# Eastman Nature Center School Program Offerings

**Presented by professional naturalists -- For reservations call 763.694.7700**

Welcome to Eastman Nature Center in Elm Creek Park Reserve! Our naturalists have designed a variety of hands-on, in-the-field units for all seasons and ages. Most programs are designed for a 2-hour time block, or you can pair topics for a full-day field experience. Preschool visits have a 20-minute puppet show followed by a self-guided trail or activity portion. Several topics are available as outreach programs, which take place at your site or at a different Three Rivers park.

Our programs are designed to support state academic standards. You can request our detailed standards chart to help choose a topic that best fits your goals. We also can work with you to adapt most of our programs to your group's grade level. We want your visit to provide a meaningful learning opportunity, enhance classroom lessons, develop environmental awareness, and promote stewardship.

| | **Fall**<br>(Sept/Oct/Nov) | **Winter**<br>(Dec/Jan/Feb) | **Spring**<br>(Mar/Apr/May) |
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| **Puppet Shows** | • Discovering Senses<br>• Nature Detectives | • Animals in Winter<br>• Nature Detectives | • Animal Babies<br>• Discovering Senses |
| **Grades K-3rd** | **Grades K-3**<br>• Apple Cider (Sept/Oct)<br>• Honey Bees and Pollination (Gr. 1-3) (Sept)<br>• Birds: Big and Small<br>• Land Insects (Sept/Oct)<br>• Pond Life Study (Sept/Oct)<br><br>**Select Grades**<br>• Heads, Tails, Wings, and Claws (K)<br>• Animal Life Cycles (Gr. 1)<br>• Seed and Plant Structures (Gr. 2-3)<br>• Weather (Gr. 2-3)<br>• Animal Structures and Functions (Gr. 3)<br>• Astronomy (Gr. 3) | **Grades K-3**<br>• Animal Tracking and Signs<br>• Birds: Big and Small<br><br>**Select Grades**<br>• Heads, Tails, Wings, and Claws (K)<br>• Snowshoeing and Historical Games (Gr. 2-3)<br>• Weather (Gr. 2-3)<br>• Animal Structures and Functions (Gr. 3)<br>• Astronomy (Gr. 3) | **Grades K-3**<br>• Honey Bees and Pollination (Gr. 1-3) (May-June)<br>• Birds: Big and Small<br>• Land Insects (May)<br>• Maple Syrup: Trees Make Sugar (March)<br>• Pond Life Study (April-June)<br><br>**Select Grades**<br>• Heads, Tails, Wings, and Claws (K)<br>• Animal Life Cycles (Gr. 1)<br>• Weather (Gr. 2-3)<br>• Animal Structures and Functions (Gr.3)<br>• Astronomy (Gr.3) |
| **Grades 4th-6th** | **Grades 4-6**<br>• Geology: Rocks and Minerals<br>• Geology: Soils and Land Formations<br>• Habitats Study<br>• Honey Bees and Pollination (Sept/Oct)<br>• Orienteering and Map Reading<br>• Survival Challenge<br>• Water Quality and Aquatic Systems<br>• Weather | **Grades 4–6**<br>• Habitats Study<br>• Orienteering and Map Reading<br>• Snowshoeing and Historical Games<br>• Survival Challenge<br>• Weather | **Grades 4-6**<br>• Geology: Rocks and Minerals<br>• Geology: Soils and Land Formations<br>• Habitats Study<br>• Honey Bees and Pollination (May-June)<br>• Maple Syrup: History and Tools (March)<br>• Orienteering and Map Reading<br>• Survival Challenge<br>• Water Quality and Aquatic Systems<br>• Weather |

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## *PRESCHOOL PUPPET SHOWS*

One-hour preschool visits include a 20-minute puppet show followed by time for a self-guided trail hike (materials/kit provided) and time to explore our exhibit area. Holiday-themed shows are also available (i.e. Valentine's, St. Patrick's, Halloween); please ask.

### ANIMAL BABIES Spring

How do wild animals take care of their babies? A baby turtle puppet looking for its parents takes the students on an adventure. Students will learn that not all animals care for their young. After the show, teachers lead a hike and play a game that matches babies to their adults.

### ANIMALS IN WINTER Winter

Animal puppets describe the different ways that animals survive through the winter months. Concepts such as hibernation and migration are presented. After the show, students go on a short teacher-led hike looking for winter animal signs including tracks, scat, and other clues of animals moving around.

### DISCOVERING SENSES Fall, Spring

We all have built-in "tools" to explore the outdoors. A puppet show introduction focuses on different animal senses. What happens when a nighttime skunk decides to find out about daytime animals? Then, students use *their* senses to explore the trails on a teacher-led hike.

### NATURE DETECTIVES Fall, Winter

A delightful tale of a squirrel who has lost his prized possession. The puppet show introduces students to the park's wild animals and to the squirrel's predicament. On a teacher-led outdoor hike, students practice observation skills, then piece together a special surprise at trail's end.

