Environmental Education Connections: Formal and Informal Educators connect to support their mutual efforts in Texas

2015 TAEE Conference

University of Houston-Clear Lake

October 9-10, 2015

Keynote Speaker: Dr. Laura Downey, Executive Director
Kansas Association for Conservation & Environmental Education
Welcome!

Location
University of Houston-Clear Lake
Environmental Institute of Houston

Website:
http://prtl.uhcl.edu/portal/page/portal/HOMEPAGE

Directions:
http://www.uhcl.edu/portal/page/portal/HOMEPAGE/MAPS_DIRECTIONS
USE CLEAR LAKE CITY BLVD. OFF I-45 TO MIDDLEBROOK DRIVE
Environmental Institute of Houston
NOA (North Office Annex) Building
University of Houston at Clear Lake, Use Entrance #3
2700 Bay Area Blvd (Official Address)
Houston, Texas 77058
EIH Main No: 281-283-3950

Lodging
Each person makes their own lodging arrangements. TAEE has reserved a block of rooms
SpringHill Suites by Marriott in Seabrook, TX.
www.marriott.com/house

Contact hotel and make sure to confirm as a TAEE conference attendee: 281-474-3456.
Sponsorship and Donations
The Environmental Institute of Houston at the University of Houston – Clear Lake has provided the facility and resources to make this event possible. We would like to express gratitude to the faculty; Dr. Brenda Weiser, Rowena McDermid and Dr. Bobby Jones for their continued commitment to environmental education in Texas. Thank you also to Rowena McDermid and a very special thanks to Wendy Reistle and Sally Wall for their tireless energy to support this effort.

The following are additional supporters of this year's event:
Artist Boat
Dogwood Canyon Audubon Center
Environmental Institute of Houston
Keep Pearland Beautiful and Keep Texas Beautiful
Offshore Energy Center
Texas A&M Forest Service
Texas Tech University-Outdoor School
Texas Wildlife Association
Southeast Regional T-STEM Center at University of Texas Medical Branch
Texas Project Learning Tree
San Antonio Water System (SAWS)
University of Houston Clear Lake STEM Program
University of Texas – San Antonio
Whole Earth Provision Company

Social Networking
You are invited to a TAAE Social Reception. Follow the scenic boardwalk to Armand Bayou Nature Center’s one of a kind interpretive building. Connect with other educators while you enjoy viewing native reptiles, amphibians and fish located in the interpretive building. Enjoy some friendly competition in a trivia quiz with beverages (non-alcoholic drinks with beer and wine) and yummy snacks! Admission included with conference registration but please let us know if you plan to attend
Armand Bayou Nature Center, 8500 Bay Area Blvd., Pasadena, TX 77507.
Friday, October 9, 6:30 p.m.
Armand Bayou Nature Center: Estuarine Odyssey
Friday October 9, 2015

Bayou, estuary and tidal stream all describe the most beautifully preserved coastal habitat in Harris County. The abundance of aquatic life which fuels the fishing industry and supplies local seafood markets and restaurants begins in these aquatic environments. Unfortunately, the life in these murky waters goes largely unseen and is therefore mostly under appreciated.

Bring your sense of adventure, water, snack and a change of clothes as we plan a morning of exploring the life in these shallow water habitats. After an introductory overview lecture, we’ll pull a seine among the tidal flats and marshes to gain a greater understanding of the richness of life that hides just below the surface. This is an immersion into estuarine ecology and will enhance the understanding of ecology for teachers, naturalists, paddlers and the young at heart. The experience may also reawaken the hidden excitement of discovery with every haul of the net.

When: Fri. October 9        Time: 10a.m. to 12:30p.m.
Where: Armand Bayou Nature Center        Cost: $25/ person-15 person max
Instructor: Mark Kramer-ABNC Biologist        Age: Adult – 18 years and older
Register Directly with ABNC at 281-474-2551 X 10, Limited Space Available!

