



## THE PARKLANDS OF FLOYDS FORK OUTDOOR CLASSROOM

# THE PARKLANDS 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 a STEAM center (Science, Technology, Engineering, Arts, and Math), offering an outdoor education 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

| Type              | Program Name                   | Content Snapshot                                       | <div><div>K</div><div>L</div><div>1</div><div>2</div><div>3</div><div>4</div><div>5</div><div>6</div><div>7</div><div>8</div><div>9</div><div>10</div><div>11</div><div>12</div></div> |  |  |  |  |  |  |  |  |  |  |   | Pg # |
|-------------------|--------------------------------|--------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|---|------|
| INTERACTIVE CLASS | PLANTS                         | STRUCTURE/FUNCTION, SEED DISPERSAL, PHOTOSYNTHESIS     |                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  | 3 |      |
| INTERACTIVE CLASS | ANIMALS & THEIR ENVIRONMENTS   | ADAPTATIONS, STRUCTURE/FUNCTION, HABITATS              |                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  | 3 |      |
| INTERACTIVE CLASS | EARTH MATERIALS                | ROCK CYCLE, FOSSIL RECORD, WEATHERING, EARTH MATERIALS |                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  | 3 |      |
| INTERACTIVE CLASS | SUNSHINE & SHADOWS             | BIOLOGY, EARTH SCIENCE                                 |                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  | 3 |      |
| INTERACTIVE CLASS | SCIENCE OF SOUND               | PROPERTIES OF SOUND, PHYSICS, BIODIVERSITY             |                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  | 3 |      |
| INTERACTIVE CLASS | NATURAL ENGINEERS              | ENGINEERING, PROBLEM-SOLVING                           |                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  | 3 |      |
| INTERACTIVE CLASS | READING THE FORESTED LANDSCAPE | PLANT ID, FOREST ECOLOGY, SUCCESSION, EARTH SCIENCE    |                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  | 5 |      |
| FIELD EXPERIENCES | TRAIL HIKE                     | FOREST ECOLOGY, STRUCTURE/FUNCTION, SUCCESSION         |                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  | 4 |      |
| FIELD EXPERIENCES | CREEK WALK                     | BIODIVERSITY, INTERDEPENDENCE, STREAM ECOLOGY          |                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  | 4 |      |
| FIELD EXPERIENCES | PADDLING ADVENTURE             | AQUATIC ECOLOGY, HYDROLOGY, KY LANDSCAPE               |                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  | 4 |      |
| INTERACTIVE CLASS | OUTREACH PROGRAM               |                                                        |                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  | 5 |      |



**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-12.

## CHOOSE FROM THE TOPICS BELOW:

**PLANTS:** Discover and explore the relationship between plants, animals, 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. SC-P-UD-1, SC-P-UD-2, SC-P-UD-3, SC-P-UD-5, SC-P-ET-U-1, SC-P-ET-U-3, NGSS: 2-LS2-1, 4-LS1-1

**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. SC-P-UD-S-1, SC-EP-3.4.1, SC-P-UD-S-2, SC-P-US-S-3, SC-EP-3.4.3, SC-P-UD-S-3, SC-P-UD-U-2, NGSS: ESS2.E, K-ESS3-1, LS1-1

**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. SC-P-EU-U-2, SC-P-BC-U-1, NGSS: 2-ESS2-2, 3-LS4-1

**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 Floyds Fork ecosystem. Apply principles learned during an exploratory walk along the stream. SC-P-EU-U-5, SC-P-EU-S-6, EP-2.3.3, EP-2.3.4, NGSS: 1-ESS1-1, 1-ESS1-2

**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

**NATURAL ENGINEERS:** Nature has produced some amazing engineers! Get ready to explore and learn from some of the greatest innovators in design and structure that nature has to offer. Challenge your engineering skills by designing and building a structure using only natural materials.

K-PS2-2, K-2-ETS1-2, 3-5-ETS1-1, MS-ETS1-1, K-2-ETS1-2, 3-5-ETS1-2, MS-ETS1-2, K-ESS3-3, K-2-ETS1-3, 3-5-ETS1-3, MS-ETS1-3

# FIELD EXPERIENCES

Field Experiences are a great way to get into nature! Programs are led by an interpretive ranger and are approximately 1-2 hours in length based on group size.

