experience hard. We need a new way to learn while we teach.
Presenter(s): Colby Mitchell (Teton Science Schools)
Strand: ●

Three Different Approaches to Encourage Families to Interact in Nature
8:30 AM–9:10 AM, Room 318
Learn about three approaches a municipality has taken to reconnect children and families with nature. Session will focus on creating environments to encourage nature interactions, programming for target groups, and collaboration and promotion of regional website resourcing outdoor family activities.
Presenter(s): Heather Merchant (City of Plano)
Strand: ●
Using a “Flipped” Training Module to Build Subject Mastery
8:30 AM–9:10 AM, Room 321
This session will highlight a “Flipped” training module developed for the Jane Goodall Institute by Knowledge Factor. Participants will receive an overview of how the training module works and why it is successful, and will examine a pilot project in Denver, Colorado.
Presenter(s): Stephanie Keller (Jane Goodall Institute), Shawn Sweeney (Jane Goodall Institute)
Strand: Roundtable Discussions

Roundtable Discussions
8:30 AM–9:10 AM

Concrete, Cracks, and Critters: Exploring Schoolyard Science for Urban Teachers
8:30 AM–9:10 AM, Room 310, Table 1
Our urban population is on the rise and the disconnect with nature continues. Discover innovative approaches to engaging urban elementary teachers in science inquiry through the urban landscape. Learn how the Audubon Society of Rhode Island connects urban teachers and students with nature through their schoolyard.
Presenter(s): Kristen Swanberg (Audubon Society of Rhode Island and Rhode Island Environmental Education Association), Jennifer Klein (Audubon Society of Rhode Island)
Strand: Growing Youth, Growing Food, Growing Cleveland

Growing Youth, Growing Food, Growing Cleveland
8:30 AM–9:10 AM, Room 310, Table 4
Green Corps is more than a high school work study program using urban agriculture. Green Corps has become a community resource providing safe outdoor space, fresh fruits and vegetables, and hope for resilient urban communities in Cleveland.
Presenter(s): Julia Ferguson (Cleveland Botanical Garden)
Strand: Growing Youth, Growing Food, Growing Cleveland

A Day in the Life of the Carmans River
8:30 AM–9:10 AM, Room 310, Table 2
Learn how to engage students, schools, and community stakeholders to collect scientific information, create snapshots of an ecosystem at dozens of locations, and then share the data using web-based technology to better understand the ecological health of the ecosystem.
Presenter(s): Melissa Griffiths (Central Pine Barrens Joint Planning and Policy Commission), Melvyn Morris (Brookhaven National Laboratory)
Strand: Growing Youth, Growing Food, Growing Cleveland

ESD Research and Development of Idea Sheets for ESD’s Concepts
8:30 AM–9:10 AM, Room 310, Table 3
The National Institute for Educational Policy Research in Japan researched ways to easily introduce Education for Sustainable Development into curriculum. The resulting Idea Sheet presents six complex concepts in a beautiful, fascinating, and understandable manner. It has proven effective for systematically introducing ESD in schools.
Presenter(s): Masakazu Goto (National Institute for Educational Policy Research of Japan), Naoyuki Tashiro (National Institute for Educational Policy Research of Japan), Yasuhiro Okamoto (Okayama University of Science)
Strand: A Day in the Life of the Carmans River

How Effective Are School Field Trips and Short EE Experiences?
8:30 AM–9:10 AM, Room 310, Table 5
Field trips and classroom presentations are popular EE programs offered by informal education organizations. Many schools and nature centers alike are questioning the effectiveness and value of these brief, one-time experiences. What’s their long-term impact, and are they worth it?
Presenter(s): Robert Mardiney (Irvine Nature Center)
Strand: How Effective Are School Field Trips and Short EE Experiences?
Study of Natural Habitats as Curriculum for Young Children
8:30 AM–9:10 AM, Room 310, Table 6
This session discusses an innovative university course that engages preservice teachers in exploring natural habitats. Strategies for parallel teaching and learning experiences will be shared. Participants will be invited to imagine how place-based curriculum might look and be implemented in their own communities.
Presenter(s): Yash Bhagwanji (Florida Atlantic University)

Strand:
Thursday 9:20 AM
The following sessions all start at 9:20 AM. End times vary with the type of session as indicated.

Traditional Presentations
9:20 AM–10:00 AM

Amphibian Monitoring STEM Style
9:20 AM–10:00 AM, Room 312
Students in Calvert County, Maryland have been monitoring amphibians and reptiles for the state atlas project. Using innovative technological tools, students gather and analyze data from their backyards and schoolyards. This unit of study can easily be adapted for different regions and other citizen science projects.
Presenter(s): Thomas Harten (Calvert County Public Schools)
Strand:

Can Classroom Presentations Change Attitude and Behavior? An Evaluation Study
9:20 AM–10:00 AM, Room 317
Do students increase recycling and waste prevention behaviors because of classroom presentations? Which is more compelling: qualitative or quantitative data? Join us as we share results, tips, and insights from evaluating waste reduction education programs in classrooms and at outdoor schools.
Presenter(s): Freda Sherburne (Metro)
Strand:

Energy and Natural Resources: Hands-On Climate Change Education
9:20 AM–10:00 AM, Room 321
Imagine students’ reactions when an Environmental Volunteer walks in with a Super Soaker to teach a class about climate change and renewable resources! Boring no more! Learn about a fun, innovative, and effective hands-on science curriculum for elementary students.
Presenter(s): Brittany Sabol (Environmental Volunteers)
Strand:

Environmental Education Resources and Opportunities for Teacher Collaboration
9:20 AM–10:00 AM, Room 318
The Nature Conservancy has launched two innovative education programs. Leaders in Environmental Action for the Future (LEAF) partners with urban environmental high schools and helps educators share best practices. Nature Works Everywhere offers free online resources, including videos and lessons.
Presenter(s): Dan Strauss (The Nature Conservancy), Sara Elliott (The Nature Conservancy)
Strand:

Implementing the U.S. Department of the Interior’s STEM Strategic Plan
9:20 AM–10:00 AM, Room 320
Did you know the Department of the Interior has a STEM strategic plan? Learn and discuss how we’re working to increase science literacy and prepare an inclusive 21st century workforce with a focus on underrepresented populations.
Presenter(s): Maria Arnold (Office of Youth, Partnerships, and Service, U.S. Department of the Interior)
Strand:
Roundtable Discussions
9:20 AM–10:00 AM
Citizen Science with 4H and Other Youth Groups: Opportunities and Challenges
9:20 AM–10:00 AM, Room 310, Table 1
The Cornell Lab of Ornithology is partnering with 4H to explore how best to support educators interested in engaging youth in citizen science. We’ll host discussion about the opportunities and challenges of using citizen science with youth groups.
Presenter(s): Ileana Betancourt (Cornell Lab of Ornithology)
Strand: Climate literacy and Energy Awareness Network (CLEAN Network)
9:20 AM–10:00 AM, Room 310, Table 2
This Network enables educators to learn from a diverse stakeholder community as they work to improve climate change and environmental education, and enable informed decision-making. Learn how you can leverage this community, make use of our resources and/or get involved.
Presenter(s): Tamara Ledley (TERC), Roberta Burnes (Kentucky Division for Air Quality), Frank Niepold (NOAA Climate), Peggy Steffen (NOAA National Ocean Service), Karen Hollweg (EECapacity, Climate Change EE Professional Learning Community)
Strand: The greening STEM: Promoting Collaboration in Environmental Literacy in D.C.
9:20 AM–10:00 AM, Room 310, Table 3
A case study of a workshop that promoted collaboration among competing initiatives (Sustainable DC Plan, ELP, NGSS, STEM, Work Force) while simultaneously identifying and selecting STEM activities using the environment as a foundation for establishing environmental literacy for 8th graders.
Presenter(s): Rebecca Davis (DCEEC)
Strand: Utilizing the Power of Collaboration to Strengthen Environmental Education in Communities
9:20 AM–10:00 AM, Room 310, Table 7
Funders, practitioners, and researchers have developed collective strategies and a shared vision for environmental education in the San Francisco Bay Area. Join us for a thought-provoking discussion about utilizing the power of collaboration to strengthen environmental education in communities.
Presenter(s): Kirk Anne Taylor (Environmental Education Collaborative), Jason Morris (NatureBridge), Craig Strang (Lawrence Hall of Science)
Strand: Impact of Environmental Education Strategies on Public Participation in Sanitation
9:20 AM–10:00 AM, Room 310, Table 4
A total of 3,000 female heads of household within six local government areas in Lagos State, Nigeria were involved in the study. It was established that effective environmental communication and message delivery were achieved using radio and traditional strategies.
Presenter(s): Akuego Madumere (n/a)
Strand: Next Generation Energy Literacy!
9:20 AM–10:00 AM, Room 310, Table 5
A presentation about “Energy Literacy: Essential Principles and Fundamental Concepts for Energy Education” with emphasis on connections to the Next Generation Science Standards and currently available resources for engaging learners from K–12 and beyond.
Presenter(s): Josh Sneideman (U.S. Department of Energy)
Strand: A School-Based Environmental Educator: Getting Students Learning Outside
9:20 AM–10:00 AM, Room 310, Table 6
We will compare the structure, funding, and content of two school-based programs for elementary schools: a Naturalist in Residence and a Garden Educator. Program successes, struggles, and rewards will be discussed.
Presenter(s): Roberta Hunter (Acorn To Oak Environmental Education/Rutgers University)
Strand:
**Poster Presentations**

9:20 AM–10:00 AM

1a) Conservation and Education Outcomes of a Mexican-Based Citizen Science Program
9:20 AM–10:00 AM, Room 309
Ecology Project International partners Mexican high school students with marine mammal researchers working in the Sea of Cortez. This poster will present educational outcomes and data being used to demonstrate the need for a whale refuge in the region.
Presenter(s): Marie Sylviane Jaume Schinkel (Ecology Project International)

1b) A Creative Mapmaking Activity to Connect Kids and Nature
9:20 AM–10:00 AM, Room 309
Children today are growing up with a rapidly changing marine environment. This poster will outline the process and outcomes of an inter-generational mapmaking activity carried out by school children and their parents/grandparents in an industrial coastal city in Queensland, Australia.
Presenter(s): Chloe Paterson de Heer (Central Queensland University)

1c) Engaging Rural Volunteers in American Chestnut Research
9:20 AM–10:00 AM, Room 309
Learn how we are engaging Appalachian residents in research by having them plant and monitor American chestnut seedlings on their property and share data using a National Geographic mapping tool. We will highlight impacts on volunteers and on chestnut restoration.
Presenter(s): Cathlyn Stylinski (University of Maryland Center for Environmental Science)

1d) Firefly Watch: A Community-Based Program
9:20 AM–10:00 AM, Room 309
We will describe our firefly watch program, aimed at promoting scientific inquiry, service learning, sustainability, and stewardship. We will discuss how we recruit and orient participants to the project, showcase our iPhone application, and discuss the impacts of the project.
Presenter(s): Michelle Cook (Clemson University)

1e) The Healing Power of Nature
9:20 AM–10:00 AM, Room 309
This poster presents the research and literature base about nature and health in order to show the scope and depth of the impacts of the natural environment on human health and development and how this research supports environmental education.
Presenter(s): Denise Mitten (Prescott College), Chiara D’Amore (Prescott College), Janet Ady (US Fish and Wildlife Service)

1f) Narratives of Adults Becoming a Docent in a Natural History Museum in Korea
9:20 AM–10:00 AM, Room 309
This study explored how adults have transformed their identity by becoming environment-related volunteers and sought its implication as a form of nonformal adult education, through a narrative research based on in-depth interviews with three docents in a national history museum in Korea.
Presenter(s): Tae-yeon Kim (Seoul National University)

1g) The Role of Environment Education in Overcoming the Double-Faced Experience of Environment Beauty
9:20 AM–10:00 AM, Room 309
People experience the natural environment both positively and negatively. This study explores two related questions: How do we increase understanding rather than judgment of environmental beauty? What factors affect environmental understanding and how can we use this information to create citizens who care about the environment?
Presenter(s): Joo-young Lee (Korea National University of Education)
1h) Wetlands Restoration, Environmental Literacy, and Hope: An Interactive Relationship
9:20 AM–10:00 AM, Room 309
What is the relationship between environmental literacy and hope in children? This presentation puts the findings of a mixed-methods study of children’s attitudes toward nature in conversation with conceptual models of hope, in the context of a wetlands restoration project.
Presenter(s): Emily DeMoor (Georgetown College)
Strand: ●

Thursday 10:00 AM
The following sessions all start at 10:00 AM. End times vary with the type of session as indicated.

Coffee Break
10:00 AM–10:30 AM, 3rd Floor Lobby

Community EE Fellowship
10:00 AM–11:30 AM, Room 322
By invitation.

Thursday 10:30 AM
The following sessions all start at 10:30 AM. End times vary with the type of session as indicated.

Traditional Presentations
10:30 AM–11:10 AM

A-Counting We Will Go: The Experience of a Lifetime
10:30 AM–11:10 AM, Room 316
What is more exciting than staying up late, wearing a head lamp and boots, and witnessing a most extraordinary event? Nothing! That is why so many people join us to participate in the annual Delaware Bay Horseshoe Crab Spawning Survey.
Presenter(s): Jennifer Holmes (Delaware National Estuarine Research Reserve)
Strand: ●

River Education Initiatives: Our Mississippi Educator Guide
10:30 AM–11:10 AM, Room 320
This fast-paced, interactive workshop, based on the Our Mississippi Educational Activities Guide, is great for both formal and informal educators. Engage in spirited conversation, hands-on activities, and networking opportunities. Get your hands on this balanced and comprehensive educational activities guide!
Presenter(s): Erin Anne Hilligoss-Volkmann (US Army Corps of Engineers), Angela N. Smith (US Army Corps of Engineers)
Strand: ●

Assessment of Change in Conservation Attitudes Through Zoo Education
10:30 AM–11:10 AM, Room 315
Are 21st century zoos catalysts for conservation? U.S. zoos reach 143 million visitors annually. The question, however, is do they inspire visitors to take meaningful conservation action? Discover a recent zoo study and take home helpful evaluation tools for your site.
Presenter(s): Teresa Randall (Oklahoma City Zoo)
Strand: ●

BMPs for the World We Need to Implement Environmental Literacy Plans
10:30 AM–11:10 AM, Room 306
What are the best management practices for states implementing Environmental Literacy Plans? Find out what states are saying about what works and doesn’t work when trying to implement their ELP’s.
Presenter(s): Pat Stephens Williams (SFA), Nancy Herron (Texas Parks and Wildlife Department), Christine Moseley (University of Texas at San Antonio)
Strand: ●

Children and Nature Initiative: Rx for Outdoor Activity
10:30 AM–11:10 AM, Room 302
The Children and Nature Initiative: Rx for Outdoor Activity connects children to nature to promote good health and environmental stewardship, by engaging communities and educating pediatric health professionals to prescribe nature.
Presenter(s): Jane Chang (National Environmental Education Foundation)
Strand: ●
Educating Like a Marketer: Social Marketing Increases Backyard Conservation
10:30 AM–11:10 AM, Room 303
Learn how marketing techniques can work when traditional education and outreach efforts fail. We had to let go of our perceived notions about education to achieve behavior change—in our case increasing the number of environmentally-friendly yards in the community.
Presenter(s): Leah Miller (Izaak Walton League of America)
Strand:

EECapacity: Update on EPA’s National Environmental Education Training Program
10:30 AM–11:10 AM, Room 312
What’s happening with EECapacity, EPA’s National EE Training Program? Come learn about grants to state consortia, new Community EE Guidelines, online courses and learning communities, publications on urban EE, and new tools for planning and evaluation. We will also discuss plans for an EE Leadership Academy.
Presenter(s): Marianne Krasny (Cornell University), Augusto Medina (EECapacity Project), Akiima Price (Akiima Price Consulting), Jose Marcos-Iga (Environmental Education Exchange), John Fraser (New Knowledge Organization), Alex Kudryavtsev, Yue Li (Cornell University), Judy Braus (NAAEE)

Engaging Residents in Transitions Toward Sustainable Cities
10:30 AM–11:10 AM, Room 305
Learn about innovative strategies cities in North America and Australia are implementing to engage residents in sustainability efforts—from programs that draw on insights from communication and psychology to ones that apply community asset and deliberative democracy principles.
Presenter(s): Michaela Zint (University of Michigan)
Strand:

Experiencing the Power of Collaborative Place-Based Service Learning
10:30 AM–11:10 AM, Room 301
The Trail to Every Classroom program innovates place-based service learning. Now in its eighth year, it has trained 350 teachers and community partners, and has engaged approximately 20,000 students. Sharing program evaluations and research, this interactive session highlights the merits of this effective place-based pedagogy.
Presenter(s): Robert Siudzinski (Washington College)
Strand:

Good, Bad, and Ugly: An Invasive Species Toolkit for Educators
10:30 AM–11:10 AM, Room 311
Engage in a hands-on learning experience that explores the concept of invasive species. This presentation will examine the invasive species common to the mid-Atlantic region, how they got here, and how educators and their students can take action!
Presenter(s): Cindy Etgen (Maryland Dept of Natural Resources), Juliann Dupuis (Notre Dame of Maryland University), Kerry Wixted (Maryland Department of Natural Resources)
Strand:

Help Launch an Alliance for Early Childhood Environmental Education
10:30 AM–11:10 AM, Room 317
NAAEE has launched a new initiative to help early childhood educators connect young children with nature. Find out how the Natural Start Alliance can help you advance your work, and how you can help build the alliance.
Presenter(s): Christy Merrick (NAAEE/Natural Start), Betty Olivolo (NAAEE/Natural Start)
Strand:
How We Implemented EE Social Justice Modules in 94 Schools
10:30 AM–11:10 AM, Room 318
University of Texas El Paso, EPA, and El Paso ISD partnered to write modules on air quality issues in border regions. Modules are implemented in every grade and reach 50,000 children each year. This session explores the project’s design and evaluation.
Presenter(s): Elaine Hampton (University of Texas at El Paso), Theresa Turner (El Paso ISD), Amy Canales (EPISD)
Strand: Innovative Education: The Inquiry-based Journey from Learner to Leader

Innovative Education: The Inquiry-Based Journey from Learner to Leader
10:30 AM–11:10 AM, Room 304
Inquiry is not only an integrated learning tool but can be a powerful agent for social change, public engagement, and ecological stewardship. Discover how inquiry-based explorations encourage graduate students, community members, and working professionals to become effective leaders for change.
Presenter(s): Kathryn Corr (Cleveland Metroparks Zoo), Jill Korach (Miami University)
Strand: Innovative Education: The Inquiry-based Journey from Learner to Leader

Overcoming Barriers to Sustainable Living Through Understanding of Specific Principles
10:30 AM–11:10 AM, Room 321
To create the change to sustainable living, we need to understand some simple principles that make the choices appealing. Most people currently are unaware of the forces controlling their decisions for living. These sustainability principles are interactively outlined here.
Presenter(s): Richard Jurin (University of Northern Colorado)
Strand: Overcoming Barriers to Sustainable Living Through Understanding of Specific Principles

To Wear or Not To Wear Our Values on Our Sleeves
10:30 AM–11:10 AM, Room 319
How transparent are you with your students about your own environmental values and ethics? This presentation will offer data suggesting that as educators we should be thinking about this question, as well as a framework for how to do so.
Presenter(s): Nicole Beeman-Cadwallader (Indiana University)
Strand: To Wear or Not To Wear Our Values on Our Sleeves

Teens as Teachers: Connecting Urban Youth to Nature
10:30 AM–11:10 AM, Room 314
Greater connection to nature comes when you are also expected to teach it. This session will explore the strengths and challenges of involving teens as teachers, and will include an open dialogue about best practices to effectively empower urban teens.
Presenter(s): Jody Van Riper (Oregon Zoo), Tracy Ocampo (Oregon Zoo)
Strand: Teens as Teachers: Connecting Urban Youth to Nature
Roundtable Discussions
10:30 AM–11:10 AM

Connecting Communities Across Space and Time for Sustainability and Justice
10:30 AM–11:10 AM, Room 310, Table 1
Critically engage with others in discussing the questions: “How can we connect communities across space and time to better achieve sustainability and justice?” and “What is the role of education in creating these connections and linkages?”
Presenter(s): Scott Fisher (The Graduate Center of the City University of New York)
Strand: Critical Pedagogy and Tar Sands Curriculum for the Fort McKay First Nation Elementary

Critical Pedagogy and Tar Sands Curriculum for the Fort McKay First Nation Elementary
10:30 AM–11:10 AM, Room 310, Table 2
Fort McKay is a small community downstream from the Tar Sands in Alberta. Local elementary school students are educated primarily about the economic benefits of the oil industry. Come critique and improve this critical pedagogy/place-based/eco-justice/problem solving curriculum that is creating an environmentally literate and responsible citizenry!
Presenter(s): Paul Steury (Merry Lea Environmental Learning Center of Goshen College)
Strand:

Eye in the Sky: Open Technology and Environmental Education
10:30 AM–11:10 AM, Room 310, Table 3
This workshop teaches participants to make and use DIY tools for environmental surveillance developed by the Public Laboratory for Open Technology and Science. The workshop includes a brainstorming session to develop new applications for DIY tools in environmental education.
Presenter(s): Philip Silva (TreeKIT)
Strand:

Going Beyond Sustainable: A Look at a Model and Replicable Program
10:30 AM–11:10 AM, Room 310, Table 4
What does it mean to be a model and replicable EE program? How to make a model and replicable program sustainable beyond the initial great idea? Join Bridging the Watershed partners to talk about the keys to building a successful program.
Presenter(s): Keith Roumfort (Alice Ferguson Foundation)
Strand:

Got Visitors? Monthly Theme Days Drive Increased Visitation and Revenue
10:30 AM–11:10 AM, Room 310, Table 5
Want to increase visitation to your facility? At this roundtable, we’ll discuss a tested and successful monthly theme day program at The Marine Mammal Center that significantly increases visitation and revenue. Techniques will be shared that can be replicated at your facility.
Presenter(s): Adam Ratner (The Marine Mammal Center)
Strand:

Impact of Infusing EE into a Teacher Preparation Program
10:30 AM–11:10 AM, Room 310, Table 6
This session will share the results of a study to determine the level of impact of a teacher preparation program infused with EE on preservice teachers’ understanding of the environment and as a result, how competent they feel teaching about the environment.
Presenter(s): Blanche Desjean-Perrotta (UTSA), Courtney Crim (Trinity University)
Strand:

