### **Educator Program Guide**







Field Trips



### ROARING BROOK NATURE CENTER

Located in Canton, CT

Bringing a Breath of Fresh Air to the Science Standards

The New Children's Museum 950 Trout Brook Drive
West Hartford, CT 06119



### Roaring Brook Nature Center



The Nature Center is located at 70 Gracey Road in Canton, CT and offers programs that take advantage of the beauty that surrounds us in nature.

#### **Nature Center Contact Information**

Phone: 860.693.0263

Email: <u>rbnc@thechildrensmuseumct.org</u>

Website: www.roaringbrook.org

#### **Field Trips**

Make sure you schedule your field trips early because space fills up quickly! (All Programs are aligned with Connecticut Science Standards and key concepts are listed below each program)



#### Times:

- Programs begin at 9:30am or 9:45am, 11:00am or 1:00pm
- Programs are approximately I hour and 15 minutes unless otherwise noted
- Scheduled times may vary slightly for two hour programs or when two consecutive programs are booked

#### **Booking Your Field Trip**

To schedule your field trip please contact the Center by calling 860-693-0263 or emailing us at rbnc@thechildrensmuseumct.org. Field Trips are typically scheduled in the mornings or afternoons on Tuesday through Friday. Remember that the Nature Center does not arrange for transportation from your school to the Center.

#### Arrival and Teacher Check-In

Upon arrival, a teacher should check in at the Gift Shop or Office. It is very important that you arrive on time to the program. Late arrivals will often result in shorter programs. Refunds are not issued for reduced time due to tardiness.

#### **Cost of Field Trips**

The Following Rates are Per Student:

\$6.00	For I hour and I5 minute programs with a \$60 Minimum cost
\$9.00	For 2 hour programs with a \$100 Minimum cost
\$11.00	All-Day Programs with a \$150 Minimum cost



#### **Chaperones and Teachers**

- Teachers and School Staff are admitted free of charge
- One Teacher or Chaperone is required for every 10 students
- Additional Chaperones may be accommodated if there is space available but will be charged at an additional \$6 per chaperone

While we enjoy working with children of all ages, we are not equipped for siblings or additional children to accompany your group. Please make alternate arrangements for a family visit to the Center.

#### Gift Shop

The Nature Center Gift Shop will be open for purchases if requested at the time of the field trip registration. Souvenir gift bags may also be ordered in advance! Give us a theme and a cost per bag and we can provide a fun memory of the trip!

#### **Picnic Facilities**

Facilities are available but reservations should be made in advance. These sites fill up quickly and some are dependent on the weather and time of the year.

#### **Special Needs**

Please notify the Nature Center if any of your students have special needs. Our building is wheelchair accessible and we have an ADA compliant restroom however, many of our trails are not wheelchair accessible.

#### **Outreach Programs**

No time to join us at the Nature Center? We'll bring the nature to you through classroom programs, afterschool programs and more! (All Programs are aligned with Connecticut Science Standards and the key concepts are listed below each program)

#### **Booking Your Outreach Program**

To schedule your Outreach Program please contact the Center by calling 860-693-0263 or emailing us at rbnc@thechildrensmuseumct.org.

#### **Details:**

- Teachers or other adult must stay with students during the program
- Many of our programs require smart boards or projector and screen, outlet and an area for the children to sit in a circle. Please let us know when booking your program if these items are available.

#### **Cost of Outreach Programs:**

Classroom Programs (One Hour Programs with a Limit of 30 Children Per Program)

- Classroom Programs (For Schools within a 25 mile Radius): \$170.00 plus mileage
- Classroom Programs (For Schools outside a 25 mile Radius): \$195.00 plus mileage

#### Assembly Programs (One Hour Programs with a Limit of 250 Children Per Program)

• Assembly Programs: \$250.00 plus mileage

Discounts are available for multiple bookings of the same program on the same day!

Ask for more details when booking your program!

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### **RBNC** Field Trip Programs

#### Bring a Breath of Fresh Air to your Curriculum

#### All in the Family

**Grades PreK-K:** We all belong to a family. So do snakes, frogs, foxes, robins, and roses. Let us show you how those families are similar and how they differ. Key concepts: life cycles, metamorphosis, body structure, describing/sorting/classifying organisms

#### The Seasons

**Grades PreK-K:** How do plants and animals deal with the changing seasons? Three programs are available based on the season:

- Preparing for Winter
- Signs of Winter Life
- Spring is Here!

