

SCHOOL SERVICES • TEACHER RESOURCES • COMMUNITY OUTREACH PROGRAMS



### **Curriculum Offerings**

**WE OFFER HANDS-ON LEARNING** adventures that focus on science concepts, farming, nature, wildlife and/or outdoor education/recreation experiences and incorporate cooperative group learning.

#### Homeschool

Lake Metroparks is pleased to offer programs for homeschool families. All programs listed in this education brochure are available on a requested basis for homeschool students. All programs meet Ohio's educational standards in science, math and social studies and are geared to the grade level of the student. All programs require a minimum paid participation for ten students. Please call 440-358-7275 to schedule your program request.

## **Summer Programs**

We are excited to offer new programming designed for camps, day cares and other summer groups that create an atmosphere of fun and excitement for combined ages preschool to grade 5.

## **Scheduling**

Please schedule at least **two weeks** in advance. Call between 8 am and 4:30 pm weekdays. To schedule a program, please call 440-358-7275. Farmpark programs may be scheduled by calling 440-256-2122.

Be prepared with first and second choices of dates and times and have the "Registration Checklist" information (on back cover) ready when you call. Spring and fall dates fill well in advance!

In order to maximize your visit to Lake Metroparks, please confirm your arrival and departure times with your transportation department several days before your visit.

## Fees: programs at our parks

- Program fees are \$7 per student participant (\$9 for StarLab programs), \$70 minimum unless otherwise noted.
- Minimum of ten students for any program; inquire about maximums or scheduling back-to-back programs.
- For Farmpark educational programs that happen on Lake County Free days, free admission will not apply to school or recreation bookings
- Farmpark members may not use their membership to get in free for an educational program.
- One adult admitted free for every ten students in grades K-12. One adult admitted free for every five preschool and kindergarten students. Additional adults are charged the student program fee. Please mention if you plan to bring a student aide when you register.
- Teachers or group leaders are required to accompany the group.
- One aide admitted free for each participant with disabilities.

## Fees: programs at your school

- Assembly programs are \$210 for the first presentation and \$150 for each additional presentation the same day at the same location unless otherwise noted.
- Assembly programs are for groups of 30 or more students.
- All non-assembly outreach programs are \$7 per student participant (\$9 for StarLab programs), \$70 minimum unless otherwise noted.
   Inquire about scheduling back-to-back programs when you call.
- Programs that require the presenter to travel outside Lake County are charged an additional \$1.50/mile fee.

Credit card and check are accepted—or an invoice can be sent.

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## **Custom Programs**

Don't see a program that fits your needs? Lake Metroparks can work with you to design a program. Please call 440-358-7275 to discuss possibilities. Note: some programs are seasonal and weather dependent.

#### **KEY**



Denotes SCIENCE content standards



Denotes MATH content standards



Denotes SOCIAL STUDIES content standards



Denotes PHYSICAL EDUCATION content standards



Denotes ART content standards



Program features a live FARM ANIMAL



Program features live OHIO WILDLIFE



STEM integrated



ADAPTED program, designed to meet the needs of individuals with disabilities







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# Make time for play during your visit to the parks!

During your free time at Farmpark, visit the farm-themed playground in **Showman's Circle.** The playground has slides, large climb-on animals and an area to roam and explore. There is also a small pavilion where you can relax in the shade. **Adventure Play** at Jordan Creek Park is designed for kids ages 7 and older and has elements and obstacles that challenge balance and climbing ability. You will find two ziplines to zoom across, a slackline forest, lookout towers connected by a 30-foot rope bridge, and the impressive 15-foot-tall Noble Wall to traverse across. At **Nature Play** at Penitentiary Glen Reservation, kids can navigate through an acre of green landscape with logs to climb on, tunnels to crawl through and a garden to tend to. Kids are encouraged to chart their own course of adventure through this outdoor play maze.



## What teachers have to say about Lake Metroparks education programs:

"This is always our favorite field trip of the year!"

"We have been participating in the Cleveland Rocks & Soils program at Chapin Forest for 20 years and it is our kids' favorite field trip."

"Students were engaged and excited all day!"

"I loved that everything was hands-on for this program! The students loved trying everything!"

"Everything is always WONDERFUL! We will definitely be back!"

# **RECREATION PROGRAMS**

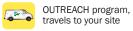
To register for these programs, call 440-358-7275



Adventure Trek Archery Adventure Cross-country Ski Adventure Fishing Adventure Kayak Adventure Oregon Ohio Trail Snowshoe Adventure		PAGE PROGRAM FOR GRADES:																	
			PRE	K	1	2	3	4	5	6	7	8	9	10	11	12			
Adventure Trek		10	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
Archery Adventure		12, 14 16			•	•	•	•	•	•	•	•	•	•	•	•			
Cross-country Ski Adventure	<b>6</b> 6	10	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
Fishing Adventure		10	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
Kayak Adventure		10		•	•	•	•	•	•	•	•	•	•	•	•	•			
<del>Oregon</del> Ohio Trail	<b>6</b>	15, 16, 17							•	•	•	•	•	•	•	•			
Snowshoe Adventure	(A)	11	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
Survivor: A Global Eco-challenge		15,16, 17					•	•	•	•	•	•	•	•	•	•			

## **SUMMER PROGRAMS**

To register for these programs, call 440-358-7275

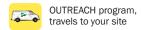


	PROGRAM NAME	PAGE	PROGR	RAM F	OR GF	RADES	<b>:</b>										
			PRE	K	1	2	3	4	5	6	7	8	9	10	11	12	]
	Archery Adventure	7			•	•	•	•	•								
スト	Eco Protectors	 7			•	•	•	•	•								
1	Fishing Adventure	7	•	•	•	•	•	•	•								
7	Insect Investigators	 7	•	•	•	•	•	•	•								V
	Kayak Adventure	7		•	•	•	•	•	•								
	Soap Bubble Chemistry	 7	•	•	•	•	•	•	•								1.1
	The Secret Picture	 7	•	•	•	•	•	•	•								
	Wilderness Games NEW	 7	•	•	• T2-55,00 or	•	•	•	•						as ver		