Nature: It’s What the Doctor Ordered!
10:30 AM–11:10 AM, Room 310, Table 7
Get up and go! Learn about innovative ways that Irvine Nature Center is promoting wellness by connecting children to nature. From fitness to healthy cooking, participants will gain a myriad of ideas and a little sweat on their brow.
Presenter(s): Courtney Sagal (Irvine Nature Center)
Strand:
Poster Presentations
10:30 AM–11:10 AM

2a) Effects of an Action Research Program on Students’ Environmental Concern
10:30 AM–11:10 AM, Room 309
We evaluated an action research recycling project with elementary school students, and we studied its effect on participants’ knowledge, locus of control, willingness to act and self-reported, as well as actual, behavior.
Presenter(s): Stella Petrou (University of Cyprus, Department of Education), Konstantinos Korfiatis (University of Cyprus), Maria Kyratzi (Primary School)

2b) Engaging Undergraduate Students in Socio-Environmental Synthesis Learning About Environmental Issues
10:30 AM–11:10 AM, Room 309
We present frameworks of undergraduate student proficiency at doing socio-environmental synthesis (SES), and for effective SES pedagogy. Examples and insights from jigsaw-based case studies at our five diverse sites will be shared, along with results from our common assessment tools.
Presenter(s): Alan Berkowitz (Cary Institute of Ecosystem Studies), Caroline Solomon (Gallaudet University)

2c) Metacognitive Learning: A Tool for Preparing Environmental Problem Solvers?
10:30 AM–11:10 AM, Room 309
Increased emphasis on metacognitive skills in environmental education may help build adaptive capacity of individuals and societies in a time of rapid ecological change. We’ll explore the role that metacognitive learning can play to boost student environmental problem-solving ability.
Presenter(s): Katie Spellman (University of Alaska Fairbanks)

2d) A New Approach to Urban Environmental Education
10:30 AM–11:10 AM, Room 309
This poster session will focus on the connections made between service, place-based, experiential, and multicultural learning for the development of environmental programs for urban youth. Participants will leave considering how they can better reach youth from marginalized communities.
Presenter(s): Edith Bunch (New York University)

2e) Science Teachers’ Subject Matter Knowledge on Environmental Issues in the Context of Sustainable Development
10:30 AM–11:10 AM, Room 309
This study investigates science teachers’ subject matter knowledge in the context of sustainable development. In-service teachers clearly identified basic concepts related to environmental issues such as matter cycles, renewable energy sources, and recycling. However, they had difficulties on relations between these issues and SD.
Presenter(s): Bahar Yilmaz Yendi (Middle East Technical University), Ceren Oztekin (Middle East Technical University), Elvan Sahin (Middle East Technical University)

2f) What a Gas! Marcellus... Utica... Development Understanding in Hands-On Activities
10:30 AM–11:10 AM, Room 309
Shale gas development in your area? Engage in two hands-on activities created by Creek Connections, Allegheny College, and Dickinson College’s ALLARM staff and students to understand potential impacts from the industry—environmental and social.
Presenter(s): Wendy Kedzierski (Creek Connections - Allegheny College), Laura Branby (Creek Connections, Allegheny College)
Thursday 11:30 AM

Keynote Address
11:30 AM-12:30 PM, Room 307-308

KRISTEN GRIMM
Communicating the Power of EE

Kristen Grimm is the founder and president of Spitfire Strategies, one of the country’s leading public relations firms dedicated to working exclusively with nonprofits and foundations to create positive social change. Clients of the firm include the David and Lucille Packard Foundation, the William and Flora Hewlett Foundation, the Ford Foundation, Brookings Institution, Surdna Foundation, and Community Catalyst. Kristen has developed numerous resources for the field including the Smart Chart 3.0, Discovering the Activation Point, the Just Enough Planning Guide and Big Ideas to Big Change.

Prior to launching Spitfire, Kristen worked as a fellow at the Vietnam Veterans of America Foundation (VVAF). Before her fellowship, she was the president and chief operating officer of Fenton Communications, where she wrote NOW HEAR THIS: The Nine Laws of Successful Advocacy Communications.

Kristen has a B.A. from Smith College. She currently serves on the boards of Grist magazine, the National Academy for State Health Policy, and Alaska Wilderness League.

Thursday 12:00 PM

Exhibit Fair
12:00 PM–5:00 PM, Exhibit Hall A

Thursday 12:30 PM

Lunch Break
12:30 PM–2:15 PM

Concessions available in Exhibit Hall A.

---

National Wildlife Federation's mission is to inspire Americans to protect wildlife for our children's future.

NWF works with more than 4 million members, partners, and supporters nationwide to actively educate, inspire, and promote achievable conservation solutions in communities from coast-to-coast. NWF has a 40-year history of educating children and young adults about the environment and offering carefully designed programs that engender environmental stewardship skills, increased science and technical knowledge and capability and valuable lifelong leadership skills. These programs include NWF Eco-Schools USA, NWF Schoolyard Habitats and the NWF Campus Ecology program.

www.nwf.org
**Thursday 1:00 PM**

**Meetings & Special Sessions**
1:00 PM–2:00 PM

**Advocacy Committee Meeting**
1:00 PM–2:00 PM, Room 301

The NAAEE Advocacy Committee coordinates the advocacy function for NAAEE, activating members, board, staff, other committees, commissions, and councils, and outside stakeholders to work towards increasingly favorable legislative and regulatory environments, and governmental funding for environmental education on all levels. Open to all.

**Diversity Committee Meeting**
1:00 PM–2:00 PM, Room 303

Join us for the annual gathering of the Diversity Committee and meet members from across North America. This meeting will outline short and long term strategies and open dialogue about how to effectively broaden participation in NAAEE from diverse communities, ethnicities, and cultural backgrounds. Open to all.

**EE Certification/Accreditation Focus Group**
1:00 PM–2:00 PM, Room 302

By invitation.

**Preservice Advisory Board Meeting**
1:00 PM–2:00 PM, Room 306

We will be discussing the work of the Preservice Advisory Board and welcome all who are interested in learning more about our ongoing initiatives to increase EE in Educator Preparation Programs. Come learn how our work can support you, your institution, and your preservice teachers. Open to all.

**Sustainability Education Special Interest Group**
1:00 PM–2:00 PM, Room 304

Meet the Co-Chairs and members of the Sustainability Education Interest Group and learn about how you can get involved in the group’s activities. Open to all conference participants.

**Young Professionals Workshop:**
Resume Writing, Interview Skills, and LinkedIn
1:00 PM–2:00 PM, Room 305

Spend the lunch hour learning how to best market yourself on paper, in person, and online. Bring your resume and a computer if you have one.

**Thursday 2:15 PM**

The following sessions all start at 2:15 PM. End times vary with the type of session as indicated.

**Symposia**
2:15 PM–3:45 PM

**Certification 101: Exploring the Design and Development of a New Certification Program**
2:15 PM–3:45 PM, Room 319

Experienced certification program representatives will describe their experiences and discuss your questions about needs assessments, forming an advisory board, determining program structure, selecting a certifying agent, and more. Meet with representatives and find a model to help develop your own program.

*Presenter(s):* Katie Navin (Colorado Alliance for Environmental Education), Sarah Haines (Maryland Association for Environmental and Outdoor Education), Jen Bucheit (Environmental Education Council of Ohio), Elizabeth Schmitz (Kentucky Association for Environmental Education)

**EE’s Role: Helping Returning Military Combatants and Their Families Heal**
2:15 PM–3:45 PM, Room 314

Returning military combatants can benefit from participation in outdoor activities but few programs exist. Explore EE’s role in helping veterans, wounded warriors, and their families heal through outdoor recreation, nature, and stewardship activities that focus on their needs.

*Moderator:* Flisa Stevenson (Cornell Lab of Ornithology)

*Coordinator:* Augusto Medina (EECapacity Project)

*Presenter(s):* Madeline Bachner (Cottonwood Institute), Benjamin Haberthur (Forest Preserve District of Kane County), Donna Love (n/a), Daniel Morgan (Project Healing Waters)
Nature Scene Investigators: Best Practices for Connecting Kids with Nature  
2:15 PM–3:45 PM, Room 315  
Calling all nature detectives! Explore case studies and learn best practices for environmental education activities that connect kids to nature. Engage in a creative hands-on session to design a self-guided environmental education activity of your own.  
Presenter(s): Lori Kiesser (Inside the Outdoors), Pam Johnson (Inside the Outdoors), Sarah Milligan-Toffler (Children & Nature Network)  
Strand: ●

Hands-on Presentations  
2:15 PM–3:45 PM  
Climate Change and Southeastern Forests: A New PLT Secondary Module  
2:15 PM–3:45 PM, Room 304  
Come get your copy of a brand new teaching resource focused on climate change and southern pine forests. Do some activities and find out how others would adapt them for their classes.  
Presenter(s): Martha Monroe (University of Florida), Annie Oxarart (University of Florida), Jie Li (University of Florida), Tracey Ritchie (Bald Head Island Conservancy), Al Stenstrup (Project Learning Tree), Kristen Glover (University of Florida)  
Strand: ●

Diving Deeper into Data; NGSS, Common Core, and NOAA Data  
2:15 PM–3:45 PM, Room 303  
NOAA has collected and made available vast amounts of earth systems science and data. Learn how to access and use these resources in support of the Common Core and Next Generation Science Standards. Bring a laptop, so you can play too.  
Presenter(s): Bart Merrick (NOAA), Peggy Steffen (NOAA National Ocean Service), Frank Niepold (NOAA Climate)  
Strand: ●

Get Out and Play: Connecting Kids with Nature Through Games  
2:15 PM–3:45 PM, Room 305  
Games can increase sensory awareness, reinforce concepts and vocabulary, and simulate complex ecological interactions. Come prepared to play as we demonstrate games for elementary aged children and discuss finding the right games for your goals and students.  
Presenter(s): Karen Vernon (Audubon Naturalist Society), James Robey (Audubon Naturalist Society)  
Strand: ●

Stretch Your Legs with Citizen Science  
2:15 PM–3:45 PM, Room 311  
Interested in trying eBird citizen science but worried you don't know enough about birds? Come see how simple it can be with a walk followed by submitting and viewing data and discussing how this fits with STEM learning in out-of-school settings.  
Presenter(s): Anne Rosenberg (Cornell Lab of Ornithology)  
Strand: ●

Teaching Biodiversity Using a Learning Progression Framework and LEAF Packs  
2:15 PM–3:45 PM, Room 306  
Using assessment results from students in grades 6–12 from six states, we will share a learning progression describing student understanding of the big ideas of biodiversity and engage participants in the hands-on, inquiry-based LEAF pack unit based on this work.  
Coordinator(s): Laurel Hartley (University of Colorado Denver), Jennifer Doherty (Michigan State University)  
Presenter(s): Cornelia Harris (Cary Institute of Ecosystem Studies), Alan Berkowitz (Cary Institute of Ecosystem Studies)  
Strand: ●

Take the Plunge with the New Project WET 2.0  
2:15 PM–3:45 PM, Room 301  
Have you experienced Project WET 2.0? The Project WET Foundation released the Curriculum and Activity Guide 2.0 in 2011 with new activities and free resources through our Portal and Discover Water websites. Project WET now offers additional online educational experiences.  
Presenter(s): Theresa Schrum (Project WET), Molly Ward (Project WET Foundation)  
Strand: ●
Bright Spots and Great Ideas
2:15 PM–3:45 PM, Room 316

Throughout the conference, you can learn about five or six successful and loosely related programs in each 90-minute group of Bright Spots and Great Ideas. Each presentation is 12 minutes long, and sessions are presented in the order listed.

Art in Nature: Connecting Creative Process with Environmental Education
Grounded in the history and research of nature-based art, this presentation invites participants to experientially discover how art bridges environmental issues with children in innovative ways. Calling on biophilia, it offers practical knowledge of integrating eco-art across curricula.
Presenter(s): Eva Auzou (University of Quebec in Montreal), Kelly Johnson (Wings, Worms, and Wonder)
Strand:

Cool Science: Using Art to Foster Learning About Climate Change Science
How can art be used to communicate science? Cool Science selected climate change artwork from K-12 students in Massachusetts. The six best pieces were put on public display on mass transit including bus interiors/exteriors and the main terminal.
Presenter(s): David Lustick (University of Massachusetts Lowell)
Strand:

Faces & Places of Northern Wisconsin
The Faces & Places of Northern Wisconsin is a program to enhance the sense of place and place-connection of residents of northern Wisconsin through sharing of personal stories and youth art. Program approaches, resources and successes will be shared.
Presenter(s): Jeremy Solin (LEAF/Wisconsin Center for Environmental Education)
Strand:

Raising Student Achievement Through a Multidisciplinary Project-Based Program
Explore an innovative after school program for underachieving students at an elementary school in rural Virginia. This project-based program has invigorated students’ enthusiasm for after school learning and has demonstrated increases in test scores for students involved.
Presenter(s): Melissa Hutchinson (Camp Wesley Woods)
Strand:

Using Anime to Communicate Conservation
NASA’s GPM mission conducted an “Anime Challenge” to engage students and young adults worldwide in learning about conservation of freshwater resources. This online competition attracted a great many participants across the globe!
Presenter(s): Dorian Janney (MCPS)
Strand:

Traditional Presentations
2:15 PM–2:55 PM

Addressing Environmental Issues with a STEMester of Service™
2:15 PM–2:55 PM, Room 320
Students become eager environmental advocates through a STEMester of Service, an extended service learning program. This interactive workshop shows how students meet classroom-based academic standards and gain critical 21st century skills. Leave with tools and strategies ready to use today!
Presenter(s): Susan Abravanel (Youth Service America), Scott Ganske (Youth Service America)
Strand:

Connecting Latino Youth with Outdoors: A California Example and Opportunity
2:15 PM–2:55 PM, Room 317
For over 30 years the California Mini-Corps Outdoor Education Program has been connecting Latino Youth with the outdoors and developing their leadership potential. Learn more about this model of success, the challenges and opportunities, and ideas to diversify the outdoor and environmental education field.
Presenter(s): Jose Gonzalez (Latino Outdoors)
Strand:
E-STEM Innovation: Exploring EE as a Pathway to STEM Success
2:15 PM–2:55 PM, Room 302
This session will explore what practitioners believe are the priorities for innovation in E-STEM education. Reporting on a national study conducted for NAAEE and Underwriters Laboratories, we will discuss what we know works and new priorities for advancing an EE agenda.
Presenter(s): Christiane Maertens (NAAEE), John Fraser (New Knowledge Organization)
Strand: 

EECapacity State Consortia: Successes and Challenges of Collaborative Networking
2:15 PM–2:55 PM, Room 312
State Consortia bring together partners from widely varied community and environmental organizations to learn from each other and exchange perspectives over the course of one year. Consortium partners will share some exciting approaches and associated challenges that have emerged from the cooperative learning experiences.
Presenter(s): Ashley Hoffman (Kentucky Association for Environmental Education), Malinda Mochizuki (Colorado Alliance for Environmental Education), Juan Reynosa (Southwest Organizing Project), Andree’ Walker Bravo (The Utah Society for Environmental Education), Lori Mann (NAAEE), Jose Marcos-Iga (Environmental Education Exchange)

Nonprofit Group Connects Kids and Nature
2:15 PM–2:55 PM, Room 318
Friends of the Arcata Marsh (FOAM) raises awareness about wetlands, wildlife, and wastewater treatment at the Arcata Marsh and Wildlife Sanctuary located in northern California. Their educational program is geared for elementary students and facilitated by preservice EE providers and interpreters from the local University.
Presenter(s): Jennifer Ortega (Humboldt State University)
Strand: 

Ocean Water Desalination 101
2:15 PM–2:55 PM, Room 322
Learn more about this controversial water treatment technology and how it will affect future water supplies. Discover how a California water agency nurtured community support by participating in a videoconference tour of its ocean water desalination facility and education center.
Presenter(s): Darryl Ramos-Young (West Basin Municipal Water District)
Strand: 

Roundtable Discussions
2:15 PM–2:55 PM
Bridging Knowledge, Closing Educational Achievement Gaps: Turnkey Educational Resource Centers
2:15 PM–2:55 PM, Room 310, Table 1
Learn about a program for creating school campus outdoor learning centers, including intermittent wetland design, construction, and associated inquiry-based interdisciplinary curriculum.
Presenter(s): Todd Fritchman (Envirotech Environmental Consulting, Inc.)
Strand: 

Continuous Improvement: Restructuring Internships for and as Sustainable Communities
2:15 PM–2:55 PM, Room 310, Table 2
In an effort to offer best sustainable community practices as an office and for our interns, as well as for the planet, we set out to identify what is working well and what needs improvement. Find out what happened next!
Presenter(s): Jonna Johnson (Western Michigan University)
Strand: 

THURSDAY
Engaging Student Learning Through the Earth Charter at Florida Gulf Coast University
2:15 PM–2:55 PM, Room 310, Table 3
Join faculty from Florida Gulf Coast University and learn practical applications and teaching strategies for incorporating the Earth Charter in your education program. Faculty will share tips and tricks for integrating the Earth Charter through service learning, assignments, and interactive activities.
Presenter(s): Sarah Davis (Florida Gulf Coast University), Kim Charmatz (Florida Gulf Coast University), Greg Lankenau (Florida Gulf Coast University)
Strand: Entertainment-Education for Environmental-Education

Entertainment-Education for Environmental-Education
2:15 PM–2:55 PM, Room 310, Table 4
This presentation will explore PCI Media Impact’s Entertainment-Education initiatives that address sustainable development and environmental collaboration in over 25 countries around the world. We will demonstrate how a “proven” methodology in the “health sector” is now being effectively remodeled for the conservation field.
Presenter(s): Alexandre Cottin (PCI Media Impact)
Strand:

Innumerable Insects are Available for Citizen Scientists Discovery
2:15 PM–2:55 PM, Room 310, Table 5
Half of the new species discovered every year are insects and for 2009 that amounted to 9,738! Insect collectors can record state records and insects new to science. Learn how we engage an intergenerational audience in insect collecting.
Presenter(s): John Guyton (Mississippi State University, MEEA & SEEA)
Strand:

Woody Biomass and His Friend Al Gee: Exploring Food, Fuel, Feedstocks, and Sustainable Energy
2:15 PM–2:55 PM, Room 310, Table 6
Food, water, shelter—energy? Will fuel compete with food? Choices we make about energy have global impacts. This session will provide the science needed to understand today’s energy conversations and the tools to teach critical thinking about the sustainability of different energy options.
Presenter(s): Rebecca Bell (Retired Educator)
Strand:

Increase Your Handprint! Decrease Your Footprint!
2:15 PM–2:55 PM, Room 310, Table 7
The Handprint concept reflects commitment to positive action towards sustainable development at individual, community, national, and global levels. The concept was launched by the Centre for Environment Education (CEE), India’s national center for excellence in environmental education. Find out more about CEE, and share Handprint initiatives and resources.
Presenter: Mamata Pandya (Centre for Environment Education, India)
Strand:
Thursday 3:05 PM

The following sessions all start at 3:05 PM. End times vary with the type of session as indicated.

**Traditional Presentations**
3:05 PM–3:45 PM

**California Water Education Innovation**
3:05 PM–3:45 PM, Room 302
Join NAAEE and the California Water Service Company to learn about innovative efforts in water conservation education throughout California. Lend your voice to the discussion as we shape these programs for the future, including the professional development component.

Presenter(s): Christiane Maertens, (NAAEE)
John Fraser (New Knowledge Organization)

**Strand:** Environmental literacy in Maryland Schools
3:05 PM–3:45 PM, Room 318
Maryland has a rich history of effective environmental education. Recent collaborative efforts among the members of the Maryland Partnership for Children in Nature have moved our state environmental literacy initiative to new levels, including a graduation requirement in environmental literacy.

Presenter(s): Laurie Jenkins (Montgomery County Public Schools)

**Strand:**

**EPA National Environmental Education Advisory Council Listening Session**
3:05 PM–3:45 PM, Room 322
The National Environmental Education Advisory Council (NEEAC) is creating a report for the EPA Administrator and Congress on EPA’s future vision of EE. We will give an overview of the NEEAC process and ask participants for input on EE successes, improvements, and national initiatives.

Presenter(s): Kelly Keena (University of Colorado Center for Children, Youth, and Environments)

**Strand:**

**Glaciers and Climate Change: A Multidisciplinary Online Learning Experience**
3:05 PM–3:45 PM, Room 312
Earth Day Network and Extreme Ice Survey have partnered to develop an interactive, online, standards-based curriculum for grades 6–8 that uses the *Chasing Ice* documentary project as a lens through which to explore climate change issues from a multidisciplinary perspective.

Presenter(s): Christine Robertson
(Earth Day Network)

**Strand:**

**Lessons and Resources from NOAA’s New Watershed Education Evaluation System**
3:05 PM–3:45 PM, Room 320
Learn about the National Oceanic and Atmospheric Administration’s new system for evaluating its national B-WET watershed education grant program. Find out what we discovered about designing such a system and obtain resources for evaluating meaningful watershed educational experiences.

Presenter(s): Michaela Zint (University of Michigan), Anita Kraemer (eeEvaluations), Bronwen Rice (NOAA), Stephanie Bennett (NOAA Pacific Services Center), Kevin Schabow (National Oceanic & Atmospheric Administration)

**Strand:**

**Moving Toward Zero Waste in the United States: Barriers and Solutions**
3:05 PM–3:45 PM, Room 321
In this session, we will discuss the meaning of “zero waste” and the status of zero waste today. Presentations will be given by recycling and composting experts, and group discussion will address barriers to achieving zero waste.