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## *SCHOOL CURRICULUM PROGRAM DESCRIPTIONS*

### ANIMAL LIFE CYCLES (Grade 1)

During an introductory puppet show, a hiking child explores the life cycles of the animals she meets. On a scavenger hunt, students find puzzle pieces that form examples of life cycles. Run the Animal Life Relay Race and meet a live animal.

### ANIMAL STRUCTURES AND FUNCTIONS (Grade 3) All Seasons

Animals have unique characteristics to survive in nature. Learn how these structures help Minnesota animals meet their needs. Uncover the identity of a mystery animal during a hike using clues about its unique structures and their functions. Compare the function of different bird beaks by examining bird specimens. Meet a live animal and apply the concepts of animal structures and functions.

### ANIMAL TRACKING AND SIGNS (Grades K-3) Winter

Become an animal sleuth and learn to identify the signs that wild animals leave behind. Learn to distinguish different tracks and the patterns they make. Demonstrate understanding by creating an ink-print tracking story. Learn the meaning of the word "scat" and how to identify it using a fun matching game! Put your detective skills to the test on a hike.

### APPLE CIDER (Grades K-3) Fall

Crisp ripe apples and fresh fall air blend together in a wooden press to make delicious apple cider. Learn the history and methods of this American tradition by making and tasting your own fresh apple cider. Listen about the apple cycle from flower to products, participate in a pollination skit, and hike to look for other seeds. [Group supplies 1-2 apples per student.]

**ASTRONOMY** **(Grade 3) All Seasons**
Starlight, star bright! Learn about stars and their apparent brightness and relative size. Enter a star bag to discover constellations of the night sky. Learn about our nearest star, the sun, and its orbiting planets through a game.

**BIRDS: BIG AND SMALL** **(Grades K-3) All Seasons**
Learn about bird characteristics and identify local birds by sight and sound. Observe birds on an outdoor hike and use a student-friendly graph to record species and behavior (2nd and 3rd grade use binoculars on the hike). Play the Migration Game or try the Nest Match-Up Challenge. Meet a live Great Horned Owl and discover what makes raptors unique among birds.

**GEOLOGY: ROCKS AND MINERALS** **(Grades 4-6) Fall, Spring**
Journey through time to discover how common rocks of Minnesota were formed. Learn basic rock types and how each is important today. Describe and classify real minerals based on their physical properties. Match earth materials to everyday products you use.

**GEOLOGY: SOILS AND LAND FORMATIONS** **(Grades 4-6) Fall, Spring**
Learn about the organic and inorganic components of soil. Uncover nature's recyclers on a forest hike, see the effect of glaciers and erosion on fields and streams, and learn how these processes have molded and changed our landscape. Create a model stream and watch it erode.

**HABITATS STUDY** **(Grades 4-6) Fall, Spring**
Examine Minnesota's three biomes to see how each one provides for the basic needs of different kinds of animals. Visit and observe three different types of habitats on a scavenger hunt: search for animal signs and shelters in the prairie, forest, and pond. Explore the four essentials that all living things need through an interactive game.

**HEADS, TAILS, WINGS, AND CLAWS** **(Grade K) Fall, Spring**
In an introductory puppet show, Baby Turtle looks for its parents but instead meets creatures different from itself. Learn how different body parts make each kind of animal unique. Hike to search for hidden wooden creatures that demonstrate how animals use camouflage to hide and discover how other body parts meet their basic needs. Play a puzzle game to match animals' body characteristics. Meet a live animal.

**HONEY BEES AND POLLINATION** **(Grades 1-6) Early Fall and Late Spring**
Find out about amazing bees: their life cycle, social structure, and roles in the hive. See the inside of an actual live hive from inside a screen tent! Play the Pollination Game and try the Bee Dance. Learn about the importance of bees and about threats to their populations. Look for pollinating insects in the field. [Limited to two classrooms (~60 students) per visit.]

**LAND INSECTS** **(Grades K-3) Early Fall and Late Spring**
Insects are the most abundant land creatures in the world. Discover insect characteristics, life cycles, and how to classify them into groups. Use nets and jars in the field to catch and identify insects and their imposters. Participate in an insect relay, go on an insect camouflage hike, or play an insect sorting game.

**MAPLE SYRUP: TREES MAKE SUGAR** **(Grades K-3) March**
March means maple syrup time! Find out the reason why and learn the parts of a tree inside and out. Experience the process of making maple syrup: identify and tap a maple tree, collect sap, visit the boiling-down station, and taste the final product! Travel back in time with a traditional story about the sweet discovery of maple sap while watching maple sugar form before your eyes.

