

Grades

5 - 6

Half and Full-day Field Trip Options



Overview

Experience life as a professional scientist. Our 5th and 6th grade programs get students exploring nature, conducting authentic investigations, and visiting world-famous research experiments.

Half-day (2 hour) and full-day (4 hour) programs are available.

Want to learn more? Curious about other programs?

Visit cedarcreek.umn.edu/ed
Contact Caitlin Potter:
caitlin@umn.edu, 612-301-2602



Half-day program options:

Half-day options can also be combined with the Biomes of Minnesota hike to make a full-day trip.

Biomes of Minnesota

Season: year-round

The Cedar Bog Lake trail is a unique experience that lets students walk through representations of all three biomes present in Minnesota before emerging at the shores of Cedar Bog Lake. Deciduous forest, tallgrass prairie and boreal coniferous forest, as well as swamps and a lake – they all contribute to make this a “Walk Across Minnesota!” There are lots of opportunities along the way to stop and ask questions about the different types of nature the students are exploring. Total distance is ~1 mile.



Sort like a Scientist

Season: year-round

Students observe and/or collect a variety of items from around Cedar Creek and use their observational skills to sort them and come up with a basic classification scheme (dichotomous key). They then test out their new skills by identifying trees down to species in our Forests and Biodiversity experimental plots.



Animal Adaptations

Season: November - March

How do local wildlife make it through Minnesota’s winters? Through a game, a hands-on investigation and lots of items to touch and explore, students will learn survival strategies that animals use to make it through to spring. Most of the program will be indoors, but we will be going outside as part of our investigation - dress for the weather!

Visit to Biodiversity Experiment (bus required)

Season: April – November

Dr. Dave Tilman’s Big Biodiversity experiment is known worldwide for its insights into the way plant communities function and its role in helping scientists, policy makers, and the general public understand and appreciate biodiversity. Explore this enormous experiment using a guided scavenger hunt that encourages students to figure out Dr. Tilman’s main results on their own. They’ll leave with an appreciation for biodiversity and science that’s hard to replicate anywhere else!



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Full-day program options:

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Ecosystem Comparison

Season: April - November

Students go on a hike to Cedar Bog Lake, learn some natural history, and make observations about changes that occur between at biome transition zones (light, temperature, soil, moisture, etc). Upon returning, they work in small groups to collect simple data on the abiotic and biotic factors in three ecosystems (prairie, forest and wetland) and investigate a basic ecological concept: how do the physical elements of an ecosystem influence the distribution of its living organisms? The day wraps up with an opportunity to draw and graph the data the class collected and collaboratively share insights into the interactions that structure ecosystems.

Insect Structure and Function

Season: June - September

Experience the wonderful world of insects! Students will put on their entomologist hats for the day as they explore the structures that allow particular species of insects to thrive in specific habitats. Back in the classroom, they'll learn the basics of structure and function, as well as how to classify insects into broad categories. Then, armed with sweep nets, they will work in teams to sample insects in the prairie and the woods. The day wraps up with teams sorting their insects by type, then collectively building a bar graph using their physical samples and discussing patterns in what insects live where.

Water Quality (bus required if going to Fish Lake)

Season: April - November

Students go on a hike to Cedar Bog Lake (see Biomes Hike above) or to Fish Lake to observe and think about the role water plays in ecosystems. All living things need water, from plants to animals to humans. How can we tell if our water is clean and our aquatic ecosystems are healthy? During and after our hike, with plenty of time for questions, observations and journaling, we will learn how scientists at Cedar Creek and elsewhere study water quality and get a chance to see some of their tools and sampling methods. Student groups will make hypotheses about which of three water sources at Cedar Creek is the healthiest (and figure out what 'healthiest' even means!) and then measure factors like dissolved oxygen, nutrient levels and pH to see how their hypotheses hold up to reality.

Forest Ecology (bus required)

Season: April - October

Students explore and investigate two of Minnesota's three biomes - the coniferous and deciduous forests. Go on a hike that passes through several forest types, learn how to identify trees, and discuss the importance of trees and forests for humans. Collect a leaf of your own, and then learn how the shape a leaf tells you something about its function as well as the type of tree it came from. Visit our brand-new Forests and Biodiversity experiment and test out your tree identification skills with a dichotomous key.

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Water Water Everywhere

Season: year-round

Learn about the importance of water to people through a game, an observational hike and a hands-on demo. Students will experience the water cycle through stories and a game of water cycle tag. They will then visit either a wetland or a swamp, and spend some time observing and drawing what they see. They will also get to get their hands wet using our stream table, where a naturalist will demonstrate the way water shapes landscapes through processes like erosion and deposition. Students will be tasked with building houses along the watershed and making real-world engineering decisions related to flood control, development and landscaping.

Beautiful Bizarre Bogs (bus required, limit 50 students per day)

Season: April - November

What makes a bog a bog? Come explore the weird and wonderful world of bogs, swamps and marshes! The day will include a walk to Beckman Bog, a peat bog that is home to tamaracks, black spruce, carnivorous plants and other unusual plants. Students will spend time out on the boardwalk in our bog, looking closely at the plants that make their home there and doing some drawing and writing about what they see. Back in the classroom, they will investigate water quality in bogs and other aquatic environments by looking at macroinvertebrates under a dissecting scope.

Wildlife Ecology

Season: year-round

How do scientists study wild animals, particularly the ones that are shy, scared or rare and thus hard to observe? Spend a day exploring and practicing field methods while learning about on-going research into wildlife at Cedar Creek. Your visit will include an introduction to the art and science of animal tracking including a nature hike and field investigation of wildlife track and sign, hands-on exposure to field methods currently in use at Cedar Creek (depending on group size and time of year, this will include radio telemetry, camera traps, or both), and plenty of time examining our collection of pelts, bones and skulls. As available, you may also have the opportunity to go birding and learn about our red-headed woodpecker research project, view our seasonal bison herd and/or assist in insect surveys.

Fees

Full-day field trips are \$330 for a "classroom" of approximately 30 students and at least one teacher/adult chaperone. Half-day programs are \$210 per "classroom". These fees cover the cost of a trained naturalist to guide and teach your group throughout the day, and provide access for your group to areas of the property not open to the public.

If this cost is prohibitive for your school, please get in touch with Caitlin (caitlin@umn.edu) - we are happy to work with you to subsidize the cost of your visit!

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Cedar Creek