

TAAE 2016 Conference Session Descriptions

Friday Short Courses

Hands-on Curriculum for a Crowded Planet - 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 curriculum. [Jennifer Riles, Population Education](#)

Growing up WILD Curriculum Training - Growing Up WILD is an early childhood education program that builds on children's sense of wonder about nature and invites them to explore wildlife and the world around them. After the 3 hour interactive training session attendees will leave with a complete Growing Up WILD curriculum guide containing 27 field-tested, hands-on, nature-based, ready-made thematic units and over 400 experiences in a full-color 11"x17" activity guide. **\$25.00 fee – preregistration required – online during the registration process.** [Rebecca Schumaker, Indian Trails Master Naturalist](#)

Saturday Sessions

Leading a Successful Bird Walk - Guiding a bird walk may sound like a challenge if you are new to birding. On this walk learn how to create a successful bird watching experience as we learn clues that help to identify birds and discuss resources that are available to create walks that are fun and informative no matter your experience. [Shannon Love, John Bunker Sands Wetland Center](#)

Connections: Native Cultural Learning - Learn how the early native cultures connected to the environment around them and passed the information down to the next generation. We will discuss how this knowledge is still beneficial to us today. Dwight Wilson learned about nature through primitive skills, storytelling and studying Native American Elders and is able to share a unique perspective on environmental education because of his experiences. [Dwight Wilson, DW Associates](#)

Carbon Cycle on the Move: Easy but Challenging Activities for the Middle and High School Classroom - Most college students in the United States do not grasp the scientific basis of the carbon cycle--an essential skill in understanding the causes and consequences of climate change. This workshop will introduce participants to basics of the carbon cycle involving engaging activities as they learn how the carbon cycle, climate and the abiotic/biotic components of the environment influence each other. Using case studies, NASA visualizations, current research, and an interactive activities, participants will explore how living things on land, in soils, and in our oceans regulate the carbon cycle. [Dawn Chegwiddden, Lewisville ISD; Jim Manley, Coppell ISD](#)

North Euless Outdoor Learning Area - A living outdoor classroom designed for Place Based Education – Learn how an elementary art teacher and an ESL teacher used grants, donations,

and volunteer work to transform a useless blank piece of land on their school's campus into a 4000+ sq ft outdoor learning area. We can't do it for you but we can tell you how we did it. There is no reason to reinvent the wheel. [Scott Matula, North Euless Elementary School, HEB ISD](#)

Easy Ways To Be Successful in the Science Classroom - If you teach Aquatic Science, Middle School Science, or Environmental Science, come and learn from two seasoned, passionate teachers that love what they do! Sample student tested activities you can use in your classroom, that promote the value of the environment and help students make educated decisions about their future on earth. Enjoy a fun hour of learning how to build a marine trash lab, interactive activities learning how to build a marine trash lab, ocean bingo, aquatic food web and much more! All the activities learned can be taken back to the classroom and used immediately. [Dawn Chegwiddden, Lewisville ISD](#); [Sharon Wood, Lake Lewisville Environmental Learning Area](#)

The NEW Texas Association for Environmental Education: Vision 2017 - Alongside a growing Texas comes a new organization to tell a new environmental education story. Join us as we take a peek at the creation of the NEW TAE and see where our organization is headed into 2017 and beyond. [Greg Wukasch, TAE](#)

Volunteer Sources for Educational Events – With a small staff, the Biodiversity Education Center (BEC) had to reach out to different local groups for volunteer facilitators to assist with the center's educational programs. In this session, we will cover how the BEC came to be, what programs it currently offers, what its docent training contains, and how it contacts its volunteers for its programming. [Alisa Annette Kozlowski, Biodiversity Education Center-City of Coppell TX](#)

Bucket Brigade: Reaching Further through Partnerships - The Bucket Brigade is a partnership between Artist Boat and the Galveston Park Board of Trustees and works to address misperceptions, to instill a sense of ownership, and improve environmental stewardship behaviors on Galveston Island. Together they work to raise awareness about human impacts on the marine environments. Learn how they have created a novel partnership that makes education accessible for the whole community. [Amanda Rinehart, Kendall Guidroz, Karla Klay, Artist Boat](#)

Interactive Graphic Organizers for the Science Classroom – TEK it, Make it, Take it and let your class soar on the wings of “TEKativity.” Learn an instructional strategy that presents educators of all grade levels a pedagogical hands-on, motivating and engaging activity that transforms an ordinary paper plate into a student generated product that aligns with the Next Generation Science Standards (NGSS). Life cycles, the water cycle, forest layers and energy pyramids are just a few of the topics that can be taught using this interactive method. [Brian McLean, Forth Worth ISD](#)

Answering the question, “So What?” to create those “A-ha!” moments! - Learn teaching principle, methods and techniques that help your students and site visitors retain and make an emotional and intellectual connection to your subject or environmental resource. These methods, that have been research and developed, are used in parks, museums, zoos and nature centers. [David Owens, Texas Parks and Wildlife Department](#)

Keynote follow-up Session: Following the keynote presentation, we will explore specific elements of what makes experiences memorable. After a short presentation, we will open the floor to share professional experiences with this approach. If you are wanting more "nuts-and-bolts" in using an emotional approach, this session is for you. [Cal Martin](#)

Texas Aquatic Science: From Molecules to Ecosystems, to Headwaters to Oceans - An introduction to Texas Aquatic Science, a comprehensive aquatic science curriculum for middle school and high school students. We'll spend most of our time doing hands on activities from the Teacher Guide, over 700 pages of TEKS aligned, hands-on activities designed to engage all learners. [Johnnie Smith, Texas Parks and Wildlife Department](#)

