

Weldon Spring Site
INTERPRETIVE CENTER

FIELD TRIPS AND OUTREACH PROGRAMS

School Year 2024–2025 and Summer 2025



WELDON SPRING SITE
A Legacy of Service



U.S. DEPARTMENT OF
ENERGY

Legacy
Management

About Our Staff

The Weldon Spring Site interpretive staff is proud to have achieved the Certified Interpretive Guide professional level certification through the National Association for Interpretation.



Field Trips and Outreach Program Requests

- Submit your program request at any time.
- Expect confirmation of your selected field trip date after scheduling begins.
 - School year 2024-2025 scheduling begins Aug. 1, 2024.
 - Summer 2025 scheduling begins March 1, 2025.
- All reservations will be confirmed by staff and supplemented with an agenda, logistics, and special instructions.
- Priority is given to groups that can visit us at the Weldon Spring Site.
- Outreach programs may occur on a case-by-case basis.

Weldon Spring Site Interpretive Center field trips and programs are provided at no cost thanks to support from U.S. Department of Energy Office of Legacy Management.

Request Process

1. Complete the **Field Trip/Outreach Program Request Form**:
 - <https://www.energy.gov/media/287092>
2. Submit via email, phone, or mail:
 - Email: WSInterpretiveCenter@lm.doe.gov
 - Phone: (636) 300-2601
 - Mail: 7295 Highway 94 South, St. Charles, MO 63304



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The Weldon Spring Site is managed
by the U.S. Department of Energy
Office of Legacy Management.



Field Trips to the Weldon Spring Site

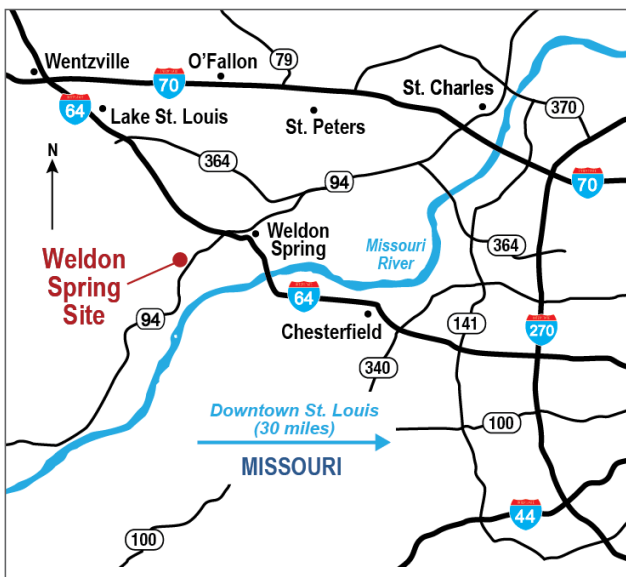
- Groups must provide their own transportation to and from the Weldon Spring Site.
- Generally, field trips are three hours long and include lunch and a disposal cell hike.
- Student groups are divided into one, two, or three smaller groups (up to 36 students per group), depending on size and rotation needs.
- Please provide at least one teacher for every student class. Adult chaperones are encouraged.
- Total daily group attendance should not exceed 100. Groups larger than 100 will require multiple days.
- **Please ensure students are prepared with appropriate clothing, shoes, sunscreen, and bug spray.**
- Outdoor and indoor lunch space is available. However, there are no vending machines or food available for purchase.

Outreach Programs

- Staff can travel to your location at no cost to host outreach programs. However, scheduling priority will be given to on-site field trips. The primary outreach availability is in the winter months — November, December, January, and February.
- Outreach programs can include drop-in tabled activities or structured classroom programs.
- Outreach programs will be confirmed a minimum of three weeks prior to the event.
- We suggest keeping the presenter in one room and rotate classes in and out during the day.
- Please provide a setting such as a classroom, gym, or library for staff to present and display materials on tabletops. Students will also need enough room to work in groups for hands-on activities.

Driving Directions

- The Weldon Spring Site is located in St. Charles County, Missouri, approximately 35 miles west of St. Louis. From I-64/Highway 40/61 or I-70, exit at Highway 94 and continue south toward Defiance.



