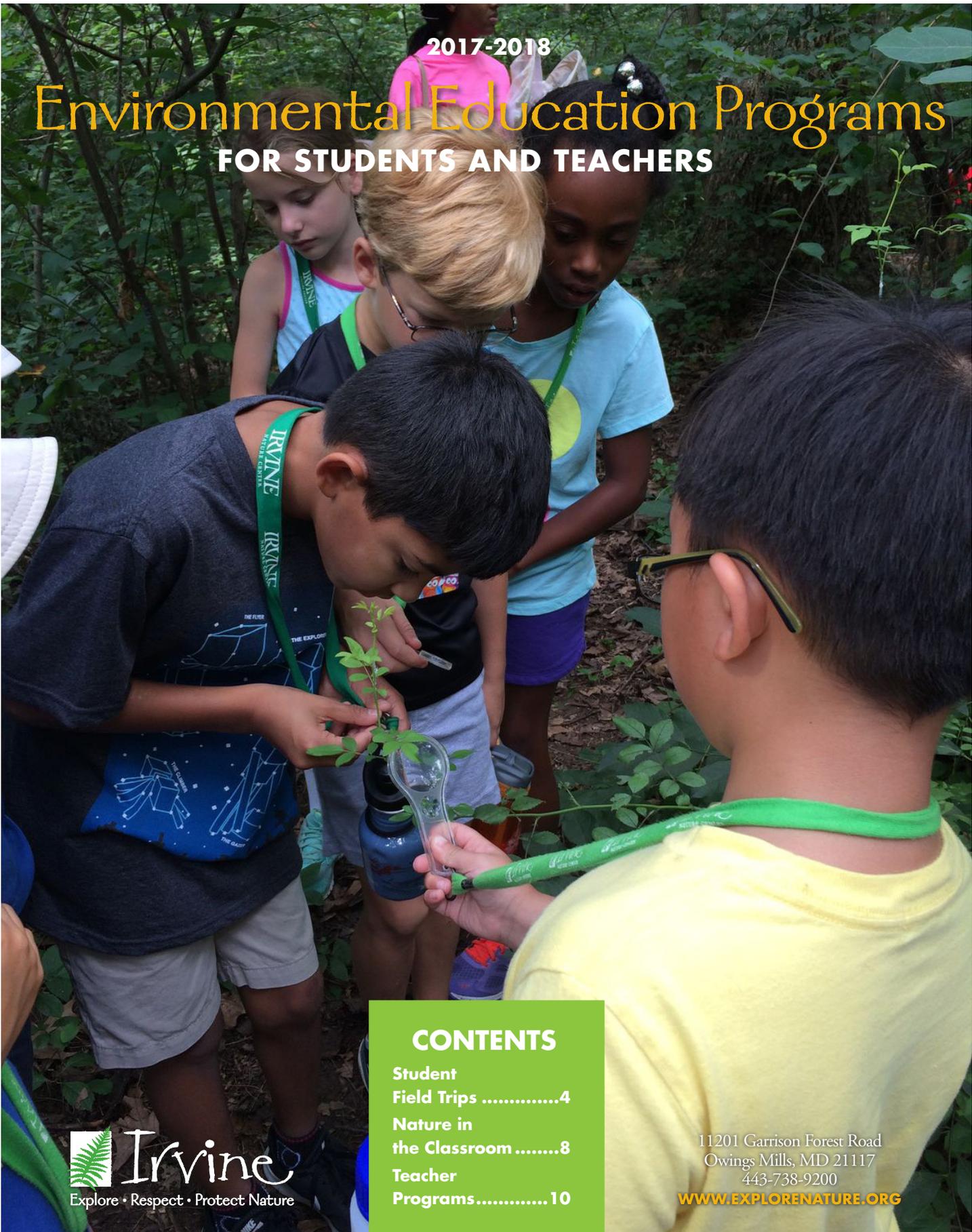


2017-2018

Environmental Education Programs FOR STUDENTS AND TEACHERS



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Irvine

Explore • Respect • Protect Nature

11201 Garrison Forest Road
Owings Mills, MD 21117
443-738-9200

WWW.EXPLORENATURE.ORG



Dear Teachers,

We're so glad you're considering a visit to Irvine Nature Center. We have a wide variety of environmental education programs for students and teachers – including high-quality field trips, engaging classroom presentations and informative teacher workshops.

