

# HURON-CLINTON METROPARKS VIRTUAL SCHOOL PROGRAMS



METROPARKS.COM

### INTRODUCTION

### School Programs and Field Trips

Your Metroparks are excited to provide both virtual and in-person learning opportunities to teachers, homeschool groups, community groups and parents. Continuing to provide educational programs on wildlife, natural science, nature, farm life and more is our privilege and we are committed to supporting your efforts in new and innovative ways through these unprecedented times.

All programs are completely FREE currently, and a wide variety support the Common Core Science, Technology, Reading, Engineering, Arts and Math (STREAM) and Michigan Science Standards curriculum in content, methodology and technology use.

### Who We Are

The Huron-Clinton Metroparks Interpretive Department boasts one of the largest interpretive programs in the nation. It has been recognized for its professional leadership, educational programs, expertise of staff, and commitment to the natural and cultural environment.

### What We Offer

School programs provide environmental, cultural, and natural science literacy. All programs support the Michigan Science Standards curriculum in content, methodology, and technology use. A wide variety of programs offered that support Common Core curriculum, STREAM, and Michigan Science Standards. Each of these programs are taught by a professional Interpreter who is knowledgeable in the content and school requirements.

### When We Offer School Programs

School programs and field trips are available year-round.

### Why Schedule A School Program

Research shows that children's social, psychological, academic, and physical health is positively impacted when they have daily contact with nature. Environmental education engages students in learning and raises test scores. Our school programs are great examples of STREAM-based environmental education, with hands-on activities, cooperative learning, and critical thinking.

# **YOUR METROPARKS**









### PRESCHOOL PROGRAMS

Life Cycles: When I Was a Baby

Grades: Preschool Program Type:

Synchronous – Live presentation Asynchronous – Preprogram video

Program Length: 20 – 30 minutes

Kids will have fun relating to how different animals grow up. Whether it's hatching from an egg, going through a total metamorphosis, or receiving a mother's care, children will participate in several life cycle activities. We'll focus on the strategies of familiar animals such as birds, butterflies and opossums through counting, movement, guessing games and dramatic play.

Please register by calling 810-227-2757 ext. 6422 or emailing MLC@metroparks.com.

### Life When It's Snowy

Grades: Preschool Program Type:

Synchronous – Live presentation

Program Length: 20 – 30 minutes

Michigan winters may be cold and snowy, but these animals have special ways to survive! Children will investigate the different methods animals use to survive the cold while they compare and contrast using hands-on animal artifacts.

Please register by calling 810-227-2757 ext. 6422 or emailing MLC@metroparks.com.

#### **Mammals are Marvelous**

Grades: Preschool Program Type:

Synchronous – Live presentation

Program Length: 20 – 30 minutes

Children will delight in learning what features make mammals unique by comparing themselves to other animals "born alive and well." They'll discover different Michigan mammals that are carnivores, herbivores and omnivores.

Please register by calling 810-227-2757 ext. 6422 or emailing MLC@metroparks.com.

### **Outstanding Owls**

Grades: Preschool Program Type:

Synchronous – Live presentation Asynchronous – Preprogram video

Program Length: 20 – 30 minutes

We'll explore "wide-eyed owls" with all their neat features, from hooked beaks to silent wings to oh-so-sharp talons, through movement, artifacts and taxidermy. We'll also listen to the sounds of Michigan owls and try to mimic them!

Please register by calling 810-227-2757 ext. 6422 or emailing MLC@metroparks.com.

#### **Shells, Scales and Pollywog Tails**

Grades: Preschool Program Type:

Synchronous – Live presentation Asynchronous – Preprogram video

Program Length: 20 – 30 minutes

Children will discover frogs, toads, and salamanders through games and artifacts that illustrate their life cycles and special features. Then turtles and snakes will make their debut with further games and activities. To wrap it all up, children will meet the live animals they've just learned about.

Please register by calling 810-227-2757 ext. 6422 or emailing MLC@metroparks.com.

# PRESCHOOL - 2<sup>ND</sup> GRADE

#### **Animals of our Area**

Grades: Preschool - 2<sup>nd</sup>

Program Type:

Synchronous – Live presentation

Asynchronous – Preprogram and post program videos

Program Length: 45 minutes

Students will discover some of the animals living in Southeast Michigan, learn what makes them unique and special, and gain a deeper appreciation of the world around them. We will explore the basic needs of all animals and the similarities and differences between mammals, birds, reptiles and amphibians.

