

PROTECT · CONSERVE · CONNECT



GEAUGA PARK  
DISTRICT

# Environmental Education 2011-12

**Opportunities for Schools and Youth Groups**

Field trip transportation funding available (see page 4)



**Richard Louv's book *Last Child in the Woods* has launched a nationwide revolution - a war in which the weapons are simple (trees, tadpoles, soil, sky, wetlands, woods) but the goal is monumental: reconnecting children with nature.**

Studies verify that schools using outdoor classrooms and other forms of experimental education enjoy significant student gains in cognitive skills, problem solving and motivation to learn.

With a remarkable diversity of natural habitats and wildlife and a skilled staff of naturalists and trained volunteers, Geauga Park District offers ideal programs and sites for outdoor learning experiences to enhance or support your school curriculum or youth programming. These educational opportunities are designed to further academic goals while nurturing a sense of wonder and stewardship for the earth.

All introduce or reinforce Grade Level Indicators in the Ohio Academic Content Standards for Science. For detailed descriptions of these, visit [www.ode.state.oh.us](http://www.ode.state.oh.us).

## Program Options at a Glance

### IN THE PARKS

Season	Program Title	Page #	K	1	2	3	4	5	6	MS	HS
F	Exploring Autumn	5	x	x	x						
W	Wonders of Winter	6	x	x	x						
Sp	Spring Things	6	x	x	x						
F/Sp	Woodland Ecology	6				x	x	x	x	x	x
F/Sp	Peering into the Pond	6				x		x		x	x
F/Sp	Pondlife Primer	7	x	x	x						
F/Sp	Habitat Hide & Seek	7	x	x	x						
F/W/Sp	Gauga Geology Rocks	7				x	x		x	x	x
F/W/Sp	Wetlands & Watersheds	8					x	x		x	
Sept.	Monarch Tagging	8			x	x	x	x	x	x	x
March	Maple Sugaring	9	x	x	x	x	x	x			

### VISITING NATURALIST PROGRAMS

Season	Program Title	Page #	K	1	2	3	4	5	6	MS	HS
Sp	Amphibian Awakenings	10	x	x	x	x	x	x	x	x	x
F/W/Sp	Feathers & Feet, Nests & Beaks	11	x	x	x	x					
F/W/Sp	Gauga History: Written in Rock	11				x	x		x	x	
F/W/Sp	Gauga Wildlife Past & Present	12		x	x	x	x	x	x	x	x
F/W/Sp	Insect Extravaganza	12	x	x	x	x	x	x			
Sept	Monarchs on the Move	13	x	x	x	x	x	x	x	x	x
F/W/Sp	Scat, Tracks & Mammal Facts	13	x	x	x	x	x	x	x	x	x
F/W/Sp	Wildlife Detectives	14	x	x	x	x	x	x		x	
F/W/Sp	Weather Wizardry	14		x	x		x	x	x	x	x

### NATURE SCOPES

Season	Program Title	Page #	K	1	2	3	4	5	6	MS	HS
F/W/Sp	Nature Scopes	15						x			

Don't see it in the list? Call to discuss special requests with our naturalist staff.

# Scheduling

- Call Geauga Park District at 440-279-0894 during weekday business hours (8:30 am to 4:30 pm) to schedule your field trip or visiting naturalist program.
- Plan ahead. A minimum of 3 weeks' advance notice is required for reservations, but popular months (October, April & May) fill early. Please submit requests for Foundation field trip funding (see page 4) at least one month in advance.
- Programs are offered during daytime hours Tuesday through Thursday with limited Saturday availability. Each class/group is limited to a maximum of 4 programs per year.
- Group size is generally limited to 60 but may vary with staff availability.
- Precedence is given to Geauga County schools/groups, which attend at no charge. Outside groups are invited to inquire about availability and fees for field trips. (Visiting naturalist programs are reserved for those in Geauga County only.)
- When calling for reservations, be prepared with:
  - Program Title/Focus
  - Date/Time (& Alternatives)
  - Grade and # of Students
  - Name(s) of Participating Teachers
  - School Address and Phone #
  - Special Arrangements

## Notes

- **TEACHER PACKETS** will be sent for outdoor programs. Packets include:
  - Program confirmation
  - Program flyer with description, pre- & post-trip activity ideas, objectives and guidelines for your visit.
  - Academic Standards
- Many programs can be modified to accommodate **SPECIAL NEEDS** and abilities. Please bring these to our attention when scheduling.
- **SPECIAL REQUESTS:** If our suggested list doesn't match your educational objectives, call to discuss modifications or special curriculum needs that can be addressed with sufficient notice.
- **SELF-GUIDED** groups are welcome. Please contact the Park Office in advance to avoid conflict with other park activities.
- **COLLECTING** is not allowed. However, in special situations a permit can be issued if applied for at least 2 weeks prior to your program date.
- **Reservable PICNIC SHELTERS** are available in most parks. Please inquire when scheduling your program.
- **COMING SOON:** Observatory Park in Montville Township will feature educational adventures from the ground to the galaxies beginning Spring of 2012!

