Environmental Education Field Trip & Enrichment Program Guide



River Bend Nature Center, Inc.

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Environmental Education Field Trip & Enrichment Program Guide

WELCOME!

River Bend Nature Center exists to provide environmental education and outdoor recreation to the children, adults and families of Racine and southeastern Wisconsin. Our school field trip programs offer teachers a unique opportunity to supplement their science curricula with hands-on environmental educational experiences. Our programs are aligned with the Next Generation Science Standards and offer students the opportunity of meeting their curriculum requirements in River Bend's outdoor laboratories of forest, prairie, ponds, and river.



Be sure to let us know if you have comments or questions— We look forward to working with you and your group!

CHOOSING YOUR PROGRAM

River Bend Nature Center offers outdoor environmental education programs for all ages of the general public (children, adults, families, scout groups, and community organizations, etc.). In addition to the programs listed, River Bend is often able to create or modify a program to suit your group's educational goals or highlight a special area of study. Feel free to contact our naturalists to discuss tailoring a program to your needs.



For more information, please call us at: 262-639-1515

Or email us at: info@RiverBendRacine.org

For an updated calendar of programs and events, please visit us online at:

www.RiverBendRacine.org

RESERVATIONS

MAKE A RESERVATION!

Phone reservations may be made Monday-Friday from 8:00am-4:00pm. Call (262) 639-1515 or email us at: info@RiverBendRacine.org

Please have the following information ready when you contact us:

- School and contact information
- Preferred dates
- Number of students, teachers and chaperones (1 adult for every 10 students required)
- Times of arrival and departure
- Preferred program(s)



Educational programs are \$7.00 per student. The costs of enrichment programs vary—please see listing for more details. Teachers and chaperones are free of charge. Discounts are available for same class/multiple visits. If you do not have sufficient funding for the program, scholarships may be available for qualifying classrooms.

RESERVATION POLICIES

Groups must consist of at least ten students, or pay a minimum fee for ten students.

At least one adult is required for every 10 students.

Maximum group size varies by program.

Payment by cash, check, or credit is due prior to the start of the program.

Please make checks payable to: River Bend Nature Center

Cancellations: If a field trip must be cancelled, we will reschedule to the best of our ability, but cannot guarantee availability. In the case of questionable weather, River Bend will determine whether a program should be cancelled. River Bend Nature Center honors the RUSD snow cancellation policy.



Photo Curtesy of: Kaitlin Montemurro

IN-SCHOOL PROGRAMS

In-school nature programs are available November through February. Class sizes are limited to a maximum of 30 students per program.

All programs are one hour. Fee structure: \$125 per program.

Registration is required by contacting the River Bend Nature Center office.

PROGRAM GUIDE: EDUCATION



BUDS & BLOSSOMS









Buds and Blossoms is designed to introduce nature to your baby or toddler (6 mo.-18 mo.) through sight, sound, smell, and touch. Nature babies will examine and play with natural objects as well as experience the sights, sounds and smells of the forest. Weather permitting, parents can take their nature babies on a guided hike around River Bend to visit our ponds, prairie, river, and forest. This is a wonderful introduction to nature for your little one as well as a great gathering place for parents and guardians.

> Classes can be found on River Bend's website: riverbendracine.org Registration is required. \$10 per child for River Bend Members \$15 per child for non-members (chaperones are free)



NY TOTS









Are you ready to explore nature at River Bend? The 90-minute, monthly Tiny Tots program is specially designed to nurture your child's love of nature with exploration and play. Participants and their parent/guardian will learn about nature through hands-on activities, crafts, songs, puppet shows and stories, as well as an outdoor exploratory adventure. Each class centers on a commonly theme found in nature for that month such as May Flowers or October's Spiders, Bats & Owls.