Our facilities include a green building with classrooms, a certified Outdoor Classroom and an Exhibit Hall with several species of native animals. We are a perfect spot for exploring the outdoors, with 210 acres of forests, meadows, streams and wetlands.

Field trips to Irvine complement Baltimore County and City Public School science curricula, Environmental Literacy Standards, Next Generation Science Standards (NGSS), and are easily adapted to coursework at private schools and neighboring counties. If your class is unable to travel to Irvine, we also offer Nature in the Classroom so that children can interact with nature at your location.

Completed forms can be sent by mail, fax or email. Please see the forms within this brochure. Be sure to let us know if you have thoughts or questions – we look forward to working with you and your school group.

Sincerely,

Robert Mardiney

Robert Mardiney
 Director of Education
 Irvine Nature Center

DID YOU KNOW?

Irvine also offers educational programs for the general public (children, families, adults, scout groups, community organizations).

For information, contact Kimberly at 443-738-9220 or GodackK@ExploreNature.org. You can also visit us online at www.ExploreNature.org for an updated calendar of programs and events.

General Information

FIELD TRIPS

During most trips, students work in small groups to make observations, collect data, compare and classify organisms, and draw conclusions. Students who visit Irvine receive the maximum benefit if the trip is taught as one part of a school unit.

To help enrich the experience, Irvine sends background information and pre/post field trip activity suggestions to teachers. Many of our field trips complement the Baltimore County Public School science curriculum (see table on page 4), Environmental Literacy Standards, and Next Generation Science Standards.

To schedule a trip, complete and return the enclosed registration form as soon as possible. Forms will be processed in the order they are received.

Private School and Home School Groups

In addition to the listed field trip topics, home school groups can contact Irvine to see if programs can be tailored to their specific science curriculum.

Middle School, High School & College Groups

Field trips for middle school, high school and college groups are tailored to the needs of the specific class. Modifications of some trips can be arranged for older age groups and we welcome requests for other topics. Teachers should call Irvine to discuss options.

Special Needs Student Groups

Children with special needs can benefit from brief nature walks and hands-on animal demonstrations either at Irvine or as an outreach program. Call us for details.

Need Help?

Contact Kimberly Godack at 443-738-9220 or GodackK@ExploreNature.org.



ABOUT IRVINE

Established as a non-profit in 1975, Irvine Nature Center is an environmental education organization. Our mission is to educate and inspire current and future generations to explore, respect and protect nature. At Irvine, we guide learning. We live green. We foster respect. And we thrive outdoors.

2017-2018 FIELD TRIP SEASONS

September 8- December 1

January 29-March 9

March 26th- May 25



Field Trips

Irvine offers 10 different field trips for school groups. The descriptions below will help you find the program that works best for your students. All field trips are led by Irvine's team of knowledgeable naturalists.

- To register for a field trip, complete and return the appropriate forms.
- For more information, contact Kimberly Godack at 443-738-9220 or GodackK@ExploreNature.org.

SENSATIONAL SEASONS

Children use all of their senses as they explore the woods, meadows and other habitats surrounding Irvine and the natural events characteristic of the current season. This program complements the Baltimore County kindergarten unit *Checkerspot Challenge*.

Age 4 – K.

Max Group Size: 50
Cost: \$4/student
Length: 2 hours
Timing: Fall & Spring

MAPLE MAGIC

Students learn how to recognize maple trees, how sap moves within trees and how the sap is collected and made into syrup. This program complements many Baltimore County units, including *Checkerspot Challenge (K)*, *Let Us Grow (3)*, and *Turtle Trouble (4)*.