# **FARM PROGRAMS**

To register for these programs, call 440-256-2122 option 2



PROGRAM NAME		PAGE	PROGR	RAM F	OR GF	RADES	<b>i:</b>									
			PRE	K	1	2	3	4	5	6	7	8	9	10	11	12
Animals & People		12				•										
Apples!		10	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Barnyard Goes to School	6E3	8	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Biodiversity Bonanza		8	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Crops & Critters		10	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Discover Maple Syrup		10	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Farm Animal Experience		10	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Farm Animals & Me		12			•											
Farm Animals Up Close		12	•	•												
Farmyard Families		12		•												
Fiber Arts from the Farm		14, 16						•	•	•	•	•				
Grist for the Meal		14					•	•	•							
Harvest Time		10	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Ice Cream		14					•	•	•							
Little Lambs & Little Sprouts		12	•	•												
Little Red Hen		13	•	•	•	•										
Longhouse Building		14, 16					•	•	•	•	•	•				
Pizza Farm		11	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Springtime on the Farm		11	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Stone Soup		13	•	•												
Studies in Biodiversity		15					•									
The Chemistry of Cheesemaking		15					•	•	•							



# **NATURE PROGRAMS**

To register for these programs, call 440-358-7275



PROGRAM NAME		PAGE															
			PRE	K	1	2	3	4	5	6	7	8	9	10	11	12	
Adopt An Animal		8	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Adopt Apollo	20	8	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Alien Invaders	<u>~~</u>	14, 16							•	•							
All Things Poop!	<b>~~</b>	12	•	•													
Apollo Project: Bald Eagle	(a2)	8		•	•	•	•	•	•	•							
Are Monsters Real?		12			•	•											
Changes in Motion		12			•	•											
Cleveland Soils		14, 16					•	•	•	•	•	•					
Feathers, Fur & Scales	<b>~</b>	8	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
It's Alive!		12	•	•	•	•											
Linking Up: From Owl Pellets to Food Webs		14						•	•								
Nature Chemistry		14, 16						•	•	•	•						
Nature's Gifts		13	•	•	•												
Night Creatures	<b>~</b>	8	•	•	•	•	•										
Operation Worm Watch		13, 15				•		•									
Park-wise Puppets Presents		13	•	•													
Pitch In!		15					•	•									
Raptor Encounters	(a2)	8	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Save the Monarchs		13, 15				•	•	•									
Spring Seasonal Discovery		13, 15	•	•	•	•	•	•	•								
Soap Bubble Chemistry		13		•	•	•											
Species of the Year: Bees	<b>~~</b>	15, 16					•	•	•	•							
StarLab: Constellation Investigation	<u>~~</u>	9	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
StarLab: Starlight Express— Astronomy for Little Ones		9	•	•													
StarLab: Sun, Moon & Stars	<b>~</b>	9			•	•											
Wee Weatherwatchers	<u>~</u>	13	•	•										1			



# SUMMER PROGRAMS NEW!

To register for these programs, call 440-358-7275

We are excited to offer new programming designed for camps, day cares and other summer groups that creates an atmosphere of fun and excitement for combined ages preschool to grade 5.

### **Archery Adventure** Grades 1-5

1 hour • Fee: \$7

Have you ever shot a bow and arrow before? Now is your chance! Students learn the proper safety of the bow and arrow, then have a chance to shoot several rounds on the range and give it their best shot!

at Jordan Creek Park or Hidden Lake

## **Eco Protectors** Grades 1-5



1 hour • Fee: \$7

Learn how you can become a protector of our natural environment by following the Leave No Trace philosophy. Through hands-on activities, program participants learn the seven principles of Leave No Trace and how to incorporate them into their daily lives as they enjoy the parks.

at Jordan Creek Park, Penitentiary Glen Reservation or your site

### Fishing Adventure Preschool-Grade 5

1 hour • Fee: \$7

This is a program that all kids will fall for hook, line and sinker. We've got the pond, fish, poles and we'll even bring the worms. Explore the local ecosystem as students learn the sport of fishing. All fish caught are released.

at Veterans Park, Blair Ridge Park, Girdled Road Reservation or **Hidden Lake** 

## Insect Investigators Preschool-Grade 5



Did you know that some of the tiniest creatures on Earth play the biggest roles in maintaining the planet's health? Insects are not just buzzing around, they are amazing pollinators and indicators of ecosystem health. Insects like bees, butterflies, and beetles are responsible for pollinating a staggering 75 percent of the crops we rely on for food. Learn the fascinating process of insect pollination, how the presence or absence of certain insect species can reveal the state of the natural world, and simple actions you can take to protect these creatures and contribute to a healthier local ecosystem.

at Jordan Creek Park, Penitentiary Glen Reservation or your site

## Kayak Adventure Kindergarten-Grade 5

1 hour • Fee: \$7

You provide the kayakers, we provide a fleet of sit-ontop kayaks, paddles, life jackets and fun! Learn the fundamentals of kayaking while paddling. Participants must be comfortable in the water.

at Fairport Harbor Lakefront Park or Hidden Lake

### Soap Bubble Chemistry Preschool-Grade 5



1 hour • Fee: \$7

Let the learning begin as your class experiences the chemistry of bubbles. Students investigate making bubbles to find the perfect recipe. After mastering the bubble mixture, experiment with everyday items for wands. Each child stands inside a bubble at the end of the program. Nearby water source is needed for outreach programs. at Jordan Creek Park, Penitentiary Glen Reservation or your site

