

# 2019 SCHOOL Programs



# THE PARKLANDS OF FLOYDS FORK OUTDOOR CLASSROOM



THEPARKLANDS.ORG

# THE PARKLANDS OF FLOYDS FORK

# **OUTDOOR CLASSROOM**

WHAT BETTER WAY TO LEARN SCIENCE AND NATURAL HISTORY THAN THROUGH DYNAMIC EXPERIENCES IN NATURE?



With the Outdoor Classroom, educators at The Parklands offer both in-classroom and out-of-doors learning experiences that lead to understanding of our Kentucky landscape and the creatures that grow and live within it.

The core purpose of the Outdoor Classroom is to teach science and natural history education through dynamic experiences in the field that stimulate **curiosity, critical thinking and discovery.** We invite your students to become landscape detectives, exploring the world around them to gain a better understanding of the interconnections of our local landscape, and its role in the history of our area.

We envision a future in which all people view themselves as life-long learners, and share a connection to and appreciation for the natural world, their community and each other.

The Outdoor Classroom is Louisville's newest outdoor **STEAM** center (Science, Technology, Engineering, Arts and Math), an outdoor educational experience utilizing natural history, arts education, and exploration to teach science.

This year, we hope you will bring your students out to The Parklands of Floyds Fork! Give us a call and we'll work with you to create an exceptional educational experience!

# SEARCH CLASSES BY GRADE OR PROGRAM

Туре	Program Name	Content Snapshot	¢	~	y )	F	5	e)	2/	°)	S	$\lambda$	Ś	K)	(é)	₽ #
INTERACTIVE CLASS	PLANTS	STRUCTURE/FUNCTION, SEED DISPERSAL, PHOTOSYNTHESIS											$\square$	$\square$	$\vdash$	ω
INTERACTIVE CLASS	EARTH MATERIALS	ROCK CYCLE, FOSSIL RECORD, WEATHERING, KY EARTH MATERIALS												$\square$	$\vdash$	ω
INTERACTIVE CLASS	ANIMALS & THEIR ENVIRONMENTS	ADAPTATIONS, STRUCTURE/FUNCTION, HABITATS												⊢	-	ω
INTERACTIVE CLASS	SUNSHINE & SHADOWS	BIOLOGY, EARTH SCIENCE												⊢	-	ω
INTERACTIVE CLASS	DIVERSITY OF LIFE	STRUCTURE/FUNCTION, ADAPTATIONS, BIODIVERSITY											-			З
INTERACTIVE CLASS	WORLD OF WATER	PROPERTIES OF WATER, WATER CYCLE, STREAM HEALTH												$\square$	$\vdash$	ω
INTERACTIVE CLASS	SCIENCE OF SOUND	PROPERTIES OF SOUND, PHYSICS, BIODIVERSITY												⊢	-	ω
INTERACTIVE CLASS	BIOMIMICRY	BIO MIMICRY, ENGINEERING, TEAMWORK												⊢	-	4
INTERACTIVE CLASS	ECOLOGY OF THE BLUEGRASS	ECOLOGY, FORESTRY, BIODIVERSITY, RESEARCH			Ц		Ц	$\vdash$								4
INTERACTIVE CLASS	READING THE FORESTED LANDSCAPE	GEOLOGY, FOREST ECOLOGY, HISTORY, INTERDEPENDENCE					-	-								4
INTERACTIVE CLASS	THE IMPORTANCE OF PLACE: HISTORICAL PERSPECTIVE	HISTORY, GEOGRAPHY, LANGUAGE ARTS, CREATIVE WRITING			_		_		_							4
											.					
FIELD EXPERIENCES	WETLAND STUDY	BIODIVERSITY, INTERDEPENDENCE, AQUATIC ECOSYSTEMS												$\square$	$\vdash$	л
FIELD EXPERIENCES	TRAIL HIKE	FOREST ECOLOGY, STRUCTURE/FUNCTION, SUCCESSION												⊢	-	л
FIELD EXPERIENCES	CREEK WALK	BIODIVERSITY, INTERDEPENDENCE, STREAM ECOLOGY												$\square$	$\vdash$	л
FIELD EXPERIENCES	PADDLING ADVENTURE	ECOSYSTEMS, CHANGE, BIODIVERSITY														м

**BOOK NOW!** Call us at 502-815-0274 to book your program while dates are still available!

# **INTERACTIVE CLASSES**



Full day programs that feature hands-on classroom lab experiments that align with state and national standards. All classes offer Ranger-led outdoor experiences for your class in one of our world class parks. Each interactive class can be adapted to fit the appropriate level for Grades K-8.