Ages 4 - College.

Max Group Size: 50
Cost: \$4
Length: 2 hours
Timing: February 1- March 3

BEE-LIEVE IT OR NOT

Students will visit Irvine's meadow to observe pollinators up close and in action! They will learn about the important components of an animal's habitat, and how a meadow supports these needs for both butterflies and bees. The connection between pollinators, plants, and people will also be explored. This program

complements the Baltimore County kindergarten unit *Checkerspot Challenge*.

K – 1st grade.

Max Group Size: 50
Cost: \$4/student
Length: 2 hours
Timing: September & October/
April & May

CREATURE FEATURES

Students take to the trails to catch, observe and release a variety of mini-beasts (insects, salamanders, etc.) in different habitats. They will learn how animals survive in the habitats they live in based on their adaptations. An indoor presentation introduces animal adaptations through the use of both live animals and animal artifacts. This program complements the Baltimore County 1st grade unit *Creeper and Creature Features* and 2nd grade unit *Bee an Engineer*.

1st – 2nd grade.

Max Group Size: 50
Cost: \$6/student
Length: 3 hours
Timing: Fall & Spring

WHERE THE WILD THINGS ARE

Students transform into scientists as they investigate the diversity of plants and animals in Irvine's stream, meadow, and forest habitats. Students receive hands on instruction through a station based field trip. This program complements the Baltimore County 2nd grade unit *Bee an Engineer* and the 3rd grade unit *Murray the Mayfly*.

2nd-3rd grade.

Max Group Size: 30
Cost: \$6/student
Length: 3 hours
Timing: Fall & Spring

DECOMPOSITION DETECTIVES

Students learn how energy flows through a food web and how decomposers break down organic material. Students do their own research and draw conclusions about the relationship between the size of earthworm populations and habitat type. Students leave

with data that can be used in the classroom to create charts, graphs and reports, adding a cross-curricular component. This program complements the Baltimore County 3rd grade unit *Murray the Mayfly* and 4th grade unit *Turtle Trouble*.

3rd-4th grade.

Max Group Size: 30
Cost: \$8/student
Length: 4 hours
Timing: Fall & Spring

AQUATIC DISCOVERIES

Students explore Irvine's aquatic habitats in search of the unique plants and animals that live here. By making careful observations of their surroundings and collecting data on water quality and animal life, students analyze the health of these ecosystems. Students also discuss the importance of streams and wetlands and how they contribute to the overall health of the Chesapeake Bay. This program complements the Baltimore County 3rd grade unit *Murray the Mayfly* and 4th grade unit *Turtle Trouble*.

3rd- 8th grade.

Max Group Size: 30
Cost: \$6/student
Length: 3 hours (morning only)
Timing: Fall & Spring

BIRD IS THE WORD

During a walk along Irvine's trails, students conduct a bird census and record observations of behaviors, flight patterns, field marks and habitats. An indoor presentation (featuring both live and stuffed birds, nests and feathers) introduces the unique adaptations of birds in comparison to other vertebrates. Students will also learn the flow of energy through a raptor's diet. This program complements Baltimore County 4th grade unit *Turtle Trouble*.

4th-5th grade.

Max Group Size: 50
Cost: \$6/student
Length: 3 hours (morning only)
Timing: Fall & Spring

PLANTASTIC!

What are the components of photosynthesis? What do plants need to survive? Students will spend the day outdoors constructing a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms.

6th-8th grade.

Max Group Size: 30
 Cost: \$8/student
 Length: 4 hours
 Timing: Fall & Spring

INTRODUCTION TO ENVIRONMENTAL EDUCATION

Discuss how to make science come alive, the effective use of a nature center's resources and how to prepare for a field trip. We'll also experience an outdoor walk involving hands-on, environmental games and activities. Recommended for college majors in natural sciences, education, psychology and other related areas.

College classes.