**Continued**

**MAPLE SYRUP: HISTORY AND TOOLS** **(Grades 4-6) March**
Learn the significance that this product of nature has held through time. Experience the process of making maple syrup: tap a maple tree, collect sap, visit the boiling-down cauldron and finishing station. At each stage of the process, compare and evaluate the tools of today and of long ago. Travel back in time with a traditional story about the sweet discovery of maple sap while watching maple sugar form before your eyes. Taste the final products!

**ORIENTEERING AND MAP READING** **(Grades 4-6) All Seasons**
Learn how to read a map: identify and locate major features and symbols, including the cardinal directions. Compare types of maps. Learn how to read a compass and use it with a map. Practice these skills to locate points on an outdoor orienteering course. [2.5 hour program, maximum 60 students.]

**POND LIFE STUDY** **(Grades K-3) Early Fall, Spring**
Examine the diversity of life in a pond. Observe and compare macroinvertebrates as students catch and release them with a net. Identify the different body characteristics of many aquatic animals and their life cycle stages. Discover the importance of wetlands and water quality. Meet a live reptile or amphibian.

**SEED AND PLANT STRUCTURES** **(Grades 2-3) Fall**
Study seeds and the structures that help them disperse. Hike and hunt for the helicopters, boats, and hitchhikers of the seed world. Act out the life cycle from seed to plant, from flower to seed, while learning what each needs to grow and move on to the next stage. Dissect a seed, plant, or model tree to identify and draw its parts.

**SNOWSHOEING AND HISTORICAL GAMES** **(Grades 2-6) Winter**
Strap on snowshoes and enjoy winter with a hike! Compare modern and historical designs of snowshoes and learn the history and engineered advantages of each. Participate in active games traditionally played by American Indians and early settlers. Discover the associated historical purpose and potential skill development of the games. All equipment will be provided. [2.5 hour program, maximum 2 classrooms per session.]

**SURVIVAL CHALLENGE** **(Grades 4-6) All Seasons**
Practice teamwork by learning the key components of wilderness survival. Practice how to stay warm or cool, engineer a shelter, and start a fire. Work in small teams to solve the problems posed by a survival situation and test solutions together in a safe, but challenging, environment.

**WATER QUALITY AND AQUATIC SYSTEMS** **(Grades 4-6) Fall, Spring**
Discover how scientists determine water quality. Collect macroinvertebrates and use a biotic index to evaluate the health of a pond. Conduct tests to assess the chemical and physical properties of water. Play a game to learn about types of pollution, their sources and impacts, and strategies to reduce them.

**WEATHER** **(Grades 2-6) All Seasons**
Explore the wonders of weather. Become a meteorologist for the day and make predictions. Conduct an investigation using weather instruments, including a thermometer and anemometer, to make observations. Identify the different types of clouds and what weather they signal. Predict and justify the forecast based on collected data.

**Continued**

**NATURE CENTER SCHOOL GROUP FEES -** $4.80 per student, with a $72 minimum fee.

**PUPPET SHOWS ONLY:** $35. For an extra fee, naturalists will lead the outside hike portion of this activity.

**OUTREACH PROGRAMS AVAILABLE:** Call for a list of outreach topics we can offer at your site. Outreach fees: $84 flat fee, plus $2.40/student/hour. Minimum charge of $120.

**WONDER FUND SCHOLARSHIPS:** We offer scholarships equal to your percentage of free and reduced lunch students (minimum 30% to maximum 60%). Please inquire for an easy application.

**BUSING FUNDING:** Funding for busing may be available through the Hennepin County Green Partners Education Program. Visit www.hennepin.us for more information. (This program is not affiliated with Three Rivers Park District.)

**CHAPERONES:** Adults are expected at a 1:10 ratio. They will not be charged, but are expected to be involved with class activities, to facilitate student involvement, and to guide behavior.

**ELM CREEK PLAY AREA:** The Creative Play Area is located in the Haeg Recreation Area. There is no extra bus fee if booked in conjunction with a naturalist program. Users are limited in number per day; thus prior reservations are required and can be made with your booking. It is a 15-minute drive from the Play Area to Eastman Nature Center.

**PAYMENTS:** Are required in advance to confirm your program reservation. If you can't pay in advance, ask the secretary to note this in your booking. Full payment will be due the day of your visit.

**CANCELLATION:** If your group cancels prior to 60 days before the date of your scheduled visit, 50% of the payment is refundable. The payment is non-refundable if your group cancels within 60 days of the program date. You may make group size changes up to 30 days before the program.

**WEATHER:** Dress for the weather; you will be going outside except in the case of severe weather. Moderate rain, snow, or normal winter temperatures do not constitute extreme conditions. If wind chills are below school indoor-recess standards, we will modify the program to remain indoors or attempt to re-schedule your trip.

**Reservations or questions, call 763.694.7700.**

Calls are answered 7 days a week:
Monday-Saturday 9 AM-5 PM
Sunday 12-5 PM

**Eastman Nature Center**
**13351 Elm Creek Road**
**Osseo/Dayton/Maple Grove**