For Children 2-4 years of age Classes can be found on River Bend's website: www.riverbendracine.org Children must be accompanied by a parent or other adult relative. Registration is required. \$10 per child for River Bend Members \$15 per child for non-members (chaperones are free)

IN-SCHOOL PROGRAMS

PRE-K-COMMUNITY WORKERS

This fun, hands-on program will introduce students to community workers they may be unfamiliar with such as a forester, ranger, water scientist, and a forest fire fighter. Students will enjoy this fast-paced program as they rotate through four different stations and learn about what these community workers do every day.

-USING YOUR SENSES

Students will awaken their five senses by using items found in the natural world. They will make discoveries using hands-on activities focused around sensory.

1-5-ADAPTATIONS

Students will enjoy seeing and feeling pelts and skulls from various native species in Southeastern Wisconsin and even some species outside of the area. How are predators structurally different from their prey? How do dentures play a role in what an animal eats? How do animals adapt to survive in their environments—especially those who stick around during the winter? All these questions and more will be explored in this very special in-school program.



WiDNR Snapshot WI-River Bend Nature Center

THINGS WITH WINGS





River Bend is home to many things with wings—some are feathered, others have fur and still many more have hard exoskeletons. Students will find that not everything has just two wings; some creatures spend part of their lives under water before taking to the skies; and not everything meets the eye. Participants will enjoy exploring the lives and niches of the birds, bats, and bugs that call River Bend their home through prairie sweeping, pond macroinvertebrate exploration, and other hands-on activities.

Science Discipline: Life Sciences
Core Idea: From Molecules to Organisms
Component Idea: Structures and Processes

Performance Expectation:

K-LS1-1: Use observations to describe patterns of what plants and animals (including humans) need to survive.





-NATURE'S PALETTE (FALL)



It's time to get your eagle eyes on and look for all the beautiful colors in nature. Students will enjoy looking up, down, and all around for colors as well as common and not-so-common shapes and patterns found in nature. Students will also gain hands-on experience with nature as they examine bugs, leaves, and plants on their hike through the woods and prairie, walk among the ponds, and trek alongside the Root River.

Science Discipline: Life Sciences
Core Idea: From Molecules to Organisms
Component Idea: Structures and Processes

Cross Cutting Concept: Colors, Numbers, & Patterns

Performance Expectation:

K-LS1-1: Use observations to describe patterns of what plants and animals (including humans) need to survive.

LS1.C: Organization for Matter and Energy Flow in Organisms



-BUILDING BLOCKS OF NATURE



Prepare to get wild and experience the softness of moss, the prickliness of burs, the gentleness of bugs, and the sweetness of a bird's song in this hands-on, inquiry-based program. Students will enjoy hunting for items that make up an ecosystem—sunshine, water, soil, bugs, plants, and animals (or signs of animals). Along the way, students are introduced to the River Bend Woods, the Gravel and Duckweed Ponds, and the prairie and explore the differences among each habitat.

Science Discipline: Life Sciences
Core Idea: From Molecules to Organisms
Component Idea: Structures and Processes

Crosscutting Concept: Patterns **Performance Expectation:**

K-LS1-1: Use observations to describe patterns of what plants and animals (including humans) need to survive.

LS1.C: Organization for Matter and Energy Flow in Organisms



PROGRAM GUIDE: EDUCATION



PLANT POWER





Students learn parts of plants, what plants need to survive, and explore the diversity of plants in the nature center. Hunt for different types of plants and leaves on a hike, participate in activities that reinforce what plants need to grow.

Science Discipline: Life Sciences

Core Idea: From Molecules to Organisms: Structures and Processes

Component Idea: LS1.A: Structure and Function of plants

Performance Expectation: 1-LS1-1: Use a model to represent how plants use their external parts to help

them survive, grow, and meet their needs.





FANTASTIC FROGS



Follow the life cycle of frogs as they grow from eggs to tadpoles to full grown fly snatchers. Students will explore froggy habitat and learn all about what frogs need through a variety of fun indoor and outdoor activities.

