



Outdoor Learning Symposium

Think Outside

October 20, 2017

Southwest Atlanta Christian Academy
3911 Campbellton Rd SW, Atlanta, GA 30331

SCHEDULE

FRIDAY, OCTOBER 20

- 8:00 - 9:00 Registration & Continental Breakfast
- 9:00 - 9:45 Welcome and Opening Remarks, Networking in the Gym, Recycle Store, Exhibitors
- 10:00 - 12:00 AM Concurrent Sessions - Long Sessions 10:00-12:00; Short Sessions 10:00-10:55 & 11:05-12:00
- 12:00 - 1:00 Lunch and Guest Speakers from One More Generation
- 1:15 - 3:15 PM Concurrent Sessions - Long Sessions 1:15-3:15; Short Sessions 1:15-2:10 & 2:20-3:15
- 3:15 - 3:30 Door Prizes, Closing Remarks

ABOUT THE COUNCIL OF OUTDOOR LEARNING

The Council of Outdoor Learning (COOL), an initiative of the Environmental Education Alliance of Georgia (EEA), is a coalition of organizations and individuals who share an interest in the design, development, maintenance, use, and longevity of outdoor classrooms. COOL serves teachers, parents, principals, and community volunteers as a resource link, providing up-to-date training and information to those interested in building and using outdoor classrooms.

ABOUT LUNCH

Lunch will be donated by local chefs and restaurants and will begin being served buffet style at noon in the gym to registered participants. Our sponsors have generously provided enough food for one serving per person, which should include up to 2 proteins and 2 veggie sides.

ABOUT THE SESSIONS

This program outlines the session times and locations. Sessions are 55 minutes or 120 minutes long. Please attend the session you registered for. The Council of Outdoor Learning is extremely grateful for the presenters who are volunteering their time to present at the symposium.



**THE COUNCIL OF OUTDOOR LEARNING IS A COMMITTEE OF
THE ENVIRONMENTAL EDUCATION ALLIANCE OF GEORGIA**



10:00
to
10:55**TEACHING CULTURE AND NATURE TO INTERPRET OUR CITY**

Darryl Haddock, Education Director, West Atlanta Watershed Alliance

West Atlanta Watershed Alliance programs tend to focus on youth leadership and community development. We are intentionally targeting inter-generational audiences in place-based K-Grey environmental education and service learning at the Outdoor Activity Center and throughout the Atlanta Children's Forest Network. We are also replicating our efforts in a ecologically impaired area within the Proctor Creek watershed. We will summarize recent programs and efforts to build environmental literacy and community capacity through in field environmental action projects. Workshop participants will learn 3 techniques to utilize "Culturally Responsive Teaching" to interpret nature in urban outdoor settings. This approach moves educators away from "culturally relevant" content aimed at minority students either siting notable persons of color or rapping about content.

10:00
to
10:55**THROUGH THE EYES OF NATIVE AMERICANS**

Mark Warren, Naturalist, Composer, Novelist, and Director of Medicine Bow

A study of historical uses of plants as foods, medicines, and craft materials, as practiced by the native people of the Southeast. How did early people learn to make use of plants? Which uses are safe for modern educators to share with children? This approach to nature study is designed to turn a commonly known landscape (the schoolyard or wooded lot next door) and its familiar components (weeds, bark, leaves, seeds) into jewels of surprise and enterprise.

10:00
to
10:55**EVALUATING YOUR OUTDOOR PROGRAM - PART ONE: HOW TO EVALUATE YOUR OUTDOOR PROGRAM**

Dr. Heather Brasell, Gaskins Forest Education Center

Effective evaluation of education programs is critical for accountability and essential for obtaining funding. However, most environmental educators are far more comfortable planning a program and teaching than they are in evaluating it. This is even more challenging for outdoor learning programs. A few basic strategies can help jump start the process. We will present key concepts of program evaluation from Core Course 3 in ATEEG (Advanced Training in Environmental Education in GA), our nationally accredited certification program.

11:05
to
12:00**EVALUATING YOUR OUTDOOR PROGRAM - PART TWO: EXAMPLES OF EVALUATION OF OUTDOOR PROGRAMS**

Dr. Heather Brasell, Gaskins Forest Education Center

Graduates from ATEEG (Advanced Training in Environmental Education in GA) will describe the independent studies they conducted as part of requirements for certification. Focus will be on how they evaluated their environmental education programs. They will provide examples of assessments and describe how they used the results.