Max Group Size: 30
 Cost: \$6/student
 Length: 3 hours
 Timing: Fall-Summer

NATIVE AMERICANS OF THE EASTERN WOODLANDS

Coming back in the 2018/2019 school year **new and improved!**

In the meantime, check out Irvine's "Maryland's Native Americans" Nature in the Classroom outreach program.

FIELD TRIP SUMMARY

TRIP NAME	LENGTH (HRS)	COST/STUDENT	MAX # OF STUDENTS	AGE/GRADE	SEASONS OFFERED	BCPS GRADE-CURRICULUM LINK
Sensational Seasons	2	\$4	50	Age 4 – K	fall, spring	K-Checkerspot Challenge
Maple Magic	2	\$4	50	Age 4 – college	Feb.-mid March	K-Checkerspot Challenge 3-Let Us Grow 4-Turtle Trouble
Bee-lieve it or Not!	2	\$4	50	K – 1st	Sept.-Oct. & April-May	K-Checkerspot Challenge
Creature Features*	3	\$6	50	1st – 2nd	fall, spring	1-Creeper and Creature Features 2-Bee an Engineer
Where the Wild Things Are*	3	\$6	50	2nd – 3rd	fall, spring	2-Bee an Engineer 3-Murray the Mayfly
Decomposition Detectives*	4	\$8	30	3rd – 4th	fall, spring	3-Murray the Mayfly 4-Turtle Trouble
Aquatic Discoveries*	3	\$6	30	3rd – 8th	fall, spring	3-Murray the Mayfly 4-Turtle Trouble
Bird is the Word*	3	\$6	50	4th – 5th	fall, spring	4-Turtle Trouble
Plant-astic!*	4	\$8	30	6th – 8th	fall, spring	
Intro to Environmental Ed.*	3	\$6	30	College	fall, spring, summer	

Native Americans of Eastern Woodlands will be offered again in the 2018-2019 school year.

* = field trips include a 30-minute lunch break

Field Trip Registration Procedures

To Schedule An Irvine Field Trip:

- Read the instructions and the entire registration form carefully.
- Complete the registration form in this brochure. More copies of the form can be printed from www.ExploreNature.org.
- Return the form to Irvine as soon as possible by mail, email (GodackK@ExploreNature.org), fax (410-902-8210) or hand delivery. Phone registrations are not accepted.
- Registrations are processed in the order they are received. You will be notified of your field trip status by email.

COMPLETING IRVINE'S REGISTRATION FORMS

- 1 Fill out the top section of the Field Trip Registration Form with school or organization and contact information.
- 2 Complete the chart requesting specific field trip information for each group that you wish to schedule.
- 3 Write your top three field trip date choices on the form.

GROUP SIZE

Irvine can accommodate a maximum of 50 students each morning or afternoon.

Teachers wishing to schedule groups larger than 50 should divide the class into smaller groups and schedule them on different days.

Unfortunately, we cannot accommodate groups of less than 5 students. Groups between 5 and 10 students will be charged for 10 students.

FIELD TRIP PREPARATION

Field trips take place outdoors. Children and adults should dress appropriately for weather conditions. Please be sure that all students have name tags. Irvine provides one leader for each trail group of 10 students. It is helpful if students are broken into trail groups prior to arrival.



CHAPERONES & CARPOOLING

The group should bring a minimum of one – but no more than two – adults for every 10 students. Adults include teachers, teacher aides and parents. There is no charge for accompanying adults. Carpooling is encouraged.

STARTING TIMES

Morning trips usually begin at 10 a.m. and afternoon trips at 12:30 p.m. or later. However, start times are flexible. Please read your field trip description for limitations.

WEATHER CONDITIONS

If Irvine deems weather conditions unsafe, your contact person will be called at least one hour prior to the start of the program.

FIELD TRIP CONFIRMATION

Once your school is scheduled, we will email you a confirmation packet. If we are unable to schedule a field trip, we will call and notify you and place your group on a wait list.