Many programs can be conducted at more than one location. A list of parks follows each program description.

- **BLR** - Beartown Lakes Reservation
- **BBMP** - Bessie Benner Metzenbaum Park
- **BC** - Big Creek Park
- **CP** - Chickagami Park
- **ERP** - Eldon Russell Park
- **FM** - Frohring Meadows
- **HP** - Headwaters Park
- **TR** - The Rookery
- **SP** - Sunnybrook Preserve
- **SCR** - Swine Creek Reservation
- **WCBP** - Walter C. Best Preserve
- **TWW** - The West Woods

*(See map on back cover for reference.)*

# Support & Funding Available

GEAUGA PARK  
DISTRICT  
FOUNDATION



Dear School Administrators and Teachers,

The Geauga Park District Foundation, a 501(C)3 supporting organization of Geauga Park District, is committed to helping you bring your students out of the classroom for hands-on education in the natural world, which is designed to enhance science education in Geauga County. Over the past few years, the Foundation has increased our support of nature education by underwriting special programs and transportation costs.

## *Transportation Scholarships*

Through the Foundation, transportation funding is available to in-county schools for field trips to Geauga Park District facilities on a first-come, first-served basis. Please limit your requests to one field trip per grade level per fiscal year (January - December).

After making your field trip arrangements, simply fax, email or mail us the application found at [www.geaugaparkdistrict.org](http://www.geaugaparkdistrict.org) by clicking on Find a Program/Event, then Field Trip Funding Application.

Requests for funding **must be submitted at least one month in advance of the scheduled field trip**. For questions about field trip funding contact Emilie Gottsegen, development officer, at 440-279-0835 or [egottsegen@geaugaparkdistrict.org](mailto:egottsegen@geaugaparkdistrict.org).

## *Geauga Park District's Nature Scopes program*

Since 2004, the Foundation has supported the development of a unique nature education opportunity for 5th-grade students called Nature Scopes. By equipping each student with his or her own Bushnell binoculars and field guides (provided through Foundation fundraising), the year-long program seeks to inspire a new generation of conservationists by making nature education local and personal. See page 15 for more details and to learn how to request this award-winning program for your 5th-grade students.

Geauga Park District is here to provide the highest quality nature education for your students, and the Geauga Park District Foundation wants to assist schools who do not have the funding to participate. Visit [www.geaugaparkdistrict.org](http://www.geaugaparkdistrict.org) to learn more about the Foundation or make a tax-deductible contribution today.

Yours for the sake of nature education,  
The Geauga Park District Foundation Trustees

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## SIGNS OF THE SEASONS WALKS

The senses enliven learning as students explore annual episodes of plant and animal life cycles and weather conditions that characterize the seasons.

Pre-K - 2nd grade

### Exploring Autumn

Students explore fall color, seed dispersal, fungus, insect activity, migration and animal preparations for winter through the use of their senses in this seasonal offering.

**Late Sept. - Nov. Length: 1 hr**

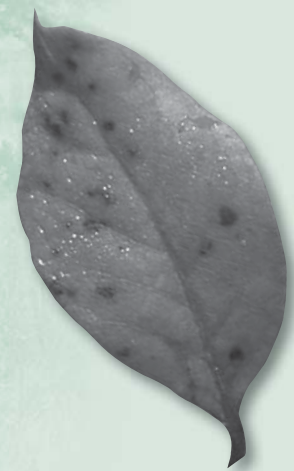
**Locations: BLR, BBMP, BC, CP, ERP, FM, HP, TR, SP, SCR, TWW**

**K** Earth & Space Sciences: 1, 2, 3, 4, 5  
Life Sciences: 1, 3, 5, 6  
Scientific Inquiry: 4, 5  
Scientific Ways of Knowing: 1, 3

**1st** Earth & Space Sciences: 3  
Life Sciences: 4, 5  
Physical Science: 8  
Scientific Inquiry: 1

**2nd** Earth & Space Sciences: 4  
Life Sciences: 5, 7, 8, 9  
Scientific Inquiry: 2, 5

# Nature Education in the Parks



# SIGNS OF THE SEASONS

## WALKS (CONTINUED)

### Wonders of Winter

Students investigate animal tracks and signs, plant and animal survival strategies, and the nature of snow and ice. An indoor component can be added for severe weather conditions.

**Dec. - Feb.** Length: 1 hr

**Locations:** BLR, BBMP, BC, CP, ERP, FM, HP, TR, SP, SCR, TWW

K Earth & Space Sciences: 1, 2, 3, 4, 5  
Life Sciences: 1, 5, 6  
Scientific Inquiry: 4, 5  
Scientific Ways of Knowing: 1, 3

1st Earth & Space Sciences: 3  
Life Sciences: 4, 5  
Physical Science: 2, 3, 8  
Scientific Inquiry: 1

2nd Earth & Space Sciences: 4  
Life Sciences: 5, 7, 8, 9  
Scientific Inquiry: 2, 5

### Spring Things

Through the use of their senses, students explore the reappearance and renewal of plant and animal life cycles including tree budding, wildflowers, reptile and amphibian activity, bird migration and nesting behavior.

