



Eagle Bluff Environmental Learning Center



Available Classes

Website: www.eagle-bluff.org

phone: 888-800-9558

e-mail: schools@eagle-bluff.org

ECOLOGY CLASSES

Big Freeze

Offered December through February

While we are snug in our heated homes, plants and animals are surviving outside in the cold and snow. Search for signs of life to discover the interesting (and sometimes seemingly strange) ways that plants and animals have adapted to endure the harsh conditions of a Minnesota winter. Conduct a winter weather experiment and participate in activities to determine which insulators and adaptations are most effective for local animals surviving cold temperature.

Forest Ecology

Offered March through October

Forests are constantly changing. Succession is defined as a pattern of change over time. In this class, students will investigate the successional changes in three forest types through forestry surveying techniques. Students will learn stages of succession, mechanisms which drive succession, and the impact of succession on the populations that utilize forests now and into the future.

Wildlife Ecology

Offered All Year

Students will investigate the dynamic interrelationships of wildlife populations and their habitats. Through interactive demonstrations and explorations, students will learn about components of habitat, limiting factors, and biodiversity, and then see examples of these concepts at work in surrounding natural areas.

NATURE IDENTIFICATION CLASSES

Amphibians

Offered April through mid-October

The unique world of amphibians will be explored as students catch live specimens in our ponds, forests, and river. Participation in an amphibian life cycle activity and an amphibian calls game will help round out the visual identification portion of the class. Emphasis is placed on the role of amphibians as bio-indicators, and how amphibians are clues that tell us about the health of the environment.

Animal Signs

Offered All Year

Using all their senses, students will try to unravel the mysterious lives of Eagle Bluff's wildlife and discover the food chains living nearby. Time will be spent exploring and interpreting animal signs, acting out an example food chain, and the entire class will work together to form one large food web.

Birds

Offered All Year

This class visits feeders for a close-up view of songbird species, explores the woods for a glimpse of canopy dwellers, sits quietly as wild chickadees approach, and enjoys a view of soaring eagles, hawks, and vultures high above the Root River Valley.

Fungus Among Us

Offered April through October

What lurks inside the Chamber of Disgust? You will know after investigating the important role that decomposers play in the world. Participants will be amazed by the diversity of fungus as they search for and identify mushrooms, molds, crusts, and slimes. They will witness decomposition in action and discover that pizza (and many other foods for that matter) just wouldn't be the same without fungus.

Insects

Offered April through October

Insects are the most successful creatures in the entire animal kingdom. They are highly adaptable and able to live almost everywhere. Although often seen as pests, insects play a crucial role in their respective habitats. Participants will have the opportunity to explore Eagle Bluff in search of some of the over one million species of insects, to be observed, and classified.

Pond Life

Offered April through October

Participants will catch and identify examples of a variety of aquatic organisms, learn how their adaptations allow for survival in an aquatic habitat, and explore how bio-indicators (organisms sensitive to environmental changes) help humans understand how our actions can impact aquatic ecosystems.

Trees and Keys

Offered All Year

There are 1,800 plant species in Minnesota and approximately 40 native tree species, which can seem overwhelming to learn at first. By working with a team, participants will learn to use a dichotomous key to identify distinguishing characteristics of some of Eagle Bluff's trees and discover the many uses people have for trees.

EARTH AND PHYSICAL SCIENCE CLASSES

Earth Exploration

Offered All Year

Get ready to explore our earth! Journey to the center of the Earth through its layers, transform into a rock for 10,000 years, learn about geologic time through major events in the Earth's history, and become a fossil hunter searching for ancient life along the rocky banks of the Root River. Get to know the Earth in the introduction to geologic concepts.

Karst Geology

Offered All Year

Using chemical and physical tests students will gain an understanding of the geologic makeup of a karst landscape while visiting the karst features of Eagle Bluff. Students will use this understanding to evaluate local, real-life environmental issues and how human activities impact our karst landscape.

Stream Lab or Winter Pond Lab

Offered All Year

In warm weather, participants will journey to the banks of the Root River and in cold weather they will walk on water to explore secrets under the ice of the Eagle Bluff pond. Time is spent at the river or pond taking physical measurements and performing chemical tests to help determine the pond or river's water quality.

HISTORY AND CULTURE CLASSES

Oneota Native American Life

Offered All Year

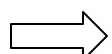
Travel back in time to discover what life may have been like for a prehistoric culture who inhabited Southeastern Minnesota in 1000 AD. Participants will hike to a secluded site to experience a day in the life of the Oneota: practicing skills such as starting a fire with friction, grinding corn for bread, making twine, playing Native American games, and telling stories in the longhouse.

Pioneer Life

Offered All Year

Minnesota's rich cultural history comes to life as students take on the roles of early pioneers traveling to MN in the 1850's. Sawing logs, starting fire with flint and steel, wheat threshing and baking soda bread are just some of the activities participants will sample at a re-created pioneer homestead.

OVER



CHALLENGE SKILLS CLASSES

Group Challenges

Offered All Year

Participants are faced with a variety of challenges designed to foster team cooperation and personal character development. Communication, trust, problem solving, and cooperation will be essential ingredients to the group's success. Low course elements include: spider web, trust fall, canyon crossing, all aboard, whale watch, Norwegian skis, alligator swamp, triple crossing and the wild woody.