PROGRAM DATES

Please list your top three program date choices below. We will send you a confirmation notice once it has been scheduled. Please observe the field trip season dates, and remember to avoid:

- School holidays
- Teacher professional development days
- Student testing days

The following dates are NOT available:

- October 11-13 and October 19-20

1. _____
2. _____
3. _____

**2017-2018
FIELD TRIP SEASONS**

September 8- December 1

January 29-March 9

March 26th- May 25

Field Trip

REGISTRATION FORM (2017 – 2018 SCHOOL YEAR)

Instructions: Please clearly complete all sections of this registration form. Submit your form via mail, email, fax or in-person as soon as possible. Retain a copy for your records.

School or Organization _____ Public Private

Contact Person _____

Address _____ Home School

City _____ State _____ Zip _____

Phone (School) _____ Phone (Home) _____

Best Time to Contact You _____

Email _____

Location: Baltimore County Baltimore City Other: Please specify _____

Group #	Grade	Trip Title	# Of Children	Desired Start Time	Picnic Lunch At Irvine?
EXAMPLE	K	Sensational Seasons	35	10 a.m.	Y N
Group 1					Y N
Group 2					Y N
Group 3					Y N

Please note: A minimum of one, but no more than two adults per 10 students is allowed.

If you prefer mornings, but mornings are filled, would you accept an afternoon: Yes No

What is the latest time your group could leave Irvine? (Remember your bus schedule.) _____

Is this a Title 1 School? Yes No

How many students have an IEP? _____ How many students have a 504 plan? _____

Do your students have any special physical, behavioral, or educational needs that our staff should be aware of? Yes No

If yes, please explain _____

How did you hear about our field trips?

Magazine/Newspaper _____

Television Program _____

Word of Mouth School Internet

OFFICE USE ONLY

Date Received

Confirmation sent

Nature In The Classroom

Irvine's Nature in the Classroom program is designed for groups that cannot visit us. These programs take place at your school.

- Traveling expenses of \$25 will be added for schools located more than 20 miles away. Irvine cannot travel more than 40 miles for a program.
- Complete and return the form in this brochure or at www.ExploreNature.org, by mail, fax (410-902-8210), email, or via person.
- For more information, contact Kimberly Godack at 443-738-9220 or GodackK@ExploreNature.org

NATURE IN THE CLASSROOM SUMMARY

TRIP NAME	LENGTH (HRS)	COST	AGE/GRADE	BCPS GRADE-CURRICULUM LINK
All About Animals	75	\$125	Age 3 – K	K-Checkerspot Challenge
Animal Super Heroes	.75	\$125	Pre-K – K	K-Checkerspot Challenge
Taking Care of the Earth	1.5	\$200	K – 2nd	K-Checkerspot Challenge
Survival of the Fittest	1	\$175	1st – 6th	1-Creature Features 2-Bee an Engineer 3-Let Us Grow 4-Turtle Trouble
Chesapeake Connections	1.5	\$200	3rd – 6th	3-Let Us Grow
MD's Native Americans	1.5	\$200	3rd – 6th	Culture
Earth Rocks!	1.5	\$200	3rd – 6th	3-Murray the Mayfly
Hunters of the Sky	2	\$200	3rd – 6th	3-Let Us Grow 4-Turtle Trouble

ALL ABOUT ANIMALS

Why can a frog not fly? Why do worms wiggle? How do you know an animal is alive? During an interactive presentation with several live animals, animal mounts, and animal artifacts students will learn how to classify animals based on their features. **Age 3- K.**

Max Group Size: 30
 Cost: \$125
 Length: 45 minutes

ANIMAL SUPER HEROES

What animal super powers would you like to have? Students learn about the awesome adaptations that animals have to survive. Children hear a story about animals, meet a variety of live animals and mimic different animals' super powers. **Pre-K – K.**

Max Group Size: 30
 Cost: \$125
 Length: 45 minutes

TAKING CARE OF THE EARTH

Students will participate in exciting hands-on explorations that help them discover the many ways they can help take care of the earth. From recycling to composting, students will leave knowing that they can make a big difference. *Each class will receive their very own compost bin to help continue on with their class' stewardship! **K – 2nd grade.**

Max Group Size: 30
 Cost: \$200
 Length: 1.5 hour

SURVIVAL OF THE FITTEST

This hands-on program provides students with the opportunity to observe, touch, and learn about unique animal adaptations. We'll guide students toward the discovery of exceptional animal characteristics and behaviors that help organisms survive.