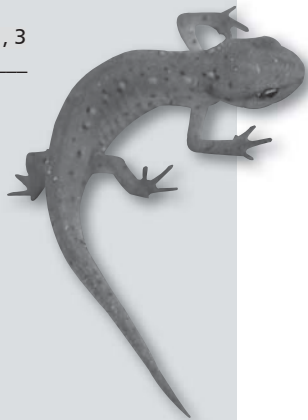
**April - early June** Length: 1 hr

**Locations:** BLR, BBMP, BC, CP, ERP, FM, HP, TR, SP, SCR, TWW

K Earth & Space Sciences: 1, 2, 3, 4, 5  
Life Sciences: 1, 3, 5, 6  
Scientific Inquiry: 4, 5  
Scientific Ways of Knowing: 1, 3

1st Earth & Space Sciences: 3  
Life Sciences: 4, 5  
Physical Sciences: 8  
Scientific Inquiry: 1

2nd Earth & Space Sciences: 4  
Life Sciences: 5, 7, 8, 9  
Scientific Inquiry: 2, 5



### Woodland Ecology

**3rd grade and up**

The forest is presented as a multi-layered ecosystem with niches for a diversity of wildlife residents that are introduced by sight, sound and sign. Mystery boxes contain wildlife cards used to assemble forest food webs. This activity defines plant and animal inter-relationships and the flow of sun energy through the forest ecosystem.

**April - Nov.** Length: 2 hrs

**Locations:** BBMP, BLR, BC, HP, SP, SCR, TWW

3rd Earth and Space Sciences: 4, 5, 6  
Life Sciences: 1, 2, 3, 6  
Scientific Inquiry: 6

4th Life Sciences: 5

5th Life Sciences: 1, 2, 3, 4, 5, 6

6th Life Sciences: 8

7th Life Sciences: 1, 2, 3, 5, 8

### Peering into the Pond

**3rd grade and up**

After the pond's plant and animal life zones are defined, students use strainers to collect, classify and examine a wide variety of small pond creatures. A video magnifier displays the special adaptations small insects have for survival in an aquatic environment. The video microscope takes students on a voyage through the micro-organism menagerie found in a drop of pond water. The ecological concept of energy flow is related using food pyramid models that stress the fundamental role of micro-organisms in the pond community.

**April - Nov.** Length: 2 hrs

**Locations:** BC, SCR

3rd Life Sciences: 1, 2, 3, 6  
Scientific Inquiry: 4, 6

5th Life Sciences: 1, 2, 3, 4, 5, 6  
Scientific Inquiry: 1, 2,

7h Life Sciences: 1, 2, 3, 5, 8  
Scientific Inquiry: 4

8th Life Sciences: 3  
Scientific Inquiry: 1, 3

# EXPLORING NATURAL COMMUNITIES

## Pondlife Primer

Preschool - 2nd grade

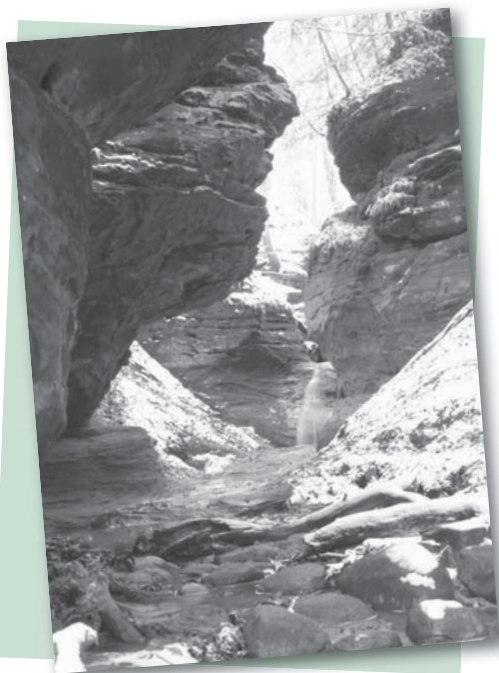
This pond program is adapted to the younger student. Plant and animal life zones, which characterize the pond as wildlife habitat, are defined. Students use strainers to collect, classify and examine the "mini-monsters" of the pond. An amusing dress-up demonstration highlights special adaptations aquatic animals use for living in water.

**April - Nov.** Length: 1 1/2 hrs  
**Locations:** BLR, BC, SCR

K Earth & Space Sciences: 2, 3  
Life Sciences: 1, 3, 5, 6  
Physical Sciences: 3, 4  
Scientific Inquiry: 1, 3, 7  
Scientific Ways of Knowing: 1, 3

1st Earth & Space Sciences: 1, 3  
Life Sciences: 1, 3, 4, 5  
Physical Sciences: 1  
Science & Technology: 2  
Scientific Inquiry: 1, 3, 4, 5, 6, 9

2nd Life Sciences: 1, 2, 3, 4, 5, 6, 7, 8  
Scientific Inquiry: 2, 4, 5, 7, 9, 10  
Scientific Way Knowing: 4



## Habitat Hide & Seek

Kindergarten - 2nd grade

The basic needs of food, water, shelter and space are emphasized as students compare meadow, forest and wetland as homes and habitat for a variety of insects and small invertebrates encountered as they roll logs, sweep nets, shake trees, dip strainers, etc. As secret hiding places are revealed, their discoveries are used to complete a big bingo board to emphasize the diversity of life found in these ecosystems.