Please register by 734-782-3956 or emailing kevin.arnold@metroparks.com.

#### **Farm Tour for Little Ones**

Grades: Preschool - 2nd

Program Type:

Asynchronous

Program Length: 15 minutes

Join us for a virtual trip around the Wolcott Mill Metropark Farm Center. We will show you all the animals that call the Farm Center home and students will learn facts and information about the role these animals play on the farm and how they impact the food and fiber we used every day.

Please register by calling (586) 752-5932 or emailing wolcott.farm@metroparks.com

### Farm Tour for Little Ones (available late November)

Grades: Preschool – 2<sup>nd</sup>

Program Type:

Synchronous – Live presentation

Asynchronous – Preprogram and post program videos

Program Length: 1 hour

What does a sheep feel like, why does a rooster crow and how many babies can a pig have? In this virtual program, your students will discover the answers to these questions and many more as they explore each animal's "Job" on the Kensington Metropark farm through multiple videos and a live session with a farm interpreter and a special animal guest.

Please register by calling 248-684-8632 or emailing kensington.farm@metroparks.com.

### KINDERGARDEN - 1<sup>ST</sup> GRADE

Wetlands through the Seasons (available beginning in March)

Grades: K – 1st grade

Program Type:

- Synchronous (optional) follow-up student discussion/Q&A (20 minutes)
- Asynchronous Prerecorded video content with linkable activities (1-2 videos)

Program Length: 45 minutes, plus time for activities

Why are seasons different? How do the different seasons affect our plants and animals here at Lake St. Clair Metropark? We will explore the changing seasons and what makes them unique from one another. We will focus on what we see here in our wetland habitats throughout our videos.

An option of scheduling a follow-up interactive video session with students and an interpreter to discuss what they learned as well as answer questions they may have is available. With each video, there will be a link provided with an activity relating to the video topic.

Please register by calling (586) 463-4332 or emailing lsc.nature@metroparks.com.

### KINDERGARDEN - 5TH GRADE

#### **Autumn Adventure**

Grades: K – 5th Program Type:

Synchronous – Live follow-up student discussion/Q&A (30 minutes)

Asynchronous – Prerecorded video content with linkable activities (4-5 videos, 8-10

minutes each)

Program Length: 1 ½ hour, plus activity time

Experience the changing of the seasons in our Northern Hemisphere. Students will learn how a leaf functions, where leaves fit into the food chain and receive virtual instruction for painting colorful fall leaves on t-shirts. A virtual guided hike through the woods will teach students to identify various species of trees. Students will collect several leaves to make their own leaf ID booklet. The history of apples, cider and the use of cider in American History is presented as student's grind and press apples to experience making real apple cider.

There will be the option of scheduling a follow-up interactive video session with students and an interpreter to discuss what they learned as well as answer questions they may have. With each video, there will be a link provided with an activity relating to the video topic.

Please register by calling (586) 781-9113 or sc.interpreter@metroparks.com.

**Build-a-Bird: Bird Adaptations** 

Grades: K – 5<sup>th</sup> Program Type:

Synchronous – Live presentation with birds Asynchronous – Two pre-program videos

Program Length: 30 minutes

During a video presentation using mounted specimens, we'll investigate the various adaptations that birds rely on to survive in their different habitats. Based on their observations, students will work together to design a bird for a specified habitat. During our live session, the class will then present the evidence for why their bird is best adapted to the given habitat. Meet Kensington Metropark Nature Center's live red-tailed hawk, Ragner, to see the unique adaptations specific to birds of prey.

Please register by calling 810-227-8917 or emailing kensington.naturecenter@metroparks.com.

Food Chains: What's for Dinner?

Grades: K – 5<sup>th</sup> Program Type:

Synchronous – Live presentation

Asynchronous - Preprogram video and linkable activities

Program Length: 40 minutes

Discover the parts of a food chain and what different types of plants and animals need to live and grow. Students will act out the parts of a food chain and build a model of a Michigan food web, including a dramatization of how humans can impact the environment. We will present live animals including Ranger, Kensington Metropark Nature center's red-tailed hawk, as we gain an understanding of their interactions and the connections between parts of the food chain.