1st – 6th grade.
 Max Group Size: 60
 Cost: \$175
 Length: 1 hour

CHESAPEAKE CONNECTIONS

The Chesapeake Bay, famous for its bounty and rich history, needs continued stewardship to protect its many resources. We'll lead students through hands-on activity stations that explore water quality, the Chesapeake Bay watershed and its tributaries, and actions students can take to help keep our Bay healthy.

3rd – 6th grade.
 Max Group Size: 30
 Cost: \$200
 Length: 1.5 hours

MARYLAND'S NATIVE AMERICANS

This program focuses on Native American use of local natural resources. A hands-on presentation discusses friction fire-making methods, replica tools and equipment, and Native American games and communication.

3rd – 6th grade.
 Max Group Size: 30

Cost: \$200
 Length: 1.5 hours

EARTH ROCKS!

Students learn about rocks and minerals first-hand. This introductory program includes a series of hands-on activity stations that teach students to identify minerals and rocks through observation and experimentation.

3rd – 6th grade.
 Max Group Size: 30
 Cost: \$200
 Length: 1.5 hours

HUNTERS OF THE SKY

Take an in-depth look at hawks and owls, using mounts and live animals, to study how their adaptations allow them to survive in Maryland's ecosystems. Learn about unique traits common to all birds of prey. Groups rotate among hands-on stations to explore owl pellets, migration, and bio magnification.

3rd– 6th grade.
 Max Group Size: 30
 Cost: \$200
 Length: 2 hours

Nature in the Classroom

REGISTRATION FORM (2017 – 2018 SCHOOL YEAR)

Instructions: Please clearly complete all sections of this registration form. Submit your form via mail, email, fax or in-person as soon as possible. Retain a copy for your records.

School or Organization _____ Public Private

Contact Person _____

Mailing Address:

Address _____ Home School

City _____ State _____ Zip _____

Phone (School) _____ Phone (Home) _____

Best Time to Contact You _____

Email _____

Program Address (if different from mailing address):

Address _____

City _____ State _____ Zip _____

Location: Baltimore County Baltimore City Other: Please specify _____

School Level: PreK-K Elementary School Middle School

Program Name _____

Age/Grade Level _____

Desired Start Time _____

Number of Participants Expected _____ Number of Teachers Attending _____

Is this a Title 1 School? Yes No

How many students have an IEP? _____ How many students have a 504 plan? _____

Do your students have any special physical, behavioral, or educational needs that our staff should be aware of? Yes No

If yes, please explain _____

How did you hear about our program?

Magazine/Newspaper _____

Television Program _____

Word of Mouth School Internet

OFFICE USE ONLY

Date Received

Confirmation sent

PROGRAMS WILL START AT 10AM UNLESS OTHERWISE NOTED.

\$25 TRAVEL FEE ADDED FOR SCHOOLS MORE THAN 20 MILES FROM IRVINE.

PROGRAM DATES

Please list your top three program date choices below. We will send you a confirmation notice once it has been scheduled. Please remember to avoid:

- School holidays
- Teacher professional development days
- Student testing days



Teacher Professional Development

Irvine offers many different professional development courses and workshops for teachers to help integrate environmental education and outdoor learning into the curriculum. These programs may be tailored to meet the needs of your group. For more information, contact Kimberly Godack at GodackK@ExploreNature.org. You can also visit www.ExploreNature.org for updated information on dates and times.