**May - Oct.** Length: 1 1/2 hrs  
**Locations:** BLR, BC, SP, SCR, TWW

K Earth & Space Sciences: 2, 3  
Life Sciences: 1, 3, 5, 6  
Scientific Inquiry: 1, 3, 7  
Scientific Ways of Knowing: 1, 3

1st Earth & Space Sciences: 1, 3  
Life Sciences: 1, 3, 4, 5  
Physical Sciences: 1  
Science & Technology: 2  
Scientific Inquiry: 1, 3, 4, 5, 6

2nd Life Sciences: 1, 2, 3, 4, 5, 6, 7, 8  
Scientific Inquiry: 2, 5, 7, 10

## Geauga Geology Rocks

3rd grade and up

Utilizing the Nature Center exhibits, a stream table, Lego blocks, clay, sand, water and real rock samples, students in this hands-on program discover the types of rock layers and fossils found in Geauga County and how they were formed. An optional 1 1/2-mile hike to Ansel's Cave offers views of a magnificent rock outcropping. Maximum 50-60 students (2 classes) at a time.

**Year-round** Length: 1 1/2 - 2 1/2 hrs  
**Location:** TWW

3rd Earth & Space Sciences: 1, 2, 3, 4, 5, 6  
Life Sciences: 4, 5  
Physical Sciences: 1

4th Earth & Space Sciences: 8, 9, 10  
Life Science: 4

6th Earth & Space Sciences: 1, 2

8th Earth & Space Sciences: 13, 14  
Life Science: 5

# EXPLORING NATURAL COMMUNITIES (CONTINUED)

## Wetlands & Watersheds

4th grade and up

Where does water come from and where does it go? After an introduction to the water cycle and watersheds of Geauga County utilizing the Nature Center exhibits, students head outdoors to explore several types of wetland habitats with hands-on activities along the trail. A visit to the green roof building and other green features relates environmentally friendly technology. An Enviroscope model graphically demonstrates sources of pollution in wetlands and streams. Maximum 50-60 students (2 classes) at a time.

April - Nov.

Length: 2 hrs

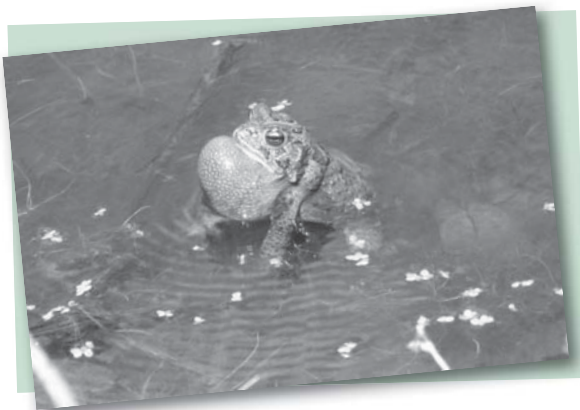
Location: TWW

4th Earth & Space Sciences: 2, 3  
Life Sciences: 5  
Scientific Inquiry: 3, 4

5th Earth & Space Sciences: 6  
Life Sciences: 4, 5, 6  
Science & Technology: 1, 2, 3  
Scientific Inquiry: 1, 4, 6

7th Earth & Space Sciences: 3, 4  
Life Sciences: 3, 5, 8  
Science & Technology: 2  
Scientific Inquiry: 4

8th Life Sciences: 3  
Science & Technology: 2, 4  
Scientific Inquiry: 2, 3



## Monarchs & More

2nd grade and up

Participate in Monarch Watch's international study of the monarch butterfly's transcontinental migration to Mexico. A review of the monarch's life cycle precedes a venture into the meadow to net butterflies for tagging and to tally other discoveries. The Monarch Migration Game dramatizes the harrowing nature of this amazing journey. Success lies in your ability to schedule your trip for September.

Mid-Sept.

Length: 1 1/2 hrs

Location: SCR (2 classes - 2 hr min)

2nd Life Sciences: 1, 2, 3, 4, 5, 6, 7, 8, 9  
Scientific Inquiry: 2, 4, 5, 6, 7  
Scientific Ways of Knowing: 2, 4

3rd Life Sciences: 1, 2, 3, 6  
Science & Technology: 2  
Scientific Inquiry: 2, 5, 6  
Scientific Ways of Knowing: 2

4th Life Sciences: 5  
Scientific Inquiry: 2  
Scientific Ways of Knowing: 2, 4

5th Life Sciences: 4, 5, 6  
Science and Technology: 1, 3  
Scientific Inquiry: 1, 2, 3, 6  
Scientific Ways of Knowing: 1, 3, 5

6th Life Sciences: 4, 8  
Science & Technology: 2  
Scientific Inquiry: 2  
Scientific Ways of Knowing: 2

## SEASONAL HIGHLIGHTS

### Maple Sugaring

#### All ages

Ancient Woodland Indian, pioneer and modern methods of syrup making are demonstrated with hands-on activities as a special relationship between people and forests. Students provide "horsepower" as they pull a sled from tree to tree, emptying small buckets of sap into a tank. Tour the sugarhouse and sample syrup during this award-winning program.