Armand Bayou Nature Center: Bayou Backwaters Canoe Tour
Friday October 9, 2015

Armand Bayou is among the best preserved bayous in the city which is known as “the Bayou City”. Join us for an extended paddle trip and an in depth overview of this local treasure. The bayou still follows the original meandering stream bed and is lined with beautiful tidal marsh, coastal prairie and coastal flatwoods forest. Wildlife abounds with common sightings of alligator, river otter and bald eagle during paddle trips.

We’ll start at the boat launch at Bay Area Park – 7500 Bay Area Blvd Houston TX, 77058. The paddling experience will be enhanced by on the water discussion to deepen the understanding of coastal wetlands, wildlife and natural history of the area. Bring hat, water, snack and change of shoes if desired.

When: Fri. October 9        Time: 2p.m. to 5p.m.
Where: Bay Area Park Canoe Launch        Cost: $25 per person
Instructor: Mark Kramer-ABNC Biologist        Age: Adult – 18 years and older
Register Directly with ABNC at 281-474-2551 X 10, Limited Space Available!
<table>
<thead>
<tr>
<th>Time</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:15</td>
<td></td>
<td>Silent Auction Opens Atrium #2 Bayou</td>
<td></td>
</tr>
<tr>
<td>8:30</td>
<td></td>
<td>Atrium #2 Bayou Nature Center Field Trips</td>
<td></td>
</tr>
<tr>
<td>9:00</td>
<td></td>
<td>session 1 Workshops</td>
<td></td>
</tr>
<tr>
<td>9:30</td>
<td></td>
<td>TAAE Board Meeting</td>
<td></td>
</tr>
<tr>
<td>9:40</td>
<td></td>
<td>Armand Bayou Nature Center Field Trips</td>
<td></td>
</tr>
<tr>
<td>10:40</td>
<td></td>
<td>Session 2 Workshops</td>
<td>Break</td>
</tr>
<tr>
<td>11:00</td>
<td></td>
<td>Board Lunch</td>
<td>Session 3 Workshops</td>
</tr>
<tr>
<td>12:00</td>
<td></td>
<td>Registration Begins Atrium 2 Bayou Building</td>
<td>Lunch Business Meeting Keynote Speaker</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Registration Continues</td>
<td>Atrium #2 Bayou Building</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TCEE Round Table Arbor Bldg. Science Lab</td>
<td></td>
</tr>
<tr>
<td>2:00</td>
<td></td>
<td>Armand Bayou Nature Center and Fieldtrips</td>
<td>EIH Rain barrels</td>
</tr>
<tr>
<td>2:45</td>
<td></td>
<td>Canoeing (2:00 – 5:00)</td>
<td>Session 4 Workshops</td>
</tr>
<tr>
<td>3:00</td>
<td></td>
<td>TX EE Literacy Plan Update and Discussion</td>
<td></td>
</tr>
<tr>
<td>3:30</td>
<td></td>
<td>Arbor Bldg. Science Lab</td>
<td>EIH School Habitats</td>
</tr>
<tr>
<td>4:30</td>
<td></td>
<td>TX EE Literacy Plan Update and Discussion</td>
<td>EIH School Habitats</td>
</tr>
<tr>
<td>5:00</td>
<td></td>
<td>TX EE Literacy Plan Update and Discussion</td>
<td>EIH School Habitats</td>
</tr>
<tr>
<td>6:00</td>
<td></td>
<td>TAAE Board Meeting</td>
<td></td>
</tr>
<tr>
<td>7:00</td>
<td></td>
<td>Social - EE Connections/Networking</td>
<td></td>
</tr>
<tr>
<td>8:00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9:00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>Workshop A Bayou 1418</td>
<td>Workshop B Bayou 2234</td>
<td>Workshop C Bayou 1133</td>
</tr>
<tr>
<td>-------</td>
<td>----------------------</td>
<td>-----------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>9:30</td>
<td>Break</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:40</td>
<td>Break</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:00</td>
<td>Lunch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:45</td>
<td>Break</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Friday:

**TC EE Roundtable.** TAAEE will be accepting applicants for the Texas Certified Environmental Educator program in the summer of 2016 after a final pilot of updated requirements. The TCEE program is based on competencies critical to a professional environmental educator and modified from the North American Association for Environmental Education's *Guidelines for the Professional Development and Preparation of Environmental Educators.* This session will share a draft of the updated requirements and application process. *(2:00p.m.-3:00p.m.)*

**Texas Environmental Literacy Plan Update and Discussion.** The Texas Natural Resource/Environmental Literacy Plan (ELP) was created in 2012 as a framework to coordinate all statewide environmental education efforts by both formal and informal educators across the state. Join us for an update on where the Texas ELP stands today and the role that the Texas Association for Environmental Education will play in the future. *(3:00p.m.-5:00p.m.)*

**Environmental Institute of Houston – UHCL.** Sheila Brown. School Habitats Workshop: Are you interested in engaging your class in outdoor investigations? Please come visit the EIH Watersmart School Habitat Demonstration Lab on the UHCL campus! We will tour the habitat site that includes a pollinator, song bird, humming bird, butterfly and pizza garden. We may even get to dip net for aquatic organisms in the pond if the weather permits. You will receive a school habitat guidebook with lesson plans, safety and interdisciplinary lessons. Please come discover the joys of learning outside and have fun, too! *Contact Shelia Brown at brownsm@uhcl.edu to reserve your space for this Friday Fun!*

**Environmental Institute of Houston – UHCL.** Wendy Reistle and Rowena McDermid. Rain Barrel Workshop: Meet at EIH for a free rain barrel workshop beginning at 1p.m. on Friday, Oct. 9. Limited to 30 participants. Participants will leave with a FREE rain barrel with the fittings ($90 value) ready to be set up at your home or school. Must be able to transport the rain barrel on day of workshop. *Contact Wendy at reistle@uhcl.edu to reserve your space for this Friday Fun!*
school and college students contributed to a restoration project with installing locally rare grasses and wildflowers into degraded prairie landscapes. The Prairie Ecology booklet will be distributed to TAAE prairie lecture attendees as well.

**Artist Boat. Amanda Rinehart. Increasing Water Quality and Quantity through Watershed Experiential Education in Texas Estuaries (WaterIQWet).** This program combined interactive classroom sessions using a watershed model and kayak adventures to locations of natural significance. We used pre/post student surveys and student blogging to evaluate how knowledge of water quality/quantity issues and attitudes/behaviors toward stewardship of estuaries changed as a result of the WaterIQWet program.

**Earth Meets Man. Amesha Morris. Blogging: Creating space for non-traditional Educators.** Blogging creates a space to share information and various perspectives on that information. As we grow into a global internet society, environmental education has the ability to truly become an interdisciplinary field by training and encouraging the voices of individuals and organizations that normally would not fit under the environmental education umbrella.

**Edith L. Moore Sanctuary, Houston Audubon Society. Sara Ranger & Bethany Foshee. Benefits of Being a Wild Child.** Edith L. Moore Sanctuary summer camps foster independence, free play and acclimation to outdoor environment. Three of the camp sessions emphasize survival skills, creativity, teamwork, and being comfortable outside for long periods. Wild in the Woods, Survivor Camp and Habitat Hideaways all build children’s levels of self-regulation, emotional control and executive functioning. Join us to learn more about how our outdoor community fosters skills and knowledge in outdoor techniques for young campers.

**Environmental Institute of Houston. Kristi Fazioli. Galveston Bay Dolphin Research and Conservation Program.** The Environmental Institute of Houston has partnered with the Galveston Bay Foundation to create a program which aims to tackle fundamental questions pertaining to the ecology, health and behavior of bottlenose dolphins in upper Galveston Bay. Due to exceptionally high levels of human activity in Galveston Bay, it is imperative to monitor this little known population.

**Keep Pearland Beautiful & Keep Texas Beautiful. Fay Watson & Christine Chute Canul. A Taste of Keep America Beautiful's Waste in Place Curriculum.** Tantalizing introductory taste of KAB Waste in Place Curriculum, highlighting some of the most effective activities to aid self efficacy and responsible attitudes towards waste management and litter prevention. TEKS correlated and TEKS objectives aligned for Texas educators.