Presenter(s): Kelley Dennings
(Keep America Beautiful)

**Strand:**
SPARKing Watershed Conservation in Rural Families  
3:05 PM–3:45 PM, Room 317  
SPARK Creek-Watchers is a nature-based experiential family learning program funded by the Toyota TogetherGreen Fellowship Program. Learn about a citizen science project that engages families in a long-term creek monitoring and clean-up project and about the TogetherGreen Fellowship program.  
Presenter(s): Anne Armstrong (The Marine Science Consortium)  
Strand: ♦

Roundtable Discussions  
3:05 PM–3:45 PM

Children & Nature Project  
3:05 PM–3:45 PM, Room 310, Table 1  
Learn about New York University’s Children & Nature Project connecting urban elementary school children to their local environment through hands-on classroom activities and field experiences in local botanic gardens, forests, and natural areas. Projects from each school will be showcased. Activities and resources will be shared.  
Presenter(s): Mary Leou (New York University), Taryn Martinez (Brown University)  
Strand: ♦

Effectively Interpreting and Communicating About Campus Sustainability Initiatives  
3:05 PM–3:45 PM, Room 310, Table 2  
Interpreting campus sustainability practices/initiatives, including both good and bad examples, and a case study of UVM’s “greened” Aiken Center (LEED Platinum certification) with ecomachine for treating human wastes, green roof, solar trackers, sustainably-harvested wood, tight energy envelope, solarium, etc.  
Presenter(s): Thomas Hudspeth (UVM Environmental Program)  
Strand: ♦

Environmental Citizenship Schools: Transforming School Culture  
3:05 PM–3:45 PM, Room 310, Table 3  
The Alberta Council for Environmental Education (ACEE) has created a model that helps schools transform their school culture to include environmental citizenship. Attendees will also be asked to share “green school” models and a discussion of successes and challenges will follow.  
Presenter(s): Kathy Worobec (Alberta Council for Environmental Education)  
Strand: ♦

Environmental Issues: Preserving and Protecting Water Resources in Changing Climates  
3:05 PM–3:45 PM, Room 310, Table 4  
This engaging session highlights the Environmental Issues Instruction (eii) model with ties to STEM and NGSS. Activities are tied to the eii issue: Should native roadside plantings be established to preserve and enhance water quality in a changing climate?  
Presenter(s): Barbara Ehlers (Upper Iowa University), Julie Delaney (St. Paul the Apostle)  
Strand: ♦

Inquiry! Innovation! Infrastructure! Museum Institute for Teaching Science (MITS) Catalyzes Collaborations  
3:05 PM–3:45 PM, Room 310, Table 5  
Come talk with us about our range of programs that catalyze collaborations of informal and formal education institutions. Our new programs: Science by Connections, MITS Educator Services, and a hybrid-model summer institute build infrastructure, open opportunities, and reach new audiences.  
Presenter(s): Sandra Ryack-Bell (Museum Institute for Teaching Science), Jane Heinze-Fry (Museum Institute for Teaching Science)  
Strand: ♦
International Handbook of Research on Environmental Education: A New Tool
3:05 PM–3:45 PM, Room 310, Table 6
The International Handbook of Research on Environmental Education describes the important concepts, findings, and theories developed by the research community and examines the historical progression, current debates and controversies, missing elements from EE research agenda, and the future.
Presenter(s): Michael Brody (Montana State University), Justin Dillon (King's College London)
Strand:

Meaningful Connections with Nature Across a K–12 Curriculum
3:05 PM–3:45 PM, Room 310, Table 7
At Abington Friends School, our goal is to empower students to become future environmental stewards by having consistent and engaging experiences in the outdoors on our campus. We have designed outdoor spaces and developed a comprehensive curriculum for all students.
Presenter(s): Rosanne Mistretta (Abington Friends School)
Strand:

Working with Faith-Based Organizations: Christianity and Sustainability
3:05 PM–3:45 PM, Room 310, Table 8
What are the concepts that create common ground between sustainability and Christianity? Approximately 75% of the U.S. population self-identifies as Christians. How can we as environmental educators connect with this large group to create more sustainable communities?
Presenter(s): Rosalyn McKeown (retired)
Strand:

Poster Presentations
3:05 PM–3:45 PM

3a) Early Childhood Educators’ Beliefs and Practices Relating to Outdoor Settings
3:05 PM–3:45 PM, Room 309
Does your work include encouraging the use of natural settings with young children? The research project shared in this session focuses on early childhood educators’ perceptions of outdoor settings, their use of these settings, and the educational opportunities, motivations, and barriers associated with these settings.
Presenter(s): Julie Ernst (University of MN Duluth)
Strand:

3b) From Playing to Protecting: Mobilizing Tikes to Take Action
3:05 PM–3:45 PM, Room 309
Conservation action knows no age boundaries, so why are preschoolers neglected from conservation efforts? Young families are a powerful resource, and in this session we will explore ways for agencies large and small to capture and utilize this overlooked demographic.
Presenter(s): Lauren Stayer (Five Rivers MetroParks), Joshua York (Five Rivers MetroParks)
Strand:

3c) A Living Institution: University Model for Preparing Early Elementary Teachers
3:05 PM–3:45 PM, Room 309
The Wildlife Conservation Society, New York Botanical Garden, and City University of New York’s Lehman College created Outside-the-Box to study collaborations between informal and formal institutions in preparing preservice elementary teachers to enrich curricula by incorporating outdoor settings across disciplines.
Presenter(s): Amanda Lindell (Wildlife Conservation Society), Judith Hutton (The New York Botanical Garden)
Strand:
3d) A Look at Early Childhood Development in the Context of Nature-Based Play
3:05 PM–3:45 PM, Room 309
Empirical evidence on the effects of nature-based experiences on young children’s physical, social-emotional, and cognitive development was examined. Current research providing evidence of the benefits of nature on development across these three domains are described along with directions for further research.
Presenter(s): Meg Gravil (University of Kentucky)
Strand: ●

3e) The Natural World of ISLA (Immersion for Spanish Language Acquisition)
3:05 PM–3:45 PM, Room 309
From spinach in the schoolyard to exploring botanical gardens, environmental literacy sounds like Spanish in ISLA (Immersion for Spanish Language Acquisition). The focus of this presentation is an innovative natural world thematic unit for native Spanish speakers 4–7 years old.
Presenter(s): Aerin Benavides (UNCG), Allyson Cates (ISLA)
Strand: ●

3f) Preschool Children’s Conservation Reasoning and Understanding About Nature
3:05 PM–3:45 PM, Room 309
Do preschool children think nature has rights? Children’s ideas about nature, harm to nature, and how to protect it will be described. Knowledge and reasoning of children attending nature preschool will be compared to that of children attending non-nature preschools.
Presenter(s): Julia Torquati (University of Nebraska–Lincoln), Car Mun Kok (University of Nebraska–Lincoln), Julia Kroeker (University of Nebraska–Lincoln)
Strand: ●

3g) Primary Teachers’ Views on Outdoor Education: Insights for Professional Development
3:05 PM–3:45 PM, Room 309
We investigated primary teachers’ views on strengths and weaknesses of outdoor education. The results indicate that taking into account the heterogeneity in views towards outdoor education within the teacher community can prove most crucial for structuring reflective professional development programmes.
Presenter(s): Konstantinos Korfiatis (University of Cyprus)
Strand: ●

3h) The Relationship Between Young People and the Environment in Indonesia
3:05 PM–3:45 PM, Room 309
Young people’s environmental attitudes, knowledge, feelings, and reported behaviours are crucial as they offer a glimpse into the likely nature of future environmental policies. Environmental education plays an important role in influencing and motivating behavioral change towards environmentally caring behaviors.
Presenter(s): Sarah Brikke (Griffith University)
Strand: ●

3i) Seedlings: Introducing Multidisciplinary Learning in Preschool Classrooms and at Home
3:05 PM–3:45 PM, Room 309
It’s never too early to start fostering connections with nature in order to encourage the growth of environmentally-minded citizens; this hands-on program introduces you to the research behind this connection as well as hands-on activities you can implement with children in your community.
Presenter(s): Emily Morris (Desert Botanical Garden)
Strand: ●
**Thursday 4:00 PM**

**Traditional Presentations**
4:00 PM–4:40 PM

Appetite for Adventure: A Multimedia Exploration of Global Food Sustainability
4:00 PM–4:40 PM, Room 311
Join Green Living Project for an engaging multimedia presentation exploring global food sustainability and the connections to climate change. Through the lens of positive storytelling, learn how you can use multimedia and film as educational resources in the classroom.
Presenter(s): Laura Knudson (Green Living Project)
Strand: ●

Birds, Butterflies, Bees, and More: Citizen Science Projects for Classrooms
4:00 PM–4:40 PM, Room 312
Citizen science provides an effective way to connect youth to nature and engage them in science and environmental learning! Learn how you can use birds, butterflies, bees, and more to jump-start exciting research in your indoor or outdoor classroom.
Presenter(s): Karen Oberhauser (University of Minnesota), Sarah Weaver (Monarchs in the Classroom-University of Minnesota), Rob Blair, (University of Minnesota), Katie-Lyn Bunney (University of Minnesota)
Strand: ●

Effectively Using Inquiry-Based Modules to Study Environmental Health Science
4:00 PM–4:40 PM, Room 315
Learn about UW-Milwaukee’s WInSTEP (Wisconsin Inquiry-based Scientist-Teacher Education Partnership) program’s unique inquiry-based environmental health science modules, which teach high school students about the toxic effects of environmental agents on the embryological and behavioral health of zebrafish, fathead minnows and earthworms.
Presenter(s): Daniel Weber (University of Wisconsin-Milwaukee), Henry Tomasiewicz (University of Wisconsin-Milwaukee), Renee Hesselbach (University of Wisconsin-Milwaukee)
Strand: ●

Get Ready! Making Sense of Smarter Balanced Assessments with EE
4:00 PM–4:40 PM, Room 302
Presenter(s): Susan Sahnow (Oregon Natural Resources Education Program), LeeAnn Mikkelson (Oregon Natural Resources Education Program), Bruce Rhodes (Tillamook School District)
Strand: ●

Greening the Net Generation: Holistic Environmental Education Pedagogy
4:00 PM–4:40 PM, Room 314
Too often higher education focuses only on developing the mind. This session illustrates how an experiential syllabus and creative, open-ended environmental education activities outdoors can be used with the “bubble-wrapped” Net Generation to promote learning with mind, body, and heart.
Presenter(s): Pierre Walter (University of British Columbia)
Strand: ●

Inquiry Approaches to Integrating Environmental Literacy and 21st Century Skills
4:00 PM–4:40 PM, Room 305
Ecology Project International offers Costa Rican high school students a semester-long experience geared toward developing environmental literacy by combining field science with online support from professional biologists. Come learn how to combine applied conservation research with appropriate technology.
Presenter(s): Miguel Fuentes (Ecology Project International), Eylen Zuniga (Ecology Project International)
Strand: ●
Intergenerational, Bi-Directional Environmental Learning
4:00 PM–4:40 PM, Room 318
This presentation will describe a project whose overall goal was to increase the diversity of participants in our family nature day program. We incorporated technology to attract the generation of digital learners. Participant satisfaction survey results will be shared.
Presenter(s): Melinda Wilder (Eastern Kentucky University), Billy Bennett (Eastern Kentucky University)
Strand: ●

Leaders in Environmental Action for the Future: Inspiring Future Conservationists
4:00 PM–4:40 PM, Room 317
The Nature Conservancy's LEAF program engages students in conservation science by providing summer internships for urban teens. For 18 years the program has succeeded by supplementing classroom lessons with the real world experience of applying those lessons in the field.
Presenter(s): Brigitte Griswold (The Nature Conservancy), John Fraser (New Knowledge Organization)
Strand: ●

The Pine Jog Fellowship: Addressing Environmental Issues Through Service Learning
4:00 PM–4:40 PM, Room 301
FAU/Pine Jog's Fellowship program provides a platform for high school students to tackle environmental issues through service learning projects. This interactive presentation will focus on the evolution and mechanics of this successful program, including its focus on facilitating local civic engagement.
Presenter(s): Susan Toth (Pine Jog Environmental Education Center), Veronica Frehm (Pine Jog Environmental Education Center)
Strand: ●

Recycling and Sustainable Agriculture in East Baltimore Midway
4:00 PM–4:40 PM, Room 306
Learn how Boone Street Farm has worked with partners and stakeholders to incorporate sustainable agriculture, community gardening, and a recycling campaign in the East Baltimore Midway Neighborhood in Baltimore City.
Presenter(s): Cheryl Carmona (Boone Street Farm)
Strand: ●

Rediscovering California: Engaging the Public in Biodiversity Research and Conservation
4:00 PM–4:40 PM, Room 303
Citizen science at the California Academy of Sciences furthers biodiversity research, promotes science literacy, informs conservation, and advances the field of PPSR. Our research and education team works with management organizations and iNaturalist to broaden our audience, deepen our impact, and increase our program’s innovation.
Presenter(s): Alison Young (California Academy of Sciences)
Strand: ●

Research Evidence for Best Practices in Environmental Education and Interpretation
4:00 PM–4:40 PM, Room 304
We conducted comparative research of nearly 400 live environmental interpretation/education programs across 24 units of the National Park Service to isolate the program characteristics that most consistently drive positive visitor outcomes. We report on the study's implications for environmental education.
Presenter(s): Marc Stern (Virginia Tech), Robert Powell (Clemson University)
Strand: ●

Starting Off Right: Early Childhood Environmental Education
4:00 PM–4:40 PM, Room 319
We know PLT’s guides and NAAEE’s Guidelines for Excellence are winners. How do we get them into the right hands? We don’t have all the answers, but it’s a start. We’ll share strategies and resources for reaching Head Start audiences.
Presenter(s): Andree’ Walker Bravo (The Utah Society for Environmental Education), Jaclyn Stallard (Project Learning Tree), Bora Simmons (National Project for Excellence in Environmental Education)
A Survey Study on Climate Change Literacy of Media Practitioners in Taiwan
4:00 PM–4:40 PM, Room 322
We will share the results of the largest survey about science/climate literacy for journalists ever conducted in Taiwan. It was found that most TV media workers did not have enough literacy in science and climate change. Training programs are necessary to improve the current situation.
Presenter(s): Shin-Cheng Yeh (Environmental Protection Administration, Taiwan), Huiching Yu (Cheng Shiu University)
Strand: Roundtable Discussions

Roundtable Discussions
4:00 PM–4:40 PM

Aliens from the Sea: Entrance Narratives About Sharks
4:00 PM–4:40 PM, Room 310, Table 1
Love or fear: which emotion would you choose to best represent sharks? This is a chance to explore our emotions as tools for more effective educational approaches. The question applies directly to you: who in reality is the alien?
Presenter(s): Joao Neves (Zoomarine)
Strand:

Connecting Urban Students to Nature in the City Through Inquiry
4:00 PM–4:40 PM, Room 310, Table 2
There is more to cities than pavement and building; nature can be found anywhere. Since all students should have opportunities to connect with nature, this session will take an in-depth look at urban students and methods in connecting them to nature.
Presenter(s): Chrissy Graszer (Lincoln Park Zoo)
Strand:

Environmental Education is Dead, Long Live Environmental Education!
4:00 PM–4:40 PM, Room 310, Table 3
The EE days of just nature hikes and classroom lessons is over. Environmental literacy must inspire change for sustainability. This workshop moves beyond traditional EE boundaries to a collective impact model that fosters systems thinking and holistic living and learning.
Presenter(s): Drew Dumsch (New England Environmental Education Alliance)
Strand:

Environmental Literacy Creates Opportunities for Regional Collaboration and Capacity Building
4:00 PM–4:40 PM, Room 310, Table 4
What can hundreds of partners, six boards, five states, two staff, one district and a regional funding partner do to support environmental literacy? Come find out what is happening in the Mid-Atlantic region; shrinking resources have led to creative ideas.
Presenter(s): Laura Johnson Collard (Maryland Association for Environmental and Outdoor Education (MAEOE)), Greg Eaton (Claytor Nature Center of Lynchburg College), Rebecca Davis (DCEEC), Ruth Roperti (PAEE), Ashley Peebles (Delaware Association for Environmental Education)
Strand:

Environmental Service Learning with Jane Goodall’s Roots & Shoots
4:00 PM–4:40 PM, Room 310, Table 5
Session will focus on developing focused environmental classroom campaigns for quality service learning. Participants will learn how to lead a community mapping activity that identifies a community need and then use this to plan an impactful community project.
Presenter(s): Stephanie Keller (the Jane Goodall Institute), Shawn Sweeney (the Jane Goodall Institute)
Strand:
Professional Learning Communities: What Works in Online Collaborative Learning 4:00 PM–4:40 PM, Room 310, Table 6
Collaborative online learning is a growing practice that is more accessible and delivers professional development at lower costs than in-person training. Find out what makes for a successful virtual learning community based on EECapacity’s two years of experience. Presenter(s): Jose Marcos-Iga (Environmental Education Exchange), Karen Hollweg (EECapacity Climate Change EE Professional Learning Community)

Using the Common Core to Create Outdoor Environmental Literacy Experiences 4:00 PM–4:40 PM, Room 310, Table 7
Participants will learn about a partnership between a school system and local environmental education center including the development of elementary field experiences. The session will discuss and connect field experiences with Common Core, Next Generation Science Standards and eLit Standards. Presenter(s): Ashley Jarvis (Howard County Conservancy) Strand:

Poster Presentations
4:00 PM–4:40 PM

4a) Combining Multiple Tools and Audiences to Evaluate a Camp Program 4:00 PM–4:40 PM, Room 309
Lincoln Park Zoo has launched a new evaluation system for its summer camp program to measure program objectives and cultivate a reflective practice. We feel our multi-method approach to participatory evaluation may be helpful to those that have not yet instituted an evaluation protocol. Presenter(s): Jaclyn Peterson (Lincoln Park Zoo) Strand:

4b) Creating a Professional Learning Community: School, University, and Museum Partnership 4:00 PM–4:40 PM, Room 309
This project sought to use professional learning communities (PLCs) as part of teacher professional development. The goal was to document PLC development through a model collaboration among a public school district, ocean scientists, and formal and informal science educators. Presenter(s): Michelle Mileham (Oregon State University), Susan O’Brien (Oregon State University) Strand:

4c) Environmental Discourses in Borana Oromo: A Focus on Narratives 4:00 PM–4:40 PM, Room 309
This study explored the discourses of environmental narratives in Borana Oromo of the southern Ethiopia. The findings revealed discourses of environmental necessity and survival, scarcity and security, hopelessness, inclusion and exclusion, seniority, responsibility, and obedience and disobedience. Presenter(s): Teshome Tafesse (Addis Ababa University) Strand:
4d) Establishment of an Interdisciplinary University Regional Ecological Stewardship Initiative
4:00 PM–4:40 PM, Room 309
Learn how a university can enhance environmental literacy and stewardship through an interdisciplinary and interdepartmental initiative. The process to establish a group mission and strategic operations will be discussed using the example at Northern Kentucky University.
Presenter(s): Steven Kerlin (University of Wisconsin-Stevens Point), Kristine Hopfensperger (Northern Kentucky University), Brad McCombs (Northern Kentucky University)
Strand: ●

4e) Evidence-Based Outdoor Classrooms Created Through Community Collaborations
4:00 PM–4:40 PM, Room 309
A collaboration between three national non-profits is providing evidence-based solutions for creating nature-rich environments where children are spending their days. Research shows these spaces support children’s skill development across all learning domains. School-community-family connections are fostered in this innovative project.
Presenter(s): Susan Wirth (Arbor Day Foundation/Dimensions Educational Research Foundation), Cecile Carson (Keep America Beautiful)
Strand: ●

4f) Mississippi River XChange: A Headwaters to Gulf Learning Exchange
4:00 PM–4:40 PM, Room 309
The Mississippi River XChange connects high school students from various reaches of the river to watershed issues, boosting river stewardship. By engaging in information “XChanges,” students will learn the differences and similarities within the basin through teleconferencing and online forums.
Presenter(s): Natalie Marioni (The National Great Rivers Research and Education Center)
Strand: ●

4g) Schoolyard Habitats as Science and Engineering Action Projects
4:00 PM–4:40 PM, Room 309
Engage students in STEM through school-yard habitat creation. Learn straightforward steps to involve students from project planning and creation to monitoring and maintenance. Guide your students to create habitats and improve water quality while gaining science and engineering skills.
Presenter(s): Katelin Mielke Frase (Environmental Concern)
Strand: ●

4h) Thinking About the Environment: What Socio-Scientific Reasoning Research Tells Us
4:00 PM–4:40 PM, Room 309
The socio-scientific reasoning literature has many insights on how people in multiple contexts think about the environment, a critical part of environmental literacy. This session will discuss relevant studies and their implications for teaching and assessing environmental literacy.
Presenter(s): Roberta Hunter (Acorn To Oak Environmental Education/Rutgers University)
Strand: ●
Thursday 5:00 PM

Plenary Panel
5:00 PM-6:30 PM, Room 307-308

CLIMATE CHANGE PANEL:
KEYA CHATTERJEE, GERALD DURLEY, CECILIA V. ESTOLANO, and WILLIAM SPITZER

Moderator: JOE HEIMLICH

Perspectives on Empowering Communities

Keya Chatterjee is Senior Director for Renewable Energy and Footprint Outreach at the World Wildlife Fund (WWF) in the United States and author of the book The Zero Footprint Baby: How to Save the Planet While Raising a Healthy Baby. Her work focuses on building a movement in support of climate action in the United States, and promoting sustainable choices. Keya’s commentary on climate change policy and sustainability issues has been quoted in dozens of media outlets including USA Today, the New York Times, Fox News, the Associated Press, the Washington Post, and NBC Nightly News.

Keya also serves on the board of the Washington Area Bicycling Association (WABA). Prior to joining WWF, Keya served as a Climate Change Specialist at USAID. Keya also worked at NASA Headquarters in their Earth Science Enterprise, working to communicate data and research results on climate change. Keya started her career as a Presidential Management Fellow in the US government, and was a Peace Corps Volunteer in a national park in Morocco from 1998 to 2000.

Gerald Durley is a man of many accomplishments. He was one of the first Peace Corp Volunteers to serve in Nigeria, West Africa. He was a basketball star in college. He has a master’s degree in Community Mental Health (one of the first in the country), a Ph.D. in Urban Education and Psychology from University of Massachusetts, and a Master of Divinity Degree from Howard University. He has been the Executive Director of Head Start Programs in Georgia, a faculty member at Morehouse School of Medicine, the Senior Pastor of the historic Providence Missionary Baptist Church of Atlanta, and a board member of Interfaith Power and Light. Throughout his career, he has also been intensely involved in the struggle for human dignity, community justice, education, and environmental protection.

Gerald has been a leader in speaking out about the importance of addressing climate change and working across faiths and disciplines to get more people to understand, care, and act. He has testified before U.S. EPA, served on the Conservation Fund’s National Forum on Children, and appears in the film, The Great Warming, where he discusses climate change with urban youth. Gerald has also been an outspoken advocate for communicating across faiths, working with Muslims, Christians, and Jews to better understand the differences and similarities among people, cultures, and beliefs.

Cecilia V. Estolano is an expert in sustainable economic development and urban revitalization. She is co-founder of Estolano LeSar Perez Advisors LLC (ELP Advisors), which provides consulting services to public agencies, foundations, business associations, and other stakeholders seeking to grow thriving, healthy, and vibrant communities. Cecilia previously served as Chief Executive Officer of the Community Redevelopment Agency of the City of Los Angeles (CRA/LA), the largest redevelopment agency in California. Cecilia redefined the role of CRA/LA, shepherded CRA/LA’s adoption of landmark policies on the promotion of Healthy Neighborhoods, and created a $42 million Land Acquisition Fund to jumpstart development in underserved markets like South Los Angeles. She conceived of Los Angeles’ CleanTech Corridor and was an early driver behind the creation of Clean Tech Los Angeles.
Cecilia served on the California Coastal Commission, as a Senior Policy Advisor with the U.S. EPA, and as Environmental Policy Advisor to Los Angeles Mayor Tom Bradley. She was also a panelist at the recent White House Summit on Climate Change and Energy.