## 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. SC-P-UD-U-1, SC-P-1-U-1, SC-P-1-U-2, SC-4-ET-U-1, SC-4-1-U-1, SC-4-1-U-2, SC-P-1-U-3, NGSS: 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. Discover the connection between biodiversity and water quality in a Macroinvertebrate study. Students will get wet and dirty in the stream so dress accordingly!

SC-P-UD-U-2, SC-P-BC-U-1, SC-P-BC-S-4, SC-4-ET-U-1, SC-4-1-U-1, SC-5-EU-U-1, SC-6-EU-U-3, SC-7-BC-U-3 NGSS: 2-LS2-1, 3-LS4-1, 4-ESS2-1, 4-LS1-1, 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. Students can expect to get wet! Best for groups of 30 and under. 3-LS4, MS-LS2A, MS-LS2C, HS-LS2, 5-LS2, 4-ESS2, HS-ESS2 \*Based on Availability



# HIGH SCHOOL CLASSES

## READING THE FORESTED LANDSCAPE: UNDERSTANDING SYSTEMIC CHANGE IN ECOSYSTEMS

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, GCSS ELA/Literacy WHST.9-12.7, SL.11-12.4



# OUTREACH PROGRAMS

## OUTREACH PROGRAMS: Grades Pre K - 12

The **S.E.E.D. (Stewardship, Exploration, Education, Discovery) Program** connects underserved youth to The Parklands through engaging, exploration-based science programming in the parks and in schools. S.E.E.D. aims to supplement STEM education within the public schools system, creating the scientists and conservationists of tomorrow.

Any traditionally underserved group or Title I school is eligible for S.E.E.D. Qualifying partner schools can receive free education programming led by Parklands Interpretive Rangers at least four times a year! These experiences are provided free of charge thanks to generous donations from individuals and community organizations.

Interactive outreach programs are available for elementary, middle, and high school students as well as adult groups. Programs are geared towards pre K-12th grade students but can be adapted for all ages. Programs are built around Next Generation Science Standards and can be combined with an interactive field trip class offered at The Parklands. Programs last 1-2 hours and include a science based-lesson and activity.



# 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

**Fees:** \$8 per student. Teachers and chaperones are free. *(Scholarships available for Title 1 schools)*

**Minimum Students:** 10 students for Interactive Classes and Field Experiences

**Maximum Students:** 120 students per day for Interactive Classes / 120 students per day 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:** \$25 per student.

**Minimum Students:** 15 students    **Maximum Students:** 32 students

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

### OUTREACH PROGRAMS

**Fees:** Vary based on number of participants and group type

**Minimum Students:** 30 students    **Maximum Students:** 200 students

**Final Changes, Cancellations & Payments:** All bookings must be made a minimum of three 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.

### ADDITIONAL BOOKING INFORMATION

Rain checks or refunds will not be issued for participants who are unable to attend the program for reasons other than weather. 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.**

### SCHOLARSHIPS

Thanks to generous donations from individuals and community organizations, a limited amount of scholarship 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.**



## 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 the pavilion, call us at 502-584-0350.**



## ONLINE RESOURCES

### THE PARKLANDS VIRTUAL CLASSROOM

The Parklands Virtual Classroom offers videos, games, activities, and resources for students, teachers, and families. Resources are organized according to science topics. Suggested grade levels for each activity correspond to Next Generation Science Standards, but we encourage learners of all ages to participate. Check back often for new content.

Visit The Parklands Virtual Classroom at [www.theparklands.org/virtualclassroom](http://www.theparklands.org/virtualclassroom).

## STAY IN THE KNOW

### THE PARKLANDS CURRENT

Subscribe to our e-newsletter, The Parklands Current, to receive updates on Parklands events and programs throughout the year. Visit [www.theparklands.org](http://www.theparklands.org) to sign up today!



*We can't wait to see you out at The Parklands!*



# **PNC ACHIEVEMENT CENTER**

## **HOME OF THE OUTDOOR CLASSROOM**



### **PNC ACHIEVEMENT CENTER FOR EDUCATION AND INTERPRETATION**

1411 Beckley Creek Parkway, Louisville, KY 40245

- 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**