Eighth Grade Field Trip Topics

Water Quality

Become an aquatic scientist for a day! Find out what "water quality" means and how we measure it? Use observation skills, testing tools, chemical kits and biological indicators to assess the water quality of a lake or stream near you. Rubber boots and tools provided.

Wetland Ecology

Slosh through a wetland to unearth its many secret roles, such as water purifier, flood preventer, erosion controller, pollution buster, and more! Students grasp what makes a wetland a wetland through their unique combination of water, soils and plants. Plus they will discover what animals thrive in this wet and muddy habitat. Rubber boots and tools provided. Meets standard: 5L.1.2.1.4, 5P.3.1.1.2

Stream and Lake Ecology

Discover the life in and around your local streams and lakes by mapping, searching for animals and their signs, using aquatic dip nets, and more! Participants will learn about food chains in this ecosystem and how aquatic insects play an important role in this ecosystem. Rubber boots and tools provided.

Forest Ecology

Uncover the mysterious methods plants have for growing and making their own food. Find out just what is really going on inside a tree and discover how forest plants and animals are interconnected. Older students will be challenged to estimate tree height and ages without cutting down a tree and using simple field equipment.
Meets standard: 3L.1.2.1.2

Prairie Ecology

Participants will explore prairie plants using various senses to better understand their unique adaptations. Searching for and identifying prairie animals and their signs will help students determine how both plants and animals have adapted to this hot, dry environment. Walking shoes and long pants are strongly recommended for this class.

** *Note: This program is best conducted in the summer or fall as these two seasons are optimal when working with prairie plants.*

Introduction to Microscopes

Microscopes are truly spectacular tools - they open up a whole new world in front of our eyes! Working in pairs with their own microscopes, students will learn the basics of the micro-world, from the parts of a microscope to view prepared slides. Participants will have the opportunity to collect samples from nature and create their own slide mounts for study and diagramming. Anything is fair game, from bug guts to feathers, soil to plant parts and more - as long as it can fit under the microscope lens!

Soils: The Dirt on Dirt

Is all dirt the same? Not at all! Unearth differences in soil types and how the soil was formed. Students take part in a soil play production, use scientific tools to take core soil samples, set up a soil experiment, investigate living and non-living components of soil, and learn how soil properties affect water movement and plant growth, as well as what that means for farmers in SW Minnesota. This program can be adapted for younger audiences.

Avian Adventure (Bird Ecology)

Our feathered friends are as varied as the environments in which they live. Discover what makes the bird such a unique animal and the adaptations that enable them to live in Minnesota. Participants will learn common bird calls and identifying characteristics to recognize them in the field. Using binoculars and newly acquired skills, participants will take a bird trek in search of our feathered neighbors.

Also available as an in-person program on school grounds

Nature Interpretation Through Art

Explore the realms of nature with a different eye–an artist's eye! Students will learn techniques for observing their surroundings and hike in the outdoors to select their artists' tools. Using what nature provides, students utilize their “tools” collected to create painted works of art. Since we work with paint, students should wear “paint” clothes and expect to return a bit more colorful!

Winter Animal Adaptations

Winter is an awesome time to explore the outdoors. If you're dressed well and prepared for colder temperatures, spending time outside is a terrific experience and rather fun! Students will learn first-hand how animals cope with sub-zero temperatures and do quite well in winter months. Simulations and experiments will teach students how animals are physically and behaviorally adapted for Minnesota winters. Students will observe which animals are active during winter months and learn what clues to look for if the critters aren’t present at the time. If sufficient snow is on the ground, we'll conduct the class via snowshoes.

Winter Birding

Not all birds have flown south for the winter! How do birds survive the cold and snow? Where do they hang out? How can we attract them to our yards and school grounds? Learn how birds make a living during our crisp winters and how to identify these winter neighbors on a hike. Students will learn how to bird by sight and by ear, and discover what clues we can find that tell us who is in the neighborhood!