### The Secret Picture Preschool-Grade 5 🚗



1 hour • Fee: \$7

Collecting stones, nuts and leaves is used to practice cooperation and communication skills. Using nature items student pairs find during exploration of an outdoor area, they will investigate and share what items each find of interest. They will utilize and improve their vocabulary for mathematical and spatial terms and concepts such as "over," "under," "below" and "beside" while creating a secret picture using their found items.

at Jordan Creek Park, Penitentiary Glen Reservation or your site

## Wilderness Games Preschool-Grade 5



1 hour • Fee: \$7

Are you ready to explore the great outdoors? Learn basic outdoor skills that will come in handy on your next adventure into nature. Activities cover everything from using a compass, basic first aid and surviving in the woods. Play games and learn how to survive in the wild!

at Jordan Creek Park, Penitentiary Glen Reservation or your site







# ASSEMBLY PROGRAMS

To register for these programs, call 440-358-7275

#### Adopt An Animal All grades

**KEYWORDS Conservation, adaptation** 30 minutes • Fee: \$125 Involve your students in conservation and a rare chance to see native wildlife up close by adopting an Animal Ambassador. Your sponsorship includes an in-class/school visit from your chosen adopted animal. Your package also includes a pen, notepad, lunch tote and certificate with a thank you letter from your Animal Ambassador.

#### Adopt Apollo

30 minutes • Fee: \$200 • Max participants 100



💋 🛌 at Penitentiary Glen Reservation or your site

## Apollo Project: Bald Eagle Grades K-6

5 hours • Fee: \$700 at your site only • March-October **KEYWORDS Ecosystems, conservation** 

The majestic and powerful bald eagle, the symbol of our nation, was almost extinct in the continental United States. Discover the awesome abilities of this bird of prey, its habitat, the challenges it faces, and how important this success story is to our ecosystem. All grades meet Apollo the bald eagle and other Animal Ambassador birds of prey in an awesome presentation. After the introduction, each grade has the chance to visit stations designed to help them understand the adaptations of eagles, their conservation and the threats that still exist to their population. Program requires parent volunteers to assist in the station presentations.











STEM [ at your site

## **Barnyard Goes to School All grades**

1 hour • Fee: \$210, \$150 each additional hour

**KEYWORDS Animal care, farm products** 

Children encounter and investigate a sheep and two other farm animals. We'll look into how farmers care for their animals and how they provide us with food, fiber and other products. Students learn how wool is turned into yarn. To register for this program, call 440-256-2122 x3104.







🚺 🔼 at your site

## **Biodiversity Bonanza** All grades

1 hour • Fee: \$210, \$150 each additional hour • March, September, October KEYWORDS Adaptations, human interaction Meet several permanent resident animals from the Kevin P. Clinton Wildlife Center and Farmpark. All have special adaptations that help them exist in their habitats. Learn how wild and domestic animals fit into our planet's ecosystem.









at Penitentiary Glen Reservation, Farmpark or your site

#### Feathers. Fur & Scales All grades

1 hour • Fee: \$210, \$150 each additional hour

**KEYWORDS Habitats, species diversity** 

What animals are covered with feathers? What animals are born with fur or scales? Meet several Kevin P. Clinton Wildlife Center residents face to face and discover where they live, their favorite foods, their hunting techniques and many more facts about the lives of Ohio's native wildlife.







at Penitentiary Glen Reservation or your site

## Night Creatures Preschool-Grade 3

1 hour • Fee: \$210, \$150 each additional hour

**KEYWORDS Ecosystems, adaptations** 

As the sun goes down and darkness envelops the forest, there are many animals that rouse from their slumbers in search of meals. Take an in-depth look at the Kevin P. Clinton Wildlife Center's nocturnal animals and discover how they function at night.







🗾 콚 at Penitentiary Glen Reservation or your site

#### Raptor Encounters All grades

1 hour • Fee: \$210 first hour, \$150 each additional hour **KEYWORDS Adaptations, habitats** 

Using the power of live Ohio hawks, owls, falcons and vultures, this program brings students into the lives of raptors. Students learn the natural history of these birds and their survival stories. Students connect with conservation issues and become empowered to take action and give back through personal stewardship.

#### **Raptor Encounters with Apollo**

Fee: \$350 first hour, \$250 each additional hour







at Penitentiary Glen Reservation or your site



# STARLAB PROGRAMS

To register for these programs, call 440-358-7275

What does the night sky have to offer? Come explore all things astronomy with the Digital StarLab! Students take part in a cutting-edge digital experience while traveling through the universe to investigate stars, planets, galaxies and so much more. All programs align to Ohio's Learning Standards. Don't see a topic that you are interested in? Lake Metroparks is happy to develop a custom program to fit your needs. The StarLab is portable and can travel to your school; all you need is a room 14.5 feet tall and 27 feet x 27 feet. Fee is \$9 per student participant.

## StarLab: Constellation Investigation

All grades • 1 hour • Fee: \$9 KEYWords Sun, moon, stars The night sky has been the inspiration for groups of people the world over to tell stories about the stars. What are constellations? Are they just fun stories? Complete your own constellation investigation as we explore how the Earth's movement causes day and night and how it moves in space around the sun.









at Penitentiary Glen Reservation or your site

#### StarLab: Sun, Moon & Stars Grades 1 & 2 1.5 hours • Fee: \$9 **KEYWORDS Daily changes**

Roleplay the sun, moon and stars to observe their apparent movements across the sky. Explore why and how the moon seems to change shape but is full again every month. Take a "night-time" trip inside the StarLab for a better look at the night sky. How many stars do you think you'll see?







📸 🎮 🖚 at Penitentiary Glen Reservation or your site

## StarLab: Starlight Express— **Astronomy for Little Ones**

SOCIAL STUDIES

PHYSICAL EDUCATION

Preschool & Kindergarten



OHIO WILDLIFE

STEM STEM OUTREACH

# ALL GRADE LEVEL PROGRAMS

To register for these programs, call 440-358-7275

#### Adventure Trek All grades

2 hours • Fee: \$7



What's off the trail? Come find out as we explore the wonders of nature and all it has to offer off trail! Students gain a better understanding of the natural world as they look for unique places throughout the park system. Using trekking poles, students discover amazing finds through a scavenger hunt. Bring your observation skills to discover what nature has to offer.