# CHOOSE FROM THE TOPICS BELOW:

**Plants:** Discover and explore the relationship of plants and the sun, go on a hike to observe flowers, grasses,

shrubs and trees growing in the park, learn about life cycles, and the structures of plants and forests. K-LS1-1; 1-LS3-1; 2-LS2-1; 3-LS4-3; LS4.C; 4-LS1-1

**Diversity of Life:** Discover the aquatic world, past and present, found in and along Floyds Fork. Get a hands-on look at the variety of vertebrates and invertebrates that live in the Fork, and learn about the adaptations plants and animals made to continue living along the stream. **K-LS1-1: K-ESS3-1: 2-LS4-1: 3-LS4-1: 3-LS4-1: 3-LS3-2: 4-LS1-1: 5-PS3-1: 5-LS2-1** 

**Animals and Their Environments:** Investigate animals large and small as we explore the natural habitats of the animals that live in The Parklands. Explore animal structure and function, their adaptations and behaviors, and discover the importance of their interdependence with the environment in which they live. **K-ESS3-1**, **1.LS1-1**; **2-LS4-1**; **ESS2.E**; **3- LS4-3**; **3-LS3-2**; **4-LS1-1**; **5-PS3-1**; **5-LS2-1** 

**Earth Materials:** Observe different rock types, explore composition of materials, explore the rock cycle, investigate local Kentucky geological history and observe and identify fossil species in limestone on a hike through the park. **2-ESS2-2**, **3-LS4-1**; **4-ESS3-1**; **4-ESS1-1**; **4-ESS2-1**; **5-PS1-3** 

**Sunshine & Shadows:** Explore the formation of shadows and investigate interactions between the sun, moon and earth in this hands-on interactive class. Observe the properties of light and learn about the sun's importance to the Floyd's Fork ecosystem. Apply principles learned during an exploratory walk along the stream. **K-PS3-1; 1-PS4-3; 1-ESS1-2; 2-PS1-1** 

**World of Water:** For living on a planet made up of 75% water, how much do you really know about H2O? Discover the importance of water and the water cycle. Get your hands and feet wet investigating the creatures living in Floyds Fork while learning about the importance of a healthy stream. **2-ESS1-1**; **2-ESS2-1**; **2-ESS2-3**; **3-ESS2-2**; **3-ESS3-1**; **4-ESS1-1**; **4-ESS2-1**; **5-ESS2-1**; **5-ESS2-2**; **5-ESS3-1** 

Science of Sound: Explore your sense of sound to better understand the world around you. Use natural soundscapes to study concepts of sound, such as wavelength, frequency and amplitude. Learn the importance of sound in predator/prey relationships and how it can help study biodiversity in an area. 1-PS4-1; PS4.A; W.1.8; 2-LS4-1; LS4.D; 2-LS2-1; LS3-1; 4-PS3-2; PS4-1; SL4.5; PSA.4

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### Interactive Classes continued

**Biomimicry:** What if we could solve all of our problems by first asking, "How does nature solve this?" Examine existing sustainable innovation inspired by nature. Then take on the role of engineer for the day as you learn to look at the natural world as inspiration for design. 1-LS1-1; LS1.A; LS1-D; 2-LS2-2; K-2-ETS1-1; K-2-ETS1-2; LS4.C; 4-LS1-1; LS1.A; 3-5-ETS1-1; 06-PS2-1; 07-LS1-1; 06-LS2-3.08-LS2-5

# HIGH SCHOOL CLASSES

### Ecology of the Bluegrass - A Systems Approach to Assessing Environmental Health: GRADES 9-12

This program is designed to bring you and your students out to The Parklands throughout the year. The focus of this program is looking at the park as a system and analyzing seasonal changes. The program focuses on stream ecology, forest health and management practices, sound ecology, climate change and biodiversity. Through hands on activities and labs, students will collect data on flora and fauna at the park and learn about human interactions with the natural world. This program is best suited for AP Biology students who can commit to 4-5 programs at the park, but we can modify lessons to best suit your needs. **HS-LS-1; HS-LS-2; HS-LS-3; HS-LS2-4; HS-LS2-6; HS-LS2-7; HS-ESS3-6; ESS3.A; ESS3.D** 