10:00
to
12:00**MEADOW, FOREST, OUTCROP AND STREAMBANK: GOING OUTSIDE TO TEACH GEORGIA'S NATURAL COMMUNITIES**Leslie Edwards, PhD, Lead Author of the *The Natural Communities of Georgia*

The many natural communities of Georgia can be broken down into several basic types, including forests, meadows, rock outcrops and streamsides. These types are an excellent way to introduce natural communities to students. Each has its own unique plants, animals, food webs, and ecology. We'll discuss each type, and talk about ways for students go outside to learn about them: the multiple layers and importance of trees in shady forests; the grasses, constantly blooming parade of flowers, and pollinators of sunny prairies; the succulents and camouflaged crickets and lizards of the "biological deserts" of rock outcrops; and the rough-and-tumble, wet, and constantly changing world of the stream side. There are two parts. Session 1: a powerpoint presentation with hand-out. Session 2: Activity using materials to build four different natural communities – their plants, animals, and physical environment, from the ground to the tree tops. This exercise can be translated to the classroom and to exploring habitats outdoors.

AM CONCURRENT SESSIONS

SESSION DESCRIPTIONS

10:00
to
12:00

DIGGING INTO DEAD STUFF

Jerry Hightower, Environmental Education Coordinator, Chattahoochee River National Recreation Area

It's more than just a rotten log. It is a very complex interconnected array of organisms from multiple families; all utilizing the decomposing log as apartment, cafeteria, nursery, and more. Teachers will focus on the role of the FBI (fungi, bacteria, and invertebrates) in recycling nutrients back into the environment as they discover the hidden excitement on and within a decomposing log. Also, learn a bit more in the decomposing log's role in the carbon cycle and the nitrogen cycle. Beginning by observing the log's exterior and then carefully dissecting subsequent layers, teachers will observe, record, identify, and occasionally collect organisms. From carnivorous arthropods and fungi to herbivorous isopods and insects; teachers will be amazed at the fantastic investigations offered by this easy to obtain teaching aid. Teachers will use "kitchen drawer" dissecting tools, hand lens, journals, identification guides, microscopes, and collection containers. Participants will record their findings in provided journals with descriptions, and sketches. Care and respect for living organisms will be stressed and all living materials will be returned to the collection site.

11:05
to
12:00

UTILIZING CITIZEN SCIENCE AS A CURRICULUM

Dr. Lynda Jenkins, Upper Learning Science Instructor, The Galloway School

Tracey Muise, Middle and High School Science Educator, St. George's Episcopal School

During this session, we will engage in several citizen science projects that can be used to enhance scientific thinking in middle and high school curricula. We will discuss the benefits and pitfalls of such work. We will also discuss how such involvement may serve to democratize science in the larger world context.

11:05
to
12:00

INTRODUCING "GETTING LITTLE FEET WET!" (PROJECT WET'S EARLY CHILDHOOD GUIDE)

Jo Adang and Monica Kilpatrick, State Coordinators, Georgia Project WET

Join Jo and Monica for a fun-filled session showcasing the latest Project WET publication "Getting Little Feet WET"; Project WET's Early Childhood Education Guide. Developed specifically for educators working with young learners (ages 3-6) and in coordination with early childhood experts, the Guide contains several interactive, hands-on activities for exploring different aspects of water. Copies of the guide will be available for \$15 each during the session.

PM CONCURRENT SESSIONS

SESSION DESCRIPTIONS

1:15
to
2:10

THINK OUTSIDE YOUR LIFESPAN: GEORGIA'S CLIMATE

Bill Witherspoon, Ph.D, co-author, [Roadside Geology of Georgia](http://RoadsideGeologyofGeorgia.com), geogiarocks.us

Today's rapid climate change, a challenge to Georgia's plants and animals, is part of a longer-term picture. Learn why the Arctic went from a habitat for alligators to one for polar bears over the past 50 million years, and how these changes shaped the landscapes and biodiversity of Georgia. Gain perspective on present and upcoming changes, driven by the burning of fossil fuels.