William Spitzer is the Vice President for Programs, Exhibits, and Planning at the New England Aquarium in Boston, MA. He is responsible for the development of mission-driven exhibits and programs, including oversight of exhibit design and animal husbandry as well as volunteer and education programs. He has served as Principal Investigator for a number of informal science education projects funded by the National Science Foundation.

Prior to coming to the New England Aquarium in 1996, Billy gained seven years of experience at TERC, an educational research and development firm in Cambridge, MA. There, he directed research and development in science education. For several years, he directed the LabNet project, an electronic community that served over 1,500 science teachers with forums for professional discussion, resource sharing, and collaborative projects. Billy holds a Ph.D. in Oceanography from MIT and the Woods Hole Oceanographic Institution and a B.A. in Chemistry and Physics from Harvard University.

Joe Heimlich, Ohio State University professor and Senior Research Associate with Lifelong Learning Group, is an award-winning leader in environmental education and free-choice learning. He has been working in the field for more than 30 years. He is the author of more than a hundred academic journal articles, chapters, and books, and has written over 250 popular publications. Joe is widely known for his methodological work in the evaluation of free-choice learning and has been a keynote speaker and presenter at conferences around the world.

**Thursday 6:00 PM**

**NOAA B-WET Program Meeting**

6:00 PM–8:30 PM  
Sheraton Inner Harbor, Potomac Room  
By invitation.

**Thursday 7:00 PM**

**Young Professionals Dinner**

7:00 PM–10:00 PM  
Meet at Charles St entrance on Pratt St

Explore Baltimore's Inner Harbor and grab a cheap dinner with other young professionals attending the conference. Because let’s be honest: who doesn’t like cheap eats and new friends? Open to all.
Dear Prospective Student,

I cannot say enough about the caliber of our graduate students and what a gift it is to teach environmental education (EE) at Antioch University New England. Teaching here is truly one of the best experiences of my life. This community inspires me to make a difference in the world. I have taught in a wide array of settings and one thing that sets teaching at Antioch apart is that every student and faculty member brings creativity, passion, intelligence and playfulness to the learning process. We are all committed to learning and making the world a better place to live, work and play. In the past week alone, I connected with past and present EE students who serve as a source of inspiration:

- Sam just successfully funded a Kickstarter project to support a traveling native butterfly exhibit throughout New England;
- Karen is committed to increasing access to healthy food and was in South America this past summer for her EE internship;
- Kim is completing her internship in Boston, driven by her passion for teaching EE in urban contexts;
- Anne serves in a leadership role at the world’s premiere hands-on science museum, the Exploratorium (http://www.exploratorium.edu);
- Recent graduate, Susan, now works at the Missouri Botanical Garden with an EE program that uses hand-held mobile devices to engage 21st century learners in the out-of-doors.

And these are stories just from the last week—can you imagine being surrounded by such inspiration every day? If so, then come join us! I look forward to meeting you!

Libby McCann, Ph.D.
Core Faculty & Director, Environmental Education
Department of Environmental Studies
emccann@antioch.edu

Antioch University New England offers an Environmental Studies Master of Science degree with six concentrations, along with a resource management and conservation MS degree and a PhD in environmental studies. Learn more at www.antioch.edu.
Friday 7:30 AM

**Special Sessions**
7:30 AM–8:15 AM

**Black Tip Reef at the National Aquarium**
7:30 AM–8:15 AM, Meet at blue entrance sign in front of Aquarium
Early birds are invited to learn about the National Aquarium's new Black Tip Reef exhibit. This morning program will give participants the chance to see the new exhibit, discover how it was created, and learn about related education programs. Sign up at the registration desk. (Note: The Aquarium is about a 15-minute walk from the convention center.)

Friday 8:30 AM

**Exhibit Fair Celebration Breakfast**
8:30 AM–10:00 AM, Exhibit Hall A

**Exhibit Fair**
8:30 AM–5:00 PM, Exhibit Hall A

---

Friday 10:00 AM

**Traditional Presentations**
10:00 AM–10:40 AM

**Arts+Action: Cafeteria Waste Reduction** *(Ranger Training and Make Change Messaging)*
10:00 AM–10:40 AM, Room 303
ARTS+ACTION increases school cafeteria waste diversion rates to over 80% by empowering students to be the agents of change. Student Cafeteria Rangers take charge of all cafeteria recycling and composting, while Student Change Makers design an alternative messaging campaign to support and engage all.

**Presenter(s): Debby Lee Cohen (Cafeteria Culture)**
**Strand:**

**Baltimore's Community-Managed Open Spaces and Forest Patches**
10:00 AM–10:40 AM, Room 320
In Baltimore, land is an abundant resource. Come learn about the wonderful green spaces residents create, and the forest patches they care for—with a focus on informal education for youth and adults.

**Presenter(s): Miriam Avins** *(Baltimore Green Space)*
**Strand:**

**Best Practices of Nonprofit Boards**
10:00 AM–10:40 AM, Room 315
Nonprofit boards have specific legal and ethical responsibilities that require establishing policies, structures, and practices that ensure those responsibilities are met. This session will discuss best practices and give examples of what can go wrong. Sample policy documents will be presented.

**Presenter(s): Susan McGuire (consultant)**
**Strand:**

---

**Strands**

- Citizen Science & Public Participation in Scientific Research
- Connecting Kids and Nature
- Conservation Education and Behavior Change
- Greening Formal Education
- Leadership and Innovation
- Sustainable Communities
- Teaching about Environmental Issues
Changing Behavior Through Creative Reuse: Using “Trash” Materials in Programming 10:00 AM-10:40 AM, Room 321
Changing behavior is about changing values. Learn to view “trash” in a new light, practically repurposing materials for use in environmental educational programs to both cut program costs and educate participants about the joy and conservation importance of creative reuse. Presenter(s): Melissa Harding (Phipps Conservatory and Botanical Gardens), Amanda Joy (Phipps Conservatory and Botanical Gardens)
Strand:

Creating an Online Community to Support Environmental Issues in Diverse Curricula 10:00 AM-10:40 AM, Room 312
We will share our experiences in offering a series of workshops to create an online learning community for K–16 faculty and informal educators to share challenges and successes in integrating environmental issues into their coursework in multiple content areas. Presenter(s): Carol Johnston (Mount St. Mary’s College, Los Angeles), Manisha Javeri (California State University, Los Angeles)

Cultural Growth: TNC LEAF Staff Youth and Family Growth Impacts 10:00 AM-10:40 AM, Room 316
Evaluation of TNC’s LEAF program 2012 demonstrated that the program has substantive cultural value beyond the student outcomes. Results covered will focus on a innovative 360 degree assessment of how youth impacted the TNC staff culture, and what these outcomes mean for larger society. Presenter(s): John Fraser (New Knowledge Organization), Brigitte Griswold (The Nature Conservancy)
Strand:

D.C. Isn’t All Hot Air: Kids Get Cool with Trees 10:00 AM-10:40 AM, Room 317
Casey Trees engages Washington D.C. metropolitan youth in hands-on, place-based environmental education through our school tree planting and summer camp programs. This presentation will share our interactive program material, challenges we face, and methods used to create successful program models. Presenter(s): Priscilla Plumb (Casey Trees)
Strand:
Developing the Certificate of Distinction in EE: Discussion and Feedback
10:00 AM-10:40 AM, Room 319
The Certificate of Distinction in EE will recognize excellence in preparation of environmental educators and facilitate assessment and improvement of EE programs that prepare environmental educators. Come learn about the development process and provide thoughts and feedback for the group.  
Presenter(s): Courtney Crim (Trinity University), Blanche Desjean-Perrotta (UTSA)

EE and Academic Achievement: A Study of Maryland Green Schools and Academic Achievement
10:00 AM-10:40 AM, Room 301
Few studies suggesting a positive correlation between EE and student achievement have controlled for variables impacting the schools and students within their samples. This study controlled for the effects of several of these variables to examine the impact of EE on student achievement.  
Presenter(s): Sarah Haines (Towson University), Amy Trauth-Nare (Towson University), Katie Dell (Baltimore County Public Schools)

Evaluating Factors Contributing to Conservation and Education Outcomes of Toyota TogetherGreen
10:00 AM-10:40 AM, Room 314
We will share insights related to which elements—such as training, leadership, adaptive management, partnerships, and engagement strategies, among others—influence success in conservation and education outcomes based on data from over 300 Toyota TogetherGreen grant and fellowship projects.  
Presenter(s): Nicole Ardoin (Stanford University), Melissa Hopkins (National Audubon Society), Marc Stern (Virginia Tech)

Keeping It Growing: Creating and Sustaining Nature Rich Outdoor Learning Environments
10:00 AM-10:40 AM, Room 305
Get evidence-based guiding principles for creating/maintaining successful outdoor classrooms and integrating nature into effective practice involving families, staff, and community. Learn the results of a national sustainability study focused on common characteristics of thriving nature-rich outdoor classrooms in diverse settings.  
Presenter(s): Susan Wirth (Arbor Day Foundation/Dimensions Educational Research Foundation)

A Model for Developing Education for Sustainability Websites for Communities
10:00 AM-10:40 AM, Room 311
Current sustainability issues demand increasing engagement and participation from communities. In this presentation, a study that designed and trialed an education for sustainability website shows the potential to develop understanding, action, and participation while addressing local and cultural needs.  
Presenter(s): Claudio Aguayo (University of Waikato), Chris Eames (University of Waikato)

Montessori Schools as an Example of Embedded Environmental Education
10:00 AM-10:40 AM, Room 302
Montessori philosophy holds nature experiences and conservation behavior as core values. Come find out how thousands of schools around the world are imbuing their students, preschool through high school, with a deep respect for the environment.  
Presenter(s): Jennifer Wyld (Oregon State University)
NOAA’s Estuarine Research Reserves: From Civic Science Engagement to Conservation Management
10:00 AM–10:40 AM, Room 318
NOAA’s Estuary Research Reserves act as “living laboratories” for addressing a wide scope of scientific questions. We will share successful examples of citizen science projects that have generated citizen engagement, extended scientific research, and helped advance conservation management of estuaries.
Presenter(s): Atziri Ibanez (NOAA National Estuarine Research Reserve System (NERRS)), Michael Migliori (NOAA)
Strand:

Valles Caldera: A Science Documentary and Teacher’s Guide
10:00 AM-10:40 AM, Room 322
Valles Caldera: The Science is a public television documentary that can be used as a tool to promote EE research and education. The workshop will include educational materials using an Earth System’s approach to environmental education.
Coordinator(s): Deb Thrall (Albert Pierce Foundation)
Presenter(s): Tim Aydelott (Blaze Canyon Productions), Ylonda Viola (Blaze Canyon Productions), Rhonda Spidell-Whitley (NMEE)
Strand:

Roundtable Discussions
10:00 AM-10:40 AM
Catan: Oil Springs—Using Board Games to Teach Sustainability
10:00 AM-10:40 AM, Room 310, Table 1
This session would teach the basics of Catan: Oil Springs and discuss key environmental issues that it addresses (including climate change, limits to growth, etc.) and show how to use this game as a fun in-class or after-school teaching tool.
Presenter(s): Erik Assadourian (Worldwatch Institute), Jeanne Braha (AAAS - American Association for the Advancement of Science)
Strand:

Changing Tourist Behavior: Endangered Hawaiian Monk Seal Educational Programming
10:00 AM-10:40 AM, Room 310, Table 2
Yearly around eight million visitors unknowingly flock to the same beaches that endangered Hawaiian monk seals call home. An educational needs assessment is one key to developing effective educational programming that fosters co-existence between these “incidental eco-tourists” and endangered seals.
Presenter(s): Jennifer Metz (NOAA Fisheries)
Strand:

Creative Conversations About “Sticky Subjects”
10:00 AM-10:40 AM, Room 310, Table 3
Engaging young audiences in conversation about more sensitive subjects within environmental conservation can be challenging. By drawing from personal experience and using creative “conversation vehicles”, attendees will brainstorm effective and appropriate techniques for interpreting challenging subjects in informal learning environments.
Presenter(s): Allison Hague (Wildlife Conservation Society), Emily Stoeth (Wildlife Conservation Society-Prospect Park Zoo)
Strand:

EE + New Education Trends = Success
10:00 AM-10:40 AM, Room 310, Table 4
Explore how EE should capitalize on current educational trends and initiatives (Common Core, Next Generation Science Standards, STEM) to meet the needs of the education community. Participants will analyze and align samples of existing EE curriculum to the standards-based education.
Presenter(s): Brenda Weiser (University of Houston-Clear Lake), Laura Downey (Kansas Association for Conservation and Environmental Education)
Strand:
Interdisciplinary Environmental Education: Tips, Strategies, and Resources for Elementary Educators
10:00 AM–10:40 AM, Room 310, Table 5
This session demonstrates how to use children’s literature, digital resources, and activities to study and problem solve global environmental issues (e.g., energy, food and water security, consumption and consumerism) with K-5 learners. Participants will receive a handout of session resources.
Presenter(s): Lisa Buchanan (University of North Carolina Wilmington), Elizabeth Crawford (UNCW)
Strand: ●

SCENIQ—Students Conducting Environmental Inquiry: Get Outside Today and Tomorrow
10:00 AM–10:40 AM, Room 310, Table 6
Come see how a scientifically-engaged inquiry-based program can motivate students and families to spend more time in nature. Learn about our grade level specific, bilingual nature journals, questioning techniques, and family-focused marketing. See how we have adapted our materials for younger students.
Presenter(s): Sandi Funke (Pepperwood Preserve), Margaret Boeger (Pepperwood Preserve)
Strand: ●

“Survivor Earth” OEEP Module
10:00 AM–10:40 AM, Room 310, Table 7
Environmental educators collaborated with a NASA mission to develop a fabulous module for sixth graders participating in Outdoor Education. We will explain how this module was developed and how to implement it with kids in formal and informal education settings.
Presenter(s): Dorian Janney (MCPS), Laurie Jenkins (Montgomery County Public Schools)
Strand ●

Two Elementary Schools’ Efforts Toward Outdoor Instruction
10:00 AM–10:40 AM, Room 310, Table 8
Researchers studied two elementary schools in the U.S. to explore their respective environmental education within their science education. Specific to the mixed methods data collection focused on outdoor experiences for the participants: teachers, principals, 5th grade students and their parents.
Presenter(s): Sarah J. Carrier (North Carolina State University), Linda P. Tugurian (North Carolina State University)
Strand: ●

Poster Presentations
10:00 AM–10:40 AM
5a) Advancing Ocean Literacy One Teen at a Time
10:00 AM–10:40 AM, Room 309
Join us as we dive in to the Oceanography Camp for Girls, share ways to teach about the ocean, and explore results from the Survey of Ocean Literacy and Engagement (SOLE).
Presenter(s): Teresa Greely (University of South Florida), Angela Lodge (USF Marine Science)
Strand: ●

5b) CLEAN: Finding Reviewed Climate and Energy Resources to Enhance Teaching
10:00 AM–10:40 AM, Room 309
Learn to use the CLEAN Portal to find scientifically and educationally reviewed climate and energy teaching and learning resources, for grades 6–16, aligned with the Climate and Energy Literacy Essential Principles and NGSS that help students become environmentally literate.
Presenter(s): Tamara Ledley (TERC), Frank Niepold (NOAA Climate)
Strand: ●
5c) Coastal Explorer Adventure Guide: How to Develop Engaging Activity Books
10:00 AM-10:40 AM, Room 309
Inspired by the National Park Service Junior Ranger Program, the Coastal Explorer Adventure Guide uses environmental education's best tools to educate, engage, and empower youth. This presentation demonstrates the process of researching, developing, illustrating, and designing a children's activity guide.
Presenter(s): Caitlin Campbell (National Park Service)
Strand: ●

5d) Creative Climate Change Communication Through Integrated Science and Art Teaching
10:00 AM-10:40 AM, Room 309
An extensive field trip to a marine biological station with 18 graduate students from the arts and sciences affected participants' knowledge of climate change issues, and their subsequent development of creative and innovative environmental interpretation materials on global climate change.
Presenter(s): Susan Jacobson (University of Florida), Jennifer Seavey (University of Florida)
Strand: ●

5e) Developing Innovative Outdoor Learning Stations for Engaging Environmental Literacy Experiences
10:00 AM-10:40 AM, Room 309
Learn how Evergreen Heritage Center leveraged diverse partnerships to create innovative outdoor learning stations at an historic homestead turned environmental education center in the heart of the Appalachian Mountains, providing underserved students with place-based outdoor experiences to improve environmental literacy.
Presenter(s): Elaine Raesly (Evergreen Heritage Center), Julie Dieguez (The Wild Child, LLC)
Strand: ●

5f) Environmental Literacy and Inquiry: The Climate Change and Energy Curriculum
10:00 AM-10:40 AM, Room 309
This session presents a new research-based Climate Change and Energy curriculum. Learning activities include environmental issues investigations with Web GIS, Google Earth, an online carbon emissions calculator, energy audit, and inquiry-based laboratories. Instructional adaptations for diverse learners are presented.
Presenter(s): Alec Bodzin (Lehigh University)
Strand: ●

5g) Teaching Resources Within the Learn More About Climate Program
10:00 AM-10:40 AM, Room 309
The University of Colorado's Learn More About Climate program has videos, lesson plans, visualizations, and lists of other educational resource links that can connect global issues to local phenomena. Come and explore these free resources with teachers and teacher educators.
Presenter(s): Deb Morrison (University of Colorado at Boulder)
Strand: ●
**Friday 11:00 AM**

**Keynote Address**
11:00 AM-12:00 PM, Room 307-308

**INTERNATIONAL PANEL:**
MAHESH PRADHAN and KEITH A. WHEELER
Moderator: KARTIKEYA V. SARABHAI

A Global Look at Environmental Education and Sustainability

**Mahesh Pradhan** is Chief of the Environmental Education and Training Unit of the United Nations Environment Programme (UNEP), and is based at UNEP’s headquarters in Nairobi, Kenya.

Since 2011, Mahesh has overseen UNEP’s engagement with the higher education sector through establishment of the Global Universities Partnership on Environment and Sustainability. He served as UNEP’s focal point for the Higher Education Sustainability Initiative—launched on the margins of the Rio+20 Summit—and is responsible for coordinating UNEP’s response to the UN Decade of Education for Sustainable Development, 2005-14. He oversees UNEP’s strategic partnership with Tongji University through the joint Institute of Environment for Sustainable Development located in Shanghai, China. He is also actively involved in several regional networks, including Mainstreaming Environment and Sustainability in African Universities, the Latin America and the Caribbean Environmental Training Network, and Asia and the Pacific Regional University Consortium on Environment for Sustainable Development.

Prior to this, Mahesh was based at UNEP’s Regional Office for Asia and the Pacific in Bangkok, Thailand. He served as head of the regional and sub-regional cooperation component, and coordinated the nexus issue of environmental education, whereby several sub-regional environmental education and training action plans were formulated.

**Keith A. Wheeler** has over 35 years of experience in the fields of sustainability, conservation, technology, education, and the environment. As Chairman and CEO of ZedX Inc., Keith provides overall leadership and strategy development focusing on sustainable agriculture and environmental resource management. He is also president of IUCN-US and emeritus chairman of IUCN’s Commission on Education and Communication.

Keith served as founding partner of Worldviews LLC, an international sustainability and CSR consultancy with clients that include General Motors and the U.S. Department of Energy. As co-founder of the Foundation for Our Future, he created a non-governmental R&D organization focused on sustainable development knowledge management, organizational change management, and capacity development. Keith also served as president of CFix LLC, a conservation carbon sequestration fund in South America, and was the first executive director for the Global Rivers Environmental Education Network (GREEN), with programs in 135 nations worldwide.

Keith was appointed to President Clinton’s Council for Sustainable Development Public Linkage and Education Task Force, served as co-chairman of the White House Conference on Partnerships for Education about the Environment, and was co-chairman of a White House initiative to establish a national framework for education and capacity development for sustainability.

He has authored numerous publications, including a book titled *Education for Sustainability: a Paradigm for Hope.*

**Kartikeya V. Sarabhai** is a leader in environmental education in India and worldwide. He founded India’s Center for Environment Education in 1984. Now, with more than 400 professional staff, CEE reaches into every school system in India and advises every state government on greening the curriculum. In addition to his work in education, Kartikeya has established several organizations that connect social and environmental development. He is a sought after speaker, presenter, and thinker, and has won numerous awards for his work.
Friday 12:00 PM

Lunch Break
12:00 PM–1:45 PM
Concessions available in Exhibit Hall A

University of Michigan Gathering
12:00 PM–1:30 PM
Pratt Street Ale House, 206 W. Pratt St
The University of Michigan’s School of Natural Resources and Environment invites all alumni, faculty and staff to a lunch hosted by Professor Michaela Zint.
Coordinator: Michaela Zint

NAAEE Community Service Project
12:00 PM–2:30 PM
Meet at Charles St entrance on Pratt St
Each year, NAAEE members participate in a community service project as a way of giving something back to our host city. Volunteer “behind the scenes” at the National Aquarium to experience one small aspect of the care and maintenance of the Aquarium’s exhibits. Sign up at the registration desk. Lunch provided.
Coordinator: Kim Martinez

Friday 12:15 PM

Southeastern Environmental Education Alliance Meeting
12:15 PM–1:30 PM, Room 303
Members of SEEA and other affiliates in the southeastern United States will meet to discuss current activities.
Coordinator: Ashley Hoffman

Meetings and Special Sessions
12:30 PM–1:30 PM
Accreditation Advisory Board and Accreditation Review Panel
12:30 PM–1:30 PM, Room 304
Accreditation Advisory Board and Accreditation Review Panel business meeting.

Professional Development and Teacher Education Special Interest Group
12:30 PM–1:30 PM, Room 305
Come meet others interested in professional development and teacher education and learn what exciting things we are planning for the upcoming year. Open to all.

Urban Special Interest Group
12:30 PM–1:30 PM, Room 301
Join other environmental educators interested in building capacity around working in urban communities. This meeting will outline resources, strategies, and open dialogue about what works and what is needed to effectively educate in urban settings. Open to all.