Science Discipline: Earth and Space Sciences

Core Idea: Earth and Human Activity

Component Idea: ESS3.A: Natural Resources

Performance Expectation: K-ESS3-1: Use a model to represent the relationship between the needs of different plants or animals (including humans).





What are seeds and why are they important? Students will enjoy hiking through the River Bend forest and prairie collecting, identifying, and dissecting seeds. Students will learn all about seeds, the plants they grow, and how they travel through hands-on learning games and activities.

Science Discipline: Life Sciences

Core Idea: Ecosystems: Interactions, Energy, and

Dynamics

Component Idea: LS2.A: Interdependent Relationships

in Ecosystems

Performance Expectation: 2-LS2-2: Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.





-WATER, WATER

EVERYWHERE!



Drip, drip, drop! Students will investigate the importance of water in an ecosystem and in our lives through hands-on inquiry-based games and activities. Participants will also enjoy visiting the Root River and several ponds at River Bend!

Science Discipline: Earth and Space Sciences Core Idea: Earth's Systems



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PROGRAM GUIDE: EDUCATION



-ECOSYSTEM EXPLORATION





Get your thinking caps on! Students will enjoy exploring the complexities of woodland, prairie, pond, and riverine ecosystems with hands-on activities and field-inquiries along the trail. Students will make observations about the adaptations of animals found based on their habitats and discover the importance of water and sunlight in the natural processes found on Earth.

Science Discipline: Life Sciences

Core Idea: Biological Evolution: Unity and Diversity

Component Idea: LS4.C: Adaptation

Performance Expectation: 3-LS4-3: Construct an argument with evidence that in a particular habitat

some organisms can survive well, some survive less well, and some can not survive at all.

B.4.4: List the components of an ecosystem, including the qualities of a healthy habitat.







Students will enjoy examining the life-histories of several native Wisconsin species by observing plants, insects, and other animals at various stages in their life cycles on an outdoor expedition.

Science Discipline: Life Sciences
Core Idea: Structure and Processes

Component Idea: Growth and Development of Organisms

Performance Expectation: 3-LS1-1: Develop models to describe that organisms have unique and

diverse life cycles but all have in common birth, growth, reproduction, and death.

PROGRAM GUIDE: EDUCATION



-POND INTERACTIONS



There's a lot going on under the surface. Students will enjoy collecting, observing, identifying and learning all about the creatures that reside in the waterways at River Bend.

Science Discipline: Life Sciences

Core Idea: From Molecules to Organisms: Structures and

Processes

Component Idea: LS1.A: Structure and Function of animals Performance Expectation: 4-LS1-1: Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.











& SCAT!

Have you ever wondered how the design of a skull or the fur of an animal helps an organism survive in the wild? Or why scat is so important to scientists? Answers to these questions and more fill this two-hour long inquiry-based program. Participants will explore the skulls and skins of more than 30 different organisms and learn how their design helps them fill their niche in the wild. Are you brave enough to try scat snack? The exploration of this chocolaty treat followed by a hike to discover real scat will have students buzzing about its scientific importance.

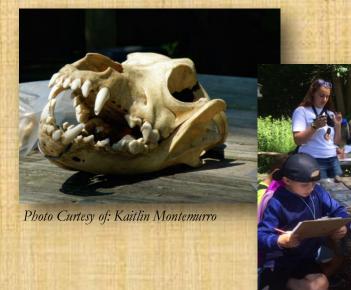
This program can also be presented in your classroom!

Science Discipline: Life Sciences

Core Idea: 4-LS1-1 From Molecules to Organisms: Structures and Processes

Component Idea: LS1.A: Structure and Function of animals

Performance Expectation: 4-LS1-1: Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.



PROGRAM GUIDE: EDUCATION



-ENERGY IN NATURE





No keys or kites required for this program! Students will enjoy learning about the transfer of energy in natural systems throughout River Bend's ecosystems. Through a series of interactive lessons, participants will search for evidence of trophic levels and make connections between diversity and energy availability to demonstrate how energy flows through each layer of an ecosystem.