**March**                      **Length: 1 1/2 hrs**  
**Location: SCR**

#### Science

K     Earth & Space Sciences: 4, 5  
      Physical Sciences: 2  
      Science and Technology: 3  
      Scientific Ways of Knowing: 3  
      Inquiry: 1

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1st   Earth & Space Sciences: 1, 2  
      Life Science: 2, 5  
      Physical Science: 2, 3, 4, 8  
      Science and Technology: 1, 4, 6  
      Scientific Inquiry: 1

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2nd   Earth & Space Sciences: 4  
      Life Sciences: 9  
      Science & Technology: 1, 2, 3  
      Scientific inquiry: 2, 7

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3rd   Science & Technology: 1, 2, 3

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4th   Earth & Space Sciences: 3  
      Life Sciences: 2  
      Physical Science: 1, 3, 4, 5  
      Science and Technology: 2  
      Scientific Inquiry: 2, 3

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5th   Earth & Space Sciences: 6  
      Science & Technology: 1  
      Scientific Ways of Knowing: 1



#### Social Studies

K     History: 2  
      Economics: 3  
      Social Studies Skills and Methods: 3

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1st   History: 3, 4, 5  
      Geography: 7  
      Economics: 2  
      Social Studies Skills and Methods: 2

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2nd   History: 5, 6  
      Economics: 1, 2, 3  
      Social Studies Skills and Methods: 4

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3rd   History: 1  
      Geography: 7  
      Economics: 3

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4th   History: 2  
      People in Societies: 1  
      Geography: 6, 8, 9  
      Economics: 2, 5

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5th   Economics:

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6th   History: 3  
      People in Societies: 1  
      Geography: 7

Unable to schedule a field trip?  
Geauga Park District has environmental education programs that can be brought to your facility to address academic content standards.

Programs may be scheduled on Tuesdays, Wednesdays or Thursdays. They are limited to afternoons during May, September and October.

The naturalist staff also welcomes inquiries and is willing to discuss alternate topics to better suit your curriculum needs.

## Amphibian Awakening

### K and up

Warm evening rains draw salamanders, frogs and toads out of hibernation to begin their annual courtship. Using slides, calls and live specimens, students discover the habits and habitats, adaptations and life cycles of these captivating creatures.

**April - June**                      **Length: 45 min.**

K	Life Sciences: 3, 4, 5, 6 Scientific Ways of Knowing: 3
1st	Life Sciences: 1, 3, 4, 5 Scientific Inquiry: 1
2nd	Life Sciences: 1, 2, 3, 4, 5, 6, 7, 8 Scientific Inquiry: 2
3rd	Life Sciences: 1, 2, 3, 6
4th	Life Sciences: 5
5th	Earth and Space Sciences: 6 Life Sciences: 3, 4, 5 Science and Technology: 1 Scientific Ways of Knowing: 4
6th	Life Sciences: 8 Science and Technology: 2
7th	Life Sciences: 1, 3, 5, 8 Science and Technology: 2
8th	Life Sciences: 3

# Visiting Naturalist Programs

## Feathers & Feet, Nests & Beaks

### K and up

What makes a bird a bird? Pellets, feathers, nests and other avian artifacts are shared as adaptations for survival in this hands-on program, which concludes with a “build-a-bird” activity that shows how birds of prey are ecologically dressed for success as hunters.

Sept. - June

Length: 45 min.

K Earth and Space Sciences: 2  
Life Sciences: 3, 4, 5, 6,  
Scientific Ways of Knowing: 3

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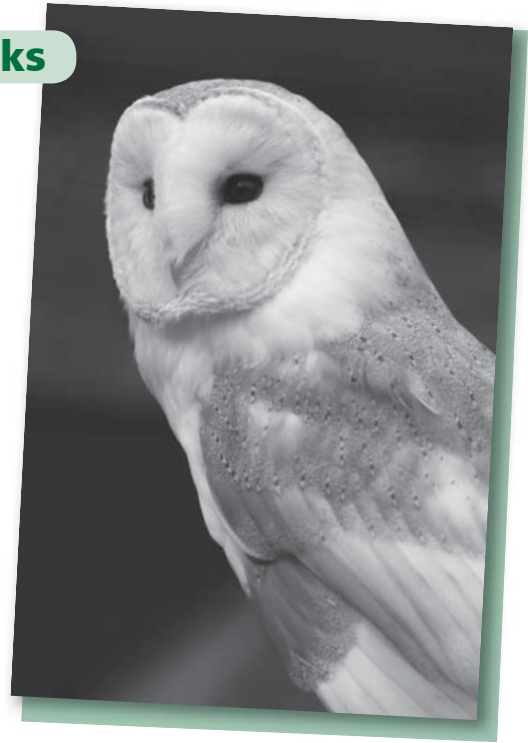
1st Earth and Space Sciences: 3  
Life Sciences: 1, 3, 4, 5