Please register by calling 810-227-8917 or emailing kensington.naturecenter@metroparks.com.

### **Plant Parts & Their Cycles**

Grades: K -5<sup>th</sup> Program Type:

Synchronous – Live presentation (20-30 minutes) Asynchronous – Preprogram videos (15 minutes)

Program Length: 45 minutes

During a live session, the class will discover the parts of a tree and flower. Students will act out the plant life cycle as they learn the parts of a plant. An interpreter will dress up as a flower to help the class learn the different parts of a flower. During a post-video presentation, students will explore the way that plant seeds are dispersed and how humans mimic some of these techniques in everyday life.

Please register by calling 810-227-8917 or emailing Kensington.naturecenter@metroparks.com

#### **Seasonal Animals**

Grades: K -5<sup>th</sup> Program Type:

Synchronous – Live presentation (20 minutes) Asynchronous – Preprogram videos (45 minutes)

Program Length: 1 hour and 5 minutes

Three different videos will explore three different strategies that animals use to survive the winter months: staying active, hibernation, and migration. Using mounts and live animals we'll look at the adaptations that help animals get through this difficult time of the year. During our live session we will discover what the wildlife of Kensington Metropark are doing that day.

Please register by calling 810-227-8917 or emailing kensington.naturecenter@metroparks.com.

# KINDERGARDEN – 6<sup>TH</sup> GRADE

#### **Marsh Menagerie**

Grades: Kindergarten – 6th

Program Type:

Synchronous – Live presentation

Asynchronous – Preprogram and post program videos

Program Length: 45 minutes

Explore the wonderful world of wetlands! In this program, students will be introduced to the marsh habitat and discover the variety plants and wildlife living there.

Please register by 734-379-5020 or emailing kevin.arnold@metroparks.com.

### 1<sup>ST</sup> GRADE – 2<sup>ND</sup> GRADE

#### **Incredible Insects**

Grades: 1st – 2nd Program Type:

Synchronous – Two live presentations. Also available as in-person, outdoor

programming. (30 minutes each)

Asynchronous – Preprogram linkable activities

Program Length: 1 - 1 ½ hours

Students will get an introduction to insects, their characteristics, life cycles and their role in the ecosystem. Students will also examine the role insects have in an ecosystem, the different habitats they are found in and compare adaptations that help t hem survive. Students will create new insects using their imaginations to add adaptations to allow it to survive in the habitat they choose.

A *Traveling Trunk* with tools to explore the schoolyard ecosystem as a teacher-led follow up activity can be reserved at the time of program registration. The trunk can be picked up by the teacher at Hudson Mills Metropark and borrowed for two weeks.

Please register by calling 734-426-8211 or emailing HM.Interpreter@metroparks.com.

#### **Wetland Wildlife**

Grades: 1st – 2nd Program Type:

Synchronous – Live follow-up student discussion/Q&A (30 minutes)

Asynchronous – Prerecorded video content with linkable activities (4 videos, 10

minutes each)

Program Length: 1 ½ hour, plus time for activities

Wetland habitats play an essential role in the lives of plants, animals and humans alike. During this virtual program, we will discuss what a habitat is, what it provides as well as the unique features of wetland habitats. Students will look at specific lifecycles and adaptations of wetland wildlife. They will meet a threatened species found in our wetland and discover ways they can help protect this important habitat.

An option of scheduling a follow-up interactive video session to discuss what they learned as well as answer questions they may have is available. With each video there will be a link provided with an activity relating to the video topic.

Please register by calling (586) 463-4332 or emailing lsc.nature@metroparks.com.

### 1<sup>ST</sup> GRADE – 5<sup>TH</sup> GRADE

**Vernal Pond Investigation** (available beginning in March)

Grades: 1st – 5th Program Type:

Synchronous – Live investigations in Fall and Spring. Also available as in-person, outdoor programming. (20-30 minutes each)

Asynchronous – Preprogram linkable activities and travelling trunk supplies Program Length: 1 - 1 ½ hours

Students will learn about vernal ponds. They will get a chance to view, learn about, and discover why vernal ponds are important. Student will see an interpreter gather and record physical data of the vernal pond. The data will be used to compare with data previously recorded, witnessing firsthand what physical changes vernal ponds go through. Students will understand the importance of vernal ponds to wildlife by exploring how animals live and use vernal ponds.

