

# 2015 DAEE Environmental Education Conference

## Session Descriptions

(In order as listed on agenda)

**A.1 Session Title: Digital storytelling 101 and 102 - Using the technology in your pocket to shoot, share, and engage others about your work (10:45am-11:30am)**

**Presenter:** Lisa Tossey, Social Media Community Manager & Editor, National Marine Educators Association

**Org type:** Non-profit

**Session type:** Demonstration

**Primary audience type:** Adult; Family

**Session description:**

These days, with high definition cameras being built into every smartphone, and adventure sports popularizing the creation of tough, affordable waterproof cams, it's getting easier and easier to capture quality footage outdoors and on the go. And sharing them is even simpler thanks to social media. Learn the basics of capturing interesting imagery of what you do, then learn some of the best ways to share them. We'll cover what platforms may be the best choice for your program to engage others and build awareness of the work you're doing – from Facebook and Twitter to Instagram and Vine. We'll also cover how to set-up and promote specific hashtags for your participants to use during your program or event so that you can easily compile them into an professional looking collaborative account that's simple to share!

**A.2 Session Title: Environmental Volunteer Opportunities in Delaware: Sussex Tech Senior Project (10:45am-11:30am)**

**Presenters:** Seniors from Sussex Tech

**Org Type:** Sussex Tech High School

**Session type:** Student Led Research/Information/Tour

**Primary audience type:** Adult; Family; Educators

**Session description:**

Before graduating, every student enrolled at Sussex Technical High School must complete a senior project aligned with their career pathway. This session is an overview of a team senior project highlighting environmental volunteer opportunities right here in the First State. Their project is aimed at engaging young people in the environment. To speak from example, the students have already participated in 5 Delaware events and recorded their experience via GoPro. Their footage will be edited into a short video and made available to surrounding media outlets. The students will be leading this session and it will conclude with a brief tour of the Agri-Science facility including their state-of-the-art greenhouse and outdoor classroom.

**A.3 Session Title: Hands-on Watershed Models (10:45am-11:30am)**

**Presenter:** William Koth, Nature Center Manager, Delaware State Parks, Trap Pond State Park

**Session type:** Demonstration/Hands-on workshop

**Primary audience type:** Elementary; Secondary

**Session description:**

Trap Pond staff constructed a scale watershed model of Trap Pond State Park. For the past two years, the model has been a focal point in our watershed education program. The model is portable, and shows land features specific to the park. Students can pour water on the model and watch how the water flows through the watershed. Several different types of watershed models will be available for participants to see. Instruction will be provided on how to construct different types of models. Park Staff will describe some techniques used in our watershed education programs. This workshop can be done as a short sign up program, or as a standalone demonstration (vendor style).

**A.4 Session Title: Mysterious Magical Monarchs (10:45am-11:05am)**

**Presenter:** Liz Androskaut, Programs Manager, Alapocas Run and Wilmington State Parks

**Org type:** Government

**Session type:** Research/Information

**Primary audience type:** Elementary

**Session description:**

The Mysterious, Magical Monarch workshop is a partnership between Delaware State Parks, Delaware Master Gardeners, Delaware Nature Society, U.S. Fish and Wildlife and teachers from the Red Clay School District. This integrated, standards based workshop was organized around teaching strategies proven to have positive effects on student learning. It is multi-curricular and incorporates various learning styles. During this session, participants will be given an overview of the workshop and will have the opportunity to participate in one or two workshop activities. The success of the workshop will also be discussed.

**A.5 Session Title: Pack your Bay Backpack! An introduction to the newly revamped environmental educator website (11:10 am-11:30am)**

**Presenter:** Julie Walker, Environmental Management Staffer - Fostering Chesapeake Stewardship Goal Team, Chesapeake Research Consortium / Chesapeake Bay Program

**Org type:** Non-profit

**Session type:** Demonstration

**Primary audience type:** Elementary; Secondary

**Session description:**

Bay Backpack is a product of the Chesapeake Bay Programs Environmental Education Workgroup aimed at Teachers (Pre K-12), School/System Administrators, and Watershed Educators. The site provides a one stop shop for teaching resources, field study programs, professional development opportunities, funding opportunities, as well as a blog to keep up to date on all things Environmental Education. Bay backpack has recently been revamped to become more user friendly and provide more valuable content for our audience. During this session we will introduce Bay Backpack to those who are new to the site, as well as introduce some of the new features the site has to offer.