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2nd Life Sciences: 2, 3, 4, 6, 7, 8

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3rd Life Sciences: 2, 3, 6



## Geauga's History: Written in Rock

### 3rd grade and up

From 400 million years ago when Geauga County was covered by a vast sea, to 14,000 years ago when giant animals roamed the edges of ice sheets that covered the land, local history is written in rock. Enjoy a video featuring how Geauga County's landscape was formed, followed by a hands-on session with local rocks and fossils. Requires TV or video monitor and VCR.

Sept. - June

Length: 45 min.

3rd Earth & Space Sciences: 1, 2, 3, 4, 5  
Life Sciences: 4, 5  
Physical Sciences: 1

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4th Earth and Space Sciences: 8, 9, 10  
Life Sciences: 4

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6th Earth and Space Sciences: 1, 2

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8th Earth and Space Sciences: 13, 14  
Life Sciences: 5



## VISITING NATURALIST PROGRAMS (CONTINUED)

### Geauga's Wildlife: Past & Present

1st grade and up

Many animals that vanished from Ohio long ago (beaver, deer, wild turkey, bear, otter, bald eagle and sandhill cranes) are making a comeback in Northeastern Ohio! Others, such as barn owls and bobolinks, that thrived on pre-WWII farmlands are vanishing populations. Examine the ever-changing landscape and its effects on wildlife.

Sept. - June

Length: 45 min.

1st Earth and Space Sciences: 3  
Life Sciences: 1, 3  
Scientific Inquiry: 1

2nd Life Sciences: 2, 3, 5, 7, 8  
Science and Technology: 1, 3  
Scientific Inquiry: 2

3rd Life Sciences: 6  
Science and Technology: 2

4th Life Sciences: 5

5th Earth and Space Sciences: 6  
Life Sciences: 2, 4, 5, 6  
Science and Technology: 1

6th Life Sciences: 8  
Science and Technology: 2

7th Life Sciences: 2, 3, 4, 5, 6  
Science and Technology: 2

8th Life Sciences: 3, 5  
Science and Technology: 2



### Insect Extravaganza

All ages

By land, sea and air, insects are everywhere! Using props and costume, discover the world of insects and other "bugs" all around us. Learn which ones we can't live without and about some of their unusual body parts and varying life cycles.

Sept. - June

Length: 45 min.

K Earth and Space Sciences: 2, 3  
Life Sciences: 3, 5, 6  
Physical Sciences: 1, 3  
Scientific Inquiry: 1  
Scientific Ways of Knowing: 3

1st Earth and Space Sciences: 3  
Life Sciences: 3, 4, 5  
Scientific Inquiry: 1

2nd Life Sciences: 2, 3, 6, 7, 8  
Scientific Inquiry: 2

3rd Life Sciences: 1, 2, 3, 6

4th Life Sciences: 5

5th Life Sciences: 4, 5, 6



## Scat, Tracks & Other Mammal Facts

### All ages

What mammals are lurking in your backyard? Many leave tell-tale signs of their presence. Discover the diversity of mammals that call Geauga County home and what makes one mammal different from others, and test your knowledge of animal signs by taking the "scat" quiz.

### Sept. - June

Length: 45 min.

- |       |  |
|-------|--|
| K     | Earth and Space Sciences: 2<br>Life Sciences: 2, 3, 4, 5, 6<br>Scientific Inquiry: 1, 4, 7<br>Scientific Ways of Knowing: 1, 3 |
| <hr/> |  |
| 1st   | Earth and Space Sciences: 3<br>Life Sciences: 1, 3, 4, 5<br>Scientific Inquiry: 1, 6<br>Scientific Ways of Knowing: 2          |
| <hr/> |  |
| 2nd   | Life Sciences: 1, 2, 3, 4, 5, 6, 7, 8<br>Scientific Inquiry: 2, 5, 6, 10   |
| <hr/> |  |
| 3rd   | Life Sciences: 1, 2, 3, 6<br>Science and Technology: 2<br>Scientific Inquiry: 2  |
| <hr/> |  |
| 4th   | Life Sciences: 5<br>Scientific Ways of Knowing: 1, 4   |
| <hr/> |  |
| 5th   | Life Sciences: 3, 4, 5, 6<br>Science and Technology: 1<br>Scientific Inquiry: 3<br>Scientific Ways of Knowing: 1               |
| <hr/> |  |
| 6th   | Life Sciences: 8<br>Scientific Inquiry: 3<br>Scientific Ways of Knowing: 2   |
| <hr/> |  |
| 7th   | Life Sciences: 1, 2, 3, 4, 8   |
| <hr/> |  |
| 8th   | Life Sciences: 5<br>Scientific Ways of Knowing: 2  |



## Monarchs on the Move

### All ages

Unique among butterflies, the monarch is one of the few insects that migrate south for the winter. This illustrated program shows about the monarch butterfly's life cycle and how tagging them helps scientists learn more about their amazing migration to Mexico. A tagging demonstration follows if live specimens are available.