A *Traveling Trunk* with tools to investigate macroinvertebrates in pre-collected pond water as a teacher-led follow up activity can be reserved at the time of program registration. The trunk can be picked up by the teacher at Hudson Mills Metropark and borrowed for two weeks.

Please register by calling 734-426-8211 or emailing HM.Interpreter@metroparks.com.

### 2<sup>ND</sup> GRADE – 6<sup>TH</sup> GRADE

**Michigan Landforms: Impact of Glaciers** 

Grades: 2<sup>nd</sup> – 6<sup>th</sup> Program Type:

Synchronous – Live on-line presentations Program Length: 1 hour, plus activity prep time

The effects of Michigan's glacial history are everywhere. Explore how glaciers formed and moved during the last ice age, and observe the evidence left at Indian Springs Metropark. Landforms, erosion, deposition and glacial features will be modeled and discussed. Activities include discussion of how glaciers form and move, and an outdoor tour of the impact of glaciers at Indian Springs Metropark. Teachers may choose to have their students use glacial goo to explore the dynamics of glacier movement in an optional handson modeling activity.

Teachers will receive the recipe to make "glacial goo" before the program, so students can participate in hands-on activity.

Please register by calling 248-625-7280 or emailing edc@metroparks.com.

# 3<sup>RD</sup> GRADE - 5<sup>TH</sup> GRADE

Predator Prey CSI (available beginning in December)

Grades: 3<sup>rd</sup> – 5<sup>th</sup> Program Type:

Synchronous – Live presentation. Also available as in-person, outdoor programming.

(30 minutes each)

Asynchronous –Travelling trunk of supplies

Program Length: 30 minutes

Students will learn what a predator and prey are, adaptations they have, and how they rely on one another in an ecosystem. We'll examine different skulls and learn characteristics of these skulls to determine if they belong to a predator or prey. By using this new knowledge, they will discover what animal a mystery skull belongs to.

A *Traveling Trunk* with supplies and activities can be reserved at the time of program registration. The trunk can be picked up by the teacher at Hudson Mills Metropark and borrowed for two weeks.

Please register by calling 734-426-8211 or emailing HM.Interpreter@metroparks.com.

### Wetlands Are Wonderful (available beginning in January)

Grades: 3<sup>rd</sup> – 5<sup>th</sup> Program Type:

Synchronous (optional) – Live follow-up student discussion/Q&A

Asynchronous – Prerecorded video with linkable activities (5 videos, 8-10 minutes

each)

Program Length: 1 ½ hours, plus activity time

Students will be introduced to the unique wetland habitat at Lake St. Clair Metropark and how it has changed over time. Students will experience the wetlands in our park alongside the interpretive naturalists on the trail, in the water and at the nature center. Throughout our videos we will explore how these wetlands impact the health of plants, animals and the people within Southeast Michigan. Students will also have the chance to virtually meet live animals and a federally licensed bird bander at a research station.

An option of scheduling a follow-up interactive video session with students and an interpreter to discuss what they learned as well as answer questions they may have is available.

With each video, there will be a link provided with an activity relating to the video topic.

Please register by calling (586) 463-4332 or emailing lsc.nature@metroparks.com.

# 3RD GRADE - 6TH GRADE

#### Reptiles & Amphibians

Grades: 3<sup>rd</sup> – 6<sup>th</sup> Program Type:

Synchronous – Live presentation

Asynchronous – Preprogram and post-program videos

Program Length: 1 hour

Many different turtles and snakes can be found in our area. Students will discover the unique adaptations these animals have for survival. Live animals will be used to introduce students to specific reptile species. Students will observe the physical characteristics of reptiles and snakes.

Please register by 734-379-5020 or emailing kevin.arnold@metroparks.com.

### Farm Animal Tour (available late November)

Grades: 3<sup>rd</sup> – 6<sup>th</sup> Program Type:

Synchronous – Live presentation

Asynchronous – Preprogram and post-program videos

Program Length: 1 hour

Through multiple videos and a live interaction with a farm interpreter (and animal guest), students will examine the animals face-to-face and discuss how the animal's structures relate to their functions, both for the animal and for people. Students will learn about the basic needs of all animals, and the similarities and differences between mammals and birds. Students will also find out what it means to be domesticated and see how parental traits can be observed in their young.

