REGISTRATION OPEN FOR 2019 REGIONAL SHORT COURSES

In 2019, the Louisiana Environmental Education Commission is bringing continuing education to you! Throughout the upcoming year, we’ll be focusing on environmental efforts going on in each part of the state, so in lieu of a single-location conference, we are staging workshops and/or tours in each of the major regions around Louisiana. The regional short courses will take place on Saturday, February 16, 2019.

The theme of this year's program is "Taking Environmental Action: What's Great About Your Part of the State?" Workshops will be held in each major region of the state (Alexandria, Baton Rouge, Lafayette, Lake Charles, Monroe, New Orleans, the North Shore and Shreveport). Educators are welcome to attend any short course regardless of their home regions.

A fee of $20 is required to complete the registration process. Upon submission of your registration form you will be prompted to pay via Paypal. Contact Thomas Gresham at tgresham@wlf.la.gov to arrange an alternative method of payment. Lunch is provided. Classroom teachers are eligible for a $30 stipend.

SHORT COURSE DESCRIPTIONS

4-H Youth Wetlands Program (Alexandria Region) Combination Workshop and Tour

Join us for a fun, hands-on workshop as we explore lessons aligned to the LSSS about wetlands. Learn about the complexities and consequences of wetland land loss, simulate some of these real world problems, and discover how the LA Coastal Master Plan manages those issues. End the day with a paddle through wetlands! Take home lessons to supplement your current curriculum and program supplies!

Presenter:  Heather Niemic, LSU AgCenter 4-H Youth Wetlands Program
Location: Woodworth Outdoor Education Center, 661 Robinson Bridge Rd, Woodworth, LA 71485
Grade Level: K-4th, 5th-8th
Time: 8:00 a.m. to 3:30 p.m.

LSU Center for River Studies and Your Classroom (Baton Rouge Region) Combination Workshop and Tour

Learn how to bring the LSU Center for River Studies 10,000 square foot scale model of the lower Mississippi River to your students! This state-of-the-art facility offers several distinct themes with illustrations and interactive features to help visualize and communicate the importance of the Mississippi River Delta, the ongoing coastal land-loss crisis, and CPRA’s comprehensive Coastal Master Plan restoration and risk reduction program. This session includes a research overview
delivered by Principal Investigator Dr. Clint Wilson. Actual water and sediment flow across the model’s 14,000 square mile section of Southeast Louisiana including Terrebonne, Barataria, Breton Sound, and Pontchartrain Basins, depicted on the map as an area from Donaldsonville to the Gulf of Mexico. Using exact parameters of the river’s physical and dynamic properties, the model produces a degree of accuracy never before achieved in lower-river physical modeling at this scale. The primary river-model goals are to produce qualitative land building results associated with sediment diversions in the Lower River, and serve as a complementary planning tool to computer models currently utilized. River Center staff will present an interactive presentation that projects satellite photos and graphics directly onto the massive model! They will also describe field trip opportunities for your students. In addition to the river model, we will cross the levee to view the spring flood pulse of the Mississippi River from the stunning terrace and conference facilities at The Estuary at the Water Campus. Here our session will continue with a review of connections to the Louisiana Student Standards for Science. Participants will learn how to use the model as an anchoring phenomenon and in the development of story-lines as they complete hands-on Youth Wetland Program lessons linked to the model. This is an experience not to be missed!

Presenters: Steve Babcock, LSU Laboratory School/CPRA with Joseph McClatchy and Dr. Clint Wilson, LSU Center for River Studies
Location: LSU Center for River Studies, 100 Terrace Ave., Baton Rouge, LA 70802
Grade Level: 5th-8th, 9th-12th
Times (choose one): Session I 8:00 a.m. to 11:45 a.m., Session II 12:25 p.m. to 4:30 p.m.

Exploring the Relationship between Watersheds, Water Quality, and Human Activity (Lafayette Region) Combination Workshop and Tour

This 7-hour CLU course is hosted by the Bayou Vermilion District and will be held at our Vermilionville Living History Museum in Lafayette, LA. Course material will introduce teachers to our environmental science field trip package that offers a unique experiential learning opportunity, which takes a holistic approach to understanding the topic of water. Our environmental education package is geared specifically towards facilitating a comprehensive understanding that connects the quality of water flowing through our local bayous to our daily habits, our cultural traditions, and our interactions with our natural resources, especially the Bayou Vermilion. In this course, participants will tour our Watershed Exhibit and Rain Garden, conduct a Macroinvertebrate sampling activity, conduct a Water Quality chemical test analysis, and take a Boat Tour on the Bayou Vermilion.