"Partnerships in Water Education" - Making Connections - Come and see how Hamline University-Center for Global Environmental Education and the Texas Wildlife Association have joined forces to bring watershed education to DFW school districts. We will be sharing components of the program, and our funding and partnership successes. Participants will receive a CD of Waters to the Sea program. [Tracy Hollis, Hamline University; Sarah Grella, Texas Wildlife Association](#)

Cert 101: How to Become a Certified Texas Environmental Educator - The Texas Certified Environmental Educator (TCEE) Program encourages professional development in EE: it acknowledges educators committed to environmental stewardship of Texas's natural resources, and establishes standards for of knowledge, skills, and experience that highly qualified Environmental Educators in Texas should be able to demonstrate. During this presentation, an overview will be provided on how you can be recognized as a Texas Certified Environmental Educator and will include the goals of the program, application and review process, and required outcomes. [Lisa Brown, Sam Houston State University; Alicia Mein-Johnson; Melissa Mullens, Baylor University; Marti Copeland, Dallas Zoo](#)

Building Cross-Sector Partnerships to Fund Green Student Innovation – Re-imagine the school building as a laboratory for applied STEM education! Learn how green school programs and cross-sector partnerships can promote eco-literacy, environmental stewardship and 21st century skills. Presented by EcoRise Youth Innovation, this session will include a facilitated group dialogue so that attendees have a chance to share insights, learn of each other's work, and expand their support network of fellow professionals committed to the green school movement. [Abby Randall, Christina Mirando, EcoRise Youth Innovations](#)

Flight of the Monarch Celebration - This session will focus on how we are educating the next generation about the importance of saving the Monarch Butterfly by getting creative, engaging the community, building partnerships and hands on experiences to bring education alive to the next generation. Learn how various partnerships lead to a successful educational program. [Mae Smith, City of Grand Prairie Parks, Arts and Recreation](#)

San Antonio Water System Presents: After the Flush - After you flush, where does "it" all go? And what is "its" impact in our environment? With teachers in mind, the San Antonio Water System

produced a video tour of a water recycling center with corresponding curriculum for all workshop participants to unpack and incorporate in their classes. [Lynne Christopher, San Antonio Water Systems;](#)
[Alicia Mein Johnson](#)

Sex in the Garden - This entertaining and educational talk describes what really goes on in our gardens: pollination. Learn how flowers lure insects to help with their reproduction and how they reward the pollinators. You will never look at the garden in the same old way again. [Janet Smith, North Texas Master Naturalists](#)

Sunday Sessions

GreenSchools: Empower Students to take Positive Environmental Action in their School & Community – Project Learning Tree's GreenSchool program inspires students to take personal responsibility for improving the environment at their school, at home, and in their community. Participants will receive an overview of the five hands-on, student-driven investigations that are at the heart of the GreenSchools program. Through GreenSchools, students examine their school's energy use, waste and recycling, water consumption, school site, and environmental quality. [Misty Bowie, Texas Project Learning Tree](#)

Small-Scale Aquaponics for the Class - Bring environmental science indoors by bringing the garden to the students, giving students a real world experience they normally wouldn't have access to. Learn the tips and tricks of setting up an aquaponics garden in the classroom allowing students observe an entire system changing over time. These observations will lead to discussions on the role of soil, how wetlands clean coastal water, water testing, water treatment, eutrophication and many other topics. Learn how to set up an aquaponics system in the classroom. Participants will come away with 8-10 lesson ideas on to how to incorporate their garden into weekly, if not daily classroom activities. [Bryan Beck, Liberty High School, Frisco ISD](#)

The Million Dollar Partnership - Volunteers! - Volunteers are a vital resource for all environmental education organizations and centers. Learn how to figure out the economic value of your volunteers as well as the impact they have on your organization and community. We will also discuss ways to help your volunteers feel like a million bucks! [Linda Dunn, John Bunker Sands Wetland Center](#)

Moving the "Plan" Forward! - Texas, it's time to move the "plan" forward! Come join us for a discussion on how the Texas Natural Resources/Environmental Literacy Plan will be implemented across our state in 2017. During this session, we will do an orientation to the parts of the Texas Natural Resources/Environmental Literacy Plan and learn how it will become the strategic plan for TAEF moving forward. [Greg Wukasch, TAEF](#)

Ethnobotany – Texas Wild Edible History and Walk – Master Naturalist, Bob Richie, has a passion for urban foraging and loves to share that passion with others. He start with a quick botany lesson on how to positively identify the plants we are looking for and then search out and try some of the fresh and tasty offerings that grow naturally in our area. We will also discuss the useful and medicinal plants that can be found in the area. Bob will also be sharing samples of preserved foraged foods he has collected throughout the year. [Bob Richie, North Texas Master Naturalist](#)

STEAM Curriculum: Building Hands-on Learning for Kindergarten Students - Participants will learn how Science and EE were incorporated into the STEAM curriculum and how the results of a year-long study focusing on the development and implementation of a STEAM curriculum, focusing on science and environmental education, could be used by others to support their efforts in STEAM, STEM and E-STEM curriculum implementation. [Brenda Weiser, University Houston Clear Lake](#); [Dr. Jana Willis](#); [Terri Chvala](#)

Bridging Silos: Partnerships in Natural Resource Literacy in a Land of Private Property – Llano River Field Station (LRFS) engages in a comprehensive spectrum of collaborations focused on finding solutions to regional problems related to natural resources and education. Through partnerships with state and federal agencies, school districts, professional organizations, NGOs, municipalities, landowners, and community colleges, LRFS successfully promotes natural resource literacy In Texas. Attendees will learn partnership strategies and integrating transdisciplinary curriculum with sustainability and trail features. [Tom Arsuffi, Koy Coffer, Texas Tech Llano River Field Station](#)