Science Discipline: Life Sciences

Core Idea: LS2: Ecosystems: Interactions, Energy, and Dynamics

Component Idea: LS2.B: Cycles of Matter and Energy Transfer in Ecosystems

Performance Expectation:

MS-LS2-3: Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem.

B.8.1: Describe the flow of energy in a natural and a human-built ecosystem using the laws of





-TREE LIFE & BIODIVERSITY





Students will enjoy exploring the biology and the biodiversity of tree species throughout the forests of River Bend. Students will learn to identify trees, examine their importance in the forest, and participate in forestry tree surveys. Participants will also enjoy learning about tree rings and will get a chance to take a core sample to bring back with them.

Science Discipline: Biodiversity, ecology, biology

Core Idea: LS2: Ecosystems: Interactions, Energy, and Dynamics

LS4: Biodiversity & Humans

Component Idea: LS2A: Interdependent Relationships in Ecosystems

LS2C: Ecosystems Dynamics, Functioning, & Resilience

LS4D: Biodiversity & Humans

PROGRAM GUIDE: EDUCATION







Students will study landforms and water flow using topographic maps, on-site observations and discussions about how earth's processes and human behavior affect the health of the watershed.

Science Discipline: Earth and Space Sciences

Core Idea: Earth's Systems

Component Idea: Earth's Materials and Systems, Earth and Human Activity

Performance Expectation:

MS-ESS2-4: Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.

MS-ESS3-1: Construct a scientific explanation based on evidence for how the uneven distributions of Earth's mineral, energy, and groundwater resources are the result of past and current geoscience processes.



Photo Curtey of: River Bend Nature Center and WiDNR Snapshot WI Program

-FOUNDATIONS OF BIODIVERSITY





The conservation of our natural resources is not only important to the planet but to people as well. During this program, students will be introduced to key concepts of conservation and ecology, ecosystem resilience, and ecosystem services. Through real-world examples, participants will also explore how ecosystems are susceptible to change from both natural and anthropogenic (human) forces and brainstorm solutions to some of our planet's most concerning challenges.

Science Discipline: Life Science

Core Idea: Ecosystems

Component Idea: Interactions, Energy, and Dynamics

Crosscutting Concepts: Stability and Change

Performance Expectation:

MS-LS2-4: Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations.

MS-LS2-5 Evaluate competing design solutions for maintaining biodiversity and ecosystem services.

LS2.C: Ecosystem Dynamics, Functioning, and Resilience

LS4.D: Biodiversity and Humans







The Anthropocene is defined by humanity's influence on the natural world. *Human Impacts on Nature* will help students to better understand how their behaviors impact the environments around them and what they can do to live more sustainably. Topics include water quality, invasive species, pollution, habitat use and destruction, sustainability.

Science Discipline: Earth and Space Sciences

Core Idea: Earth's Systems

Component Idea: Earth and Human Activity; Interdependent Relationships in Ecosystems

Performance Expectation:

MS-ESS3-3: Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.

MS-ESS3-4: Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth's systems.

MS-LS2-2: Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.





-WATER QUALITY





The conservation of our natural resources is not only important to the planet but to people as well. During this program, students will be introduced to key concepts of conservation and ecology, ecosystem resilience, and ecosystem services. Through real-world examples, participants will also explore how ecosystems are susceptible to change from both natural and anthropogenic (human) forces and brainstorm solutions to some of our planet's most concerning challenges.

Science Discipline: Life Science

Core Idea: Ecosystems

Component Idea: Interactions, Energy, and Dynamics

Crosscutting Concepts: Stability and Change

Performance Expectation:

MS-LS2-4: Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations.

MS-LS2-5 Evaluate competing design solutions for maintaining biodiversity and ecosystem services.