Watershed Exhibit tours: Introduce students to the dynamic interconnections of planetary heat distribution due to the seasons, seasonal weather phenomenon, the water cycle, the life cycle of plants and animals, the physics of watersheds, the effects of water on humanity, and the effects of humanity on water.

Rain Garden Tours: Introduce students to Best Management Practices used to improve water quality as they tour our BMP demonstration projects on property.

Macroinvertebrate Sampling: During this activity, students will collect water samples from our pond, identify and classify the larvae of various aquatic macroinvertebrate organisms, and use their data as indicators of water quality.

Water Quality Sampling: During this activity, students will collect water samples from the Bayou Vermilion and use our water quality test kits to test for temperature, pH, salinity, turbidity/water clarity, and dissolved oxygen.
Boat Tours of the Bayou Vermilion: Expose students to a firsthand experience and interpretation of Bayou Vermilion topography and hydrology, the process of riparian and alluvial sedimentation, riparian habitats, and the important role that swamp systems serve to improve water quality.

**Presenter:** Gregory Guidroz, Bayou Vermilion District  
**Location:** Bayou Vermilion District, 300 Fisher Rd, Lafayette, LA 70508  
**Grade Level:** 5th-8th, 9th-12th  
**Time:** 8:30 a.m. - 4:00 p.m.

---

**Coastal Dune Enhancement Project** (Lake Charles Region) Workshop/Planting Event

A hands-on experience in coastal restoration! A coastal dune enhancement project will be held in Cameron Parish near Holly Beach, LA. Hackberry and red mulberry seedlings and toothache tree stem/root cuttings will be planted in back-dune swales of previously established dunes, and bitter panicum and railroad vine will be planted on areas of developing dunes. Gain a firsthand understanding of how replanting efforts are accomplished.

**Presenters:** Andrea Gorum, Gulf Coast Soil & Water Conservation District, and Joey Breaux, Louisiana Department of Agriculture and Forestry Office of Soil & Water Conservation  
**Location:** Holly Beach, LA  
**Grade Level:** General (K-12)  
**Time:** Begins at 8:30

---

**Wetlands, Animals, and Early Childhood Oh My** (Lake Charles Region) Hands-on Workshop

This early childhood environmental education short course will utilize the story Babies in the Swamp as the backdrop to introduce early learners to the importance of environmental education (environmental awareness, stewardship and sustainability). The short course will provide hands-on, interactive activities that will immerse young learners in the wonders of the wetlands with a special emphasis on the plants and animals that live and need the wetlands for survival. Participants will be provided electronic access to the module.

**Presenters:** Angee Burd, McNeese State University, with Melissa Hastings and Amy Smothers, Calcasieu Parish Schools, and Kayla Devillier, Sandra Theriot and Erin Washington, McNeese students  
**Location:** McNeese State University, 4205 Ryan Street, Lake Charles, LA 70605  
**Grade Level:** Pre-K and Kindergarten  
**Time:** 9:00 a.m. to 12:00 p.m.

---

**Environmental and Physical Effects of Altering the Calcasieu River** (Lake Charles Region) Tour

This tour will start south of Lake Charles at the Gulf Intracoastal Waterway, move to the Calcasieu Ship Channel, continue on to Prien Lake, and finally to the Salt Water Barrier. Participants will collect water samples to test for salinity and other water quality parameters.

**Presenter:** Brian Fontenot, Calcasieu Parish Public Schools  
**Location:** Lake Charles area waterways  
**Grade Level:** General (K-12)  
**Time:** 8:00 to 12:00 p.m.
Using Mobile Devices to Track Biodiversity in the School Yard and Habitat Restoration Areas
(Monroe Region) Combination Workshop and Tour

Ecological Restoration is a key tool conservation biologists and natural resource managers use to create new habitat for plants and animals and to restore ecosystem services to people. To understand the impact of restoration and the success of those efforts, the changes in ecological communities need to be monitored over time. These changes can be assessed by monitoring changes in the number and type of species of plants and animals found in the restoration area over time. Our workshop and tour will involve a discussion of restoration, particularly of the Shortleaf Pine ecosystem, which is endangered in Louisiana. We will tour Wafer Creek Ranch, which is one of the only Shortleaf Pine restoration projects in the state. Teachers will acquire skills and knowledge about restoration and wildlife through learning about multiple restoration practices and active engagement in techniques used to monitor wildlife with an emphasis on how these can be employed in classroom activities. In particular, this workshop will emphasize biodiversity monitoring through iNaturalist, which is a free citizen science app and web-based platform compatible with smart phones, tablets and computers. Through iNaturalist, users can take pictures of organisms and upload them to an online database to document plant and animal locations. Organism identification occurs with the help of other iNaturalist users, and scientists worldwide can use the data collected. The techniques learned could be easily implemented to examine school-yard plants and animals. Teachers will also leave the workshop with the tools and practice to incorporate an anchoring phenomena routine in line with science practices and the new Louisiana environmental and earth science standards.