# Reading the Forested Landscape - Understanding Systemic Change in Ecosystems: GRADES 9-12

Reading the forested landscape is the process of seeing the Kentucky landscape as a dynamic and continuously changing entity. This requires a thorough understanding of the vocabulary: the plants, trees, soils, geologic layers, and wildlife. In this critical thinking based, interdisciplinary class, students will learn to look for field marks in the forest that will explain changes in forest composition. These changes will be the result of differing forest disturbance histories such as fire, logging, pasture abandonment, and blowdowns. Students will learn the process of reading the landscape at various forested sites with the help of interpretive rangers and then use their skills to interpret their own site and develop a hypothesis as to why the forest composition is such. For those interested in enhancing their sense of place, there is no better way than by becoming intimately acquainted with their local forests and the fascinating stories they tell. HS-LS2-6, HS-LS2-7, HS-PS3-1, HS-LS2-3, HS-LS4-4, HS-LS4-5, HS-ESS1-5, HS-ESS2-7, HS-ESS3-3 CCSS ELA/Literacy WHST.9-12.7, SL.11-12.4

The Importance of Place - A Historical Perspective of Our Landscape: GRADES 9-12

In this interdisciplinary, place-based literature class, students will investigate and interpret literary themes surrounding elements of storytelling and the importance of naming and describing our place both historically and geographically. How has history shaped and molded the landscape of The Parklands (and that of the U.S., Kentucky, and Louisville), and how can we use the language of place to inform our writing? Students will explore these questions and more as they investigate how history can be applied to our unique bio-region. Through field investigations, literary analysis, observations, and research, students will seek connections between the current local and global landscape. Students will have the opportunity to produce their own essay, poem, or narrative applying the language and structure of place. CCSS.ELA-LITERACY. RL.11-12.1, 11-12.2, 11-12.3, 12.4, 12.5, 12.6, CCSS.ELA LITERACY.RL.1112.9CCSS.ELA-LITERACY. WHST.11-12.1 (A-D) 11-12.2 WHST.11-12.4 CCSS.ELA-LITERACY.RL.1112.9.1 (2.2, 12.3, 12.4)

# **FIELD EXPERIENCES**



A great way to get into nature! Programs are led by one of our interpretive rangers and are approximately 1-2 hours in length based on group size. Field Experiences will be staggered throughout the day. Each student will participate in one experience. Program can accommodate up to 200 students.

# **CHOOSE FROM THE TOPICS BELOW:**

# Trail Hike: GRADES K-3, 4-5, or 6-8

Introduce your students to forest ecology, in this field

experience that explores forest succession, plant structure and function, and interdependence. 2-LS2-1, 5-LS2-1, 4-LS1-1, MS-LS1-5

# Creek Walk: GRADES K-3, 4-5, or 6-8

Introduce your students to stream ecology, in this field experience that explores the diversity of creek life and emphasizes their importance to Kentucky's landscape.

2-LS2-1, 3-LS4-1, 4-ESS2-1, 4-LS1-1, MS-LS1-5

### Wetland Study: GRADES K-3, 4-5, or 6-8

Introduce your students to wetland ecology, in this field experience that explores their functions and ecological value to Kentucky. **2-LS2-1**, **5-LS2-1**, **MS-LS2-4**, **MS-ESS3-1**, **MS-LS1-5** 

# Paddling Adventure: Grades 4-5, 6-8, or 9-12

Introduce your students to stream ecology from a fish-eye perspective in this field experience that explores aquatic ecology and hydrology on Floyds Fork. Students will learn basic paddling skills while learning how Floyds Fork and Kentucky's rivers shape our landscape. **3-LS4, MS-LS2A, MS-LS2C, HS-LS2, 5-LS2, 4-ESS2** 

