



Activities

Insects of the Prairie (grades K–5)

Explore the creepy-crawly world of the insects that call Missouri prairies home! This hands-on program consists of exploratory activities that help students learn about the classification and parts of insects. Students will also create their very own bug mask and may tour our native plant garden to observe insects such as the dogbane leaf beetle, yellow garden spider, and the red milkweed beetle in their natural habitat.

Grassland Birds of the Midwest (grades K–5)

Did you know there are an estimated nine thousand species of birds in the world? In this activity, students will learn how to identify some of the many birds that inhabit Missouri's grassland areas. Students will also learn where these birds make their nests, what many of these species eat, hear their unique calls, and learn many other interesting birding basics. Following this presentation, students will create and decorate their own one-of-a-kind bird feeder out of materials provided by our staff.

Tower of Power (grades 3–8)

Students will learn basic information about how engineers construct different types of towers. Following this presentation, teams of students will apply what they have learned and race against each other to see who can build the best tower. Each team's tower must pass a series of fun and exciting tests in order to win. This indoor activity may also be performed outdoors.



NEW Activities

Food Chains and Food Webs (grades 1–4)

Food chains, also called food networks, describe the linear eating relationships between species within an ecosystem. This presentation includes exciting information about many of the plants and animals that make it possible for producers, consumers, predators, and prey to thrive in Missouri and on Missouri's prairies.

Students will learn about the many interconnections that exist within food chains and become familiar with how a food web extends the food chain concept from a simple linear pathway to a complex network of interactions. During the hands-on portion of this activity, students will work in small groups to create their own vivid interpretation of the interactions that occur in food chains and food webs.

Soil . . . It's More Than Just Dirt (grades 1–3)

Did you know that soil is one of our most important natural resources? In this activity, students explore the wonderful world of soil by learning what soil is made from, how it changes over time, and the differences between sandy, silty, and clayey soils. This presentation also covers information about erosion, soil conservation, the importance of soil at the Weldon Spring Site, and the effect of humans on soil.

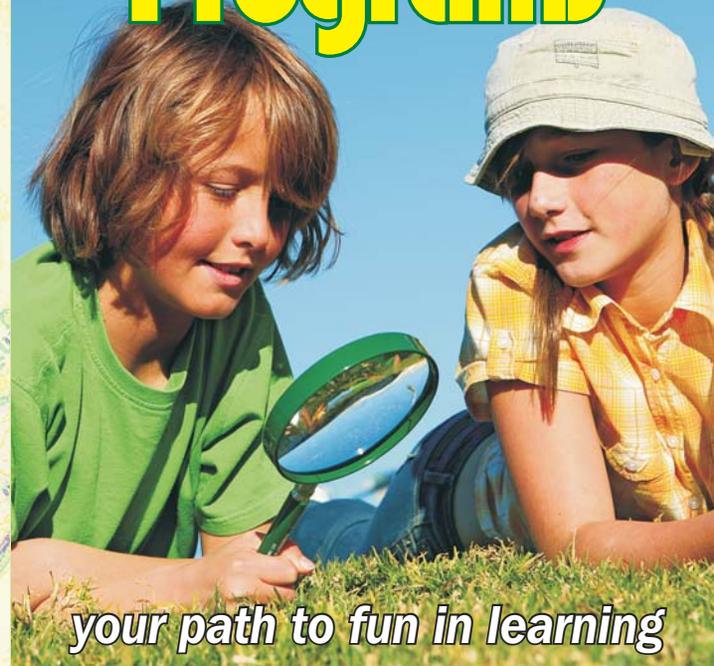
Students will take a hands-on, up-close look at three different types of soil to examine and compare factors such as color, texture, size, and odor. Students will also gain an understanding of soil horizons.