**B.1 Session Title: Digital storytelling 101 and 102 - Using the technology in your pocket to shoot, share, and engage others about your work (11:45 am-12:30pm)**

**Presenter:** Lisa Tossey, Social Media Community Manager & Editor, National Marine Educators Association

**Org type:** Non-profit

**Session type:** Demonstration

**Primary audience type:** Adult; Family

**Session description:**

These days, with high definition cameras being built into every smartphone, and adventure sports popularizing the creation of tough, affordable waterproof cams, it's getting easier and easier to capture quality footage outdoors and on the go. And sharing them is even simpler thanks to social media. Learn the basics of capturing interesting imagery of what you do, then learn some of the best ways to share them. We'll cover what platforms may be the best choice for your program to engage others and build awareness of the work you're doing – from Facebook and Twitter to Instagram and Vine. We'll also cover how to set-up and promote specific hashtags for your participants to use during your program or event so that you can easily compile them into an professional looking collaborative account that's simple to share!

**B.2 Session Title: Empower Your Students to Engage and Explore: Tree Identification (11:45 am-12:30pm)**

**Presenter:** Alice Mohrman, Education Coordinator, Delaware Nature Society at Abbott's Mill Nature Center

**Org type:** Non-profit

**Session type:** Hands-on Workshop

**Primary audience type:** Elementary; Secondary; Adult; Family

**Session abstract:**

In this age of instant information, students need to be "empowered" throughout the process of inquiry in science. A two for the price of one session: Looking at our teaching approaches to environmental and science education and a hands-on experience identifying local trees in winter. This interactive session is designed to encourage educators to tweak activities and lessons to promote student initiative and independence. Using the foundation of the 5 E's and your experiences as educator, let's toss in a little Freud; add some Zen and season with style. A collaborative session followed by group discussion.

**B.3 Session Title: Partnering with IB (International Baccalaureate) and AP (Advanced Placement) teachers at Delaware's high schools (11:45am-12:30pm)**

**Presenter:** Ryan Revel, Science Teacher, Sussex Central High School

**Org type:** School (K-12)

**Session type:** Research/Information

**Primary audience type:** Secondary

**Session description:**

The session will include a presentation of the IB and AP programs including the project requirements of the programs and discussion with participants about opportunities to engage students in citizen science and research.

**B.4 Session Title: A School Yard Report Card: Reflections on an Environmental Curriculum for Middle School (11:45am-12:05pm)**

**Presenter:** Kevin Brown, Science Teacher, Springer Middle School

**Org type:** School (K-12)

**Session type:** Research/Information

**Primary audience type:** Elementary; Secondary

**Session description:**

The session will include a talk, question and answer discussion, photographs (Ability to show Power Point is requested), and could include a brief outdoor component. A handout will be provided to share the current activities or our course. Highlights and unexpected observations of wildlife will also be included.

**Co-presenters:** Maureen Romeo; Maggie Lyman

**B.5 Session Title: The Delaware Envirothon - Celebrating 20 Years of Challenging Environmental Education (12:10pm-12:30pm)**

**Presenter:** Richard Mickowski, Conservation Planner/Public Education Coordinator and Chair, Delaware Envirothon, New Castle Conservation District/Delaware Envirothon

**Org type:** Government

**Session type:** Research/Information

**Primary audience type:** Secondary; Adult

**Session description:**

The session will provide a quick overview of the topic areas for the Delaware Envirothon through a Power Point presentation. Attendees will be provided with the Delaware Envirothon guidebook, brochure, and example of recent tests from the 2014 Delaware Envirothon. The Envirothon provides opportunities for adults to serve as team advisors for up to three five-student teams. The Delaware Envirothon is open to teams for high schools or other youth groups such as home-schooled students, FFA, and 4-H. Workshops are held on three Saturdays during the school year - October, November, and January with the state competition normally held the last Thursday in April. The winning Delaware team

is awarded an all-expenses paid trip to represent Delaware in the NCF Envirothon which is usually held in late July or early August. The winning students also receive a \$500 college scholarship and other prizes.

**C.1 Session Title: What is new about Next Generation Science Standards? (1:30pm-3:15pm)**

**Presenter:** Tonyea Mead, Science Education Associate, Delaware Department of Education

**Org type:** Government

**Session type:** Hands-on Workshop

**Primary audience type:** Elementary; Secondary

**Session description:**

Participants will learn about the three dimensions of the Next Generation Science Standards: The practices, cross cutting concepts, and core ideas and how they all work together. Participants will discover how the Next Generation Science Standards work together with the Common Core Standards in ELA and in Math. Participants will gather data, reason and communicate the standards through discovering phenomena.