**Offshore Energy Center. Doris Tomas. It's Only Natural.** Engage your students with a plethora of hands on activities dealing with natural resources. Learn how to use inexpensive items to create extraordinary, fun science lessons. Participants will experience a variety of activities used to teach living and nonliving, renewable and nonrenewable, and products derived from natural resources.

**Project Learning Tree. Misty Bowie. Focus on the Forest.** Project Learning Tree has updated their secondary guide Focus on Forest. In this workshop we will do a forest inventory from the guide. This activity sets the tone for the guide and prepares the students to do an outside ecosystem inventory.
San Antonio Water System. Lynne Christopher & Greg Wukasch. Groundwater Sleuthing. We all know that water is essential to life. However, many times we take this resource for granted. We expect it to be clean and abundant, but we do not always take the necessary precautions to protect or conserve it. Participants will do some groundwater “sleuthing” to find out more about this important resource and what we can do to protect it.

Stephen F. Austin State University. Arthur Temple College of Forestry & Agriculture. Dr. Shelby Gull Laird, CEE. Cultural competency and environmental education. Through work in small groups and whole room sessions, participants will develop their own understanding of what it means to be an environmental educator and how this relates to their own cultural identity. Concepts of cultural competency for environmental educators as well as possible positive solutions for engaging diverse audiences and organization members will be discussed.

Texas A&M University-Corpus Christi. Lucinda N. Sohn. Nature Journaling 101: Introduction to Nature Journaling. This presentation will introduce you to many different ways to do nature journaling and ideas on how to get started. We will share examples of commercial, teacher, and student made journals; information about historical figures who used journals; children’s books written in journaling formats; journaling activities; and books on how to journal.

Texas Parks & Wildlife Department. Emma Clarkson. Aransas Bay Ecosystem. This workshop will focus on novel methods for outreach about coastal aquatic systems. Special focus will be placed on activities and outreach concerning seagrass habitats. Learn to identify the species of seagrass found in Texas, as well as some of the fish that you may find associated with seagrass habitat. Key conservation concerns will be discussed, as well as ways that you can help conservation efforts.

Texas Tech University Outdoor School. Tom Arsuffi and Linda Edwards. Texas Natural Resource/Environmental Literacy Plan: Strategies for Implementation and Engagement. The new Natural Resource and Environmental Literacy Plan for Texas provides a framework on getting the hearts and minds of the next generation informed on land, water, climate and ecosystems. The plan emerged from planning meetings, discussions from multiple stakeholders and partnerships with focus on Lifelong Learning and Community Connections, Formal Education, Informal Education, Professional Development, Assessment of Environmental Literacy and Funding and Support elements of the plan.

Texas Wildlife Association. Kassi Scheffer, Adrienne Paquette, Jo Picken, & Elanor Dean. Wildlife trunks, and webinars, and they’re free – oh my! Texas Wildlife Association's L.A.N.D.S. Outreach Program includes Distance Learning, Discovery Trunks, and Wildlife by Design classroom presentations, and educator workshops. All Outreach programs are TEKS-aligned and available statewide at no charge!

United States Fish & Wildlife Service, Texas Coastal Ecological Services Field Office, Clear Lake. Jennifer Smith-Castro. Project EduBat. Come see the "Bat Trunk" from the Project EduBat curriculum (http://batslive.pwnet.org/edubat/) which can be checked out for use by any FWS staff or any partners for educational activities. Also learn about bat conservation and the ecosystem services bats provide and white-nose syndrome and disease management efforts.
University of Texas Medical Branch. Valerie C. Blackburn. Elementary STEM: Flower Pollination or Sounds in Nature. Enhance your teaching pedagogy by engaging your students in Engineering Design Process, Increase the comfort level in teaching engineering and technology, Move your science curriculum into the new science frameworks with 21st Century Skills, Modify current curriculum to incorporate engineering at the elementary school.