To schedule a field trip or guest speaker, contact Brendan McGhee, Marketing Specialist

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2009–2010 Indoor & Outdoor Educational Programs



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Indoor Activities

A Sea of Grass (grades K–5)

Students are given a 15–25 minute PowerPoint presentation about all of the unique plants, animals, and insects that live in Missouri prairies and at the Weldon Spring Site's Howell Prairie. While listening to this presentation, students will be able to see and touch different types of grasses, seeds, photos, and tools used to maintain prairies. Following this presentation, our staff will instruct students through the creation of their own butterfly feeder.



Rocks (grades 2–5)

Our rocks activity begins with a 15–20 minute PowerPoint presentation that discusses sedimentary, metamorphic, and igneous rocks, as well as minerals. Next, this activity gives students a hands-on approach at learning how to identify different samples of each type of rock. Students will also be able to examine different types of fossils and rocks in our extensive collection from all over the world. This activity may also involve the use of streak plates and Mohs scale of mineral hardness per instructor's request.

Solids, Liquids, and Gases (grades 2–8)

Did you know that all matter is made from small particles that are in constant movement? This program introduces the concepts of how atoms are arranged in solids, liquids, and gases. Following this presentation, students will work in small groups to create a simple chemical reaction that further demonstrates the properties of solids, liquids, and gases. For higher grade levels, properties of plasmas will also be introduced.

Scavenger Hunt (grades 3–12)

This activity involves the students using a fill-in-the-blank worksheet with questions relating to the displays in the Interpretive Center. Students use a map to help them hunt for displays that contain the correct answers to the questions.

pHear Factor (grades 4–12)

Water quality testing is done on a regular basis at the Weldon Spring Site and pH is one of the most fundamental tests. In this activity, students work in teams to explore the meaning of the pH scale and then put the test to a variety of substances using laboratory-grade materials. Students will also be able to use other types of technical equipment to test pH and other parameters.

Radiation in the Environment (grades 5–12)

Students use Geiger-Müller counters to scan household objects for the presence of radioactivity, and then discuss why certain objects are radioactive. The Geiger counter can also be used to demonstrate more technical concepts of how radioactivity changes with distance and shielding. Additionally, students will be educated about the types of worker protective gear used during our environmental cleanup and may even have the opportunity to wear it.

Subsurface Investigations (grades 5–12)

Groups will gain a basic understanding of what an aquifer is and how surface contamination can affect lakes, rivers, and groundwater drinking sources. Students observe how a little pollution can travel a long way in our tabletop ground water model. A variety of additional hands-on activities illustrate the properties of different types of soil and bedrock layers. This activity helps to unlock just some of the mysteries beneath the surface of the earth.

Outdoor Activities

Disposal Cell Walking Trip (grades K–12)

Students hike to the viewing platform at the top of our 75-foot disposal cell. Individuals visiting the top of the disposal cell will be able to enjoy the 360-degree view of the metropolitan skyline and maybe even spot the St. Louis Arch! This activity provides a good opportunity for discussion about human impact on the environment. The round-trip distance of the walk is approximately one-half mile.

Orienteering Challenge (grades 5–12)

Individuals learn cross-country navigation skills using a map and a clue sheet. Small groups use detailed maps of the Weldon Spring Site to find 18 checkpoints placed at various locations. At each checkpoint students must record a letter or a number that will lead them to a final secret location.

This is a great activity to enhance group dynamics and group problem solving.



Native Plant Walk and Talk (grades 2–12)

Students stroll through our 8-acre garden of native Missouri plants and the 150-acre Howell Prairie and learn about prairie ecosystems and become

proficient in native plant identification techniques. More than 200 species of native plants are represented at the Weldon Spring Site.

NOTE: This activity is only available late spring through early fall.

Toxic Waste (grades 3–12)

This activity involves students working as a group while devising a plan to move the contents of simulated containerized waste to a safe location. The group must use minimal equipment, maintain a required distance, and perform the activity within a certain time limit! Groups may be divided into two teams and race to see which team can finish first.