

Indoor Activities (continued)

Insects of the Prairie (grades K-5)

Explore the creepy-crawly world of insects that call the Missouri prairies home! This hands-on program uncovers the different parts of insects' bodies, how they are classified and where some of these amazing creatures live in nature. Students will create their very own bug mask and have the opportunity to view our huge insect collection that contains species such as the dogbane leaf beetle, meadow spittle bug, and the red velvet ant.

Grassland Birds of the Midwest (grades K-5)

Did you know there are an estimated 9,000 species of birds in the world? Through this presentation, 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 them eat, hear their unique calls, and many other interesting birding basics. Following the presentation, students will create and decorate their own one-of-a-kind bird feeder out of materials provided by our staff.

Food Chains and Food Webs (grades 1-4)

Food chains describe the linear eating relationships between species within an ecosystem. This presentation contains exciting information about many of the plants and animals that make it possible for producers, consumers, predators, and prey to thrive in the state of Missouri and on its 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 create their own food chain to help them recall the primary components that make up an ecosystem.

Force and Motion (grades 2-8)

Force is what puts things in motion! This fun filled program explains how everything on the earth, including you and me, are in constant motion all the time. Concepts covered in this presentation are based around Sir Isaac Newton's Three Laws of Motion and explain the differences between concepts such as mass, weight, velocity, inertia, speed, and distance.

Tower of Power (grades 3-8)

Do you like science? Do you like math? If so, someday you might want to become an engineer! During this program, students learn about several different disciplines in engineering and discuss how engineers solve problems related to the environment, space, chemistry, and mechanics. Students will also discuss some of the area's marvels in engineering, like the St. Louis Arch. Following this presentation, participants will work in teams to see who can build the tallest arch using only the materials that are supplied for the project.

The ABCs of Bees (grades 1-5)

Bees are some of the most important insects in the entire animal kingdom. This presentation shares many interesting bee basics such as differences between honey bees, carpenter bees, and bumble bees; as well as queens, workers, and drones. Students will learn about a bee's life cycle, why only female bees can sting, and how some bees can actually dance! Groups participating in this program can also see our collection of non-living bees up close. For the hands-on portion of this program students will create their very own bee craft out of materials provided by our staff.



Recycling and Beyond (grades 2-8)

Americans produce 251 million pounds of trash each year, which amounts to approximately 4.4 pounds of trash per person each day! This program describes what happens to our garbage when we throw it away and why recycling is more important than ever. Students will learn the steps of the recycling process, waste reduction, composting techniques, and the many items at the Weldon Spring site that are made from recycled materials.

To schedule a field trip or guest speaker,
contact the Interpretive Center Team

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Outdoor Activities

Disposal Cell Walk (grades K–12)

Students hike (approximately one-half mile round trip) to the viewing platform at the top of our 75-foot tall disposal cell. Individuals visiting the top of the disposal cell will be able to enjoy the 360° view of the metropolitan skyline. This activity encourages discussion about human impact on the environment.

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 Plants (grades 2–8)

One of the most exciting features at the Weldon Spring Site is the 150-acre Howell Prairie! This program teaches students about the major parts of a flower and how to identify components such as the stamen, pistil, and sepals. Students will also learn how to identify plant leaves by their shape, margin, and arrangement. During the growing season, the site's 8-acre Native Plant Educational Garden serves as an outdoor classroom that allows students to use what they've learned in this program to identify some of the amazing, flowering species found on the site's prairie and throughout the state of Missouri.



Indoor Activities

Butterfly Life Cycles (grades K–5)

Did you know that advanced insects such as butterflies and moths have a “complete” life cycle? This program teaches students the order of the four separate stages in the life cycle of a butterfly and the differences between them. Students will also learn how to tell the difference between butterflies and moths and how to identify some of the common and rare butterflies that inhabit Missouri prairies. Students will enjoy exploring our colorful collection of non-living species. Following this presentation, students will create their own butterfly feeders, an activity that our staff will use to teach them even more about butterflies.

A Sea of Grass (grades 1–5)

Students are given a presentation about the unique plants, animals, and insects that live in Missouri prairies and at the Weldon Spring Site's Howell Prairie. Students will learn how Native Americans and early European settlers used the plants in their daily lives for things such as navigating the prairie, healing, and even for making toys.

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.

Students will examine three different types of soil and compare factors such as color, texture, size, and odor. Students will also gain an understanding of soil profiles and soil horizons.

Rocks (grades 2–5)

Our rocks activity begins with a presentation that discusses sedimentary, metamorphic, and igneous rocks. Next, students will learn how to identify different samples of each type of rock. Students will also be able to examine the different types of fossils and rocks in our extensive collection from all over the world.

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

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

Scavenger Hunt (grades 3–12)

In this activity, students will work in small groups to find answers to questions based on the Interpretive Center's vivid, interactive displays. This activity is designed to help individuals learn more about the Weldon Spring Site's massive, 18-year, \$905 million environmental cleanup, the U.S. Department of Energy's mission, and the early history of the area.

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 test 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 101 (grades 5–12)

This program provides students with a unique learning experience that discusses the in-depth history of the Weldon Spring area and the site's environmental cleanup. During the activity portion of this program, students use Geiger-Müller counters to scan household objects for the presence of radioactivity, and then discuss why certain objects are radioactive. Additionally, students will be educated about the different types of protective gear that workers wore during our environmental cleanup; participants might even have the opportunity to wear the gear.

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. Our tabletop groundwater-model demonstration will show students how a little pollution can travel a long way. Our exciting, hands-on activity illustrates the properties of different types of soil and bedrock layers. This activity helps to unlock some of the mysteries that lie beneath the surface of the earth.

Renewable Energy (grades 6–8)

Did you know that renewable energy plays an increasingly important role in meeting our nation's energy needs? When renewable energy sources are used, the demand for fossil fuels is reduced! This program educates students about the five most common renewable energy sources and how they are used today. Students will participate in an activity to learn more about how clean energy systems function.