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<https://www.energy.gov/lm/weldon-spring-site-interpretive-center>



Field Trips to the Weldon Spring Site

Pre-K-5th Grade

Each field trip lasts three hours and contains multiple sessions, including a hike to the top of the disposal cell.

Prairie Pals

Grades: Pre-K-1
Setting: Indoor/outdoor
Number of Students: 10-100 per program

Become pals with the plants and animals of the native tallgrass Howell Prairie at the Weldon Spring Site. Get your hands on real animal pelts and skulls as you discover how their specialized features allow them to survive in nature. Through play and storytelling, understand how plants and animals go through life cycles, passing on their traits to future generations. Engage your senses as you walk through the prairie ecosystem on your way to the top of the disposal cell to get a birds-eye view of the entire prairie ecosystem.

Standards: K.LS1.C.1, 1.LS3.A.1

Prowling the Prairie

Grades: 2-5
Setting: Indoor/outdoor
Number of Students: 10-100 per program

Learn about one of the world's most endangered ecosystem — the tallgrass prairie — by exploring the lives of animals and plants that call Howell Prairie home. Analyze animal behaviors through an investigation of animal tracks, pelts, and skulls. Step into the food chain through an active outdoor game that helps illustrate energy flow and interconnectedness of organisms. Observe the prairie's biodiversity as you hike to the top of the disposal cell.

Standards: 4.LS1.A.1, 5ls2.b.1, 3.LS3.C.1



Celebrating Seeds!

Grades: Pre-K-1
Setting: Indoor/outdoor
Number of Students: 10-100 per program

Explore the features of seeds that allow them to move, reproduce and survive. Engineer and test your own seed capable of being dispersed by wind, water, animals, or “explosion.”

Standards: Prek 11.A, K.LS1.C.1, K.ETS1.B.1, 1.LS1.A.1



Seeds Move!

Grades: 2-5
Setting: Indoor/outdoor
Number of Students: 10-100 per program

Plants use many strategies to transport and germinate their seeds, ensuring future generations of plants survive and thrive. Discover how seeds use special characteristics like “wings,” pods, and tufts, to disperse. Engineer and test your own seed to determine if it can successfully disperse in nature. Students will step into the food chain through an active outdoor game that helps them understand how seeds are an important part of the food chain.

Standards: 2.LS2.A.2, 4.LS1.A.1, 2-5. ETS1.C.1



What's the Matter?

Grades: 2-5
Setting: Indoor/outdoor
Number of Students: 10-100 per program

Chemists, engineers, and environmental scientists all need to understand how molecules are arranged as well as how they behave, change, and combine. Students will explore the properties of solids, liquids, and gases through hands-on investigations and exciting scientific explorations.

Standards: 2.PS1.A.1, 3.PS1.B.1, 3.PS1.A.1, 5.PS1.A.1, 5.PS1.B.2



Wild Weather

Grades: 2-5
Setting: Indoor/outdoor
Number of Students: 10-100 per program

Weather is something that we experience every day. However, extreme weather can have huge impacts on the Earth as well as humans. Identify and explore extreme weather events and their effects on humans and the environment. Engineer solutions to a real-world problems created by extreme weather, and learn how scientists and engineers work together to protect human health and the environment.

Standards: 2-5/ETS1.C.1, 2-ETS1.C.1, 2.ESS2.A.1, 2.ESS2.C.1, 3.ESS2.3.B.1, 4.ESS2.A.1, 5.ESS3.C.1



Field Trips to the Weldon Spring Site

6th-12th Grade

All field trips include a hike to the top of the disposal cell. Groups may select up to two additional programs.

From Factories to Foxgloves: An Investigation of the Weldon Spring Site Story

Grades: 6-12
Time: 60 minutes
Setting: Indoor
Number of Students: 10-30

Develop museum literacy skills during this interdisciplinary program. Learn about the history and science of the site while engaging in guided techniques that foster critical thinking and collaborative learning. Explore the Weldon Spring Site exhibit hall, use maps to evaluate factory sites selection during World War II, and analyze past historical defense and environmental decisions. Consider the variety of perspectives people held during the Cold War. Understand the cleanup process of the Weldon Springs Site and propose and defend your own ideas on beneficial reuse.