# PADDLING EXCURSIONS



# Interdependent Relationships in Ecosystems: GRADES 5-12

Introduce your students to the interactions and interdependent relationships of forest ecosystems on a canoe float exploration of Floyds Fork. Students will learn about the diversity of life within The Parklands, visit two interpretive sites to explore native species, and learn about the human relationships with the landscape over time. Join us for this unique experience that allows your students to explore sections of Floyds Fork that are accessible only by paddling. **HS-LS2-6, HS-LS2-7, LS2:C, LS4:D, ETS1.B** \*Based on availability

# ADD IT ON

# RENT THE PRICEWATERHOUSECOOPERS LLP PAVILION

Looking for a great school lunch location? Our PWC LLP Pavilion can hold up to 150 people comfortably and is conveniently located next to our PNC Achievement Center for Education & Interpretation and near the Marshall Playground and Sprayground in Beckley Creek Park. For more information about booking, call us at 502-815-0274.

# **BOX LUNCHES**

Box lunches can be arranged for all school groups beginning at \$5 per student. Please contact us if you would like to have lunch provided as a part of your trip.

### **PADDLING ADVENTURE**

Want to enhance your field trip experience and get your students on the water? Blue Moon Canoe & Kayak of Kentucky can provide hour-long paddling excursions that you can "add on" to your interactive class or field experience. Students 8-years-old and older can add on a paddling adventure for \$15.

# **STAY IN THE KNOW**

### THE PARKLANDS CURRENT

Subscribe to our e-newsletter, The Parklands Current, to receive updates on Parklands events and programs. Visit <u>www.theparklands.org</u> to sign-up today!

# **SCHOLARSHIPS**

Thanks to generous donations from individuals and community organizations, a limited amount of funds are available for Title I schools. These scholarships help supplement the cost of our classes, labs and field experiences, making the Outdoor Classroom accessible to even more students throughout the Louisville area. For more information on available scholarships, call 502-815-0274.





# **MAKE YOUR RESERVATION**

Booking a program with The Parklands is easy! Call 502-815-0274 or email us at ccarman@21cparks.org to make your reservation. *Programs fill quickly, so call today!* 

### **RATES AND INFORMATION**

# **CLASSES, FIELD EXPERIENCES & FIELD DAYS**

Fees: \$8 per student. Teachers and chaperones are free.

Minimum Students: 10 students for Interactive Classes and Field Experiences

**Maximum Students:** 132 students for Interactive Classes / 120 students for Field Experiences **Final Changes, Cancellations & Payments:** All bookings must be made a minimum of 3 weeks in advance. You may cancel or change your reservation numbers up to 2 weeks prior to your scheduled visit, at which point full payment is due.

### PADDLING PROGRAMS

Fees: \$15 per student.Minimum Students:15 studentsMaximum Students:32 studentsFinal Changes, Cancellations & Payments:All bookings must be made a minimum of 4 weeks in<br/>advance, and full payment will be due at the time of booking.<br/>Paddling equipment, tandem canoes,<br/>guides and interpretive instructors are included in the cost of the program.<br/>Groups may not bring<br/>their own equipment as a part of the trip, and all participating individuals must complete a waiver/<br/>permission slip prior to their trip.<br/>Paddling is subject to weather conditions and water levels.

# ADDITIONAL BOOKING INFORMATION

Rain checks or refunds will not be issued for participants who are unable to attend the program. Any unpaid reservations will be canceled. Programs canceled due to inclement weather will be rescheduled by The Parklands. **Parklands Membership discounts are not valid for any group visits.** 

The Parklands will accept credit card, checks or a completed purchase order as a form of payment. Please note that your reservation is not complete until payment is received.



# **PNC ACHIEVEMENT CENTER**

# HOME OF THE OUTDOOR CLASSROOM



# PNC ACHIEVEMENT CENTER FOR EDUCATION AND INTERPRETATION

- Home of the Outdoor Classroom
- Located off Shelbyville Rd. in Beckley Creek Park
- Educational museum exhibit
- Two, state-of-the-art classrooms
- Close proximity to the Marshall Playground and Sprayground
- Easy Access to Floyds Fork

# GIVE US A CALL TODAY OR USE THIS GUIDE TO CHOOSE YOUR LEARNING ADVENTURE!

THEPARKLANDS.ORG • 502-815-0274 • CCARMAN@21CPARKS.ORG