🏋 🚌 at Chapin Forest Reservation, Jordan Creek Park or your site

#### Apples! All grades

2 hours • Fee: \$7 • Sept.-mid-Oct.

KEYWORDS Orchard tour, cider making

Students explore the apple orchard, make and taste apple cider, explore bees as pollinators and examine the tree grafting process. To register for this program, call 440-256-2122.







🐞 飾 👔 at Farmpark

## **Crops & Critters** All grades

2 hours or more • Fee: \$7 • June-August

**KEYWORDS Farm animals, crops** 

Children may tour the gardens, learn about hydroponic growing, explore sheepherding (weather permitting), discover bees, encounter horses, milk a cow and visit with sheep, pigs and chickens. To register for this program, call 440-256-2122.







🐞 飾 🜇 at Farmpark

## **Cross-country Ski Adventure** All grades

1 hour • Fee: \$7 **KEYWORDS Lifetime physical activity** 

Learn to love wintry life in the snowbelt! Cross-country skiing is a great way to enjoy winter and exercise at the same time. All equipment and instruction provided.





at Chapin Forest Reservation or your site



### **Discover Maple Syrup** All grades

2 hours or more • Fee: \$7 • mid-Feb. - mid-March

**KEYWORDS Evaporator, processing** 

Discover the history and technology of maple syrup and explore the maple sugaring process. Learn about trees and photosynthesis. Explore how pioneers ground grain to create pancakes. Taste real maple syrup with mini pancake sampling. To register for this program, call 440-256-2122.









stem at Farmpark

## Farm Animal Experience All grades

2.5 hours • Fee: \$7 • mid-October to the end of March

**KEYWORDS Basic needs, farm animals** 

Meet farm animals, learn what products we obtain from them and what it takes to raise them. Milk a cow, meet sheep and chickens in the Well Bred Shed and visit with horses. Explore the world of honeybees and their role on the farm. To register for this program, call 440-256-2122.







at Farmpark

### Fishing Adventure All grades

1 hour • Fee: \$7

**KEYWORDS Lifetime activity, ecosystems** 

This is a program that all kids will fall for hook, line and sinker. We've got the pond, fish, poles and we'll even bring the worms. Explore the local ecosystem as students learn the sport of fishing. All fish caught are released.





at Veterans Park, Hidden Lake or Farmpark

### **Harvest Time** All grades

2 hours or more • Fee: \$7 • Sept.-mid-Oct.

**KEYWORDS Harvest, crops** 

As the fall leaves begin to change, students may discover apple cider production, harvest potatoes, explore the Corn Maze, milk a cow and meet farm animals. To register for this program, call 440-256-2122.







at Farmpark



# ALL GRADE LEVEL PROGRAMS

To register for these programs, call 440-358-7275

#### Kayak Adventure All grades

1 hour • Fee: \$7 KEYWORDS Water safety, lifetime physical activity You provide the kayakers, we provide a fleet of sit-ontop kayaks, paddles, life jackets and fun! Learn the fundamentals of kayaking while paddling. Participants must be comfortable in the water.



at Fairport Harbor Lakefront Park or Hidden Lake

#### Pizza Farm All grades

3.5 hours • Fee: \$8 with pizza sample, \$7 without pizza sample mid-Oct.-mid-March **KEYWORDS Food sources, ingredients** Students discover that farmers grow pizza! They engage in a farm-wide hunt to investigate pizza making from field to table and uncover the sources of ingredients in this nutritious food. Include pizza making and sampling in exchange for other farm activities. To register for this program, call 440-256-2122.









at Farmpark

## **Snowshoe Adventure All grades**

1 hour • Fee: \$7 **KEYWORDS Lifetime physical activity** Snowshoeing has been around for thousands of years. It started as a way to get around to hunt or gather food, but now it's for fun! Wear your own outdoor winter boots (snowshoes fit over them). We supply the instruction and snowshoes. Program is specialized for each grade level.





 at Chapin Forest Reservation, Jordan Creek Park or your site

## Springtime on the Farm All grades

2 hours or more • Fee: \$7 • April-May

**KEYWORDS Planting, farm animals** 

Think spring! Students may plant potatoes or flowers. discover sheepherding (weather permitting), uncover the art of sheep shearing (upon availability), encounter horses, milk a cow and visit with sheep, pigs and chickens. To register for this program, call 440-256-2122.







📔 at Farmpark



# PRESCHOOL-GRADE 2 PROGRAMS

To register for these programs, call 440-358-7275

## All Things Poop! Preschool & Kindergarten





What goes in, must come out. Discover what all living things have in common. This 'scat-tacular' lesson introduces students to herbivores, omnivores and carnivores, composting through the lifecycle of poop and scat identification. We will also read a story about poop and make some 'scat' to take home.



at Penitentiary Glen Reservation, Children's Schoolhouse Nature Park, Jordan Creek Park or

## Animals & People Grade 2

2.5 hours • Fee: \$7 • mid-Oct.-mid-March

KEYWORDS Food web, energy

Second graders investigate the farm and gather pieces to create a food web. Students discover how people and animals depend on each other for food and shelter. At the conclusion, magnetic pieces are used to illustrate the interdependence of life. To register for this program, call 440-256-2122.