Presenters: Julia Earl, Chris Campbell, Terri Maness and Natalie Clay, Louisiana Tech University
Location: Carson Taylor Hall, Louisiana Tech University, 1 Adams Blvd, Ruston, LA 71272
Grade Level: 5th-8th, 9th-12th, College
Time: 9:00am to 4:30pm

Cross-curricular Instruction with Animals in the Classroom (Monroe Region) Workshop and Tour
Using the Louisiana Student Standards for Science, Language Arts, and Math, our goal is to provide K-5 teachers of Northeast Louisiana a comprehensive workshop that includes hands-on activities which highlight environmental stewardship. We are aware that students at the K-5 level are extremely impressionable and it is never too soon to spark their interests in environmental conservation, research, and protection. The workshop will include the opportunity to learn how to create habitats using earthworms, mealworms, and butterflies, which will cover all elements that teachers need to replicate and implement the habitat in their own classrooms. Building these habitats will teach students how to engage in language arts through keeping journals, and science and math skills through building and maintaining the habitats. The workshop will also include a tour through Monroe’s Chennault Park where teachers will be exposed to our local resources for scientific education. During the tour, the LEEC, Black Bayou and ULM will work collectively on a water sampling event at the pond. The microscopes will be used after to examine the water for show and tell. Ryan Daniel, an Inland Wildlife Biologist, and Nova Clarke, Black Bayou Education Specialist, will participate in the water sampling by discussing the aquatic habitat and ecosystem of the pond.

Location: Northeast Louisiana Delta African American Museum, 1051 Chennault Park Drive, Monroe, LA 71203
Grade Level: K-5th
Time: 8:00 a.m. to 3:30 p.m.
Citizen Science in Education (New Orleans Region) Hands-on Workshop

Citizen Science is quickly becoming one of the most effective ways to engage people in the scientific method, connect people to their public lands, and gain a sense of stewardship and connection to the environment. Using Citizen Science in education encourages students to pursue their own interests, gain comfort in and fascination with their local environments, and learn about natural systems and the scientific method.

Come participate in a sampling of 3 citizen science education programs offered at the Barataria Preserve. Some examples include: Water Quality Testing and dipnetting, Nature's Notebook (seasonal monitoring in animals and plants), soil testing and aerial mapping. Participants will gain the tools and knowledge necessary to implement these and similar programs in their own classrooms and school yards and learn about the resources offered to formal and informal educators by Jean Lafitte National Historical Park and Preserve.

Presenters: Lea Schram von Haupt and Kali Bunn, Jean Lafitte National Historical Park and Preserve
Location: Barataria Preserve Education Center
Grade Level: 5th-8th, 9th-12th
Time: 8:00 a.m. to 12 p.m.

Teach Wild: A Lesson on Marine Debris (New Orleans Region) Combination Workshop and Tour

This workshop will highlight land-based marine debris education programs offered through Audubon Nature Institute's school field trips as well as resources teachers can use back in the classroom. This workshop will educate regional educators and help them educate their students on plastic use in our society, the effects of marine debris along the Gulf Coast, and how to act both individually and as a community to prevent the creation of marine debris. Activities will introduce the topic of marine debris and its impacts on ocean wildlife and local communities. An active learning experience will involve use of a micro-plastic filter apparatus and demonstrations to show the effects of micro-plastic ingestion by sea birds. Community based action can help empower our local communities.

Presenters: Sonia Vedral and Monica Pasos, Audubon Nature Institute
Location: Audubon Aquarium of the Americas, 1 Canal St., New Orleans, LA 70130
Grade Level: General (K-12)
Time: 10 a.m. to 5 p.m.

Eagle Tour (New Orleans/Baton Rouge Regions) Tour

The American Bald Eagle is a common visitor on the Cajun Coast. Join us to view these majestic birds perched in a tree, soaring overhead, tending their young or hunting for food. BTNEP in partnership with LDWF will provide a tour to see the eagles' nests and to discover the threats to our National bird. BTNEP will provide information on Raptures, Sparrows, Hummingbirds and Warblers along with a K-12 Bird Curriculum. The tours will be guided by ornithologists and wildlife biologists.