Rock Climbing

Offered All Year

4 adults required

The indoor climbing wall is an excellent venue that promotes personal growth, self-confidence, and pride. Participants will learn the fundamentals of rock climbing as they strive to reach their climbing goals on a 30 foot-high wall. This class is designed to help participants accept new challenges and face individual fears in a safe, controlled environment.

Tree Tops High Ropes

Offered All Year

This confidence building experience promotes personal growth and strengthens group bonds. Participants will maneuver 30 feet in the air through a series of towers connected by various cable, rope, and log elements. The course itself presents a very safe atmosphere that encourages participants to recognize and confront their fears. Achieving success on the course is a powerful experience with a lasting effect.

West Course = grades 4-12, 3 adults required

East Course = grades 5-12, 3 adults required

South Course = grades 6-12, 4 adults required

OUTDOOR ADVENTURE CLASSES

Archery

Offered All Year

Draw, aim, fire! Participants will discover the joy behind this long established sport. Understanding the history, following the safety rules, and learning the skill is just the beginning. Through hands-on target practice and friendly competition, participants will learn about self-discipline and improve shooting skills. Both indoor and outdoor ranges are available.

Beginning Orienteering

Offered All Year

Feeling lost? Combining earth science with practical outdoor skills, participants will navigate Eagle Bluff's remote orienteering course. Emphasis will be placed on recognizing how the compass has impacted human history, understanding the earth's magnetic field, and learning the parts and proper use of a compass. Working cooperatively and applying this knowledge will be the highlight as students navigate a 14 point orienteering course through the woods.

Competitive Orienteering

Offered All Year

Could you find your way through the woods using only a map and a compass? Reading a topographic map, understanding contour lines, and utilizing compass skills will be essential in this fast paced sport. Participants will be challenged to work as a team navigating through the woods locating ten control points as quickly as possible. Previous knowledge of compass skills required.

Cross Country Skiing

Offered January through mid-March (conditions permitting)

Traversing on two skis is not only great exercise, but also an excellent way to observe the beauty of the winter landscape. Participants will learn the origin of cross-country skiing, the correct fitting and usage of equipment, and a few skill techniques before gliding across the glistening snow. Skis, poles, and boots provide.

GPS Pathfinders

Offered All Year

On your mark, get set, DASH! Students will get a glimpse into navigational technology advancements during this fast paced class. Learning the basic concepts behind GPS technology and how a receiver works is just the beginning as each pair of students is given a GPS receiver in which to practice finding waypoints. Once the basics are mastered and the practice points are found, students will tackle Eagle Bluff's "Dash for the Cache" where they will navigate through the woods in search of hidden caches.

Backcountry Camping

Offered mid-March through October

Camping is a great way to experience the outdoors, yet if done improperly, it can affect the serenity and beauty of the site. Students will learn the basics of backpack camping following the seven principals of Leave No Trace; a nationally recognized program to reduce our impact when outdoors. Teamwork and good decision making will be a must as students pack a backpack, navigate the trail, setup a tent, cook using a camp stove and dispose of their waste properly.

River Canoeing

Offered during safe weather and river conditions

1 adult with previous river canoeing experience, 6th grade and up

Paddle 3.5 miles of scenic waters down the mighty Root River! Trained instructors will prepare paddlers for an unforgettable adventure.

Understanding the equipment, reading the river and its hazards, executing river paddling strokes, and following safety precautions will be essential as participants work together paddling through both slow and fast moving waters. All groups will be asked to select an alternate class in case of high water or inclement weather conditions.

Root River Hike

Offered mid-march through December

Experience the outdoors in a unique and personal way! Participants will become "naturally" immersed while traversing across the Root River landscape. By utilizing their senses and sharpening interpretive skills, students will unveil what lies beyond the hiking trail. Interactive games and a variety of drawing and writing exercises are incorporated within the class to promote creative and imaginative expression using nature as inspiration.

Snowshoeing

Offered January through mid-March (conditions permitting)

Step into one of human's oldest inventions! Participants will understand the important role snowshoes had for those living in 4000 B.C., as well as the role and use of snowshoes today. Understanding how to fit snowshoes correctly, dressing properly, and learning a few basic skills is just the beginning as students enjoy a frosty hike along the bluffs of the Root River. Each hike includes a naturalist choice theme which is determined by snow conditions, grade level, and knowledge base.

Winter Survival

Offered November through March

Participants are placed in an imaginary survival situation to develop wilderness skills and understand the need for teamwork and a positive mental attitude for survival. Students will test their survival competence by prioritizing a list of supplies, constructing a shelter, building a fire, conserving limited resources, and guarding against the elements. Are you a survivor?

Bring "Eagle Bluff in the Classroom"

Eagle Bluff offers teachers classroom resources which complement your classes and activities.

Find materials at: www.eagle-bluff.org/in-the-classroom.html

- *Pre and Post-visit Activities*
- *Journal Pages*
- *Class Outlines*
- *Outreach Programs*