**C.2 Session Title: Big Trees of Delaware: Champions in the Forest – Ambassadors in the Classroom (1:30pm-3:15pm)**

**Presenter:** Ashley Peebles, Education Coordinator, Delaware Forest Service

**Org type:** Government

**Session type:** Hands-on Workshop

**Primary audience type:** Secondary; Adult

**Session description:**

Big Trees of Delaware, in its 4th edition, is a full-color guidebook to the First State's largest trees. This session will concentrate on the history and methodology used to gather data on Big Trees in Delaware and how these champions can be Ambassadors in the classroom. Participants will learn how to use this publication to identify, measure, and incorporate these champions into the classroom. Participants will learn methods used by foresters to measure trees with tools as simple as a 12 inch ruler. Activities from Project Learning Tree (PLT) will be showcased for classroom implementation and a sample PLT guidebook will be given to all participants. Other resources to be included in the session are posters and PLT giveaways. PLT activities to be used: We All Need Trees; How Big Is Your Tree?; Name that Tree; Tree Cookies

**C.3 Session Title: Growing Success: Linking School Curriculum and Outdoor Learning in the Middle Grades (1:30pm-2:15pm)**

**Presenter:** Maggie Legates, Coordinator, Delaware Geographic Alliance / University of Delaware

**Org type:** University

**Session type:** Research/Information

**Primary audience type:** Elementary; Secondary

**Session description:**

This session will provide: \*an overview of recent developments in school curriculum as they relate to environmental education, including efforts to integrate science and social studies/geography, and English Language Arts. Presenters will outline the goals for each learning discipline and explain how each goal was addressed in the outdoor learning experience. \*a summary report of recent school programs and participation in structured outdoor experiences \*experience with learning aids developed for student use while outdoors and in the classroom \*teacher and outdoor educator experiences and reflections. \*a brief outline of plans in progress to extend outdoor learning experiences related to watersheds to public and non-public schools across the state. Hand-outs will include student observation sheets, case study readings, and student activity booklets for the Ecosystems in Delaware unit for grade 5.

**Co-presenters:** Dr. David Legates; Pam Swadley

**C.4 Session Title: School Garden Basics (1:30pm-1:50pm)**

**Presenter:** Wendy Turner, Second Grade Teacher, Mt. Pleasant Elementary School

**Org type:** School (K-12)

**Session type:** Research/Information

**Primary audience type:** Elementary

**Session description:**

This session will discuss the benefits of having a school garden. Details will include how to get started, what you need and how to have a successful growing season.

**C.5 Session Title: Rain Garden Design: A Tool for Environmental Education and Action (1:55pm-2:15pm)**

**Presenter:** Maria Dziembowska, Director of Outreach & Partnerships, The Nature Conservancy

**Org type:** Non-profit

**Session type:** Research/Information

**Primary audience type:** Secondary; University

**Session description:**

The Nature Conservancy and its partners used participatory landscape design methods to design and install a rain garden in Brandywine Creek State Park. The project aims to combat runoff from the visitor parking lot, create habitat for local wildlife, and build people's connection to and understanding of the human impacts on the environment. / / This presentation paper describes the evolution of the project, looking at the participatory landscape design process as a tool for enhancing environmental stewardship among young people and target communities.

**D.1 Session Title: Bay to Bay: A multidisciplinary, multi-watershed investigation for teachers (2:30pm-3:15pm)**

**Presenter:** Christopher Petrone, Marine Education Specialist, Delaware Sea Grant / University of Delaware

**Org type:** University

**Session type:** Research/Information

**Primary audience type:** Secondary; University; Adult

**Session description:**

In this ongoing, NOAA-funded project, teachers participate in a hands-on investigation across the Delmarva Peninsula to investigate how we use our watershed to build our economy and way of life, and how we are preserving and restoring the watersheds of the Chesapeake and Delaware Bays. During the professional learning opportunity, teachers participated in classroom and field activities meant to increase content knowledge of watersheds and ecosystems—topics found throughout the current Delaware State Standards—and build a skills base that would raise their confidence in taking students outside.

**D.2 Session Title: Rain Barrel Fun: Hands-On Opportunities for Student and Adult Water Education (2:30pm-3:15pm)**

**Presenter:** Sarah Wozniak, Regional Watershed Coordinator, DNREC

**Org type:** Government

**Session type:** Research/Information

**Primary audience type:** Elementary; Secondary; Adult

**Session description:**

A rain barrel is a container that collects and stores the water from roofs and downspouts for future uses such as watering lawns, gardens, and house plants; cleaning off gardening tools; and washing your car. Rain barrels help to lower your water bills, particularly in the summer months by collecting thousands of gallons of free water a year that you don't have to buy! The Delaware Department of Natural Resources and Environmental Control (DNREC) sponsors two contests in which local artists and children compete to design and paint the best rain barrel. This contest highlights the benefits of using rain barrels to reduce rainwater runoff and improve water quality. Selected local artists and children's groups are invited based on their applications to paint creative designs on a rain barrel that are then displayed throughout the state to spread the benefits of their use. Want to learn more about the benefits of rain barrels, creating your own rain barrel, or having your group participate in this contest? Then attend this workshop to find out more!

**Co-presenters:** Sharon Webb