🧃 at Farmpark

## Are Monsters Real? Grades 1-2 NEW

1.5 hours • Fee: \$7

KEYWORDS Scientific investigation, environmental conditions, biotic interactions

Learn the science behind mysterious creatures in nature and legends. Could Nessie, the Mothman, chupacabras and other fantastical creatures be real? Examine these mysteries in nature through exploration of real animals and with activities focused on discovering why people believed these mythical and legendary creatures walked, swam and flew among us.









at Penitentiary Glen Reservation, Children's Schoolhouse Nature Park, Jordan Creek Park or your site

## Archery Adventure Grades 1-2

2 hours • Fee: \$7 • May-August

**KEYWORDS Lifetime physical activity** 

Have you ever shot a bow and arrow before? Now is your chance! Students learn the proper safety of the bow and arrow, then have a chance to shoot several rounds on the range and give it their best shot!





at Jordan Creek Park or Hidden Lake

## Changes in Motion Grades 1-2

1.5 hours • Fee: \$7 KEYWORDS Force, friction, speed

If you want anything to move, you have to give it a push or pull. Observe and demonstrate Newton's laws of motion and gravity through activities using forces on wheels and rockets. Students design stomp rockets to launch to demonstrate force and gravity.











at Jordan Creek Park or your site

#### Farm Animals & Me Grade 1

2.5 hours • Fee: \$7 • mid-Oct.-mid-March

**KEYWORDS Animal needs, animal products** 

Examine the basic needs of farm animals and investigate how much animals eat each day. See how horseshoes are made. Students collect products and identify the animals that produce them. During a closing activity, students analyze their findings by creating a pictograph of farm animals' food needs. To register for this program, call 440-256-2122.







🔯 🚼 🎧 at Farmpark

## Farm Animals Up Close

Preschool & Kindergarten • 2.5 hours • Fee: \$7

**KEYWORDS Basic needs, farm animals** mid-Oct.-mid-March

Encounter farm animals to gain respect for how farmers raise and care for them. Milk a cow, visit horse stables and meet farm animals in the Well Bred Shed. To register for this program, call 440-256-2122.





🔯 👔 at Farmpark

## Farmyard Families Kindergarten

2.5 hours • Fee: \$7 • mid-Oct.-mid-March

**KEYWORDS Census, offspring** 

Count animals, identify farm animal families and learn about animal care and needs through a Farmpark livestock report. After collecting data, students attend a scientific meeting where they create a pictograph of their findings and share their information. To register for this program, call 440-256-2122.







at Farmpark

## It's Alive! Preschool-Grade 2

1.5 hours • Fee: \$7

**KEYWORDS Observe living things** 

Discover what all living things have in common. Get up close and personal with some real live bugs! Take part in a skit to learn about tree parts and their importance. Activities demonstrate the interdependence of plants, animals and people too!



at Penitentiary Glen Reservation or Children's **Schoolhouse Nature Park** 

## **Little Lambs & Little Sprouts**

Preschool & Kindergarten • 2 hours • Fee: \$7 • mid-Jan.-March KEYWORDS Seedlings, young

Listen to a story about spring lambs and learn how farmers provide for the needs of young animals. Prepare for spring planting by transplanting seedlings to take home. Meet spring lambs and encounter other farm animals. To register for this program, call 440-256-2122.









# PRESCHOOL-GRADE 2 PROGRAMS

To register for these programs, call 440-358-7275

### Little Red Hen Preschool-Grade 2

3 hours or 1 hour at your school (classroom-sized groups) Fee: \$7 • mid-Oct.-mid-March or year-round for outreach

**KEYWORDS Grain processing, ingredients** 

The Little Red Hen invites students to see how the farm provides the ingredients for bread. We'll measure, mix and knead these farm ingredients into honey wheat bread dough and then sample wheat bread. To register for this program, call 440-256-2122.











STEM [ at Farmpark or your site

### Nature's Gifts Preschool-Grade 1

1.5 hours • Fee: \$7 • Second Tues. of Nov.-first Fri. in Jan.



Winter is the time of year for giving and receiving gifts. Let's meet a woodland character, make a gift for the birds and search for nature's gifts that are all around us on a woodland hike.







at Children's Schoolhouse Nature Park or your site

### **Operation Worm Watch** Grade 2

2 hours • Fee: \$7 **KEYWORDS Interaction, invasive, resources** What do earthworms have to do with forests? Students work together in research teams to understand how earthworms are changing the forest environment and the human environment. Students collect and examine different earthworms up close to see what is living in the forests.











at Jordan Creek Park or your site

## **Park-wise Puppets Presents: Backyard Critters**

Preschool & Kindergarten • 1 hour • Fee: \$7 • This program is designed for a class, maximum 30 students. Programs can be scheduled back to back to accommodate larger groups.

**KEYWORDS Observe living things** 

Introduce your students to nature! Programs include a brief puppet show, hands-on activities and games or a craft and discovery hike. A song to reinforce the theme will complete each program. Do you think wildlife is only found in the parks or at the zoo? The puppet cast will show you that wildlife is all around no matter where you live.









at Penitentiary Glen Reservation, **Children's Schoolhouse Nature Park** or your site

#### Save the Monarchs Grade 2

2 hours • Fee: \$7



Students learn about insect specialization, the monarch lifecycle and the importance of milkweed. Students design a pollinator garden with flowering plants to provide food to monarchs throughout the year, with a special emphasis on milkweed and the role pollinators play in the ecosystem.