Key concepts: making observations, weather, seasons, animal and plant adaptations

#### It's Alive!

**Grades K-I:** Learn all about the differences between living creatures and non-living environments they need in order to survive. Key concepts: life cycles, reproduction, growth, energy, properties of living and non-living things

### Discover Nature with Your Senses

**Grades K-I:** Discover the sights, sounds, smells, and textures found in the natural world. Learn how animals' senses are different from ours. *Key concepts: senses, making observations* 

### From Seed to Seed (Fall and Spring Only)

**Grades K-2:** Explore how flowering plants change throughout their life in order to survive. Key concepts: plant structures, life cycles of flowering plants, seed production

### Eastern Woodland Native Americans

Grades K-6: Discover how Native Americans relied on the natural environment for shelter, clothing, and food. Tour a longhouse replica. Grade K-2 version is one hour and the Grade 3-6 version is two hours. Key concepts: shelter, adaptations, crops, describing ways that humans obtain water and goods, social studies

### Insects and Their Relatives (May to Oct. only)

**K- Grade 6:** Your students won't be bugged while they explore different insect habitats and observe insects up close. Key concepts: insect body parts, metamorphosis, adaptations, habitats, ecosystems, sorting and classification of characteristics

### Nature's Engineers Grades 1-6:

What is an engineer? Meet animal engineers and see how the structures they build are designed to help them raise their young, survive winter, store food, or escape predators. What we can learn from them? Key concepts: habitat, structures and behaviors that allow animals to meet basic needs, ecosystem, adaptations, food chain, shelters



#### **Adaptations**

**Grades I-6:** Choose our general **Adaptations program** or a topic from the list below:

- Flowers, Poisons & Thorns
- Forests, Fields & Ponds
- Animals Under Cover
- · Can You See Me?

Key concepts: Ecosystems, adaptations, lifecycle, structures living things, extinction, what animals depend on for survival

#### It's Not Just Dirt!

**Grades 2-6:** What is soil? What color is it? What does it feel like, sound like or smell like? Does soil change from place to place? Why is it important? Key concepts: soil quality, food chain, ecosystems, physical properties of Earth materials, soil types, textures, biodiversity, food chains





#### Who's For Dinner?

**Grades 3-6:** Explore basic concepts of food chains and webs to understand how energy cycles through CT's ecosystems. Key concepts: food webs and chains, energy in ecosystems, recycling, decomposers, herbivores, carnivores, producers, consumers

### Changing Land, Changing Wildlife Grades 3-6:

As CT's ecosystems change, so does the state's wildlife. Observe first-hand how natural phenomena and human activities have an impact on animal populations. Key concepts: how natural and human activity changes habitats and inhabitants, adaptations, extinction, ecosystems, resources that organisms need, conservation of resources

#### **Connecticut Rocks!**

**Grades 3-8:** What geologic forces shaped Connecticut's landscape? Examine rocks and minerals and learn how to recognize basic rock types outdoors and the forces that shape them. Key concepts: rocks and minerals, properties and classification of earth materials, erosion, fossils

#### The Secret World of Plants

**Grades 3-8:** It's a jungle out there, and plants are not defenseless. Learn the ways plants fight the battle for survival. Key concepts: adaptations, camouflage, structures of plants

#### Water Life Both Big and Small

**Grades 4:** Learn the basics of using a variety of tools such as microscopes and hand lenses to discover the Micro and Macro organisms found in rivers and ponds. Find out about the adaptations these creatures have and what makes CT water habitats different. **Available for a 2-Hour Program** Key Concepts: Ecosystem, organism, food chain, erosion, aquatic environment, river formation, adaptations

#### **Bedrock to Stone Walls**

#### (Fall and Spring Only) Grades 4-8:

Geology, ecology, and human history combine to create the landscape we see.

#### This is a two-hour program.

Key concepts: ecosystems, properties and classification of earth materials, how human activities affects habitats, rocks and minerals, adaptations, conservation of resources

#### **Hunting with your Senses**

**Grade 4-8:** Do animals sense the world the same way humans do? Learn how our senses compare to those of other animals. Key concepts: sensory organs and stimuli, human and animal senses, nervous system

#### All Day Ecology

**Grades 4-8:** We can customize a program to fit your curriculum. Students learn about adaptations, food webs, and the general principles of ecology through field study, observation of live animals, and co-operative games. Each program limited to 50 students or fewer. Key concepts: adaptation, survival, energy, habitat, biodiversity

### Winter Survival Skills (December through March only)

**Grades 4-8:** Don't just hibernate. Learn basic survival skills including map reading, using a compass, fire building, constructing shelter, the right clothes and food. Dress for the weather outside!

#### This is a two-hour program.

Key concepts: adaptations, conflict with nature



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### **RBNC** Outreach Programs

### **Assembly Programs (Outreach)**

Assembly programs are a great educational tool and great value.

One hour with a maximum 250 children per program.