1:15
to
2:10

LOTS OF LESSONS LEARNED WITH LICHENS

Malcolm Hodges, Ecologist, The Nature Conservancy

So many aspects of biology and ecology can be taught using lichens as subjects, besides symbiosis. Adaptation, biodiversity, pollution tolerance, systematics, reproductive strategies and more. They're also one of the most accessible groups of organisms in the outdoor classroom. We'll talk some lichen basics, and discuss the various ways they can be looked at and used as teaching tools.

1:15
to
2:10**TEACHING MUSIC IN THE OUTDOORS***Stefan Moss, Outdoor Afro*

Music is often described as a universal language. In this session, environmental educators will listen to an array of songs inspired by the natural world and will learn how to develop lesson plans that integrate music into their environmental/earth science classroom activities. The session will provide useful tips on how to engage students using songs from multiple genres of music and how to connect song lyrics to topics like pollution, water conservation, biodiversity, etc.

1:15
to
3:15**THE SECRET LIVES OF INSECTS & WHY THEY ARE SO COOL TO TEACH SCIENCE***Duane M. Jackson, Ph.D, Professor of Psychology and Chair of the Division of Science & Mathematics
Morehouse College*

Power Point presentation dealing with a brief overview of insects, followed by scientific experiments that can be done using insects, k-5. Live insects and simple apparatus will be presented. Teachers will have some hands-on experience in the classroom with insects and simple apparatus. We will also go outside, if weather permits, and collect data on insect visitation and look for correlation between insect body type and flower petal type.

1:15
to
3:15**AGRICULTURE EXTREME INNOVATION OUTDOOR LEARNING CLASSROOM***Ray Williams, Mirror Image Mentoring, Exclusive Education Partner of Greenhouse Foundation*

Hands on lesson in greenhouse classroom focused on indoor vs. outdoor grow systems. Innovation and development for grow spaces. Participants will be able to define more grow areas and understanding of selected crops for similar areas on their personal campus. Whether professional is able to grow inside or outdoors sample grow lessons to be distributed. Ask and grow session for teachers to address specific challenges in their area.

2:20
to
3:15**THE MILKWEED PROJECT***Jackie Sherry, Program Manager, Dunwoody Nature Center*

The Dunwoody Nature Center has partnered with several elementary schools around the Atlanta area to help protect the Monarch butterfly and raise awareness of the troubling decline of the population. We have developed a curriculum spanning the entire school year with various lessons on the milkweed plant and Monarch butterfly. These lessons include harvesting milkweed seeds, growing plants from seeds, planting a pollinator garden, and monitoring the garden for eggs, caterpillars, and butterflies. The beauty of this curriculum is that it cannot only be replicated for any grade at pretty much any school, but also that it is easily repeated year after year. The Dunwoody Nature Center will share the various lessons with the attendees along with supplemental resources helpful when using these lessons. The attendees will also participate in one of the lessons undergoing metamorphosis, turning into butterflies and migrating to their overwintering habitat in Mexico. They will experience firsthand the challenges that Monarch butterflies face journeying south.

2:20
to
3:15**DRAGONFLIES 101***Susan Meyers, Monarchs Milkweed & More LLC, Manager*

Through a series of hands-on activities, participants will hone their observation skills to discern the anatomy and field markings of Georgia's dragonflies. Life cycle and behaviors will be reviewed through video clips. Using field guides, participants will identify five mystery migratory species from photographs and clues. Links, protocols and a dragonfly curriculum will be shared. Ideally live specimens will be available for observations.

2:20
to
3:15**THE TREE CONNECTION***Liz Cole, Senior Project Manager, Greenberg Farrow*

What happens when you give 43 lower and middle grade students a tree sapling and a journal; introduce them to artists, design and environmental professionals; and take them to locally protected conservation lands? Magic... simply magic! Hang-on to your seat as you experience "The Tree Connection", an interactive community based initiative that connects people, culture and the natural environment.

EXHIBITORS

LOCATED IN THE GYM

VISIT THE EXHIBITS ON THE MAIN FLOOR OF THE GYMNASIUM. A VARIETY OF AGENCIES AND ORGANIZATIONS HAVE COME TOGETHER TO PROVIDE MORE INFORMATION ABOUT THEIR SERVICES OR OFFERINGS - ALL OF WHICH HELP BRING ENVIRONMENTAL EDUCATION ALIVE IN GEORGIA!