🚳 🕮 🖚 at Jordan Creek Park or your site

## Spring Seasonal Discovery

Preschool-Grade 2 • 1 hour • Fee: \$7 Discover the wonders of seasons and gain a better understanding of nature's unique adaptations. Explore how plants and animals prepare for and survive seasonal changes with hands-on activities. Discover what is growing in the spring! Hands-on exploration of a pond or marsh focuses on how spring's changes are interconnected and the concept of life cycles.





at Penitentiary Glen Reservation

## Soap Bubble Chemistry Kindergarten-Grade 2

1 hour • Fee: \$7

KEYWORDS Gravity, surface tension, properties of materials Let the learning begin as your class experiences the chemistry of bubbles. Students investigate making bubbles to find the perfect recipe. After mastering the bubble mixture, experiment with everyday items for wands. Each child stands inside a bubble at the end of the program. Nearby water source is needed for outreach programs.









at Jordan Creek Park or your site

# Stone Soup Preschool & Kindergarten

2.5 hours • Fee: \$7 • mid-Oct.-mid-March

Discover the classic tale Stone Soup and investigate how the ingredients are grown. Students chop vegetables to create a nutritious and enjoyable soup to share. Explore the farm as your soup cooks and choose healthy servings of fruits and vegetables in our child-sized farmers' market. To register for this program, call 440-256-2122.





at Farmpark

#### Wee Weatherwatchers

Preschool & Kindergarten • 1 hour • Fee: \$7 • This program is designed for a class, maximum 30 students. Programs can be scheduled back to back to accommodate larger groups.

**KEYWORDS Daily changes** 

**KEYWORDS Plant parts, nutrition** 

Be weather wise by becoming aware of weather changes. Explore the sun, seasons, winds and clouds. This program includes songs, puppets, experiments and lots of movement to keep your 3 to 5-year-olds engaged!





at Penitentiary Glen Reservation, Children's Schoolhouse Nature Park or your site

# GRADES 3-5 PROGRAMS

To register for these programs, call 440-358-7275

## Alien Invaders Grade 5 NEW!



2 hours • Fee: \$7

KEYWORDS Food web, ecosystem role, physical properties

Believe it or not, the region is filled with invasive species! From mussels in Lake Erie to birds in our backyards to the plants in the parks, discover what these species are, how they got here and what makes them detrimental to the ecosystem. You'll learn the difference between invasive and non-native species, how to identify key invasive species and what you can do to help protect the environment from these alien invaders!









at Penitentiary Glen Reservation, Jordan Creek Park or your site

#### Archery Adventure Grades 3-5

2 hours • Fee: \$7 • May-September

**KEYWORDS Lifetime physical activity** 

Have you ever shot a bow and arrow before? Now is your chance! Students learn the proper safety of the bow and arrow then have a chance to shoot several rounds on the range and give it their best shot!





at Jordan Creek Park or Hidden Lake

#### Cleveland Soils Grades 3-5

2 hours • Fee: \$7 • Fall, Spring, Summer

**KEYWORDS** Earth's resources, observations of nature

Students observe rock layering, texture and erosion as they hike through Sharon Conglomerate ledges and enjoy breathtaking views of Lake Erie and ancient beach ridges. Small group soil testing activities allow for investigation of soil properties and composition.



📸 at Chapin Forest Reservation

#### Fiber Arts from the Farm Grades 4-5

2.5 hours • Fee: \$7 • October-March **KEYWORDS Wool, fibers** Explore the farm to see the science and technology involved in turning plant material and animal products into useful and beautiful fiber creations by spinning, weaving and dyeing. To register for this program, call 440-256-2122.





at Farmpark

#### Grist for the Meal Grades 3-5

3.5 hours • Fee: \$7 • mid-Oct.-mid-March

**KEYWORDS Recipes, ingredients** 

Students explore techniques to thresh, winnow and grind wheat into flour. They milk a cow, observe cream separation, make butter and learn how bees make honey. Students investigate how yeast causes bread to rise and measure and combine ingredients to make bread dough. Students then sample wheat bread. To register for this program, call 440-256-2122.









stem at Farmpark

#### Ice Cream Grades 3-5

3 hours or 1 hour at your school (classroom-sized groups) Fee: \$7 • mid-Oct.-mid-March or year-round for outreach

**KEYWORDS Ingredients, food sources** 

Let's make ice cream! Discover where milk comes from and how it's processed. Learn how plants grow and what we use for flavors. Students use math to make and shake a tasty ice cream treat. This program is also available for other grade levels. To register for this program, call 440-256-2122.











at Farmpark or your site

# **Linking Up: From Owl Pellets to Food**

Webs Grades 4 & 5

1.5 hours • Fee: \$7

**KEYWORDS Energy flow, ecosystems** 

Dissect an owl pellet and trace energy through a food chain from the sun to decomposers. Discover how habitat destruction endangers wildlife. Additional charge for owl pellets.







at Penitentiary Glen Reservation, Jordan Creek Park or your site

## Longhouse Building Grades 3-5

2 hours • Fee: \$7 • Sept.-Oct. KEYWORDS Adaptations, resources Almost 300 years ago, the Haudenosaunee or "people of the longhouse" lived off of the Ohio wilderness. Work together to build a life-sized replica of a longhouse in the Farmpark woods. See what it's like to make a shelter using poles and canvas. Dress for the weather. To register for this program, call 440-256-2122.





at Farmpark

## Nature Chemistry Grades 4 & 5

2 hours • Fee: \$7

**KEYWORDS Chemistry, lab safety** 

What is everything made of? Chemistry investigates the matter around us. Let's explore what goes on in nature with some chemistry lab experiments!





at Jordan Creek Park

# GRADES 3-5 PROGRAMS

To register for these programs, call 440-358-7275

### **Oregon** Ohio Trail Grade 5

1.5 hours • Fee: \$7 KEYWORDS Survival skills, social interaction Prepare to strike out for adventure! Learn the basics of a variety of outdoor survival skills, from compass reading to backpacking. Test your skills and knowledge to see what is needed to survive in the wilderness.







at Chapin Forest Reservation, Jordan Creek Park, Girdled Road Reservation or your site

#### **Operation Worm Watch** Grade 4

2 hours • Fee: \$7 **KEYWORDS Interaction, invasive, resources** What do earthworms have to do with our forests? Students work together in research teams to understand how earthworms change the forest environment and the human environment. Students collect and examine different earthworms up close to see what is living in the forests.













at Jordan Creek Park or your site

## Pitch In! Grades 3-4 NEW

1.5 hours • Fee: \$7

KEYWORDS Limited resources, survival, environmental change

This program provides students with ways to "pitch in" by exploring everyday solutions for pollution. Through guided discussion, a nature walk and hands-on activities, children gain an understanding of how their lives intertwine with the environment with the goal of encouraging them to make conscious choices that ensure a cleaner healthier planet for all living things!









at Penitentiary Glen Reservation, **Children's Schoolhouse Nature Park** or Jordan Creek Park

### Save the Monarchs Grades 3 & 4

2 hours • Fee: \$7



Students learn about insect specialization, the monarch lifecycle and the importance of milkweed. Students design a pollinator garden with multiple flowering plants to provide food to monarchs throughout the year, with a special emphasis on milkweed and the role pollinators play in the ecosystem.







