

# HURON-CLINTON METROPARKS VIRTUAL SCHOOL PROGRAMS

2020-2021 School Year





# 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, STEM, and Michigan Science Standards. Each of these programs are taught by a professional Interpreter who is knowledgeable in the content and school requirements.

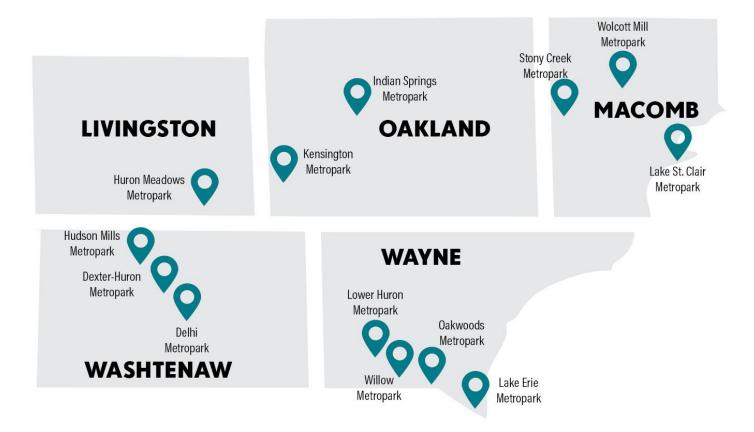
### When We Offer School Programs

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 STEM-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 lisa.parsons@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 lisa.parsons@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 lisa.parsons@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 lisa.parsons@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 lisa.parsons@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.

This program includes a *Travelling Trunk* with activities, supplies, and related artifacts that can be reserved at the time of program registration. The trunk will be delivered to your school, at a designated date, in advance of your program.

Please register by 734-441-6639 or emailing justin.smith@metroparks.com.

#### Farm Tour for Little Ones

Wolcott Mill Metropark 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

Kensington Metropark 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 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.

#### Virtual Story Time (available beginning November 2020)

Grades: Preschool – 2<sup>nd</sup> Program Type: Asynchronous Program Length: 15 minutes, plus time for activity

Join us as we visit the Wolcott Mill Metropark Dairy Farm and see how the journey of our favorite summertime treat begins. We will then read "Tales of a Dairy Godmother, Chucks Ice Cream Wish" for the class. After the story, students will get the chance to make their very own ice cream (supply list provided)!

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

### KINDERGARDEN – 2<sup>nd</sup> GRADE

#### Wetland Wildlife (available November 2020)

Lake St. Clair Metropark Grades: K – 2<sup>nd</sup> 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 <sup>1</sup>/<sub>2</sub> 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.

### KINDERGARDEN – 5<sup>th</sup> GRADE

#### **Autumn Adventure**

Stony Creek Metropark 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**

Kensington Metropark 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 precise habitat. 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 Ranger, our live red-tailed hawk, 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?

Kensington Metropark 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 animal interactions to gain an understanding of the connections between parts of a food chain, including a visit with Ranger, our red-tailed hawk.

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

#### Signs of the Seasons

Lake St. Clair Metropark Grades: K – 5<sup>th</sup> Program Type: Synchronous – Live follow-up student discussion/Q&A (30 minutes) Asynchronous – Prerecorded video with linkable activities (1-2 videos, 8-10 minutes each) Program Length: 1 hour, plus activity time

We will explore seasonal changes in plants as well as wildlife found in our park. Each video will highlight an observable seasonal change and encourage students to get outside and find evidence of these changes near their own home.

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.

#### **Seasonal Animals**

Kensington Metropark 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, 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 explore what the wildlife of Kensington Metropark is doing on 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 – 6<sup>th</sup> 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.

This program includes a *Travelling Trunk* with activities, supplies, and related artifacts that can be reserved at the time of program registration. The trunk will be delivered to your school, at a designated date, in advance of your program.

Please register by 734-441-6639 or emailing justin.smith@metroparks.com.

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

#### **Incredible Insects**

Hudson Mills Metropark Grades: 1<sup>st</sup> – 2<sup>nd</sup> Program Type: Synchronous – Two live presentations. Also available as in-person, outdoor programming. (30 minutes each) Asynchronous – Preprogram linkable activities and post program videos 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 create an insect, then use their imaginations to add adaptations to create a new insect that can survive in the habitat they choose.

This program includes a *Travelling Trunk* with activities, supplies, and related artifacts that can be reserved at the time of program registration. The trunk will be delivered to your school, at a designated date, in advance of your program.

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

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

#### Vernal Pond Investigation – (available beginning March 2021)

Hudson Mills Metropark Grades: 1<sup>st</sup> – 5<sup>th</sup> Program Type:

Synchronous – Live investigations in Fall and Spring. Also available as in-person, outdoor programming. (30-45 minutes each)

Asynchronous – Preprogram linkable activities and travelling trunk supplies Program Length:  $1 - 1\frac{1}{2}$  hours

Students will learn about wetlands, what a vernal pond is and how these vernal ponds change over time. They will understand the importance of vernal ponds to wildlife by exploring how animals live and use vernal ponds. While studying these animals, habitat requirements, food chain, and other topics will be introduced. Students will obtain biological, as well as physical data in the spring and fall to compare changes.