Young Professionals Workshop:
Grant Writing 101
12:30 PM–1:30 PM, Room 302
In the non-profit world, everyone wants a capable grant writer. That could be you! Learn some tips from seasoned experts about how to find funding sources and craft your grant proposal.
Friday 1:45 PM

Symposia
1:45 PM–3:15 PM

Challenges and Successes of Citizen Science in International Collaboration
1:45 PM–3:15 PM, Room 314
Despite the rapid growth and impact of citizen science, many challenges remain in this young field. Facilitating communication, collaboration, and innovation, and identifying points of strength and concern for the field will be discussed in this symposium.
Moderator(s): Joe E. Heimlich (Ohio State University Extension)
Presenter(s): Hiromi Kobori (Tokyo City University), Susan Jacobson (University of Florida), Wataru Kitamura (Tokyo City University), Ryo Sakurai (Yokohama National University), Flisa Stevenson (Cornell Lab of Ornithology)
Strand: ●

Promoting Excellence in Environmental Education
1:45 PM–3:15 PM, Room 315
You’ve heard about NAAEE’s Guidelines for Excellence and may even have a copy or two. But how are they being used to improve EE practice? Hear directly from educators who are using them for program development, implementation, and improvement.
Presenter(s): Bora Simmons (National Project for Excellence in Environmental Education), Andree’ Walker Bravo (The Utah Society for Environmental Education), Katie Navin (Colorado Alliance for Environmental Education), Elizabeth Schmitz (Kentucky Environmental Education Council), Yash Bhagwanji (Florida Atlantic University), Theresa Turner (El Paso ISD), Amy Canales (EPISD), Donny Roush (Earth Force)

Hands-on Presentations
1:45 PM–3:15 PM

Connecting Kids with Nature: National and State Advocacy
1:45 PM–3:15 PM, Room 304
Sierra Club and the Outdoors Alliance for Kids are advocating at the national and state levels to increase access and opportunities for kids and families to get outdoors. Participants will learn about national and state level efforts and gain tangible skills in advocacy.
Presenter(s): Jackie Ostfeld (Sierra Club)
Strand: ●

Ecoliteracy in Practice
1:45 PM–3:15 PM, Room 319
What are the life practices that an ecoliterate person engages in daily, and how can we cultivate them in ourselves and our students? We will explore five practices developed by the Center for Ecoliteracy in collaboration with psychologist Daniel Goleman.
Presenter(s): Lisa Bennett (Center for Ecoliteracy), Carolie Sly (Center for Ecoliteracy)
Strand: ●

Get into The Woods with Kids for Real Science
1:45 PM–3:15 PM, Room 306
Learn about a collaborative and replicable project where kids move from classroom simulation, to scientific lecture, to data collection in the woods. Developed by a 5th grade English and science teacher and a USDA Forest Service research ecologist.
Presenter(s): Richard Hallett (USDA Forest Service), Christopher Hall (Oyster River Middle School)
Strand: ●

Hands-On, Minds-On Climate Interactives
1:45 PM–3:15 PM, Room 305
Come learn about new interpretive activities and an iPad app designed to help educators engage learners in better climate change understanding. Participants will leave with ways to use these activities for free in their institutions or classrooms.
Presenter(s): Sylvia Scharf (New England Aquarium)
Strand: ●
Hands-On Curriculum for a Crowded Planet
1:45 PM–3:15 PM, Room 301
Human population pressures underlie so many environmental issues including climate change, biodiversity loss, water scarcity, and pollution. Explore these connections in innovative, interdisciplinary activities that promote critical thinking and problem-solving skills across the middle and secondary curriculum.
Presenter(s): Pamela Wasserman (Population Connection)
Strand:

Interactive Web Tool for Teaching Sustainable Growth in Maryland
1:45 PM–3:15 PM, Room 311
“Where Do We Grow from Here?” is a web-based teacher’s guide on Smart Growth and Sustainability in Maryland. This session will highlight interactive activities that explore community design, health, sustainability, habitat protection, transportation choices, and others.
Presenter(s): Sandra Olek (Maryland Department of Natural Resources), Marcie Taylor-Thoma (Maryland State Department of Education)
Strand:

PLT Curriculum and The Next Generation
1:45 PM–3:15 PM, Room 303
Come learn about PLT’s 3-year revision process for its most popular resource, the PreK-8 Environmental Education Activity Guide. You will have the opportunity to voice your environmental education needs and explore viable ways to incorporate them into PLT’s educational materials.
Presenter(s): Kathy McGlauflin (Project Learning Tree) Jaclyn Stallard (Project Learning Tree), Al Stenstrup (Project Learning Tree)
Strand:

Teacher Education for Sustainability: Examples from San José State University
1:45 PM–3:15 PM, Room 302
Learn how a pilot project funded by the Clarence E. Heller Foundation is investigating barriers to Educating for Sustainability in K-12 schools and teacher education programs and explore best practices for integrating sustainability into teachers’ existing standards-based curricula.
Presenter(s): Ellen Metzger (San Jose State University)
Strand:

Bright Spots and Great Ideas
1:45 PM–3:15 PM, Room 316
Throughout the conference, you can learn about five or six successful and loosely related programs in each 90-minute group of Bright Spots and Great Ideas. Each presentation is 12 minutes long, and sessions are presented in the order listed.

EE in a Preservice Elementary Science Methods Course
Future elementary teachers learn about environmental education within their preservice science methods classes through professional development including Population Connection and Project WILD. Students create an invention but must also consider how their ecological footprint and cradle-to-grave impact their invention.
Presenter(s): Jeanine Huss (Western Kentucky University)

EE in Our Education Preparation Program
Come learn about innovative ways we have incorporated EE into a large, urban, educator preparation program. We will discuss curriculum design, systematic infusion of EE across the program, and essential university partnerships with non-formal programs.
Presenter(s): Courtney Crim (Trinity University), Blanche Desjean-Perrotta (UTSA)

Environmental Education Within Murray State University’s College of Education
Learn how the College of Education at Murray State University is immersing undergraduate and graduate students in field-based environmental education learning experiences using the Land Between the Lakes National Recreation Area as their classroom.
Presenter(s): David Allen (Murray State University)
Integrating EE into the World of Pedagogy
Discover how EE is used as the cornerstone for preservice candidates from their intro technology class to methods to their capstone experience.
Presenter(s): Brenda Weiser (University of Houston-Clear Lake), Jana Willis (University of Houston-Clear Lake), Debby Shulsky (University of Houston Clear Lake)

Transforming Student World Views Through Nonformal EE at a Historically Black University
Learn about innovative techniques for engaging non teacher-preparation students in EE experiences at a Minority Academic Institution. These efforts to foster environmental literacy and community engagement have had some surprising results and underscore the potential of EE as a tool for transformative change.
Presenter(s): Himanshu Gopalan (Winston-Salem State University)

Traditional Presentations
1:45 PM–2:25 PM

Children Making Personal Choices: Lessening Environmental Impact and Deepening Feelings
1:45 PM–2:25 PM, Room 312
Learn about how children make choices about their actions in Earthkeepers, a program with a worldwide track record of success in helping children change their personal behaviors to lessen their environmental impact and deepen their connections to the Earth.
Presenter(s): Colin Waite (Cooper Center for Environmental Learning), Mike Mayer (The Institute for Earth Education and University of Arizona)

The Climate and Urban Systems Partnership: Insights and Challenges from Year 1
1:45 PM–2:25 PM, Room 321
Climate and Urban Systems Partnership is a network of organizations that deliver multi-platform, targeted, and coordinated education programs to improve urban residents’ climate literacy. Here we present insights and challenges from our pilot implementations using neighborhood, digital, and festival platforms.
Presenter(s): Richard Johnson (The Franklin Institute)

Climate Change Environmental Education: Project-Based Online Learning Community Alliance (POLCA)
1:45 PM–2:25 PM, Room 320
Learn about the products created by environmental educators in EECapacity’s 2013 Climate Change Environmental Education Project-based Online Learning Community Alliance (CCEE POLCA)—products designed to help the broader EE community advance our individual and collective efforts regarding climate change education.
Presenter(s): Lori Kumler (University of Mount Union), Susan Gentile (Antioch University)

Investigating Environmental Issues and Actions: A Chesapeake Watershed Instructional Model
1:45 PM–2:25 PM, Room 317
Based on the nationally recognized environmental education model, “Investigating and Evaluating Environmental Issues and Actions” (IEEIA), participants will learn about a new education resource focused on environmental issues in the Chesapeake Bay watershed. Take your students from awareness to action!
Presenter(s): Donna Stotts (CISDE), Trudi Volk (CISDE), Harold Hungerford (CISDE), LeeAnn Hutchison (Maryland State Department of Education), Eric Cromwell (Baltimore County Public Schools), Karen Cifranick (CISDE)

Citizen Science & Public Participation in Scientific Research
Connecting Kids and Nature
Leadership and Innovation
Conservation Education and Behavior Change
Greening Formal Education
Sustainable Communities
Teaching about Environmental Issues
NOAA Climate Stewards: Affecting Change Through Education, Collaboration, and Action
1:45 PM–2:25 PM, Room 318
Hear how an expanding national community of educators is working to reduce carbon footprints and “go green” through sustained professional development, collaborative online tools, and active stewardship. Success stories will be shared, and free education resources will be distributed.
Presenter(s): Bruce Moravchik (NOAA National Ocean Service), Peggy Steffen (NOAA National Ocean Service)
Strand: ●

Watershed Policies, Trees, Paddling Trips, and Geocaches
1:45 PM–2:25 PM, Room 322
The Center for Environmental Education has been leading a five year process to develop and implement a watershed plan for the county. A significant amount of effort was put into public involvement (paddling, volunteering, and geocaches) to make policy changes.
Presenter(s): April Haight (Morehead State University)
Strand: ●

Roundtable Discussions
1:45 PM–2:25 PM
Community-Based Social Marketing in Conservation: The Evolution of Rare Pride Programs
1:45 PM–2:25 PM, Room 310, Table 1
Over 25 years Rare has developed and scaled an innovative education program (Pride) that equips community leaders with necessary social marketing tools to meet local conservation goals. This presentation looks at the history evolution of the Rare Pride program.
Presenter(s): Matthew Aruch (College Park Scholars Science Technology and Society Program)
Strand: ●

Creating a State EE Board: Round 3
1:45 PM–2:25 PM, Room 310, Table 2
Missouri has quality environmental education programs throughout the state, but poor coordination results in duplication of effort, gaps in offerings, and competition for scarce resources. Find out how our third effort to foster coordination is doing and share your experiences.
Presenter(s): Jan Weaver (Missouri Environmental Education Association)
Strand: ●

A Deeper Shade of Green: Sustainability, Global Competence, and 21st Century Education
1:45 PM–2:25 PM, Room 310, Table 3
Poverty, biodiversity, climate change: global challenges that require understanding natural and human systems and a broader perspective to devise balanced solutions. Explore teaching resources that support critical thinking about global issues and provide the knowledge and habits of mind necessary for citizenship in the 21st century.
Presenter(s): Rebecca Bell (Retired Educator)
Strand: ●

Digging into Environmental Education: Research on School Gardens in Under-Resourced Communities
1:45 PM–2:25 PM, Room 310, Table 4
Presenting research from primary schools in Cape Town, South Africa, this session explores teachers’ and principals’ experiences of on-site gardens in under-resourced schools. The data analyzed in this study provides insight critical to the implementation and design of school gardens.
Presenter(s): Hannah Rich (Stanford University)
Strand: ●
Interested in Becoming a Certified Environmental Educator? What You Need to Know
1:45 PM–2:25 PM, Room 310, Table 5
Learn more about certification. Certified environmental educators and experienced certification program representatives will address your questions about the why, where, how, what, and when of becoming a certified environmental educator—even if you live in a state that doesn’t have a program.
Presenter(s): Sarah Haines (Maryland Association for Environmental and Outdoor Education), Michelle Finchum (Colorado Alliance for Environmental Education), Jen Bucheit (Environmental Education Council of Ohio), Elizabeth Schmitz (Kentucky Association for Environmental Education)

Meaningful Science: Nature’s Notebook Engages Citizens in Exciting and Relevant Research
1:45 PM–2:25 PM, Room 310, Table 6
Hands-on discussion and presentation will be used to highlight how a local research question can spark interest in long-term scientific engagement. Learn how the Nature’s Notebook citizen science program can inspire your participants to make meaning out of science.
Presenter(s): LoriAnne Barnett (USA National Phenology Network)
Strand: ●

A New Approach to Climate Change Communication
1:45 PM–2:25 PM, Room 310, Table 7
The National Network for Ocean and Climate Change Interpretation convenes informal science interpreters to learn communications strategies based on social, cognitive, and scientific research to empower audiences to engage as citizens. We will practice three strategies that stimulate productive dialogue.
Presenter(s): Hannah Pickard (New England Aquarium), Megan Moore (National Aquarium)
Strand: ●

Stimulating Students Groups to Create Community Environmental Action Plans Through Partnership
1:45 PM–2:25 PM, Room 310, Table 8
Learn how we stimulated community based environmental initiatives by partnering with public and private organizations to encourage school-based groups to write community environmental action plans. Students are challenged to become engaged citizens while solving real world problems.
Presenter(s): Josh Sneideman (U.S. Department of Energy)
Strand: ●

Friday 2:35 PM

Traditional Presentations
2:35 PM–3:15 PM

Advancing Sustainability Through Environmental Literacy in District of Columbia Schools
2:35 PM–3:15 PM, Room 318
In the District of Columbia, sustainability is moving forward alongside District-wide strategies that target student health and environmental literacy. Learn how the D.C. Environmental Literacy Plan is the platform for integrating environmental and sustainability education into District schools, rather than allowing them to become competing initiatives.
Presenter(s): Grace Manubay (District Department of the Environment), Dan Guilbeault (District Department of the Environment), Sam Ullery (DC Office of the State Superintendent of Education)
Strand: ●

Collaborative Lesson Plan Development About Serious Plant Pests and Diseases
2:35 PM–3:15 PM, Room 312
The Plant Heroes program hosts a collaborative space for development of activities related to plant pests and diseases. Learn how these projects evolve from the wiki “sandbox” to inclusion in the Plant Heroes’ Lesson Plan Clearinghouse and how to participate!
Presenter(s): Daniel Stern (American Public Gardens Association)
Strand: ●
Development of iOS-Based (iPad) In-Field Environmental Data Collection Strategies
2:35 PM–3:15 PM, Room 320
iOS platforms are emerging as excellent strategies for in-field environmental monitoring. iPads can replace traditional pen and pad with an interactive interface, and the integration of data sources, as well as the quick transmission of data to colleagues half a world away.
Presenter(s): Scott Graves (Southern Connecticut State University)

Play in Environmental Education: Connecting Children with Nature Through Play
2:35 PM–3:15 PM, Room 322
Participants will examine ways children engage in and benefit from outdoor play and how environmental educators can enrich those experiences. Participants will explore open-ended creative ways to work with children outdoors using approaches employed in the playwork profession through hands-on activities and informal discussions.
Presenter(s): Heidi Faris (Lake Superior Zoo)

Taking Tech Outdoors: Using Technology to Connect Students and the Environment
2:35 PM–3:15 PM, Room 321
In an increasingly digitally connected society, students spend more time on mobile devices and less exploring the natural world. But technology can be beneficial. Learn about strategies to connect students with the environment using smartphones, tablets, and digital cameras.
Presenter(s): Jennifer Tabola (National Environmental Education Foundation), Sarah Kozicki (National Environmental Education Foundation)

Roundtable Discussions
2:35 PM–3:15 PM
Alive in Alabama: Preschool to Preservice
2:35 PM–3:15 PM, Room 310, Table 1
This session will support lively conversation regarding an ongoing case study that addresses the 2013 draft of Alabama Alive! A State Environmental Literacy Plan for Education K–12. Components of the discussion will include preschool curriculum and preservice teacher education.
Presenter(s): Esther Howard (University of West Alabama), Andrea Minear (University of West Alabama)

Climate Change Curriculum: “Extreme Makeover, Lifestyle Edition!”
2:35 PM–3:15 PM, Room 310, Table 2
Join us for two activities that help educators and students make connections between human energy use and rising carbon dioxide concentrations in the atmosphere, followed by a short discussion about obstacles and challenges to teaching and learning about climate change.
Presenter(s): Hannah Miller (Michigan State University), Allison Webster (Michigan State University)

Creating an Environmental Education Framework
2:35 PM–3:15 PM, Room 310, Table 3
Learn how the Alberta Council for Environmental Education worked with a research associate, a multi-stakeholder advisory committee, and Alberta Education to create an Environmental Education Framework. ACEE staff will share the how and the why of creating the Framework to advance environmental education in curriculum.
Presenter(s): Kathy Worobec (Alberta Council for Environmental Education)

Developing Environmental Action Competence in High School Students
2:35 PM–3:15 PM, Room 310, Table 4
How is sustained, infused, environmental education being implemented in California public high schools? We will discuss the program elements and pedagogical approaches that 18 environmental partnership academies are using to develop environmental action competence in youth.
Presenter(s): Anne Stephens (UC Davis and California Department of Education), Heidi Ballard (School of Education, University of California)

Diverse Ecological Pathways to EE: Sharing Our Stories
2:35 PM–3:15 PM, Room 310, Table 5
What led you to an interest in environmental education? Join environmental educators from Florida and Wyoming to engage in discussion about the diverse pathways that bring us together as environmental educators and the ways we can support others on their paths.
Presenter(s): Sarah Davis (Florida Gulf Coast University), Joel Pontius (University of Wyoming)
Family Time in Nature: Nurturing Bonds and Environmentally Responsible Behavior  
2:35 PM–3:15 PM, Room 310, Table 6  
Family time in nature can help strengthen family bonds and cultivate environmentally responsible behavior. This presentation will share research on the relationship between family bonds, time in nature, and environmental behavior, as well as tools and resources for local action.  
Presenter(s): Chiara D’Amore (Prescott College)  
Strand: ●

Ogallala Aquifer Documentary: A Listening Session  
2:35 PM–3:15 PM, Room 310, Table 7  
The purpose of this Roundtable is to access the current level of awareness of the Ogallala Aquifer and its issues. This information will be used to guide development of a 60-minute documentary about the Ogallala for Public Television.  
Presenter(s): Tim Aydelott (Blaze Canyon Productions), Merri Trigilio (n/a), Deb Thrall (Albert Pierce Foundation), Ylonda Viola (Blaze Canyon Productions)  
Strand: ●

Science Talk in the Outdoors: BEETLES Professional Development  
2:35 PM–3:15 PM, Room 310, Table 8  
Talking about ideas is crucial to learning, but many outdoor educators provide few opportunities for students to discuss science ideas. Learn to make outdoor science learner- and discussion-centered using two key BEETLES activities: Walk and Talk, and Nature Scene Investigators.  
Presenter(s): Craig Strang (Lawrence Hall of Science), Kevin Beals (Lawrence Hall of Science)  
Strand: ●

Poster Presentations  
2:35 PM–3:15 PM  
6a) Development of Concepts for Building a Sustainable Society  
2:35 PM–3:15 PM, Room 309  
We developed six concepts for building a sustainable society and implemented practical studies of ESD. In these studies six concepts were introduced to regional learning in some schools. Through these studies effective applicability of six concepts was proved.  
Presenter(s): Yasuhiko Okamoto (Okayama University of Science), Masakazu Goto (National Institute for Educational Policy Research of Japan)  
Strand: ●

6b) Effectively Connecting Urban Youth with Nature  
2:35 PM–3:15 PM, Room 309  
We will share stories of lessons learned—locally and nationally recognized successes from environmental education experiences we have created for Baltimore City youth. We will encourage participants to reflect on how these lessons learned can apply to ALL environmental education.  
Presenter(s): Rachael Dickey (Living Classrooms Foundation)  
Strand: ●

6c) Growing Gardens and Leaders: Reaching Adult Audiences Where They Work  
2:35 PM–3:15 PM, Room 309  
Workplace gardens show great potential for increasing the well-being of corporate employees and their families while increasing community resilience. Learn about an innovative academic-corporate partnership that engages employees while developing EE leaders and addressing food insecurity in local communities.  
Presenter(s): Susan Baron (Antioch University New England), Elizabeth (Libby) McCann (Antioch University New England)  
Strand: ●
6d) Impact of the LEAF Program on Environmental Attitudes
2:35 PM–3:15 PM, Room 309
An empirical study using the Environmental (2-MEV) Scale Questionnaire (Johnson and Manoli, 2001) to assess environmental attitudes of LEAF program participants. Pre-, post-, and follow-up data will be presented that shows statistically significant change over time for urban youth participants.
Presenter(s): Trevor Soponis (NYU Doctoral Candidate)
Strand:

6e) Make EE a School’s Top Priority by Tackling Student Achievement
2:35 PM–3:15 PM, Room 309
Expand your work with schools by understanding and addressing the needs of teachers and principals. Explore research and strategic thinking done on needs in this Common Core era and, by solving these needs, how to become top priority within schools.
Presenter(s): Eaton Dunkelberger (Sierra Nevada Journeys)
Strand:

6f) The No Child Left Inside Act: Systemic EE in K–12 Schools
2:35 PM–3:15 PM, Room 309
Get caught up on the No Child Left Inside Act, a federal bill to increase environmental education in K–12 schools. Learn how changes in Congress may affect NCLI and the reauthorization of the Elementary and Secondary Education Act.
Presenter(s): Traci Price (Gray Family Foundation), Sarah Bodor (Chesapeake Bay Foundation)
Strand:

6g) The Scope of Nature and Outdoor Education in Montana
2:35 PM–3:15 PM, Room 309
To promote healthy kids and families, connect kids with nature, support place-based education, and get families outside, a database of available outdoor and nature education opportunities in Montana was created.
Presenter(s): Amanda Obery (Montana State University)
Strand:

6h) Teachers in a Student Directed Research Program: Lessons For EE PD
2:35 PM–3:15 PM, Room 309
The SIP program focuses on student directed science research in the K–5 classroom. Now entering its sixth year, it has resulted in changes in teacher practice across content areas. Data provides important information for creating effective professional development in environmental education.
Presenter(s): Roberta Hunter (Acorn To Oak Environmental Education/Rutgers University)
Strand:

Friday 2:35 PM
Symposia
3:30 PM–5:00 PM
Cross-Country Collaboration
3:30 PM–5:00 PM, Room 322
What happens when EE Associations collaborate to creatively administer their regions’ EPA Small Grants Program? A first-of-its-kind national innovation that propelled many of the administrators to positions of regional leadership and furthered environmental literacy in small projects nationwide.
Moderator(s): Barbara Garrity (EEANM)
Presenter(s): Laura Downey (Kansas Association for Conservation and Environmental Education), Adrian Ayson (New England Environmental Education Alliance), Andree’ Walker Bravo (The Utah Society for Environmental Education), Ashley Hoffman (Kentucky Association for Environmental Education), Donny Roush (Earth Force), Kacey Wetzel (Chesapeake Bay Trust)
Strand:

Environmental Curriculum and Technology Tools: Together They Make a Difference
3:30 PM–5:00 PM, Room 314
Panel will focus on how Environmental Education (EE) curriculum and technology are incorporated across several preservice courses in a non-EE serving university. Students develop a foundation leading to increases in perceptions regarding EE and technology integration strategies in EC-12 classrooms.
Presenter(s): Jana Willis (University of Houston Clear Lake), Brenda Weiser (University of Houston-Clear Lake), Debby Shulsky (University of Houston Clear Lake), Donna Kirkwood (University of Houston Clear Lake)
Strand:
Hands-on Presentations  
3:30 PM–5:00 PM  

Designing Chesapeake Bay Geochallenges on a Dime!  
3:30 PM–5:00 PM, Room 304  
Educators will learn how to engage students in outdoor challenges that meet environmental literacy standards. Participants will rotate through the stations in “Survivor” like style. Teachers will be inspired to create geochallenges that are inexpensive and reusable.  
Presenter(s): Ann Strozyk (Howard County Public School Systems)  
Strand: ECAST: Deliberations as Tools for Teaching Environmental Issues  

ECAST: Deliberations as Tools for Teaching Environmental Issues  
3:30 PM–5:00 PM, Room 301  
Participate in a mini-version of the World Wide Views on Biodiversity to learn more about how you can partner with ECAST to use participatory technology assessment as a tool to educate about controversial issues and cultivate civic engagement.  
Presenter(s): Jeanne Braha (AAAS–American Association for the Advancement of Science), Katie Behrmann (Museum of Science, Boston)  
Strand: EE “As Seen on TV”: Best Practices and Success Stories in Environmental Stewardship Projects  

EE “As Seen on TV”: Best Practices and Success Stories in Environmental Stewardship Projects  
3:30 PM–5:00 PM, Room 306  
Learn how to engage students in environmental stewardship projects that teach Next Generation Science Standards. Watch clips from This American Land, a PBS show spotlighting, spotlighting Captain Planet Foundation grantees in exciting student-led project-based learning. Try out lessons and protocols that make these projects replicable in your class.  
Coordinator(s): Leesa Carter (Captain Planet Foundation)  
Presenter(s): Karan Wood (Captain Planet Foundation)  
Strand: U.S. Fish and Wildlife Service Schoolyard Habitat Program  

U.S. Fish and Wildlife Service Schoolyard Habitat Program  
3:30 PM–5:00 PM, Room 305  
The Schoolyard Habitat Program partners with schools to create native wildlife habitat on school grounds. The authors will walk through the steps of the Project Guide to show the process of creating restoration projects at schools and building community partnerships that last.  
Presenter(s): Carolyn Kolstad (U.S. Fish and Wildlife Service), Karen Mullin (Willow Oak Group)  
Strand: Youth Greening New York City: Environmental Education to Build Sustainable Communities  

Youth Greening New York City: Environmental Education to Build Sustainable Communities  
3:30 PM–5:00 PM, Room 302  
How are New York City youth working to create a campaign to convince public officials to create and implement a plan to expand green roofs on schools? This workshop will share strategies to strengthen environmental education and sustainable communities.  
Presenter(s): Molly Delano (Global Kids)  
Strand: Nature’s Littlest Learners: Building Facts into Familiar Stories and Songs  

Nature’s Littlest Learners: Building Facts into Familiar Stories and Songs  
3:30 PM–5:00 PM, Room 311  
Children under 6 learn through play. They enjoy doing new things in familiar ways and familiar things in new ways. Learn how to use stories, songs, rhymes, movement, and traditional games to introduce nature to our littlest learners.  
Presenter(s): Lauren Lewis (Headful of Stories)  
Strand: Tailoring Your Message: Effective Advocacy Through Persuasive Communication  

Tailoring Your Message: Effective Advocacy Through Persuasive Communication  
3:30 PM–5:00 PM, Room 303  
Advocacy involves winning over decision makers, whether that’s a congressional representative, agency head, or the local school board. Through practice with real examples, learn how to craft messages that matter to your audience about issues that matter to you.  
Presenter(s): Brock Adler (n/a), Traci Price (Gray Family Foundation), Pat Skelly (n/a)  
Strand: Youth Greening New York City: Environmental Education to Build Sustainable Communities  

Youth Greening New York City: Environmental Education to Build Sustainable Communities  
3:30 PM–5:00 PM, Room 302  
How are New York City youth working to create a campaign to convince public officials to create and implement a plan to expand green roofs on schools? This workshop will share strategies to strengthen environmental education and sustainable communities.  
Presenter(s): Molly Delano (Global Kids)  
Strand: Nature’s Littlest Learners: Building Facts into Familiar Stories and Songs  

Nature’s Littlest Learners: Building Facts into Familiar Stories and Songs  
3:30 PM–5:00 PM, Room 311  
Children under 6 learn through play. They enjoy doing new things in familiar ways and familiar things in new ways. Learn how to use stories, songs, rhymes, movement, and traditional games to introduce nature to our littlest learners.  
Presenter(s): Lauren Lewis (Headful of Stories)  
Strand: Tailoring Your Message: Effective Advocacy Through Persuasive Communication  

Tailoring Your Message: Effective Advocacy Through Persuasive Communication  
3:30 PM–5:00 PM, Room 303  
Advocacy involves winning over decision makers, whether that’s a congressional representative, agency head, or the local school board. Through practice with real examples, learn how to craft messages that matter to your audience about issues that matter to you.  
Presenter(s): Brock Adler (n/a), Traci Price (Gray Family Foundation), Pat Skelly (n/a)  
Strand: U.S. Fish and Wildlife Service Schoolyard Habitat Program  

U.S. Fish and Wildlife Service Schoolyard Habitat Program  
3:30 PM–5:00 PM, Room 305  
The Schoolyard Habitat Program partners with schools to create native wildlife habitat on school grounds. The authors will walk through the steps of the Project Guide to show the process of creating restoration projects at schools and building community partnerships that last.  
Presenter(s): Carolyn Kolstad (U.S. Fish and Wildlife Service), Karen Mullin (Willow Oak Group)  
Strand: Youth Greening New York City: Environmental Education to Build Sustainable Communities  

Youth Greening New York City: Environmental Education to Build Sustainable Communities  
3:30 PM–5:00 PM, Room 302  
How are New York City youth working to create a campaign to convince public officials to create and implement a plan to expand green roofs on schools? This workshop will share strategies to strengthen environmental education and sustainable communities.  
Presenter(s): Molly Delano (Global Kids)  
Strand: Nature’s Littlest Learners: Building Facts into Familiar Stories and Songs  

Nature’s Littlest Learners: Building Facts into Familiar Stories and Songs  
3:30 PM–5:00 PM, Room 311  
Children under 6 learn through play. They enjoy doing new things in familiar ways and familiar things in new ways. Learn how to use stories, songs, rhymes, movement, and traditional games to introduce nature to our littlest learners.  
Presenter(s): Lauren Lewis (Headful of Stories)  
Strand: Tailoring Your Message: Effective Advocacy Through Persuasive Communication  

Tailoring Your Message: Effective Advocacy Through Persuasive Communication  
3:30 PM–5:00 PM, Room 303  
Advocacy involves winning over decision makers, whether that’s a congressional representative, agency head, or the local school board. Through practice with real examples, learn how to craft messages that matter to your audience about issues that matter to you.  
Presenter(s): Brock Adler (n/a), Traci Price (Gray Family Foundation), Pat Skelly (n/a)
Bright Spots and Great Ideas
3:30 PM-5:00 PM
Throughout the conference, you can learn about five or six successful and loosely related programs in each 90-minute group of Bright Spots and Great Ideas. Each presentation is 12 minutes long, and sessions are presented in the order listed.

GROUP A
3:30 PM–5:00 PM, Room 315
Building on Online Infrastructure for Environmental Literacy
Can educators access local EE training and programs? How do you evaluate resource and programming gaps? Join us to explore how Colorado is putting their environmental literacy plan online and evaluating where EE is happening on a community level.
Presenter(s): Katie Navin (Colorado Alliance for Environmental Education)
Strand: ●

Framing Nature: How Emphasizing Human Nature Interconnectedness Can Increase Environmental Concern
In this session we share research on how different ways of framing nature impact environmental concern. We find that emphasizing the interconnectedness of people and nature can significantly increase environmental concern, especially among people who don’t hold pro-environmental beliefs.
Presenter(s): Caroline Hodge (Stanford University)
Strand: ●

Improving Experiential Environmental Education Through Quantifying Benefits and Refining Design
How do we supercharge the promotion of experiential environmental education? We have developed tools to gather quantitative information that will help. We will highlight lessons learned, and share findings that may help environmental educators strengthen outreach and enhance program design.
Presenter(s): Brenda Gail Bergman (Michigan Tech University)
Strand: ●

NOAA Environmental Science Training Center: Connecting Science and Education Professionals
Where do you get your environmental science information? Journals? Blogs? Facebook and Twitter? Join us to learn about the NOAA Environmental Science Training Center, an innovative program that connects science and education professionals.
Presenter(s): Bart Merrick (NOAA)
Strand: ●

Unifying Evaluation Around NAAEE Environmental Literacy Outcomes
Environmental literacy outcomes defined by NAAEE resonate across content and audience. Outcomes-based resources can therefore unify evaluation across the field. Shedd Aquarium’s Evaluation Toolkit models outcomes-based strategies and tools that may improve evaluation rigor, consistency, and capacity for informal programming.
Presenter(s): Stephanie Bohr (John G. Shedd Aquarium)
Strand: ●

GROUP B
3:30 PM–5:00 PM, Room 316
Cases of Citizen Science Projects of Korea: Sustainable or Not Sustainable?
This presentation will share small but meaningful successes in citizen science, which is an emerging practice in Korea. We will share experiences with amphibian monitoring projects, some of which were not sustainable but nevertheless provide important messages to environmental educators.
Presenter(s): Chankook Kim (Korea National University of Education), Eunju Lee (Cornell University)
Strand: ●

Climate Change and Policy Implications
Climate change policies and implications are bubbling up more frequently in education and government. The year 2012 has been described as, “The year climate change was finally accepted by the public.” This session will summarize two recent symposia at a large science education research conference.
Presenter(s): Sarah J. Carrier (North Carolina State University)
Strand: ●
Ethical Practices in the Environmental Conservation of a Developing Country (Bangladesh)
Self directed emotional analysis of a person can be the best process for personal development leading to practices of some ethical behaviors in the environmental conservation. Following that, the study seeks for the connection between a person’s ethical violations and environmental management practices in Bangladesh. 
Presenter(s): Polin Saha (Unnayan Onneshan)
Strand: ●

Evaluation of Restored Urban Ponds by PPSR in Japan
This study provides a clear demonstration of the value of Public Participation in Scientific Research where citizens have monitored the ecological significance of restored dragonfly ponds in an industrialized area in Yokohama, Japan for 10 years in collaboration with various sectors of the city.
Presenter(s): Hiromi Kobori (Tokyo City University)
Strand: ●

Rising from the Ashes: Growing a Grove of Knowledge
How can you take a plague and turn it into an educational hot spot? This presentation will explore how to do that through multilevel partnership building and a budding tree-cycling program.
Presenter(s): Ericka Popovich (Elkhart Environmental Center), Daniel Coy (City of Elkhart)
Strand: ●

See the Real Story of the Endangered Little Fish!
The decades-old story of the endangered little snail darter fish versus Tennessee’s last dam continues to be a political putdown quip against environmentalism and environmentalists. This photo slide presentation rebuts the caricature, showing an intriguing real history.
Presenter(s): Zygmunt Plater (Boston College)
Strand: ●

Traditional Presentations
3:30 PM–4:10 PM

Beyond “Translation”: Making EE Research Useful to Educators
3:30 PM–4:10 PM, Room 312
Interested in creating more effective programs based on current environmental education research? EECapacity’s online eeEcology mapping tool can help. We will demonstrate how you can use eeEcology to design programs based on research results and contribute to meaningful change.
Presenter(s): Marianne Krasny (Cornell University), Judy Braus (NAAEE), John Fraser (New Knowledge Organization), Alex Kudryavtsev (Cornell University)

Education for Sustainability: Promises and Challenges of “Greening” Teacher Preparation
3:30 PM–4:10 PM, Room 321
Achieving “green” schools necessitates the preparation of teachers with the knowledge, skills, and values to educate for a sustainable future. This presentation highlights how elementary teacher educators collaborated to infuse global issues and related environmental concepts across their methods courses.
Presenter(s): Elizabeth Crawford (University of North Carolina Wilmington), Lisa Buchanan (University of North Carolina Wilmington)
Strand: ●

Environmental Education and Effective Professional Development
3:30 PM–4:10 PM, Room 320
Come learn about PLT’s new Guiding Principles for Effective Professional Development and how we are developing new and innovative PD models. You will have the opportunity to learn how the Guiding Principles can strengthen your own EE professional development programs.
Presenter(s): Rachel Bayer (Project Learning Tree), Michael Duffin (PEER Associates, Inc.)
Strand: ●
Is Sustainability Still Possible? Preparing Students for a Turbulent Future
3:30 PM–4:10 PM, Room 317
Is Sustainability Still Possible? This presentation will explore key findings of State of the World 2013 and how to design environmental education in a way that best prepares students for the difficult future that is likely in store for them.
Presenter(s): Erik Assadourian (Worldwatch Institute)
Strand: ●

Nature: A Child's Playground for Learning and Fun
3:30 PM–4:10 PM, Room 318
Lil’ Sprouts Nature Preschool is a new program that uses nature, the original playground, as a learning platform. Research has shown children benefit from being outside. Come learn about how Lil’ Sprouts engages children and helps them learn in nature.
Presenter(s): Corey Sperling (Reedy Creek Nature Center, Mecklenburg County Parks and Recreation)
Strand: ●

University Students Produce Videotapes for Storytelling About Sustainability Heroes/Heroines
3:30 PM–4:10 PM, Room 319
Students in the University of Vermont’s Creating Environmentally Sustainable Communities service learning course produce videotapes to tell Sustainability Stories about local individuals/groups who can serve as role models or examples for others to emulate in transitioning/downshifting to more environmentally sustainable communities.
Presenter(s): Thomas Hudspeth (UVM Environmental Program)
Strand: ●

Roundtable Discussions
3:30 PM–4:10 PM
Climate Change: Issue Investigations in Formal and Informal Settings
3:30 PM–4:10 PM, Room 310, Table 1
Do you question the science behind news articles about climate change? MADE CLEAR (Maryland and Delaware Climate Change Education, Assessment and Research) invites you to an engaging and evidence-based session to provide you with current climate change environmental education resources.
Presenter(s): Christopher Petrone (Delaware Sea Grant/University of Delaware), Angela Baldwin (Assateague State Park), Carrie Samis (Maryland Coastal Bays Program), Nicole Shea (University of Delaware), Kimberly Dixon (Maryland Zoo), Robert Ferrell (Appoquinimink School District)
Strand: ●

Creating a Green Culture in Schools: A Green Schools Recognition Program
3:30 PM–4:10 PM, Room 310, Table 2
Palm Beach County’s Green Schools Recognition Program not only encourages schools to become more sustainable but recognizes and rewards them for their efforts. This program encompasses areas of schoolyard enhancement, conservation, integrated curriculum, administration involvement, and community support.
Presenter(s): Susan Toth (Pine Jog Environmental Education Center), Qingqing Chui (Pine Jog Environmental Education Center), Eileen Cassidy (FAU/Pine Jog Environmental Education Center)
Strand: ●

Determining Preservice Teachers’ Beliefs Toward Human Population Growth
3:30 PM–4:10 PM, Room 310, Table 3
Preservice teachers’ beliefs are crucial to implement population education programs. Thus, this study focused on their beliefs towards population growth in Turkey. Validity and reliability of scale will be reported and descriptive statistics will be utilized.
Presenter(s): Sinem Demirci (Middle East Technical University)
Strand: ●
FRIDAY

Engaging Audiences Through Video: Communicating Science Effectively and Interestingly
3:30 PM–4:10 PM, Room 310, Table 4
Explore the power of video as a tool for education and communication. This session will describe how video can be used to communicate your topic of interest in an engaging and interesting way.
Presenter(s): Shelby Krantz (University of Florida)
Strand: ⬛

Sense of Wonder: Nature Journaling
3:30 PM–4:10 PM, Room 310, Table 5
Come be inspired to rekindle your sense of wonder by making your own nature journal and learning innovative ways to use that journal. Connections to the Common Core Standards, trade books, and 5E lesson plans will be shared.
Presenter(s): Molina Walters (Arizona State University), Teresa Coker (Green Mountain College)
Strand: ⬛

The Viking Kingdom: Scandinavian Secrets for Success in Outdoor Education
3:30 PM–4:10 PM, Room 310, Table 6
Come learn what Scandinavian countries are doing to create dynamic, engaged communities of learners in outdoor environments. Based on research undertaken in 2012, this session includes tips and hands-on activities to bring back to your school or center.
Presenter(s): Kerrilee Hunter (Greenburgh Nature Center)
Strand: ⬛

What Makes a Good Formal Environmental Educator?
3:30 PM–4:10 PM, Room 310, Table 7
April Haight will present one of her essential research questions: What is the most effective way (workshop vs. in classroom vs. combination) to expose preservice students to environmental education that leads them to incorporate environmental education into their classroom?
Presenter(s): April Haight (Morehead State University)
Strand: ⬛

Using the Power of Nature to Transform Urban Youth
3:30 PM–4:10 PM, Room 310, Table 8
This discussion presents information on the effort to reconnect urban youth and nature, work led by the Children and Nature Network, and powerful examples of grassroots programs that have been effective. The session will also provide an opportunity for participants to engage in brainstorming.
Presenter(s): Brother Yusuf Burgess (Youth Ed-Venture & Nature Network)
Strand: ⬛

Poster Presentations
3:30 PM–4:10 PM
7a) Film as a Tool of Critical Pedagogy of Place
3:30 PM–4:10 PM, Room 309
How can film be used in place-based pedagogy? Beyond films rooted in students’ individual places, this presentation will show how film can be used in innovative ways to encourage students to situate themselves in their cultural and ecological places.
Presenter(s): Nicole Beeman-Cadwallader (Indiana University)
Strand: ⬛

7b) GLOBE: Empowering Students to Measure, Investigate, and Understand Climate
3:30 PM–4:10 PM, Room 309
This presentation will present highlights from the GLOBE Program’s Student Climate Research Campaign and provide a framework for developing similar campaigns in the future.
Presenter(s): Jessica Mackaro (The GLOBE Program), Gary Randolph (The GLOBE Program)
Strand: ⬛
7c) Impact of Sustainable School Design on Children’s Environmental Attitude and Behavior
3:30 PM–4:10 PM, Room 309
This paper investigates the effect of sustainable school design on children’s environmental attitude and behavior. The research outcomes suggest that sustainable school design creates a dialogue between “children” and “school building” that generates opportunities for improving the young generation’s environmental awareness.
Presenter(s): Parisa Izadpanahi (Deakin University, Australia)
Strand: ●

7d) Teaching Habitat Ecology Through Math and Language Arts Common Core
3:30 PM–4:10 PM, Room 309
The Common Core Standards ask everyone to become math and English teachers; we’ll show you how when it comes to habitat ecology. View examples of fiction and non-fiction text and sample activities aligned to the math standards as well.
Presenter(s): Amanda Lindell (Wildlife Conservation Society)
Strand: ●

7e) TeenNat—Youth Scientists Using Technology to Answer Critical Applied Research Questions
3:30 PM–4:10 PM, Room 309
We will present a poster about the new TeenNat program. Youth scientists used technology to answer research questions vital to the ecological management of Pepperwood Preserve in Santa Rosa, California. Outreach techniques, program results, and lessons learned will be shared.
Presenter(s): Sandi Funke (Pepperwood Preserve)
Strand: ●

7f) Uncommon Seeds in Common Areas: Engaging Students in South Florida Conservation
3:30 PM–4:10 PM, Room 309
Through ex-situ plant nurseries and research immersion days, the Fairchild Challenge unites students, teachers, and community partners around plant conservation issues. Come discover our replicable process and explore how to make students part of the answer.
Presenter(s): Thaddeus Foote (Fairchild Tropical Botanic Garden)
Strand: ●

Friday 4:20 PM
Traditional Presentations
4:20 PM–5:00 PM
Citizen Science: A Vehicle for Student Achievement and Career Motivation
4:20 PM–5:00 PM, Room 320
The purpose of the mixed method quasi-experimental study was to examine the impact of a citizen science program on student achievement and career motivation. Findings indicated that this program had a positive impact on student performance and STEM career trajectories.
Presenter(s): Suzanne Hiller (George Mason University)
Strand: ●

Environmental Literacy and Behavior Change
4:20 PM–5:00 PM, Room 317
In this session attendees will learn about Keep America Beautiful’s internal environmental literacy plan and the goal to use it to both improve internal programs and influence and measure behavior change. See if the strategy would work for your organization.
Presenter(s): Cecile Carson (Keep America Beautiful)
Strand: ●
NCATE Environmental Education Standards: An Opportunity for Input
4:20 PM–5:00 PM, Room 319
Nearly three out of four teachers graduate from a CAEP accredited program. Reaching these teachers is essential. NAAEE is revising our CAEP approved EE Standards. Come, learn more about this process, and get a sneak peak at our current draft.
Presenter(s): Terry Wilson (Western Kentucky University), Bora Simmons (National Project for Excellence in Environmental Education)

Parental Influence and Role Modeling of Environmental Ethos for Children
4:20 PM–5:00 PM, Room 318
This session uses video clips to present research findings of an intergenerational learning study that examines how parents facilitate and communicate an environmental ethos to their children during outdoor walks at a Nature Center.
Presenter(s): Lucy McClain (Shaver’s Creek Environmental Center - Penn State University), Heather Zimmerman (Penn State University)

Recipe for Success: Cooking Up a Certification Program from Scratch
4:20 PM–5:00 PM, Room 312
The Advanced Training for Environmental Education in Georgia program is the first certification program to receive accreditation by NAAEE. This presentation will share our recipe, the ingredients used, the value of the program, and our journey through the accreditation process.
Presenter(s): Kim Morris-Zarneke (Georgia Aquarium), Cheryl Ashley-Serafine (Cobb County Public Schools)

Stop, Look, Listen: Future Teachers Think About Science and Teaching
4:20 PM–5:00 PM, Room 321
Students become agents of change as they tackle issues related to water and the environment. A community-based learning course enables preservice science teachers to work with environmental educators as they develop high school service learning projects.
Presenter(s): Carolyn Viviano (Loyola Marymount University)

Roundtable Discussions
4:20 PM–5:00 PM

Addressing the Interconnections of Well-Being: A Curriculum
4:20 PM–5:00 PM, Room 310, Table 1
Thinking spherically toward sustainable well-being for all—self-health, other-compassion, earth-respect and whole-awareness, and action!
Presenter(s): Jonna Johnson (Western Michigan University)