Standards: 6-8.AH.1.CC.B, 9-12.AH.1.CC.B, 9-12.GV.1.CC.B, 9-12.AH.1.CC.E, 6-8.GEO.1.CC.E, 9-12.GV.1.CC.E, 6-8.GEO.1.GS.A, 9-12.AH.4.G.A, 9-12.AH.4.PC.B, 9-12.AH.5.PC.A, 9-12.AH.4.CC.B, 9-12.AH.5.CC.B, 6-8.GEO.2.G.C

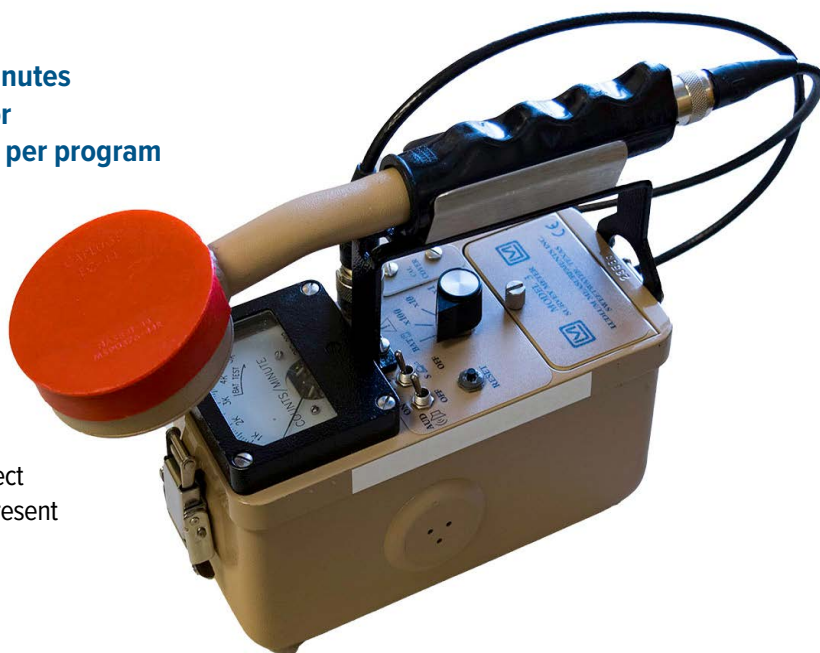


Get a Half Life

Grades: 6-12
Time: 60 minutes
Setting: Indoor
Number of Students: 10-72 per program

Radiation is all around us, all the time, from natural and human-created sources. Radiation is used in modern medicine, energy production, and nuclear weapons. Develop a better understanding of the risks and benefits associated with nuclear technology by evaluating common misconceptions. Students will use Geiger counters to detect low-level sources of radiation typically present in our everyday lives.

Standards: 9-12.PS.4.B1, 9-12.PS.4.B2



Subsurface Investigation

Grades: 6-12
Time: 60 minutes
Setting: Indoor
Number of Students: 10-30

Dive into groundwater, soil science, and what it takes to clean up environmental contamination in this hands-on exploration of the Weldon Spring Site. Take on the role of a scientist by using a groundwater model to make observations, collect samples, and evaluate the effect karst topography has on pollution migration. Learn about soil contamination and explore soil samples. Propose solutions to environmental contamination and learn about the details of Weldon's environmental contamination and environmental cleanup.

Standards: 6-8.ESS3.A.1, 6-8.ESS3.C.2, 9-12.ESS3.C.2

Marie Curie: A Pioneer in Science

Grades: 6-12
Time: 60 minutes
Setting: Indoor
Number of Students: 10-30

Marie Curie is an icon of modern science. Her passion for science, relentless resolve, and resilience in the face of physical and personal hardships is the backdrop to the fascinating story of how she fundamentally changed our understanding of the atom and radioactivity. Participate in a "two truths and one lie" game about Marie Curie's life, engage in hands-on activities and learn how the discoveries she made over 100 years ago have been applied throughout the history of the Weldon Spring Site.

Standards: 6-8.PGC.5.CC.5, 9-12.GS.4.WH.4.C



Disposal Cell Hike

Grades: 6-12
Time: 60 minutes
Setting: Outdoor

Connect to lessons from the past and explore a modern engineering marvel. The 41-acre disposal cell hosts a 75-foot stairway climb to a platform with panoramic views of the surrounding area. Discover why the disposal cell was constructed — and what contents are stored within it — and learn about the long-term monitoring environmental stewardship efforts at the Weldon Spring Site.