Cost: \$250 per event plus mileage.

NOTE: Some assembly events may also be scheduled as classroom programs.

#### **Animal Life Cycles**

**Grades K-3:** Animals develop in different ways. Learn about different life cycles and the effects of different environmental factors. Key concepts: life cycles, metamorphosis, structure of body parts, adaptations, structure and behavior of living things.

#### **Adaptations**

**Grades I-6:** Choose a general **Adaptations program** or a topic from the list below:

- Flowers, Poisons & Thorns
- Forests, Fields & Ponds
- Animals Under Cover
- Can You See Me?

Key concepts: Ecosystems, adaptations, lifecycle, structures living things, extinction, what animals depend on for survival





#### Reptiles & Amphibians

**Grades I-8:** Reptiles and amphibians have unique adaptations. Discover which ones live in Connecticut and the environmental threats they face.

Key concepts: ecosystem, advantages, camouflage, hibernation, migration, structures of living things, extinction, biodiversity, life cycles.

#### **Snakes Alive**

**Grades I-8:** Separate fact from fiction and learn to appreciate these fascinating creatures. This class includes live snakes. Key concepts: ecosystem, adaptations, camouflage, hibernation, migration, structures of living things, extinction, independence, foodchain

#### **Endangered Species**

**Grades 3-8:** What is an endangered species? Which live in Connecticut? How are these species threatened? Why are they endangered? Key concepts: adaptations, ecosystem, camouflage, structures of living things, how human activities change habitats, interdependence, food chain.

#### **Connecticut Wildlife Digest**

**Grades 4-8:** Learn about the diversity of animals in our small state and how human activity affects that diversity. Key concepts: adaptations, ecosystem, camouflage, hibernation, migration, structures of living things, extinction.



### Classroom Programs (Outreach)

#### It's time to bring a breath of fresh air to your classroom

One hour with a maximum of 30 children per program Cost: \$170 plus mileage (For schools within a 25 mile radius); \$195 plus mileage (For schools outside a 25 mile radius)

#### All in the Family

**Grades PreK-K:** We all belong to a family: humans, snakes, frogs, foxes, robins, and roses. How are their families similar and different? *Key concepts: life cycle, metamorphosis, body structures, describing/sorting/classifying organisms with similar characteristics* 

#### Living vs. Nonliving

**Grades PreK-K:** What distinguishes living from nonliving things, and how are they classified? Key concepts: life cycles, characteristics of living and nonliving things, growth, observing similarities and differences, response to stimuli

#### **Animal Detectives**

**Grade K:** Who left those tracks? What made that sound? We live in a world of wonder, so let's use our senses and explore! Key concepts: responding to stimuli, characteristics of living and non-living things, body structures.



#### The Seasons

**Grades K-3:** How do plants and animals deal with the changing seasons? Three programs are available:

- Winter's Coming,
- Signs of Winter Life
- Spring is Here.

Key concepts: observations, weather, seasons, animal and plant adaptations

#### The Age of Reptiles

**Grades K-3:** Who were the dinosaurs, and why did they disappear... or did they? How do they differ from modern-day reptiles? Key concepts: ecosystems, adaptations, extinction, body structures, organisms depend on living and non-living features

#### **Insects and Their Relatives**

**Grades K-3:** Insects are everywhere. Why are they so important to our world? Key concepts: insect body parts, metamorphosis, adaptations, habitats, ecosystems, sorting and classification of characteristics

#### Animals on the Move

**Grade I:** Two legs, four legs, six legs, and no legs! All living things move but they all move in different ways. Find out about fins, wings and animal movements! Key Concepts: Organism, adaptations, plant, animal, energy, structures, characteristics of living and non-living things

#### **Snow & Ice Studies**

**Grades I-2:** Learn about the properties of snow and ice. Key concepts: properties of solids/liquids/gasses, effects of heating and freezing, measurement

#### Seed to Seed

**Grades I-2:** A look at the life cycle of flowering plants. Key concepts: plant structures, life cycles of flowering plants, seed production

#### **Butterflies**

**Grades I-2:** It's a wonderful life cycle - from egg to caterpillar to butterfly. Key concepts: life cycles, metamorphosis, habitats, migration, adaptations, structure of living things.