Alphabet Soup—WFIT, CSWEP: A Collaborative Model for Watershed Education
4:20 PM–5:00 PM, Room 310, Table 2
Our presentation will focus on the New York City watershed and the unique educational opportunities that have been developed to educate participants about where their water comes from and the working landscapes that protect it.
Presenter(s): Jessica Olenych (Common Ground Educational Consulting), Susan Cox (US Forest Service)

Characterizing Preservice Teachers Awareness and Attitudes About Environmental Problems and Issues
4:20 PM–5:00 PM, Room 310, Table 3
This presentation profiles preservice teachers’ responses to a questionnaire measuring awareness and attitudes about environmental issues and problems. The intent of the survey results is to aid teacher trainers in better matching curriculum with students’ perception of the environment.
Presenter(s): Fletcher Brown (University of Montana)
Engaging Your Audiences Using Twitter
4:20 PM–5:00 PM, Room 310, Table 4
So you have a Twitter feed. Now what? Learn the next steps in engaging and energizing your followers to care about your environmental education cause. We’ll talk about increasing followers, making updates relevant, and charting change overtime using online tools.
Presenter(s): Beth Lacey Gill (Irvine Nature Center)
Strand:

Exploring the Effects of Naming Animals on Knowledge Retention
4:20 PM–5:00 PM, Room 310, Table 5
To name or not to name animal teaching tools? This study sought to answer this question. We assessed whether participants retained more knowledge when exposed to an owl with an anthropomorphic name compared to an owl without a name.
Presenter(s): Milton Newberry (University of Florida)
Strand:

Helping Students to Deepen Their Observation Skills
4:20 PM–5:00 PM, Room 310, Table 6
Making observations in nature is a powerful way to connect students to the natural world, and is a science process skill that forms the basis of many discoveries. Experience strategies from BEETLES activities that will help students develop their observation skills.
Presenter(s): Kevin Beals (Lawrence Hall of Science)
Strand:

Multimedia Conservation Education: Creating a New Generation of GLOBIO Resources
4:20 PM–5:00 PM, Room 310, Table 7
Help define a new generation of multimedia resources for conservation education. GLOBIO needs your input to help create valuable educational materials that you will use in your learning environments. Be one of the first to test and evaluate innovative and exciting multimedia tools.
Presenter(s): Lauren Roden (GLOBIO)
Strand:

Poster Presentations
4:20 PM–5:00 PM

8a) Assessing the Impact of a Wildlife Education Program in Japan
4:20 PM–5:00 PM, Room 309
We evaluated the effects of a wildlife education program on residents’ attitudes and behaviors in Japan, and found that residents in the treatment model district had higher confidence in their ability to prevent wildlife damage than the control district residents.
Presenter(s): Ryo Sakurai (Yokohama National University), Susan Jacobson (University of Florida)
Strand:

8b) Cognitive Influences and Shrimper Participation in the Gulf Shrimp Fishery
4:20 PM–5:00 PM, Room 309
Framed in the cognitive hierarchy approach, this research examines the relationships between values, attitudes, and behaviors in the Gulf shrimp fishery. This mixed methods study investigates how norms, attitudes, and perceptions influence participatory behaviors within the shrimping community.
Presenter(s): Jolvan Morris (FAMU School of the Environment)
Strand:

8c) Developing Indicators for Evaluating Taiwan Forestry Bureau’s Nature Centers
4:20 PM–5:00 PM, Room 309
Taiwan Forestry Bureau’s (TFB) nature centers are collectively one of the leading outdoor environmental education program providers in Taiwan. This study shows efforts of developing evaluation framework with five major concerned areas and 69 indicators for TFB’s nature centers by using Delphi Technique.
Presenter(s): Ju Chou (Graduate Institute of Environmental Education, National Taiwan Normal University), Shih-Jang Hsu (n/a)
Strand:
8d) The Effect of Animations on Primary Children’s Environmental Conceptions
4:20 PM–5:00 PM, Room 309
We examined the effect of the animated movie “Wall-E” on 89 primary students’ (9 and 12 years old) conceptions about environmental protection. Our findings suggest that the movie enriched participants’ ideas on protection actions, especially those of the younger ones.
Presenter(s): Maria Photiou (University of Cyprus, Department of Education), Stella Petrou (University of Cyprus, Department of Education)
Strand: ●

8e) The Effect of Personality Characteristics and Environmental Literacy on Environmental Preference Disposition
4:20 PM–5:00 PM, Room 309
The purpose of this study is to shed light on the relationship between personality characteristics and environmental preference disposition. This study reveals that ecological and scientific understandings of environment have no significant influence on determining environmental preference disposition.
Presenter(s): Joo-young Lee (Korea National University of Education)
Strand: ●

8f) Kontra I Kulepbla: Challenging the Brown Treesnake with Behavior Change
4:20 PM–5:00 PM, Room 309
The voracious brown treesnake silenced Guam’s forests. This invasive species impacts communities’ quality of life and has created gaps in the island’s natural and cultural history. This social marketing campaign will awaken and mobilize island-wide brown treesnake consciousness.
Presenter(s): Cheryl Calaustro (Guam Dept. of Agriculture)
Strand: ●

8g) Using Social Marketing as Education Tool on Tiger Conservation
4:20 PM–5:00 PM, Room 309
The effectiveness of social marketing campaigns to lead to measurable biodiversity conservation is still debated and requires more empirical evidence from field. We show both positive and significant changes in human behavior towards tiger conservation resulting from a social marketing campaign in Lao PDR.
Presenter(s): Santi Saypanya (Cornell University)
Strand: ●
**Friday 6:00 PM**

**Governor’s Reception & Stapp Scholarship Auction at the Maryland Science Center**
6:00 PM–8:30 PM, Maryland Science Center

Join us in honoring Maryland Governor Martin O’Malley, who will be presented with a special award for his outstanding leadership in environmental education. The governor will be on hand to greet NAAEE members and share a few words about environmental literacy efforts he has championed.

Then get ready to bid on your favorite items in the live auction, including an amazing trip **for two to the Galapagos by Lindblad Cruises**, a signed and numbered lithograph by renowned **marine life artist Wyland**, and an original photograph by **wildlife photographer Gerry Ellis**.

The silent auction will culminate at the reception as well. Be there to slip in your final bid just under the wire and snatch up a great variety of books (many signed by the authors), crafts, jewelry, backpacks, binoculars, T-shirts, gift certificates, tickets, and much more.

And with all this activity, don’t forget to explore the magnificent Maryland Science Center—**Maryland’s oldest scientific institution and one of the oldest such institutions in the United States**. With new displays and exhibits enjoyed for generations, there’s a tremendous amount to see and do: Lie on a bed of nails, enjoy a symphony of body digestion noises, stand in a dinosaur footprint, and experiment with Newton’s principles of physical science. And that’s just a start!

**Every auction purchase helps to support conference scholarships.** 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 to the association and the conference. Many “Stapplings” have gone on to hold leadership positions in the organization.

Substantial hors d’oeuvres and cash bar. One drink ticket included.

Note: The Maryland Science Center is about ¾ mile from the Convention Center. It is about a 15-minute walk.

If you need assistance getting to the Maryland Science Center, please notify the registration desk by 3:00 PM on Friday.
Hands-on Presentations
8:30 AM-10:00 AM

AGsploration: Investigating Agriculture and Its Environmental Connections
8:30 AM-10:00 AM, Room 306
AGsploration is an engaging University of Maryland Extension agriculture curriculum that helps youth develop science literacy skills. Hands-on lessons engage youth in exploration of plant and animal agriculture, environmental connections, and agricultural technology. Youth also explore diverse agricultural careers.
Presenter(s): Thomas Hutson (University of Maryland Extension)
Strand: ●

Increasing Urban Tree Canopy and Stream Health Through Meaningful Student Service Learning
8:30 AM-10:00 AM, Room 304
Students Restoring Urban Streams is a meaningful service learning program designed to engage Baltimore City School teachers and students in restoring riparian stream buffers. Workshop participants will practice the student led service learning process using USDA Forest Service i-Tree and field-study tools.
Presenter(s): Desiree Shelley (Parks & People Foundation), Samuel Little (University of Michigan)
Strand: ●

Nature’s Healing Circles
8:30 AM-10:00 AM, Room 305
Native American Healing circles engage all within the circle to touch nature through their body, mind, and spirit. The four directions, the talking stick, and our connection to Mother Earth and Father Sky become part of each participant’s individual and collective circles.
Presenter(s): Rayna Gangi (Rayna G.)
Strand: ●

All events take place at the Baltimore Convention Center unless otherwise noted.
Using Model My Watershed:
An Authentic Online Hydrologic Model
8:30 AM-10:00 AM, Room 302
Model My Watershed is an intuitive web application where students can model neighborhood and watershed hydrology. Using real data and an authentic model, students can examine their local environment and make changes to improve hydrology.
Presenter(s): Susan Gill (Stroud Water Research Center), Nanette Marcum-Dietrich (Millersville University of Pennsylvania), Christina Medved (Stroud Water Research Center)
Strand: ●

Walking in Two Worlds: Coming Together for Aboriginal Youth and Community
8:30 AM-10:00 AM, Room 301
Share in the journey of how a northern aboriginal community came together to co-create experiential learning opportunities for its youth. This interactive session will weave together land based learning, Elder knowledge, curriculum, and collaborative approaches for sustainability. Presenters include youth, community members, and elders.
Presenter(s): Beverley Barca (Northland School Division/OSLI)
Strand: ●

Why Nature Preschool?
8:30 AM-10:00 AM, Room 303
The value of nature-based learning in early childhood education is immense. Meeting the demand for environmental education with early learners presents its own challenges. Discover why nature preschool is beneficial to young learners and to the well-being of communities as whole.
Presenter(s): Monica Wiedel-Lubinski (Irvine Nature Center)
Strand: ●

Bright Spots and Great Ideas
8:30 AM-10:00 AM, Room 316
Throughout the conference, you can learn about five or six successful and loosely related programs in each 90-minute group of Bright Spots and Great Ideas. Each presentation is 12 minutes long, and sessions are presented in the order listed.

Chesapeake Chefs: Connecting Kids to Food Systems
Chesapeake Chefs was a shot-in-the-dark summer nature camp. It was designed to teach kids how to cook while connecting them to the food system in one week. The result was the best week of camp ever!
Presenter(s): Steve Mickletz (Irvine Nature Center)
Strand: ●

Environmental Club for ESOL Students: Immigrants Connecting with New Environments
Hands-on environmental education through conservation projects is a perfect fit for ESOL students (English for Speakers of Other Languages). Learn how our club provides connections with students’ new school, helps make community service opportunities accessible, and inspires a new generation of environmentalists.
Presenter(s): Karen Vernon (Audubon Naturalist Society)
Strand: ●

From Science Students to Engaged and Responsible Environmental Citizens
Project WISE is a science education program based in a national park that engages students through scientific investigations, media production, and student-driven research. In this program, students gain scientific knowledge and develop skills needed for success in a competitive global economy.
Presenter(s): Francis Taroc (Golden Gate National Parks Conservancy)
Strand: ●
Leopold Education Project: Connecting Youth with the Outdoors
LEP is an innovative, interdisciplinary conservation and environmental education curriculum based on the essays in the famous book *A Sand County Almanac*. The original curriculum has now been expanded to include new activities, incorporate new technologies, and encourage teaching in places like nature centers and zoos!
Presenter(s): Carson Main (Aldo Leopold Foundation)
Strand: ●

Let’s Make Rain Gauges!
We will make rain gauges using recycled materials and learn how to participate in citizen science projects with CoCoRaHS and the GLOBE project.
Presenter(s): Dorian Janney (MCPS)
Strand: ●

Scientists Like Me
Sixth-grade students in a ZooCamp program in Oregon participated in an evaluation activity where they created their own qualitative research project over the course of the week.
Presenter(s): Kathayoon Khalil (Stanford University)
Strand: ●

Traditional Presentations
8:30 AM–9:10 AM

BioBlitz: From Arizona to Oklahoma and the Amazon Rainforest
8:30 AM–9:10 AM, Room 320
Might you organize a BioBlitz? This session offers lessons, handouts, inquiry tools and demonstrates how Project Noah’s free online photo platform supports students and researchers who explore biodiversity in a schoolyard, at the Oklahoma City Zoo, in Saguaro National Park, and in the Peruvian Amazon.
Presenter(s): Teresa Randall (Oklahoma City Zoo), Molina Walters (Arizona State University), Christa Dillabaugh (EnviroNatura)
Strand: ●

Connecting Kids to Nature Via Observations and Photography
8:30 AM–9:10 AM, Room 310
This session demonstrates one way to connect children to nature via the empowerment of technology. Our process reveals insights into students’ relationships with natural environments. The presentation includes examples of student work, including photos with comments and videos. We’ll compare grades K-1 and 7-8.
Presenter(s): Robin Long (The Harley School), Marilyn Fenster (The Harley School), Gail Hanss (The Harley School)
Strand: ●

Environmental Inquiry: Embedding the Local Community into Elementary Education
8:30 AM–9:10 AM, Room 317
Two elementary school teachers in Ottawa focus their classroom programs on the three E’s (environment, economy, and equity) to encourage their students to explore their local neighbourhoods as they learn the true meaning of a sustainable community.
Presenter(s): Stephen Skoutajan (Ottawa-Carleton District School Board)
Strand: ●

Integrating Environmental Education into Your Curriculum Creating Schoolyard Habitats
8:30 AM–9:10 AM, Room 312
The Schoolyard Habitat Program, an Audubon Connecticut and U.S. Fish and Wildlife Service partnership, creates outdoor classrooms in a place-based environmental education model. It engages various members of school communities as stewards of their local environment and serves as a model bridging formal and informal education.
Presenter(s): Taralynn Reynolds (Audubon Connecticut), Francesca Williams (Audubon Greenwich)
Strand: ●
LSU Coastal Roots: School-Based Native Plant Nursery for Habitat Restoration
8:30 AM–9:10 AM, Room 314
Learn how 2nd to 12th grade teachers connect the Coastal Roots Project to their curriculum and their kids to important coastal issues by involving their students in a hands-on school-based native plant nursery that supports their place-based stewardship project.
Presenter(s): Pamela Blanchard (Louisiana State University)
Strand: ●

A Smorgasbord of Environmental Education Tools for Diverse Learning Environments
8:30 AM–9:10 AM, Room 318
No matter the season, budget, or level of available technology, resources from the Cornell Lab of Ornithology can help you get kids excited about the natural world while engaging in learning that meets STEM and common core standards.
Presenter(s): Ileana Betancourt (Cornell Lab of Ornithology)
Strand: ●

Using Communities of Practice to Advance Environmental Education
8:30 AM–9:10 AM, Room 321
We’ve organized environmental educators into a number of Communities of Practice: they share a passion for a particular environmental education topic and work together to build bridges over barriers, become more efficient and strategic—and advance environmental education!
Presenter(s): Kathy Worobec (Alberta Council for Environmental Education)
Strand: ●

Saturday 9:20 AM
EECapacity National Training Workshop Wrap-Up
9:20 AM–12:00 PM, Room 319
By invitation.
Presenter(s): Augusto Medina (EECapacity Project), Marianne Krasny (Cornell University), Judy Braus (NAAEE), Jose Marcos-Iga (Environmental Education Exchange), Akiima Price (Akiima Price Consulting), Bora Simmons (National Project for Excellence in Environmental Education), John Fraser (New Knowledge Organization), Rupu Gupta (New Knowledge Organization), Lori Mann (NAAEE)

Traditional Presentations
9:20 AM–10:00 AM
Aquatic Inquiry: Integrating Field Investigations with K-12 STEM Education
9:20 AM–10:00 AM, Room 317
Field investigations can connect children with nature while sharpening scientific inquiry skills. Learn how the newly updated Aquatic WILD curriculum integrates field investigations and STEM as well as ways to overcome hurdles associated with conducting student focused scientific investigations.
Presenter(s): Marc LeFebre (Council for Environmental Education), Kerry Wixted (Maryland Department of Natural Resources)
Strand: ●

Coalition-Building to Support Environmental Literacy Plan Development, Adoption, and Implementation
9:20 AM–10:00 AM, Room 318
With the Environmental Literacy Plan (ELP) movement progressing in every state, the skill of building and nurturing coalitions to support the phases of ELP development is evolving. This session will convene coalition building experts and EE leaders to share lessons learned.
Presenter(s): Traci Price (Gray Family Foundation), Brock Adler (n/a), Renee Strand (North Carolina State University)
Strand: ●
Engaging College Freshmen in Tech-Based Citizen Science Research
9:20 AM–10:00 AM, Room 312
What can millennials teach us about motivation and technological tools for conducting citizen science research? Studying the behavior of first year University of Maryland students during a university course, we learned what it takes to engage digital natives in exploration of their campus’s natural environment.
Presenter(s): Matthew Aruch (College Park Scholars Science Technology and Society Program), Carol Boston (University of Maryland), Yurong He (University of Maryland)
Strand: ●

Flipped Classroom: Innovations in Teaching Energy Efficiency
9:20 AM–10:00 AM, Room 314
Teaching students about energy efficiency is an essential part of environmental education, and giving them hands-on learning experiences deepens that learning. Teachers often don’t have time for both classroom instruction and project-based learning. Flipped classrooms allow them to do both.
Presenter(s): Aaron Stainthorp (Alliance to Save Energy)
Strand: ●

Implementing a Water Sports Adventure Weekend to Promote Nature Education
9:20 AM–10:00 AM, Room 320
Ohio 4-H bridged a developing gap in summer resident camp science, paddlesport and fishing education by implementing a Watersports Adventure Weekend specialty camp for middle schoolers. We will discuss the need for, implementation process behind, and educational outcomes of WAW.
Presenter(s): Tim Tanner (Ohio State University Extension), Jenny Cherry (Ohio State University Extension)
Strand: ●

Modeling and Mapping Sea Level Rise in the Delaware and Chesapeake Bays
9:20 AM–10:00 AM, Room 311
We will guide you through our sea-level-rise curricular unit and companion National Geographic modeling and mapping tool and will discuss how you can incorporate this resource in your own program.
Presenter(s): Cathlyn Styilinski (University of Maryland Center for Environmental Science), Cassie Doty (University of Maryland Center for Environmental Science Appalachian Laboratory), Bart Merrick (NOAA), Jennifer Holmes (Delaware National Estuarine Research Reserve), Elena Takaki (National Geographic Society)
Strand: ●

Pine Jog’s After School Green Hour: Fostering Environmental Literacy
9:20 AM–10:00 AM, Room 310
Florida Atlantic University/Pine Jog has developed an Environmental Literacy Curriculum geared to after school settings addressing EE Learner Guidelines and state standards. Third to fifth graders engage in a yearlong exploration of environmental topics organized into six thematic modules. Presenters will share lessons learned and impact on students.
Presenter(s): Veronica Frehm (Pine Jog Environmental Education Center), Liting Niu (Pine Jog Environmental Education Center), Susan Toth (Pine Jog Environmental Education Center)
Strand: ●

Rethinking Children’s Participation in Sustainable Development
9:20 AM–10:00 AM, Room 321
Democratic and participatory engagement by young people is necessary for developing sustainable communities. This presentation outlines the social and political dimensions of engaging young citizens in sustainable development and describes a variety of highly participatory methods for democratic engagement.
Presenter(s): Roger Hart (The Graduate Center of the City University of New York), Scott Fisher (The Graduate Center of the City University of New York), Bijan Kimiagar (CUNY Graduate Center)
Strand: ●
Poster Presentations
9:20 AM–10:00 AM

9a) Investigating Green Growth Education at Secondary Schools in Korea
9:20 AM–10:00 AM, Room 309
The purpose of this study is to investigate current state of Green Growth education (GGE) in secondary schools of Korea. GGE is currently implemented in many ways at elementary and secondary levels.
Presenter(s): Seonghoa Cho (Korea National University of Education), Don-Hyung Choi (Korea National University of Education)
Strand:

9b) Lessons Learned from Teaching Karst Topics to Preservice Elementary Teachers
9:20 AM–10:00 AM, Room 309
Preservice elementary teachers participated in one- or two-day experiences at Mammoth Cave National Park. Using the Environmental Education Efficacy Belief Instrument (Sia, 1992) showed no differences between groups. Student drawings and concept maps did show significant differences (p>.05).
Presenter(s): Jeanine Huss (Western Kentucky University), Nielsen Pereira (Western Kentucky University), Cheryl Messenger (Mammoth Cave National Park)
Strand:

9c) Linking Preservice Science Teachers’ Environmentally Friendly Behaviors with Psychological Attributes
9:20 AM–10:00 AM, Room 309
This present study investigates the relationship among Turkish preservice science teachers’ environmental friendly behaviors, locus of control, and optimism bias. The outcomes will contribute to the literature regarding to developing EE programs for preservice teachers.
Presenter(s): Umut Alper (Science Entertainment Centre), Elvan Sahin (Middle East Technical University)
Strand:

9d) Mobilizing Student Research and Participation in Dramatic Environmental Issues
9:20 AM–10:00 AM, Room 309
Drawing upon several decades of examples—in the BP Deepwater Horizon blowout, the Exxon-Valdez oil spill, and the classic endangered species “snail darter”/TVA Tellico Dam case—of mobilizing students (mostly college and grad) into active research and policy contributions.
Presenter(s): Zygmunt Plater (Boston College)
Strand:

9e) Nature Perceptions: Implementing an Adult Environmental Education Workshop
9:20 AM–10:00 AM, Room 309
Learn how a series of workshops was used to educate parents on quality interactions in their natural surroundings and ways to use nature to encourage their children to grow and become informed and responsible stewards of their natural surroundings.
Presenter(s): Jenny Leeper Miller (UNL Ruth Staple Child Development Laboratory), Erin Hamel (University of Nebraska -Lincoln)
Strand:

9f) New KAB Curriculum Highlights Partnerships–Online Professional Development–Service Learning–Technology
9:20 AM–10:00 AM, Room 309
Online professional development, teacher designed workshops, service learning, technology interaction, and social media in and outside the classroom make KAB’s Natural Resource Conservation and Community Greening curriculum for grades 6–12 relevant and exciting by incorporating research, self-reflection/journaling, and action.
Presenter(s): Cecile Carson (Keep America Beautiful)
Strand:
9g) Place-based Education in the Urban Setting for Prospective Teachers
9:20 AM–10:00 AM, Room 309
During an environmental education seminar of undergraduates who will become primary school teachers, a place-based education in the urban setting approach was undertaken, to connect students with the community and focus learning on local issues.
Presenter(s): Marianna Kalaitsidaki (University of Crete)
Strand:

9h) Redefining the Classroom Walls: Taking Middle Schoolers Outdoors
9:20 AM–10:00 AM, Room 309
Struggling to engage students in “real” learning? Want to connect them to the natural world outside classroom walls? Clubs are great, but why not a whole grade level? We’ll share our logistical trailblazing: developing activities, building buy-in, and overcoming obstacles.
Presenter(s): Wendy Grimshaw (Botetourt County Public Schools, Virginia)
Strand:

Saturday 10:30 AM
Symposium
10:30 AM–12:00 PM
Your Watershed, Your Backyard: An Uncommon Collaborative in Baltimore
10:30 AM–12:00 PM, Room 315
Your Watershed, Your Backyard uses live fish to involve urban middle school students in STEM, environmental restoration, civic engagement, and career exploration. Local partners with distinct missions work to achieve maximum collective impact and build capacity in urban K-12 schools.
Moderator(s): Valerie Butler (Carnegie Institution for Science)
Presenter(s): Tom Gamper (Trout Unlimited), Michael Martinko (General Motors, LLC.), Chandra Harvey (BioEYES), Kurt Moser (Earth Force)
Strand:

Hands-on Presentations
10:30 AM–12:00 PM
Cultivating Joy and Wonder: Educating for Sustainability in Early Childhood
10:30 AM–12:00 PM, Room 302
Early Childhood Education for Sustainability is an emerging field. This session will explore the big ideas of sustainability and how they mesh with the best practices of education for the young child through experiences set in nature, food, and community.
Presenter(s): M Wellings (Shelburne Farms)
Strand:

Project Learning Tree National GreenSchools! Program
10:30 AM–12:00 PM, Room 303
Learn more about Project Learning Tree’s (PLT) GreenSchools! program—a PLT program that connects Project Learning Tree (PLT) with service learning, professional development, and environmental action. Hear from Green Team student leaders from a local PLT model GreenSchool!
Presenter(s): Al Stenstrup (Project Learning Tree), James McGirt (Project Learning Tree), Vicki Arthur (U.S. Forest Service)
Strand:
Responsive Teaching Strategies in Water Education  
10:30 AM–12:00 PM, Room 304  
Learning progression-based formative assessment is an exemplary practice that enhances student achievement in principle-based environmental science reasoning. This session offers firsthand experience using formative assessments to elicit, interpret, and respond to students’ ideas in water instruction.  
Presenter(s): Claire Sargo (Mount de Sales Academy), Aubrey Cano (University of California at Santa Barbara)

Teaching Urban Ecology: Engaging Strategies  
10:30 AM–12:00 PM, Room 301  
Novice science teachers in urban public schools face the constraints of budget restriction and lack of student engagement in environmental science. These activities integrate STEM pedagogy and inquiry-based learning with readily available resources to teach about local environmental issues.  
Presenter(s): Shanmugavel Rajendran (Baltimore City Public School System), Mark Kather (Baltimore County Public Schools)

Volunteer Water Quality Monitoring: Examples and Activities for All Ages  
10:30 AM–12:00 PM, Room 306  
Learn about three successful models for engaging citizen scientists through water quality monitoring for adults and children. We will discuss effective use of technology and partnerships to ensure data use. Get hands-on training in macroinvertebrate identification and water chemistry testing.  
Presenter(s): Leah Miller (Izaak Walton League of America)

Bright Spots and Great Ideas  
10:30 AM–12:00 PM, Room 316  
Throughout the conference, you can learn about five or six successful and loosely related programs in each 90-minute group of Bright Spots and Great Ideas. Each presentation is 12 minutes long, and sessions are presented in the order listed.