LS2.C: Ecosystem Dynamics, Functioning, and Resilience

LS4.D: Biodiversity and Humans

SUGAR BUSH FIELD TRIP

Where does maple syrup come from? Students will enjoy hiking into the woods to tap maple trees, collect and carry sap to the evaporator for boiling, and taste the progression of sap to syrup. Participants will learn about syrup production and participate in each step of the syrup-making process. Other topics include tree identification, photosynthesis, and the process of evaporation and experience the history of how Wisconsin's Native Americans collected and used maple sap for cooking and trading.

Pass the syrup, please! Participants can also stay for a pancake lunch and taste real maple syrup made entirely at River Bend!

2-Hour program · offered February through March \$7.00 per student · \$5 for pancake lunch (chaperones included)





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Team Venture

Team Venture is an outdoor challenge course placed strategically throughout the woods of River Bend that is designed to help participants cooperate and communicate with each other as they navigate through various physical and mental challenges. Participants strengthen skills such as team-building, communication, creative problem-solving, self-awareness and self-confidence, team strategy, leadership, and more. Participants will enjoy working through challenge elements such as rocking the boat on Whale Watch, buzzing through The Web, and Walking the Plank, just to name a few.

2-3 hour program • \$10 (2 hours)/\$15 (3 hours)

For adult groups, please inquire for pricing and information.

Challengers must be 10 years and older to participate.



RIVER BEND NATURE CENTER PROGRAM GUIDE: ENRICHMENT

Survival Skills

Survival Skills Challenge is a two- to three-hour program designed to teach kids general survival skills such as fire-building, shelter-construction, orienteering, and wilderness first-aid. After the educational portion of the program, the day is topped off with a survival skills challenge where students must use their skills cooperatively to complete several different tasks in order to 'survive' the big woods of River Bend.

Kindergarten: Survival Skills (90 minutes/\$7 per student)
Grades 1-5: Survival Skills Course (2 hours/\$7 per student)
Grades 6-8: Middle School Survival Challenge (3 hours/\$10 per student)
Grades 9-12: High School Survival Challenge (3 hours/\$10 per student)





Offered April through October



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Beginning Canoe/Kayak Course

The beginning canoe and kayak course is a three-hour introduction specifically designed for ages 10-adult and taught on the Root River by a certified American Canoe Association instructor. Topics include nomenclature, basic paddling strokes, common knots, boat control and safety. While most of the class will take place on the river, it will begin at River Bend's boat launch.

Maximum class size: Canoeing - 10 / Kayaking - 5

Paddlers 10 years and older welcome! 3-hour course · \$25 Members/\$30 Non-members









PROGRAM GUIDE: ENRICHMENT



Monarchs in Motion



Offered June ithrough August

Summer

Thanks to our pollinators, River Bend is home to one of the most beautifully restored natural prairies in the state. Join us as we learn more about the ecology, biology, and conservation of these amazing creatures. Participants will be able to visit our monarch rearing facility, take a walk through the prairie, and participate in conservation efforts by releasing a tagged monarch.

This is an 1.5-hour long program done primarily outside. Monarch releases can only be done on days when temperatures are above 60 degrees Fahrenheit, there is little wind, and no rain.

90-minute program · \$7.00 per person



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Nature by Water: Guided Canoe/Kayak Paddle







Who doesn't love to be out on the water on a beautiful day? Nature by Water is a two-hour guided canoe or kayak trip down (or up) the Root River. Participants will benefit from receiving basic paddling and boat safety instruction from our program leaders and will enjoy exploring the upper and lower Root River. Wildlife abound on the shores of the Root River. Paddlers may spot the Blue Heron Rookery upstream, turtles on logs, fish jumping, and muskrats swimming nearby.

Paddlers under 10 years old must be accompanied by an adult paddler. One adult for every two children under 10 is required. 2-hour program

Summer/Weekend Programs 8:30a or 5p · Boat Rental/boat + \$25 guide fee Schools/Daycares Monday-Friday · \$12/person (chaperones free of charge)



Tracks!