### Sept.

Length: 35-45 min.

- |       |  |
|-------|--|
| K     | Earth and Space Sciences: 3<br>Life Sciences: 3, 4, 5, 6<br>Scientific Inquiry: 1<br>Scientific Ways of Knowing: 3           |
| <hr/> |  |
| 1st   | Earth and Space Sciences: 3<br>Life Sciences: 3, 4, 5<br>Scientific Inquiry: 1<br>Scientific Ways of Knowing: 1, 2           |
| <hr/> |  |
| 2nd   | Life Sciences: 2, 3, 4, 5, 6, 7, 8, 9<br>Scientific Inquiry: 2, 5, 6<br>Scientific Ways of Knowing: 4                        |
| <hr/> |  |
| 3rd   | Life Sciences: 1, 2, 3, 6<br>Science and Technology: 2<br>Scientific Inquiry: 2, 5, 6<br>Scientific Ways of Knowing: 2       |
| <hr/> |  |
| 4th   | Life Sciences: 5<br>Scientific Inquiry: 2<br>Scientific Ways of Knowing: 2, 4  |
| <hr/> |  |
| 5th   | Life Sciences: 2, 4, 5, 6<br>Science and Technology: 1, 3<br>Scientific Inquiry: 2, 3<br>Scientific Ways of Knowing: 1, 3, 5 |
| <hr/> |  |
| 6th   | Life Sciences: 4, 8<br>Science and Technology: 2<br>Scientific Ways of Knowing: 2  |
| <hr/> |  |
| 7th   | Life Sciences: 3, 5<br>Science and Technology: 1, 2  |

## VISITING NATURALIST PROGRAMS *(CONTINUED)*

### Wildlife Detectives

**K - 7th grade**

A fascinating program which introduces various types of wildlife evidence (tracks, droppings, nests, shed and molted material and meal remains) as clues that reveal animal presence and activity. This program includes an illustrated presentation supplemented by natural artifacts to handle and match with corresponding pictures.

**Sept. - June**                      **Length: 45 min.**

**K**      Earth and Space Sciences: 2, 3  
Life Sciences: 1, 5, 6  
Scientific Inquiry: 1

**1st**    Earth and Space Science: 3  
Life Sciences: 3, 4, 5  
Scientific Inquiry: 1  
Scientific Ways of Knowing: 2

**2nd**    Life Sciences: 2, 6, 7, 8  
Scientific Inquiry: 2, 5, 6, 10

**3rd**    Life Sciences: 2, 3

**4th**    Life Sciences: 5

**5th**    Life Sciences: 5, 6  
Scientific Inquiry: 3

**7th**    Life Sciences: 1, 8  
Scientific Inquiry: 5, 6



### Weather Wizardry

**K and up**

Weather is the one element in nature guaranteed to be seen, felt and sensed no matter what time of year it is! A trunk of tricks helps show the secrets of rain, tornados, clouds and more through fun, interactive experiments and games that introduce weather concepts through simple science techniques.

**Sept. - June**                      **Length: 45 min.**

**1st**    Physical Sciences: 2, 3, 4, 6, 8  
Scientific Inquiry: 1, 5, 6  
Scientific Ways of Knowing: 2

**2nd**    Earth and Space Sciences: 4, 5  
Physical Sciences: 1  
Scientific Inquiry: 2, 5, 6, 7, 8, 10  
Scientific Ways of Knowing: 1

**4th**    Earth and Space Sciences: 1, 2, 3, 4, 6, 7  
Physical Sciences: 1, 4, 5  
Science and Technology: 2  
Scientific Inquiry: 1, 2, 3  
Scientific Ways of Knowing: 1

**5th**    Earth and Space Sciences: 1, 3  
Physical Sciences: 1  
Scientific Inquiry: 1  
Scientific Ways of Knowing: 6

**6th**    Physical Sciences: 3, 4, 6, 7  
Scientific Inquiry: 2  
Scientific Ways of Knowing: 3

**7th**    Earth and Space Sciences: 1, 2, 3, 5, 6, 7, 8, 9  
Scientific Inquiry: 4, 6

Geauga Park District's *Nature Scopes* environmental education program was established in 2003 as an answer to research which shows that close encounters with nature have greater impact on student learning than classroom discussion or viewing photos in textbooks.

## Nature Scopes

Registered Geauga County 5th-grade classes receive a total of six interactive sessions, five of which involve outdoor exploration. Using Bushnell binoculars and field guides, the year-long program seeks to inspire a new generation of conservationists. *Nature Scopes* concludes in May with a field day, when students graduate from the program and are awarded their own binoculars and field guides.