BOOK SIGNING WITH

LESLIE EDWARDS

THE NATURAL COMMUNITIES OF GEORGIA
www.ugapress.org/index.php/books/natural_communities_of_georgia

BOOK SIGNING WITH

MARK WARREN

SECRETS OF THE FOREST
A 4 VOLUME SERIES
www.medicinebow.net/media/books

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ROADSIDE GEOLOGY OF GEORGIA
www.georgiarocks.us

AUTREY MILL NATURE CENTER

autreymill.org

GEORGIA PROEJECT WET

projectwet.georgia.gov

CLAYTON COUNTY WATER AUTHORITY

MELVIN L. NEWMAN WETLANDS CENTER

ccwa.us/newman-wetlands-center

GEORGIA RIVER OF WORDS

projectwet.georgia.gov/ga-river-words

COBB COUNTY WATERSHED STEWARDSHIP

cobbstreams.org

MONARCH ACROSS GEORGIA

eealliance.org/mag

FULTON COUNTY PUBLIC WORKS

fultoncountyga.gov/fcwr-home

NATIONAL PARK SERVICE - CHATTAHOOCHEE RIVER NATIONAL RECREATION AREA

nps.gov/chat

ENVIRONMENTAL EDUCATION ALLIANCE

eeingeorgia.org

ONE MORE GENERATION

onemoregeneration.org

DUNWOODY NATURE CENTER

dunwoodynature.org

STATE BOTANICAL GARDENS OF GEORGIA

botgarden.uga.edu

GEORGIA DNR NONGAME CONSERVATION

georgiawildlife.com/nongame

WEST ATLANTA WATERSHED ALLIANCE

wawa-online.org

RECYCLE STORE

LOCATED IN THE GYM FOYER

RE

VISIT THE RECYCLE STORE- MAKE A DONATION!

You never know what you'll find at the recycle store. Check back throughout the day, new items may appear!

For more information or to register, visit www.eealliance.org/outdoor-learning-symposium.
Registration deadline is Friday, October 7, 2016.

Think Outside

	DOWNSTAIRS GYM ROOM 1 & 2	DOWNSTAIRS GYM ROOM 4 & 5	UPSTAIRS GYM ROOM 7 & 8	UPSTAIRS GYM ROOM 9 & 10	BUILDING A 4TH GRADE CLASSROOM
8:00-9:00	In the Gymnasium Foyer: Registration Open & Continental Breakfast				
9:00-9:45	In the Gymnasium: Opening Remarks: Welcome, Exhibitors, Networking, Book Signing, Recycle Store				
10:00 - 10:55	Digging Into Dead Stuff	Evaluating Your Outdoor Program: Part 1 - How To	Teaching Culture & Nature to Interpret Our City	Meadow, Forest, Outcrop: Going Outside to Teach Georgia's Natural Communities	Through the Eyes of Native Americans
11:05 - 12:00		Evaluating Your Outdoor Program: Part 2 - Examples	Introducing "Getting Little Feet WET!"		Utilizing Citizen Science As A Curriculum
12:00 - 1:00	In the Gymnasium: 0Lunch, Speakers: One More Generation, Exhibitors, Book Signing, Recycle Store				
1:15 - 2:10	Think Outside Your Lifespan: Georgia's Climate	The Secret Lives of Insects & Why They Are So Cool To Teach Science	Lots of Lessons Learned With Lichens	Teaching Music Outdoors	Agriculture Extreme Innovation Outdoor Learning Classroom
2:20 - 3:15	The Milkweed Project		Dragonflies 101	The Tree Connection	
3:15 - 3:30	In the Gymnasium: Door Prizes & Closing Remarks				



A special note of gratitude to the Southwest Atlanta Christian Academy for donating their fantastic school and facilities for the 2017 Outdoor Learning Symposium.

For more information about the Southwest Atlanta Christian Academy, please visit www.sacawarriors.com.

The National Park Service, Chattahoochee River National Recreation Area; is a continuing supporter and sponsor of the Outdoor Learning Symposium.



We hope you will join us again next year for the 2018 Outdoor Learning Symposium.