Presenters Alma Robichaux, Richard DeMay and Delaina LeBlanc, Barataria-Terrebonne National Estuary Program
Location: Gibson Boat Launch, Marina Drive, Gibson, LA 70356
Grade Level: General (K-12)
Time: 8 a.m. to 4 p.m.

Marsh Restoration Exploration in Big Branch National Wildlife Refuge (Northshore Region)
Combination Workshop and Tour

This combination hands-on workshop and tour will allow educators to explore an active coastal restoration (marsh creation) site, located in Big Branch National Wildlife Refuge close to Slidell, LA. The group will meet at the SE Louisiana Refuges Headquarters in LaCombe for introductory activities, before driving to the site of CWPPRA Restoration project PO 104. See fact sheet at: https://www.lacoast.gov/reports/gpfs/PO-104.pdf. They will travel by boat to view the newly created marsh habitat where groups of students and adult volunteers have planted marsh grass to enhance the wetland functions. Participants will walk on the newly created land and learn about the methods employed to create the 600+ acres of wetlands. They will learn first hand how sediment is placed using a dredge, and how a restoration project of this kind is designed and executed. They will have the opportunity to plant wetland grass at the restoration site and assess the success of previous volunteer plantings. Educational materials and activities will be provided by UNO Coastal Education Program and USFWS.

Presenters: Dinah Maygarden, University of New Orleans, with Rebecca Larkins and Daniel Breaux, US Fish and Wildlife Service
Location: Big Branch National Wildlife Refuge
Grade Level: 5th-8th, 9th-12th, College
Time: 8:30 a.m. to 3:30 p.m.

WET, WILD and PLT (Shreveport Region) Workshop

Award-winning cross-curricular programs, Project Learning Tree, Project Wild and Project WET, include hands-on experiential learning aligned with national standards. These lessons and activities inspire students to develop awareness, knowledge, skills and commitment to their environment.

Presenters: Cindy and Ricky Kilpatrick
Location: Red River National Wildlife Refuge, 150 Eagle Bend Point, Bossier City, LA 71112
Grade Level: General (K-12)
Time: 9 a.m. to 3:30 p.m.

STUDENT ART AND LANGUAGE ARTS CONTEST

The 2019 LEEC Student Environmental Awareness Art and Language Arts Contest will feature the theme "Taking Environmental Action: What's Great About Your Part of the State?" We encourage students to investigate environmental efforts specific to their hometown, parish or region of the state.

Students: Does your community have a unique recycling center, dedicated volunteer organization, green business or outdoor facility that makes it unique in the environmental landscape? Take inspiration from people doing good things for the environment and create a piece of visual or language art that explains what is great about your part of the state.

The deadline for the contest is Friday, April 19, 2019.

Download the official registration form.
HEALTHY SCHOOLS COLLABORATIVE: NEW ORLEANS SUMMIT
Wednesday, November 7, 2018 from 10:00 a.m. – 4:00 p.m. at the Smoothie King Center, New Orleans

The Healthy Schools Collaborative will be hosting a school health summit for education leadership! Attendees will learn strategies for supporting the Whole School, Whole Community, Whole Child. Well-Ahead Louisiana and Aetna for Better Health of Louisiana are sponsoring the summit. For more information, please contact WellAhead@la.gov.

View the meeting agenda and register here.

DID YOU KNOW? According to the Centers for Disease Control and Prevention, children who have obesity are more likely to have high blood pressure and high cholesterol, which are risk factors for cardiovascular disease; increased risk of impaired glucose tolerance, insulin resistance, and type 2 diabetes; breathing problems, such as asthma and sleep apnea; joint problems and musculoskeletal discomfort; fatty liver disease, gallstones, and gastro-esophageal reflux.

Source Centers for Disease Control and Prevention

LAGNIAPPE

NINE OF THE COOLEST BAT SPECIES IN THE UNITED STATES

Often misunderstood, bats are crucial to our planet. They provide essential pest control, pollinate our plants and disperse seeds for new plants and trees. Find out more about some of the most interesting species of bats in the US at the US Department of the Interior.

A pallid bat enjoys a tasty snack of a scorpion. In addition to eating arthropods, including spiders and cicadas, pallid bats also occasionally feast on small lizards or mice. Photo by Richard Jackson, U.S. Fish and Wildlife Service.

BUY A PLATE TO EDUCATE
Support the LEEC by purchasing an Environmental Education specialty plate at www.expresslane.org

VENISE ORTEGO Coordinator
(337) 948-0255 vortego@wlf.la.gov
THOMAS GRESHAM Assistant Coordinator
(225) 765-0124 tgresham@wlf.la.gov
BRIAN GAUTREAU Green Schools Coordinator
(225) 765-2864 bgautreau@lsu.edu