### Program Goals

Geauga Park District's *Nature Scopes* program is designed to:

- Supplement school science instruction by providing hands-on lessons matched to the Ohio Science Standards for 5th grade.
- Provide tools and skills that increase students' life-long enthusiasm for and appreciation of the natural world.
- Connect professional naturalists and trained volunteers with students throughout the school year to provide experiential nature study in a wide variety of natural habitats.

### Sept. - June

5th Earth and Space Sciences: 1, 2, 4  
Life Sciences: 1, 3, 4, 5, 6  
Physical Sciences: 5  
Scientific Inquiry: 1, 2, 3  
Scientific Ways of Knowing: 4, 5

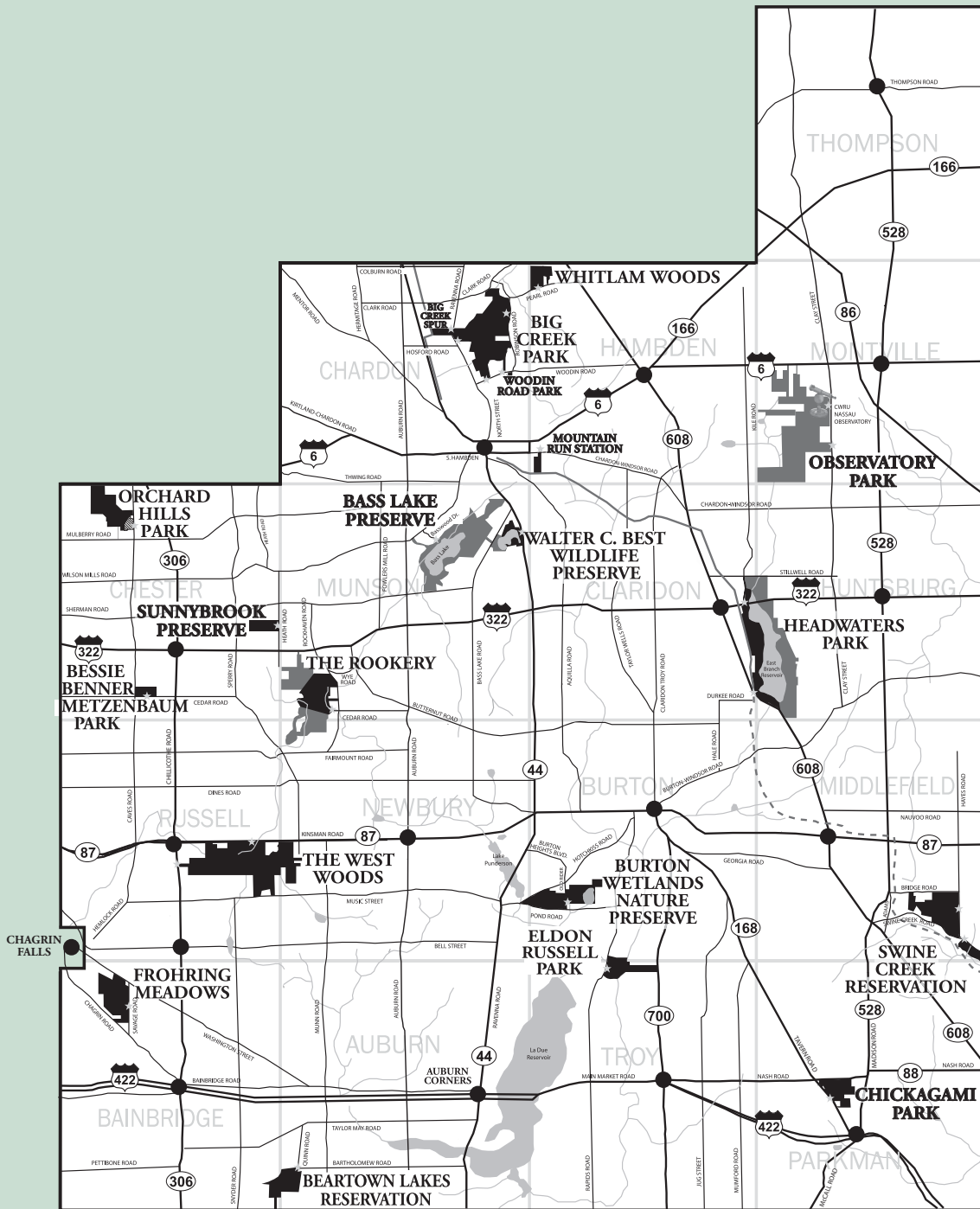
*"I think that the Nature Scopes program was really neat! I didn't really know how to use binoculars except that you look through them and turn the knob to focus. Now I know the three L's: Look, Lock and Lift. I never knew that they could be used as a microscope, either."*

Jacob, St. Helen's School



# Nature Scopes

Call Barb Emch at 440-279-0823 for more information or to request the *Nature Scopes* program at your school. Requests must be received by May 1 to be included in programming for the next school year.



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