Please register by calling 248-684-8632 or emailing kensington.farm@metroparks.com.

### Maple Sugaring Tour (available beginning in March)

Grades: 3<sup>rd</sup> – 6<sup>th</sup> Program Type:

Synchronous – Live presentation

Asynchronous – Preprogram and post-program videos

Program Length: 1 hour

Discover the science and history of maple sugaring at Kensington Metropark. In this virtual program, learn how to find and tap a maple tree, tour Native American and pioneer sugaring camps, and watch the process of turning sap into syrup. As we visit different trees in search of a maple tree, students will learn about the parts of a tree and their functions. Students will achieve a higher level of understanding and respect toward the environment and the contributions of Native American people.

Please register by calling 248-684-8632 or emailing kensington.farm@metroparks.com.

# 3<sup>RD</sup> GRADE – 12<sup>TH</sup> GRADE

Lives of the Voyageur: Fur Trade

Grades: 3<sup>rd</sup> – 12<sup>th</sup> Program Type:

Synchronous – Live presentation

Asynchronous – Preprogram and post program videos

Program Length: 1 hour

During this program, students will be immersed in the French Fur Trade Era. They will discover how the Voyageurs travelled, what their clothes were like, the importance of the Beaver to the time, and what trading might have been like.

Please register by 734-379-5020 or emailing kevin.arnold@metroparks.com.

# 4<sup>TH</sup> GRADE - 6<sup>TH</sup> GRADE

#### **Winter Adventure**

Grades: 4<sup>th</sup> - 6<sup>th</sup> Program Type:

Synchronous – Live follow-up student discussion/Q&A

Asynchronous – Recorded video content with linkable activities

Program Length: 1 ½ - 2 hours, plus activity time

Winter is a season of challenge for wildlife and finding food and shelter consume much of their time. Discover some strategies wild animals have adapted to survive through winter. Wildlife leave their signs in the snow – tracks, scat, gnawing and fur/feathers. Students will discover which animal passed through by looking at the clues left behind.

Although we are protected from winter's severity by the energy grid, survival skills are worth knowing. Students will learn the basics of survival and take the Survival Quiz. Students will practice tying four simple knots, then gather branches/poles and construct their own "travois" (sled), utilized by the Plains Tribes of North America.

There will be the option of scheduling a follow-up interactive video session with students and an Interpreter to discuss what they have learned, as well as answer questions they may have. With each video, there will be a link provided with an activity relating to the video topic.

Please register by calling (586) 781-9113 or emailing sc.interpreter@metroparks.com.

### 4<sup>TH</sup> GRADE – 12<sup>TH</sup> GRADE

#### **Ecosystem Investigation**

Grades: 4th - 12th Program Type:

Synchronous – Live presentation or in-person at school Asynchronous – Prerecorded version available as well

Program Length: 1 hour

Join an interpreter for an overview of prairie, wetland and forest ecosystems Indian Springs Metropark. Then explore one of the ecosystems in depth. We will go onsite to a wetland or prairie and take measurements of windspeed, temperature, relative humidity, and light intensity. We will also observe the plants and any signs of animals. Students will be able to ask questions and explore in real-time. We will discuss how we keep ecosystems healthy in a park setting, which is good for people, but also plants and animals! This is expected to be a live, synchronous field exploration, but an asynchronous video series is also available.

A *Traveling Trunk* with tools to explore the schoolyard ecosystem as a teacher-led follow up activity can be reserved at the time of program registration. The trunk can be picked up by the teacher at Indian Springs Metropark and borrowed for two weeks.

Please register by calling 248-625-7280 or emailing edc@metroparks.com.

### **Wetland Ecosystem Comparison, Exploring Wetlands**

Grades: 4<sup>th</sup> – 12<sup>th</sup> Program Type:

Synchronous – Live investigation or in-person at school

Program Length: 1 hour

Wetlands play an important role when it comes to water quality. Students will explore different types of wetland ecosystems through a virtual hike, view life under the water, and identify creatures using a dichotomous key. Then calculate and determine the health of pond through a biological assessment.

Please register by calling 248-625-7280 or emailing edc@metroparks.com.