🕋 雵 at Jordan Creek Park or your site

## Spring Seasonal Discovery

Grades 3-5 • 1 hour • Fee: \$7

KEYWords Basic needs

Discover the wonders of seasons and gain a better understanding of nature's unique adaptations. Explore how plants and animals prepare for and survive seasonal changes with hands-on activities. Discover what is growing in the spring! Hands-on exploration of a pond or marsh focuses on how spring's changes are interconnected and the concept of life cycles.





at Penitentiary Glen Reservation

### **Species of the Year: Bees** Grades 3-5

1.5 hours • Fee: \$7 • Fall, Spring

KEYWORDS Ecosystem change, life cycles, limited resources Want to know a cool fact? Bees are found on every continent except Antarctica! With that in mind, we can begin to think about how important these insects are to the planet and to us. Explore the world of bees and how they affect the world around you! They don't just make honey—they do so much more. Through hands-on activities, adventures outside and group learning, learn about how these small insects make a huge impact.







at Penitentiary Glen Reservation, Jordan **Creek Park or your site** 

### Studies in Biodiversity Grade 3

2.5 hours • Fee: \$7 • mid-Jan.-mid-March

**KEYWORDS Breeds, traits** 

Learn about animal traits and genetics as you encounter cows, horses and spring lambs. Explore the world of corn and teosinte. To register for this program, call 440-256-2122.







STEM at Farmpark

## Survivor: A Global Eco-challenge

Grades 3-5 • 1 hour • Fee: \$7

KEYWORDS Team building, leadership skills

Biomes of students compete against each other in mental and physical challenges. Teamwork and leadership skills are put to the test to determine which biome is the ultimate "Survivor." Challenges vary with each location and group.









at any park or your site

## The Chemistry of Cheesemaking

Grades 3-5 • 2.5 hours • Fee: \$7 • mid-Oct.-mid-March

KEYWORDS Enzymes, chemical changes Using the scientific method, students work in teams to make a distinct dairy product. Students use physical and chemical changes to accomplish specific outcomes in their experiments. Students will also milk a cow and visit dairy

sheep and goats. To register for this program, call 440-256-2122.









at Farmpark



# GRADES 6-8 PROGRAMS

To register for these programs, call 440-358-7275

### Alien Invaders Grade 6 NEW



2 hours • Fee: \$7

KEYWORDS Food web, ecosystem role, physical properties

Believe it or not, the region is filled with invasive species! From mussels in Lake Erie to birds in our backyards to the plants in the parks, discover what these species are, how they got here and what makes them detrimental to the ecosystem. You'll learn the difference between invasive and non-native species, how to identify key invasive species and what you can do to help protect the environment from these alien invaders!









at Penitentiary Glen Reservation, Jordan Creek Park or your site

#### Archery Adventure Grades 6-8

2 hours • Fee: \$7 • May-September

**KEYWORDS Lifetime physical activity** 

Have you ever shot a bow and arrow before? Now is your chance! Students learn the proper safety of the bow and arrow, then have a chance to shoot several rounds on the range and give it their best shot!





at Jordan Creek Park or Hidden Lake

#### Cleveland Soils Grades 6-8

2 hours • Fee: \$7 • Fall, Spring, Summer

KEYWORDS Earth's resources, observations of nature

Students observe rock layering, texture and erosion as they hike through Sharon Conglomerate ledges and enjoy breathtaking views of Lake Erie and ancient beach ridges. Small group soil testing activities allow for investigation of soil properties and composition.



📸 at Chapin Forest Reservation

#### Fiber Arts from the Farm Grades 6-8

2.5 hours • Fee: \$7 • October-March **KEYWORDS Wool, fibers** Explore the farm to see the science and technology involved in turning plant material and animal products into useful and beautiful fiber creations by spinning, weaving and dyeing. To register for this program, call 440-256-2122.





🖊 at Farmpark

#### Longhouse Building Grades 6-8

2 hours • Fee: \$7 • Sept.-Oct. KEYWORDS Adaptations, resources Almost 300 years ago, the Haudenosaunee or "people of the longhouse" lived off of the Ohio wilderness. Work together to build a life-sized replica of a longhouse in the Farmpark woods. See what it's like to make a shelter using poles and canvas. Dress for the weather. To register for this program, call 440-256-2122.





at Farmpark

#### **Nature Chemistry** Grades 6 & 7

2 hours • Fee: \$7 **KEYWORDS Chemistry, lab safety** 

What is everything made of? Chemistry investigates the matter around us. Let's explore what goes on in nature with some chemistry lab experiments!





at Jordan Creek Park

#### Oregon Ohio Trail Grades 6-8

1.5 hours • Fee: \$7 KEYWORDS Survival skills, social interaction Prepare to strike out for adventure! Learn the basics of a variety of outdoor survival skills, from compass reading to backpacking. Test your skills and knowledge to see what is needed to survive in the wilderness.







at Chapin Forest Reservation, Jordan Creek Park, Girdled Road Reservation or your site