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 (available beginning December 2020)

Indian Springs Metropark Grades: 2<sup>nd</sup> – 6<sup>th</sup> Program Type: Synchronous – Live presentations Asynchronous – Preprogram video Program Length: 1 hour, plus activity time

The effects of Michigan's glacial history are everywhere. Students will understand how glaciers formed and moved during the last ice age, and observe the evidence left at Indian Springs Metropark. The topics of landforms, erosion, deposition and glacial features will be modeled and discussed. Activities include a virtual tour of where we see the impact of glaciers at Indian Springs Metropark, modeling glacier movement with "glacial goo", and modeling river erosion using a stream-table.

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

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 December 2020)

Hudson Mills Metropark Grades: 3<sup>rd</sup> – 5<sup>th</sup> Program Type: Synchronous – Live presentation. Asynchronous – Two preprogram videos linkable activities and travelling trunk of supplies Program Length: 30 minutes

Introduce students to predator/prey relationships and the observable adaptations each have that help them survive. They will get a hands-on opportunity to view animal skulls and discover characteristics of these skulls that show us how the animals live. By using this new knowledge, they will discover what animal a mystery skull belongs to.

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

#### **Wonderful Wetlands**

Lake St. Clair Metropark Grades: 3<sup>rd</sup> – 5<sup>th</sup> Program Type: Synchronous – Live presentation student discussion/Q&A (30 minutes) Asynchronous – Prerecorded video with linkable activities (4-5 videos, 8-10 minutes each) Program Length: Program Length: 1 ½ hours, plus activity time

Wetlands are an essential habitat for many plants and animals as well as people. In this virtual program students, will be introduced to different types of wetlands in the Great Lakes region and how they have changed over time. Learn the role wetlands play in improving water quality by examining native plants and macroinvertebrates. Students will get to meet a threatened species from the nature center that relies on wetland habitats to survive. We will also discuss the threat of invasive species and conservation efforts to control these threats.

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.

### 3<sup>RD</sup> GRADE – 6<sup>TH</sup> 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.

This program includes a *Travelling Trunk* with activities, supplies, and related artifacts that can be reserved at the time of program registration. The trunk will be delivered to your school, at a designated date, in advance of your program.

Please register by 734-441-6639 or emailing justin.smith@metroparks.com.

#### **Farm Animal Tour**

Kensington Metropark 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 January 2021)

Kensington Metropark 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. 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.

This program includes a *Travelling Trunk* with activities, supplies, and related artifacts that can be reserved at the time of program registration. The trunk will be delivered to your school, at a designated date, in advance of your program.

Please register by 734-441-6639 or emailing justin.smith@metroparks.com.

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

#### **Ecosystem Investigation - (Available beginning November 2020)**

Indian Springs Metropark Grades: 4<sup>th</sup> - 12<sup>th</sup> Program Type: Synchronous – Live presentation or in-person at school Asynchronous – Introduction and Ecosystem Exploration Program Length: 1 - 1 ½ hours

Explore the ecosystems of Indian Springs Metropark, including prairie, forest and wetlands. This program includes an introduction, and three video visits where students will compare and contrast park ecosystems using science tools to collect data about each. Students will measure air temperature, humidity, wind speed, light intensity, sound level and identify plants and animals in the area to develop a better appreciation for the diversity of ecosystems in Southeast Michigan.

This program includes a *Travelling Trunk* with activities, supplies, and related artifacts that can be reserved at the time of program registration. The trunk will be delivered to your school, at a designated date, in advance of your program.

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

### Wetland Ecosystem Comparison, Exploring Wetlands (Available beginning March 2021)

Indian Springs Metropark Grades: 4<sup>th</sup> – 12<sup>th</sup> Program Type: Synchronous – Live investigation or in-person at school Asynchronous – Preprogram and post-program videos Program Length: 1 hour total

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.

#### Water Quality Investigation (Available beginning December 2020)

Indian Springs Metropark Grades: 6<sup>th</sup> - 12<sup>th</sup> Program Type:

Synchronous – Live presentations, interpreter-led water quality testing at school (55 minutes)

Asynchronous – Preprogram and post program videos, teacher-led schoolyard water quality testing (30 minutes)

Program Length: 1 <sup>1</sup>/<sub>2</sub> hour

This program provides hands-on water quality investigation for students. They will be able to measure water quality parameters at a body of water near their school or on pond water provided by the Metroparks.

The virtual visits will be augmented by borrowing a Traveling Trunk containing water quality testing supplies. Teachers may select to have an interpreter visit the schoolyard to lead water quality assessment or may lead the water quality testing on their own.

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