### **RBNC** Outreach Programs



### Classroom Programs (Outreach)

#### Survival: Plants and Animals

**Grades I-3:** From the mountains to the prairies! Explore these habitats and many more to discover how plants and animals survive in these harsh environments. Key Concepts: Behavioral and structural adaptations, advantage, survival, camouflage, energy



#### Frogs

**Grades I-3:** From egg to tadpole to frog, these amphibians tell us a lot about our environment. Key concepts: lifecycles, metamorphosis, adaptations, describing similarities and differences of adults and offspring

#### Nature's Engineers Grades I-6:

What is an engineer? Meet animal engineers and see how the structures they build are designed to help them raise their young, survive the winter, store food, or escape predators. Learn how some of these animals change their environment and what we can learn from them. Key concepts: habitat, structures and behaviors that allow animals to meet basic needs, ecosystem, adaptation, food chain

### Eastern Woodland Native Americans

**Grades 2-6:** How did early Native Americans meet their survival needs? Key concepts: shelter, adaptation, crops, describing ways that humans obtain water and food, social studies

#### It's Not just Dirt!

**Grades 2-6:** It's part animal, part vegetable, part mineral. Learn about the soil food web and why it is important to humans and other animals. *Key concepts:* soil quality, physical properties of earth materials, soil types and properties, biodiversity, textures, food chains

#### **Connecticut Rocks!**

**Grades 3-4:** Discover what rocks and minerals can be found in our own backyards! Find out how they got there and about Connecticut's geological history. Key Concepts: Rocks and minerals, fossils, erosion, properties and classification of earth materials

#### Food Chains & Webs

**Grades 3-6:** Explore interrelationships of all living things. Key concepts: food chains and webs, energy in ecosystems, how organisms depend on living and nonliving things for survival

### Changing Land, Changing Wildlife

**Grades 3-6:** How do natural phenomena and human activity impact animal populations?

Key concepts: conservation of resources, ecosystem, adaptations, how natural and human activity changes habitats and their inhabitants, resources that organisms need to survive, extinction, interdependence, food web

#### The Secret World of Plants

**Grades 3-6:** Plants fight back. Discover the natural defenses of plant life. Key concepts: structure of living things, adaptations, life cycles of flowering plants, seed production

#### **Adaptations**

**Grades 3-7:** How do living things adapt to meet survival needs? Key concepts: how organisms depend on living and non-living things for survival, predator/prey relations, plant structures for obtaining water and sunlight



#### **Keeping Water Clean**

**Grades 3-8:** Water is basic to all life. Learn what we can do to keep our water supply clean and safe. Demonstration uses Enviroscape™ and groundwater models. Key concepts: why water is essential for life, point and non-point water pollutants, watersheds, how substances dissolve in ground water, natural resources, conserve

#### A World of Water - H2O Whoa!

**Grade 4:** Follow a drop of water from the sea to the sky to the mountain and back! Discover how water shapes the world around us through its different phases. Key Concepts: Water Cycle, properties of liquids, effects of melting, evaporation, condensation, freezing of water, erosion, physical and chemical properties of water, river formation

#### Invisible World

**Grades 4-7:** Open your eyes to a new world of life too small to be seen without the help of a microscope. Key Concepts: Use of optical instruments to enhance vision, use of eye glasses/magnifiers/microscopes

#### **Super Senses**

**Grade 5:** How do animals perceive the world? How does it look, smell, taste and feel? Discover animals' super senses and their odd ones too! Key Concepts: Response to stimuli, structures of body parts, observations, senses, adaptations



## What else can Roaring Brook Nature Center bring to your school?

#### **Naturalist in Residence**

Have a Naturalist visit your school for an entire day to offer engaging and hands on programs. Choose from a variety of program topics listed for outreach presentations. Don't see the program you are looking for? Contact us to see if we can design a program to suit your needs! Cost: \$500 plus mileage

#### **Professional Development**

Let's face it- Science and outdoor education is not everyone's specialty. However, it is ours! Have a Naturalist from the Nature Center visit your school to work with staff to develop and integrate grade-level science curriculum. Visiting Naturalists can also show teachers how to best utilize school grounds to complement the lesson plans in the classroom.

#### Read-A-Thon

Make reading even more exciting with a Fundraiser Read-A-Thon! This is a great way to promote reading while also reinforcing the idea of giving back to your community. The Nature Center is a non-profit organization and we are looking for your support. The kids can choose what the money is used for! At the end of the Read-A-Thon the participating classes will get a FREE half hour program describing what the donated money funded.

Contact the Nature Center at 860-693-0263 or rbnc@thechildrensmuseumct.org for additional information on these programs.

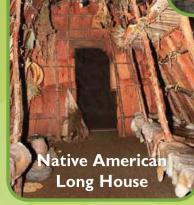
# What you'll find at Roaring Brook Nature Center:

Beaver Wetland Exhibit



Changing Land & Wildlife Exhibit

Ancient Forest Exhibit





Miles of Walking Trails & Butterfly Garden

### Live Animals

Birds of Prey

Connecticut Native Animals

Non-Native Animals