University of Texas Medical Branch/Project Learning Tree. Sally Wall & Misty Bowie. Climate Change and SE Forest. Project Learning Tree has a new guide on how climate change is affecting forest in the southeastern part of the U.S. Come get an overview and free copy of this secondary module. Topics covered include the carbon cycle, carbon sequestration and managing the changing forest.

University of Texas Medical Branch/University of Houston Clear Lake. Sally Wall and Brenda Weiser. STEM and EE. STEM is the new buzzword but has been a big part of EE for a long time. This workshop will cover what STEM is and is not and how it fits into any EE lesson plan.

University of Houston Clear Lake. Cindy Howard. Amazon Adventures. UHCL students, professors and others have been exploring the Rio Solimões (the Amazon River in Brazil) and the Rio Negro (the Amazon's largest tributary) on university expeditions about twice a year (over 30 times!) since 1996. On the summer (high water) trips, we study the ecology of the flooded tropical rainforests and observe many species of monkeys, reptiles and spectacular birds. During the winter (low water) trips, we explore the exposed lowland forests and focus on fishing and birding.

University of Texas – San Antonio. Christine Moseley. Population Education: Oh How We have Grown! In this hands-on session, participants will engage in simulations to visualize human population growth and its impact on carrying capacity, natural resource use, and Earth’s landscape, habitats and biodiversity. Presented strategies include group problem solving, graphing/analysis, and role-playing simulations. CD of lessons provided.
KEYNOTE ADDRESS

Saturday, October 10th

Connecting C’s for TAEE!

In an age of increasing demand and shrinking pools of volunteers and funds it is more important than ever for non-profit organizations to stay focused on its mission and purpose.

Laura Downey, Executive Director for the Kansas Association for Conservation and Environmental Education (KACEE) will explore the myths and commonalities of impactful non-profits, share some success stories from the field and inspire TAEE with her own four C’s of creating impactful organizations- Commitment, Collaboration, Creativity, Collective Leadership.

Laura Downey, Executive Director for the Kansas Association for Conservation and Environmental Education (KACEE)

A former Chicago Public School Teacher, Laura recognized early on that getting kids learning about the world around them and getting outside was key to their education. While working in a school in an economically depressed neighborhood on the Southside of Chicago, Laura helped to establish a relationship with a cemetery across the street to use as an outdoor classroom as it was the closest place with grass, trees and a small pond. Laura moved to Kansas about 22 years ago and continued teaching about the environment and science with first middle schools students and then first graders. In 1998, Laura was fortunate to join the staff with KACEE and in 2000 became the Executive Director for the organization. KACEE is a non-profit, 501(c) 3 organization with the mission of promoting and providing quality, non-biased and science-based conservation and environmental education for all Kansans. Toward that goal, KACEE works with volunteers from around the state to conduct environmental education workshops, coordinate the Kansas Green Schools Program, host an annual environmental education conference, and much more!

Laura currently sits on the steering committee for the Affiliates Network of the North American Association for Environmental Education (NAAEE), the Educational Operating Committee with Project Learning Tree, is active with the National Science Teachers Association and has served a board member for the Council for Elementary Science International. She holds a Bachelor’s in Elementary Education, a Master’s in Administration and Supervision and a Doctorate from Kansas State in Curriculum and Instruction for Math, Science and Technology.
TAEE Officers and Board Members—Serving 2015-2016

TAEE is accepting nominations for Board volunteers for fall 2015- fall 2017. Send questions or completed Nomination Form to www.taeo.org.

To contact any of these Texas EE Leaders, send email to info@taee.org

Officers—Serving 2015-2016
  President: Linda Bartley
  Vice President: Lucinda N Sohn
  Secretary: Greg Wukasch
  Treasurer: Chris Lowe
  Past President: Sally Wall

Board Members, Serving 2014 - 2015
  Allen Bartell
  Brenda Weiser
  Hailey Summerford
  Jana Willis
  Marti Copeland

Board Members, Serving 2015 - 2016
  Lisa Brown
  Joe Miller
  Shelby Gull Laird
  Tammie Hyde
  Wendy Reistle

Check us out on Facebook

Thank you! We look forward to seeing you next year!