## **Species of the Year: Bees** Grade 6

1.5 hours • Fee: \$7 • Fall, Spring

KEYWORDS Ecosystem change, life cycles, limited resources Want to know a cool fact? Bees are found on every continent except Antarctica! With that in mind, we can begin to think about how important these insects are to the planet and to us. Explore the world of bees and how they affect the world around you! They don't just make honey—they do so much more. Through hands-on activities, adventures outside and group learning, learn about how these small insects make a huge impact.







at Penitentiary Glen Reservation, Jordan Creek Park or your site

## Survivor: A Global Eco-challenge

Grades 6-8 • 1 hour • Fee: \$7

KEYWORDS Team building, leadership skills, biome

Students become members of a biome trying to overcome global environmental challenges that affect their survival. The biomes compete in mental and physical challenges. Teamwork and leadership skills are tested to find the ultimate Eco Protector.









at any park or your site

# GRADES 9-12 PROGRAMS

To register for these programs, call 440-358-7275

### **Archery Adventure** Grades 9-12

2 hours • Fee: \$7 • May-September

**KEYWORDS Lifetime physical activity** 

Have you ever shot a bow and arrow before? Now is your chance! Students learn the proper safety of the bow and arrow, then have a chance to shoot several rounds on the range and give it their best shot!



at Jordan Creek Park

### Oregon Ohio Trail Grades 9-12

1.5 hours • Fee: \$7 KEYWORDS Survival skills, social interaction Prepare to strike out for adventure! Learn the basics of a variety of outdoor survival skills, from compass reading to backpacking. Test your skills and knowledge to see what is needed to survive in the wilderness.







at Chapin Forest Reservation, Jordan Creek Park, Girdled Road Reservation or your site

## **Survivor: A Global Eco-challenge**

Grades 9-12 • 1 hour • Fee: \$7

KEYWORDS Team building, leadership skills, biome

Students become members of a biome trying to overcome global environmental challenges that affect their survival. The biomes compete in mental and physical challenges. Teamwork and leadership skills are tested to find the ultimate Eco Protector.









at any park or your site



## **Education Services**

- Most Lake Metroparks facilities are wheelchair accessible and maintain first aid stations including AED.
- Scholarships are available to groups with financial need; please inquire when you call for a reservation.
- Teacher guides complement most programs with pre- and post-visit activities and background information.
- Custom program packages can be created for year-round, multi-visit programs or grant projects. Lake Metroparks' staff collaborates with area teachers to develop customized programs that make full use of our facilities' potential to reinforce concepts and skills in science, language arts, history, math, nutrition or art in themed units on farming, nature, recreation, physical education, health or related topics.
- Invite us to your next staff meeting for a 15-minute presentation on Lake Metroparks' education or recreation programs.

## **Gift Shops**

Take home a souvenir! A wide variety of nature and farmthemed gifts and educational items are available to enhance your visit.

- The Nature Store at Penitentiary Glen Nature Center is open daily 9 am to 4:30 pm
- Farmpark's Gift Shop is open 9 am to 5 pm Tuesday through Saturday and 11 am to 5 pm Sunday.

## **Professional Development**

Lake Metroparks offers professional development opportunities, many in cooperation with Lake Erie College or NEOEA. These weekend and summer workshops enhance educator knowledge and understanding of science, social studies and math and are aligned with Ohio's Academic Content Standards. We welcome the opportunity to work with professional development committees to develop and present workshops to fulfill teacher certification requirements. To schedule an in-service or receive information on upcoming professional development opportunities, call 440-358-7275.

## **Gifted & After School Programs**

Lake Metroparks is excited to offer an incredible array of gifted and after school programs. In fact, many of the programs listed in this book can be adapted or developed to fit extracurricular school activities. Clubs, gifted programs and special groups or programs are invited to schedule any of our program offerings. We can also develop multi-session programs on a variety of topics to fit your needs. These programs can be scheduled at Lake Metroparks facilities or can be brought to your school or organization. Does your Gifted Education teacher need a series of six programs on a special topic? We can do that! Do you have an Ecology Club looking for a special eco program or environmental adventure? We can do that too! Call 440-358-7275 for more information.

NOTE: Many of the programs listed in this book can be adapted to fit clubs, programs and special groups of all ages.

#### Please note:

Lake Metroparks reserves the right to photograph and record all of its activities, events, classes, programs and facilities for promotional purposes.

### Lake Metroparks

# **EDUCATION FACILITIES**

#### **Lake Metroparks Farmpark**

8800 Euclid Chardon Rd. (Rt. 6) Kirtland, Ohio 44094

#### **Children's Schoolhouse Nature Park**

9045 Baldwin Rd. Kirtland Hills, Ohio 44060

# **Environmental Learning Center at Jordan Creek Park**

7250 Alexander Rd. Concord Twp., Ohio 44077

#### **Penitentiary Glen Nature Center**

8668 Kirtland-Chardon Rd. Kirtland, Ohio 44094

# **Kevin P. Clinton Wildlife Center** at Penitentiary Glen Reservation

8668 Kirtland-Chardon Rd. Kirtland, Ohio 44094

#### **Fairport Harbor Lakefront Park**

301 Huntington Beach Dr. Fairport Harbor, Ohio 44077

#### **Chapin Forest Reservation**

9938 Chillicothe Rd. (Rt. 306) Kirtland, Ohio 44094

Pine Lodge Ski Center 10381 Hobart Rd. Kirtland, Ohio 44094

Visit **lakemetroparks.com** for driving directions and location information or inquire when requesting a program.





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# Pass it on!

Be sure to share the great ideas inside and pass this program guide on to a colleague! Lake Metroparks encourages the conservation and wise use of natural resources and supports recycling. Please help to reduce waste—share this publication with your colleagues.

#### Please circulate to:

- ☐ Curriculum coordinators
- ☐ Science specialists
- ☐ Science Club advisors
- ☐ PTO/PTU leaders
- ☐ Homeschoolers
- ☐ Aftercare coordinators
- ☐ Librarians
- ☐ Physical Education teachers