Be a Nature Detective! Hands-On Activities for Out of School Settings  
Get kids out investigating the natural world in a fun yet meaningful way! Come try games and activities designed to help kids connect with nature while learning about habitats, food webs, life cycles, and the lives of their local birds.  
Presenter(s): Anne Rosenberg (Cornell Lab of Ornithology)

Growing with Nature  
Using Growing Up WILD Curriculum, learn how to engage students in nature. Growing Up WILD helps connect children to the outdoors through 27 activities. Each activity presents a wide range of options so that children can work and learn at their own developmental level.  
Presenter(s): Jack Parker (Ward Museum of Wildfowl Art)

Let’s Take a Child Outside!  
Spending time outside with children has become increasingly popular. The Take A Child Outside Week website is an easily accessible free tool for finding outdoor opportunities. We’ll share information about the platform and partnership opportunities available to EE providers.  
Presenter(s): Beth Cranford (North Carolina Museum of Natural Sciences)
Ms. Smarty-Plants™ Grows Earth Heroes®
Clad in colorful overalls, Ms. Smarty-Plants™ takes you on a magical journey to inspire your own group of “Earth Heroes” to save the planet. Exceeding STEM standards you will learn fun, effective, conservation curriculum ideas to incorporate into your programs.
Presenter(s): Pam Meisner (Water Conservation Garden)
Strand: ●

Nature’s Playground: Building a Love of the Outdoors in Pre-K
With preschool children spending 87 percent of their time indoors, it’s critical to think “outside the classroom.” Learn about our model to help Pre-K and Head Start classes explore and play in nature right outside their classroom windows.
Presenter(s): Rebecca Wadler (Izaak Walton League of America)
Strand: ●

A Species a Day: Photography and Professional Development
In 2009, I decided to tackle a photo-a-day project. My specific challenge was to photograph a different species of living thing each day. Find out how a simple challenge like this can contribute to daily EE professional development.
Presenter(s): Steve Mickletz (Irvine Nature Center)
Strand: ●

Traditional Presentations
10:30 AM–11:10 AM
Assessment and Evaluation for EE Certification Programs
10:30 AM–11:10 AM, Room 312
Experienced certification program representatives will explore alternatives and questions in two fundamental areas: (1) how to assess candidates in your certification program; and (2) how to evaluate major features of your certification program to help guide program improvements.
Presenter(s): Thomas Marcinkowski (Florida Institute of Technology), Andree’ Walker Bravo (Utah Society for Environmental Education), Katie Navin (Colorado Alliance for Environmental Education)

Competing Conceptualizations: Climate Change in the High School Classroom
10:30 AM–11:10 AM, Room 311
Global warming remains a highly controversial topic among the U.S. public. This presentation highlights new research that explores how high school social studies and science teachers, textbooks, and supplemental curricula conceptualize the problem of and potential responses to global warming.
Presenter(s): Casey Meehan (Bowdoin College)
Strand: ●

Learning from Participants in the California Naturalist Program About Motivations and Citizen Science
10:30 AM–11:10 AM, Room 320
Linking two highly successful adult EE approaches, we present findings from our study of what motivates people to participate in California Naturalist (a Master Naturalist program), and what motivates them to then volunteer in citizen science versus other stewardship or education activities (or not).
Presenter(s): Heidi Ballard (School of Education, University of California), Emily Evans (UC Davis), Adina Merenlender (University of California)
Strand: ●

Making Connections: A Student-Led Approach for Promoting Sustainability
10:30 AM–11:10 AM, Room 321
A high school environmental group sparked their community to create a foundation with a mission to empower youth across the country to become sustainability leaders. Witness this inspirational story and learn how the new foundation can help your students.
Presenter(s): Ken Hamilton (Souderton Area High School)
Strand: ●
Maryland Partnership for Children In Nature: The Power of Statewide Collaboration  
10:30 AM–11:10 AM, Room 314
What happens when passionate professionals get together to resolve common challenges surrounding connecting children with nature and developing environmentally literate citizens? Come and see how Maryland is implementing a successful model of collaboration among multiple entities for statewide, positive results. Presenter(s): Britt Slattery (MD Department of Natural Resources),

Schoolyard Sanctuaries: Growing Resilience in Green Schoolyards  
10:30 AM–11:10 AM, Room 318
Schoolyards are vital venues for reconnecting children with natural habitats. They provide important environmental content and values, but also restore attention, relieve stress, and strengthen children’s resilience. This presentation reveals direct evidence of these health benefits to children’s environmental education. Presenter(s): Emily Stanley (Jemicy School), Kelly Keena (University of Colorado Center for Children, Youth, and Environment)

Universities Cooperate to Institutionalize New EE Courses for Teachers  
10:30 AM–11:10 AM, Room 317
This presentation highlights the lessons learned through a three-year project where four universities in Kentucky worked together to create new environmental issues courses for educators, which are now part of each institution’s environmental education endorsement program. Presenter(s): Terry Wilson (Western Kentucky University), Billy Bennett (Eastern Kentucky University), Joe Baust (Murray State University), Melinda Wilder (Eastern Kentucky University), April Haight (Morehead State University)

Roundtable Discussions  
10:30 AM–11:10 AM
Assessment ABC’s  
10:30 AM–11:10 AM, Room 310, Table 1
This session will provide a basic introduction to assessment of learners’ knowledge, skills, attitudes, and beliefs. It will provide examples of types of assessments, rubrics for evaluation and opportunities for participants to begin developing assessments for their lessons or programs. Presenter(s): Jan Weaver (Missouri Environmental Education Association)

Including Spirituality Connections Without Alienating Anyone’s Beliefs  
10:30 AM–11:10 AM, Room 310, Table 2
Spirituality has become a buzzword for how many of us feel connected to nature. How is spirituality understood by most people and how can it be included in any program without offending existing beliefs? Presenter(s): Richard Jurin (University of Northern Colorado)

Interdisciplinary, Solutions-Based Global Warming Education  
10:30 AM–11:10 AM, Room 310, Table 3
Calling all teachers of any and all disciplines! How do you help students become informed citizens on global warming who can participate in public discourse on the topic and take action to reduce greenhouse gas emissions? Come share your expertise and learn something new. Presenter(s): David Fallick (Montgomery College)
Intergenerational Dialogue: How to Raise More Environmental Educators
10:30 AM–11:10 AM, Room 310, Table 4
What prevents kids from sympathizing with nature? Join us for a problem-solving dialogue, across generations, to find the answer. Trained as facilitators, dynamic young leaders guide this conversation. This is a rare opportunity to exchange knowledge among cultural ambassadors.
Presenter(s): Johanna Jackson (Shaver’s Creek Environmental Center), Artemis Eyster (Arc of Appalachia Preserve System)
Strand: ●

Planting Seeds of Change: Cultivating Leadership Skills Through Garden Education
10:30 AM–11:10 AM, Room 310, Table 5
Through Community Garden Connections, graduate students forge community partnerships that build the local capacity to grow, process, and prepare nutritious food. They address issues of food security, health, and resilience. Students will share their experience in community-based food justice efforts.
Presenter(s): Andrew Herrick (Antioch University New England)
Strand: ●

Slither, Slide, Musk, and Hide: Animals in the Classroom
10:30 AM–11:10 AM, Room 310, Table 6
Learn how to use snakes, salamanders, turtles, lizards, and frogs to address the Next Generation Science Standards. Discover how your school grounds can house field studies and provide students with authentic research experiences. Leave with resources that can easily be implemented in K-12 classrooms.
Presenter(s): Catherine Matthews (UNCG), Aerin Benavides (UNCG), Terry Tomasek (Elon University)
Strand: ●

Saturday 11:20 AM
Traditional Presentations
11:20 AM–12:00 PM

Critical Science Pedagogy: Intersections of PAR, Equity, and Climate Science
11:20 AM–12:00 PM, Room 314
This is a discussion of teachers working to create student-centered action research projects within the context of the Next Generation Science Standards on the content of climate science. The presentation will explore their challenges, solutions, and products.
Presenter(s): Deb Morrison (University of Colorado at Boulder)
Strand: ●

Low Cost/No Cost School Site Enhancements: Facilitating Outdoor Learning
11:20 AM–12:00 PM, Room 317
Enjoy a session filled with practical tips and teacher-tested techniques for turning the schoolyard into an outdoor classroom using no cost/low cost site enhancements. Explore how teachers can unlock the powerful learning experiences existing just beyond the classroom door.
Presenter(s): Herb Broda (Ashland University)
Strand: ●

Marine Science in the Classroom: Teachers, Museums, and Scientists Collaborating
11:20 AM–12:00 PM, Room 311
This presentation discusses how teachers used activities from professional development (PD) in the classroom. The PD focused on ocean sciences content, pedagogical content, and strategies for employing field sites such as museums, university labs, and natural areas in inquiry-based science.
Presenter(s): Michelle Mileham (Oregon State University), Susan O’Brien (Oregon State University)
Strand: ●
The Oregon Environmental Literacy Plan: From Inception to Implementation
11:20 AM—12:00 PM, Room 312
Oregon was the third state in the nation to complete an Environmental Literacy Plan. Learn how innovative approaches to our stumbling blocks are helping us establish state infrastructure and stable, coordinated funding to cultivate ecological problem solvers and informed, responsible stewards.
Presenter(s): Traci Price (Gray Family Foundation), Susan Sahnow (Oregon Natural Resources Education Program)
Strand:

Perceptions and Choices: Middle School Students and Environmental Learning
11:20 AM—12:00 PM, Room 320
Connecting adolescents to environmental issues is an urgent task. The Institute for Earth Education will share strategies from a successful program to meet this crucial need, utilizing an outdoor center, schools, and community resources.
Presenter(s): Colin Waite (Cooper Center for Environmental Learning), Bruce Johnson (University of Arizona), Mike Mayer (The Institute for Earth Education and University of Arizona)
Strand:

Place-Based Education for Sustainable Communities
11:20 AM—12:00 PM, Room 321
Sense of place can be a strong motivator for citizenship behavior to improve community sustainability. This session will provide recommendations, tips, and resources for designing programs to develop participants’ sense of place as a motivator for sustainable behaviors.
Presenter(s): Jeremy Solin (LEAF/Wisconsin Center for Environmental Education)
Strand:

Successful Partnerships with Underserved Communities Through Citizen Science and Stewardship
11:20 AM—12:00 PM, Room 318
We will explore how Celebrate Urban Birds, an international citizen science project from the Cornell Lab of Ornithology, successfully engages new audiences from urban underserved communities. We will share best practices and research to diversify access to the sciences.
Presenter(s): Marta del Campo (The Cornell Lab of Ornithology)
Strand:

Roundtable Discussions
11:20 AM—12:00 PM
Breaking the Mold: How to Achieve Environmental Education in Schools
11:20 AM—12:00 PM, Room 310, Table 1
Learn how the Howard Gardener School (HGS)—a private secondary school—was able to achieve a successful cross-curricular environmental education program since 2004. Using alumni feedback and NAAEE’s Guidelines for Excellence, HGS will share their successes and failures.
Presenter(s): Addison Helmke (The Howard Gardener School), Erick Johnson (The Howard Gardener School)
Strand:

Going Graphic with Environmental Education: Using Comics in K–12 Classrooms
11:20 AM—12:00 PM, Room 310, Table 2
This interactive session presents how graphic novels can introduce learners of all ages (K–12) to the knowledge required of an environmentally literate citizen. Leave armed with four activities, a resource list, and a need to visit a comic book store!
Presenter(s): Debby Shulsky (University of Houston Clear Lake), Donna Kirkwood (University of Houston Clear Lake)
Strand:
Learning Through Nature: Environmental Education for Preschool and Primary Students  
11:20 AM–12:00 PM, Room 310, Table 3  
Participants will engage in activities from early childhood (EC) environmental education curricula and examine the relationship to NAAEE guidelines/state standards. A primary teacher will facilitate discussion of the curricula’s effectiveness with support of video vignettes showing implementation with children.  
Presenter(s): Vicki Stayton (Western Kentucky University)  
Strand: ●

Rising S.T.A.R’s: Creating an EE Centered Internship Program  
11:20 AM–12:00 PM, Room 310, Table 4  
Designing an internship to meet your organization’s needs can be easy and rewarding. However, designing an internship that addresses the development needs of future environmental education leaders is harder. Session will cover tips for developing an environmental education centered internship.  
Presenter(s): Charnell McMullen Bushman (The Marine Science Consortium)  
Strand: ●

Opportunities Adults Provide for Young Children to Learn Outdoors  
11:20 AM–12:00 PM, Room 310, Table 5  
We reflect on a case study conducted during enhancement of a childcare outdoor learning environment. Parental and teacher reflections of their own childhood experiences and current opportunities they provide for children reveal implications for understanding how adult experience in nature impacts future generations.  
Presenter(s): Shelby Laird (Charles Stuart University)  
Strand: ●

Water Restrictions: An Educational Approach to a Mandate  
11:20 AM–12:00 PM, Room 310, Table 6  
Due to 2012 fires on our watershed and low snowpack, the City of Fort Collins, Colorado implemented water restrictions. Our unique approach used behavior change science to encourage compliance. Although enforcement was a part of the equation, our success was rooted in engaging our community.  
Presenter(s): Michelle Finchum (Ft. Collins Utilities)  
Strand: ●

Saturday 12:00 PM  
Awards Luncheon & Keynote Address  
12:00 PM–2:00 PM, Room 307-308  
Help us recognize NAAEE’s annual award recipients at the Awards Luncheon. Individuals and organizations will be honored for their laudable work on behalf of the environment, including the President’s Award and NAAEE’s highest honor, the Jeske Award.  

Keynote Address  

OVIE MUGHELLI  
Our Future is Green  

Ovie Mughelli, currently Sports Analyst for CBS Atlanta, played 10 years in the NFL as a starting Pro Bowl fullback for the Atlanta Falcons and the Baltimore Ravens. Ovie was among the biggest fullbacks to play the game, known for being a power blocker, for being able to pick up blitzes, and as one of the best special team minds in the game.  

Making his mark off the field, Ovie is also heavily involved with his community, especially through his award-winning Ovie Mughelli Foundation, which empowers youth to take ownership and pride in their lives and the roles they play in society. The Foundation emphasizes assisting quality programs that educate youth on the environment.  

Named a Top 5 Eco Athlete by Planet Green, Ovie Mughelli is passionate about both sustainability practices and physical activity. He brings these passions together through programs that include sustainable youth environmental education clubs, a green speakers series, and a model eco-field. Ovie believes that if you empower kids by educating them about the environment, you give them a platform to transform their households, their neighborhoods, their communities, and the world.
**Saturday 2:15 PM**

**Workshops**
2:15 PM–5:30 PM

**Note:** Registration and an additional fee are required for all workshops. You may register for these workshops at the NAAEE office throughout the conference as space allows.

---

**National Aquarium “Making Connections”**
2:15 PM–5:30 PM, National Aquarium
Meet at the blue entrance sign in front of the Aquarium
At the National Aquarium we strive to make meaningful connections through our exhibits, animals, and staff. Join this discussion on program planning and exhibit development for our newest exhibit, Blacktip Reef. We’ll share our challenges and methodologies and take a sneak peek behind the scenes.
Presenter(s): Nancy Hotchkiss (National Aquarium)

**Preschools that Nurture the Nature Bond: Playfully!**
2:15 PM–5:30 PM, Room 301
Nature preschools are licensed, professionally taught preschools that are typically affiliated with environmental education centers and use the outdoors as the daily focus of their program. This workshop will cover the philosophy, value, development, operations, and finances of nature preschools.
Presenter(s): Ken Finch (Green Hearts INC), Patti Bailie (The Biosophical Institute)

**Strengthening Environmental Education Through Equity and Diversity**
2:15 PM–5:30 PM, Room 303
The cultural and political context of environmental education in the 21st century demands new approaches and attention to equity and diversity. We’ll explore foundational concepts and skill sets that practitioners need to meet the needs of an increasingly diverse constituency.
Presenter(s): Angela Park (Diversity Matters)

---

**Saturday 2:30 PM**

**NAAEE Business Meeting: Future Directions**
2:30 PM–3:30 PM, Room 302
We welcome your input! Join NAAEE’s President, Executive Director, board, and staff for a discussion on the current state of the organization and future directions for NAAEE. Topics will include strategic planning, special interest groups, financial report, and your questions.
Presenter(s): Jose Marcos-Iga (Environmental Education Exchange), Judy Braus (NAAEE), Craig Freshley (Good Group Decisions)

---

**Saturday 5:30 PM**

**Closing Reception**
5:30 PM–7:00 PM, Room 310
This casual gathering is the last conference opportunity to enjoy networking with colleagues—new and long lasting. Join us for light hors d’oeuvres and warm conversation as we say farewell until Ottawa in 2014.
NAAEE Staff and Board

2013 NAAEE Board of Directors

Pepe Marcos-Iga, President
Michael Marzolla, President Elect
Susan McGuire, Secretary
Mary Ford, Treasurer
Steve Altman
Jeanne Braha
Liz Fogel
Brenda Metcalf
Jason Morris
Jillian Rubio
Flisa Stevenson
Aliza Weller
Abby Ybarra

NAAEE Staff

Judy Braus, Executive Director
Christiane Maertens, Deputy Director
Lori Mann, Program & Conference Manager
Christy Merrick, Early Childhood Coordinator
Mary Ocwieja, Technology & Member Services
Betty Olivolo, Assistant Early Childhood Coordinator
Drew Price, Senior Program Associate
Ashley Simmons, Office Assistant
Anne Ferguson, EE Consultant

Special thanks to....

Alicia Dimaio, Conference Planning
Rob Stewart, Technology
Sylvia Weir, Graphic Design
Gerry Ellis, Photography
Katrina Sweeney, Accountant
Bob Ertter, Human Resources Advisor

Our Amazing Interns

Libby Backman
Dianna Bonilla
Pasquale DiFrancesco
Max Kennady
Haley McGlauflin

Fulbright Fellow

Mamata Pandya, Centre for Environment Education, Ahmedabad, India
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 SP, 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, Mexico
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
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
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 pour d’éducation et de communication relatives à l’environnement
Colorado Alliance for Environmental Education
Delaware Association for Environmental Education
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
Louisiana Environmental Education Association
Maine Environmental Education Association
Maryland Association for Environmental & Outdoor Education
Massachusetts Environmental Education Society
Mexico Centro de Información y Comunicación 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
Environmental Education Association of New Mexico
New York State Outdoor Education Association
Environmental Educators of North Carolina
North Dakota Coalition for Conservation and Environmental Education
Environmental Education Council of Ohio
Oklahoma Association for Environmental Education
Environmental Education Association of Oregon
Pennsylvania Association of Environmental Educators
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
Virginia Resource-Use Education Council
Vermont Statewide Environmental Education Programs
Environmental Education Association of Washington
West Virginia Environmental Education Association
Wisconsin Association for Environmental Education
Wyoming Association for Environmental Education
With beautiful heritage buildings, world class cultural attractions, and the Rideau Canal winding its way through this wonderfully walkable city, Ottawa and NAAEE are perfect for each other.

Grâce à ses beaux édifices patrimoniaux, à ses attractions culturelles de premier ordre et au canal Rideau qui la serpente nonchalamment, Ottawa est une belle ville qui convient parfaitement à la NAAEE.

October 8-11, 2014
du 8 au 11 octobre 2014
Environmental Education We Need for the World We Want

Follow us on Facebook. Facebook icon
Follow us on Twitter. Twitter icon

naaee.org