In this two-hour program, participants will examine the tracks of several different mammals native to River Bend and even make their own animal prints to take home. Students will also enjoy learning about the ecology of River Bend's most beloved wildlife and how they survive in the wild.

This program takes place both indoors and outdoors year-round.

Trackers should be 4-10 years of age

2-hour course \$7.00 per student



RIVER BEND NATURE CENTER PROGRAM GUIDE: ENRICHMENT

Archery

Guided by a NASP-certified (National Archery in the Schools Program) archery instructor, students will learn the art of target shooting at either River Bend's outdoor archery range or inside our large lodge room (during winter and inclement weather only). Participants are taught proper handling and shooting techniques as well as the importance of safety at all times on the range. Students will enjoy learning and mastering their craft while striving to hit those pesky mosquito, tick, and yeti target centers.









Archers must be 7 years old or older to participate! 2-hour course · \$10 per student





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Geocaching & Orienteering

Do you love looking for treasure? Would you like to know more about orienteering and finding your way? Join us as we navigate the big woods, ponds, and prairie of River Bend. Participants will learn how to use a compass and a GPS and enjoy exploring natural signs to add to their navigational toolkits. The program is topped off with a round of geocaching for treasure!



Offered May through October

Treasure hunters must be 12 years and older to participate!

2-hour course • \$7.00 per student



Photo Curtesy of: http://www.militaryaerospace.com

PROGRAM GUIDE: ENRICHMENT



Ski & Snowshoe Classes

Want to get out in the winter and explore? What better way to enjoy Wisconsin's winter-wonderland than on a pair of skis or snowshoes? Our instructors will cover the basics from equipment fit to use and guide you on a beautiful trek through our nearly 80 acres of snow-covered forests.

90-minute course
A minimum of 4" of snow is required.
\$15/Members
\$20/Non-Members



Photo Curtesy of: https://www.jsonline.com/story/travel/wisconsin/day-out/2017/02/03/6-winter-bikes-within-60-miles-milwaukee/97338936/

River Bend Nature Center Community Program Guide

All Programs 60 minutes / \$50 / Max. 25 Participants



The Birds of River Bend · Outreach or On-Site

Explore many of the bird species that call River Bend home. Participants will learn about resident and non-resident avian species and what they can do to support these populations year-round. An optional bird-walk is included for on-site programs.



Bats of Wisconsin · Outreach

Bats play a pivotal role in our ecosystem and face many anthropogenic (human-induced) challenges. Meet the Badger State bats and learn about the many ways bats impact our lives and what we can do to support these amazing creatures.



Ruby-Throated Hummingbirds · Outreach

A sure sign of the changing seasons is the arrival and departure of our beloved hummingbirds. Find out more about these fascinating birds and how you can help them during times of migration and nesting.



Monarchs in Motion · Outreach or On-Site

Monarchs are beautiful reminders of spring and summer and they need our help! *Monarchs in Motion* will introduce the life of a monarch and the many hurdles these pollinating insects face. Participants of a summer program will enjoy releasing a monarch!

*Warm temperatures, little wind, and no rain are required to release a monarch.



Animal Adaptations · Outreach or On-Site

Many organisms live at River Bend year-round but how do they survive the brutal cold of winter or the extreme heat of summer? Discover the many adaptations that help our favorite animals survive in the wild year-round. Participants will have the opportunity to examine the skulls and pelts of our native animals and explore the similarities we share with our furry friends.

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Scout Programs

River Bend is proud to offer several single- and multi-day merit badge workshops, of which our own merit badge counselors can certify completion! Please see below for available merit badges and call to inquire about dates and pricing.









Cooking

























Kayaking

Sustainability





Hiking

Soil & Water Conservation









Orienteering

Eagle Scout Projects

River Bend is home to many Eagle Scout projects that have been developed over the years and we are proud to continue that tradition today.

Please call to inquire about the many project opportunities available.





Photography:

All photos taken by Christa Trushinsky except where otherwise noted.

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