MSDE IN-SERVICE CREDIT COURSE

Animal Adaptations, Habitats & Classification

15 hours, 1 MSDE In-service credit

Dates: TBD

Using Irvine's extensive live and preserved animal collections, teachers will participate in many hands-on, STEM-focused activities for use in the classroom and on the schoolyard. The course will include detailed background content on vertebrate and invertebrate animals and project-based activities such as conducting a habitat analysis, monitoring a schoolyard nest box and investigating earthworms. Links to local and national science standards are included. All participants will receive a Project WILD curriculum guide.

MSDE CLOCK-HOUR WORKSHOPS

MSDE Office of Child Care Approval
Number: CKO-6041

Nature-based Learning: Indoors and Out!

6 MSDE clock-hours

(Content area: 6 hours Curriculum)

Dates: TBD

What is nature-based learning? What role does it play in an early childhood program? How can educators offer nature-based experiences with limited resources and outdoor space? In class, we address ways to incorporate MD State Curriculum Standards through innovative activities in nature and with natural and recycled materials. No matter what the setting or population, educators will gain skills and strategies to

create engaging nature-based lessons that align with science, language and literacy, physical fitness, and fine art standards.

Planning Your Outdoor Classroom

6 MSDE clock-hours (Content areas: 1 hour Child Development, 2 hours Community, and 3 hours Curriculum)

Dates: TBD

How do you go about creating an enriching outdoor setting with limited time, space and resources? Join The Nature Preschool staff at Irvine as we share the triumphs (and harrumphs) of designing and building an outdoor classroom. Participants will discover interactive elements of effective natural learning environments and ways to get started. We will also dig into cost-effective strategies for obtaining materials and labor to make your dream space a reality. In addition, nature-based curriculum ideas will be shared to inspire the design of your outdoor classroom.

Telling Stories: Language and Literacy in Nature

3 MSDE clock-hours

(Content area: 3 hours Curriculum)

Dates: TBD

Discover how stories and storytelling can capture students' imaginations while developing language and literacy skills. Various story formats will be explored in this class. Stories encompass a range of language skills while promoting a love of nature, too! Educators will explore printed books as well as Native American oral stories. We will also share innovative ways to engage students in storytelling.

The Artistry of Nature-based Learning

6 MSDE clock hours

Dates: TBD

Curriculum comes alive when children explore nature and reflect through creative pursuits in visual, dramatic, movement and musical arts. Join The Nature Preschool staff at Irvine to discover how children build skills through magical, expressive media. In this program, we examine the connection





between science, outdoor learning and inquiry-based approaches as we learn outdoors and participate in a variety art experiences.

NON-CREDIT WORKSHOPS

- Project WILD / Aquatic WILD
- Project WET
- Project Learning Tree (PLT)
- Wonders of Wetlands
- Growing Up WILD
- Flying WILD
- Early Childhood PLT

These seven environmental education workshops include many hands-on activities for use in the classroom and the schoolyard. Workshops range from 4-6 hours in length. Participants receive a curriculum guide with dozens of activities.

** For Specific Dates and Times check Irvine's calendar of events at www.ExploreNature.org.*



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 Owings Mills, MD 21117
 443-738-9200
 www.ExploreNature.org



DISCOUNTED MEMBERSHIP

Thank you for teaching the next generation of children who will explore, respect and protect nature! In recognition of your ongoing efforts, Irvine offers a special, discounted membership option for Maryland teachers. Members enjoy free and low-cost program fees, exclusive access to the Outdoor Classroom and 10% off all items in the Nature Store. To take advantage of this offer, you must call Lindsey at 443-738-9222.

\$35 - Full Time Teacher Rate



Need a fun *and* inspiring alternative to after school care for your students?

Irvine's Eco Explorer Club

Continue learning after the bell rings:

- Nature discovery
- Science experiments
- Active exploration of the outdoors!
- Live animal encounters
- Nature crafts

Contact Tara at LilleyT@ExploreNature.org.



Ask for it at your school!