Standards: 3.LS3.D.1, 5.ESS3.C.1, 6-8.LS2.C.2, 9-12.LS2.C.2



Outreach and Off-Site Programming

Survival in Howell Prairie

Grades: K-5
Time: 45 minutes
Setting: Indoor
Number of Students: 10-30 per session

Explore the unique features of Missouri native wildlife that make Weldon Spring Site's Howell Prairie their home. Get your hands on a variety of animal biofacts, including real pelts and skulls. Discover how animals survive as they constantly search for food, water, and shelter and determine if the Howell Prairie is a thriving ecosystem.

Standards: K.LS1.C.1, 3.L.S3.C.1, 4.L. S1.A.1, 5.PS3.D.1, 5.LS2.B.1



Mind Over Matter

Grades: Pre-K-1
Time: 45 minutes
Setting: Indoor
Number of Students: 10-30 per session

What makes something a solid, liquid, or a gas? Learn to identify an object's state of matter. Participate in a "sink or float" demonstration, analyze physical properties of matter, and conduct a chemical reaction to experience changes in matter from one state to another.

Standards: Early Education: Physical Science I.A, K.PS1.A.1



Solids, Liquids, Gases

Grades: 2-5
Time: 45 minutes
Setting: Indoor
Number of Students: 10-30 per session

Chemists, engineers, and environmental scientists all need to understand how molecules are arranged as well as how they behave, change, and combine. Understand how the molecules of each state move differently depending on their energy. Explore the properties of solids, liquids, and gases through a buoyancy activity and a chemical reaction.

Standards: 2.PS1.A.1, 3.PS1.B.1, 3.PS1.A.1, 5.PS1.A.1, 5. PS1.B.2

Geology Rocks!

Grades: 2-5
Time: 45 minutes
Setting: Indoor
Number of Students: 10-30 per session

Dig into this interactive overview of rocks, minerals, fossils, and earth processes. Get your hands on rocks, minerals, and fossils as you learn to identify common specimens and discover how rocks are formed.

Standards: 2.PS1.A.1, 3.PS1.B.1, 3.PS1.A.1, 5.PS1.A.1, 5.PS1.B.2



The Incredible Journey

Grades: 2-5
Time: 45 minutes
Setting: Indoor or outdoor — a larger play space is needed
Number of Students: 10-30 per session

Embark on the incredible journey of a water droplet as it moves through the water cycle. Become a water drop traveling through different stages of the cycle. Consider how water interacts differently with parts of the geosphere, biosphere, and atmosphere.

Standards: 2.ESS2.C.1, 5.ESS2.C.1

History and Science of the Weldon Spring Site

Grades: 6-12
Time: 45 minutes
Setting: Indoor
Number of Students: 50 per session

The Weldon Spring Site story began over 100 years ago. Prairies, farmland, and three towns were acquired in the 1940s in the name of national defense. A TNT munitions plant was constructed to support America's World War II efforts, and later, a uranium refinery operated during the Cold War. Learn about the site's contamination and environmental cleanup. Experience a Geiger counter demo to understand how radiation is detected.

Standards: 6-8.LS2.C.2,
9-12.LS2.C.2,
9-12.AH.5.CC.D,
9-12.AH.5.GB





Marie Curie: A Pioneer in Science

Grades: 6-12
Time: 45 minutes
Setting: Indoor
Number of Students: 10-30 per session

Marie Curie is an icon of modern science. Her passion for science, relentless resolve, and resilience in the face of physical and personal hardships is the backdrop to the fascinating story of how she fundamentally changed our understanding of the atom and radioactivity. Students will participate in a “two truths and one lie” game about Marie Curie’s life, engage in hands-on activities, and learn how the discoveries she made over 100 years ago have been throughout the history of the Weldon Spring Site.

Standards: 6-8.LS2.C.2, 9-12.LS2.C.2, 9-12.AH.5.CC.D, 9-12.AH.5.GB



Event Tables and Booths

Grades: K-12
Number of Students: Any

Is your school having a science night, career fair, or similar event? We offer walk-up table activities with a variety of themed, hands-on activities. Reach out and let us know what you’re looking for.

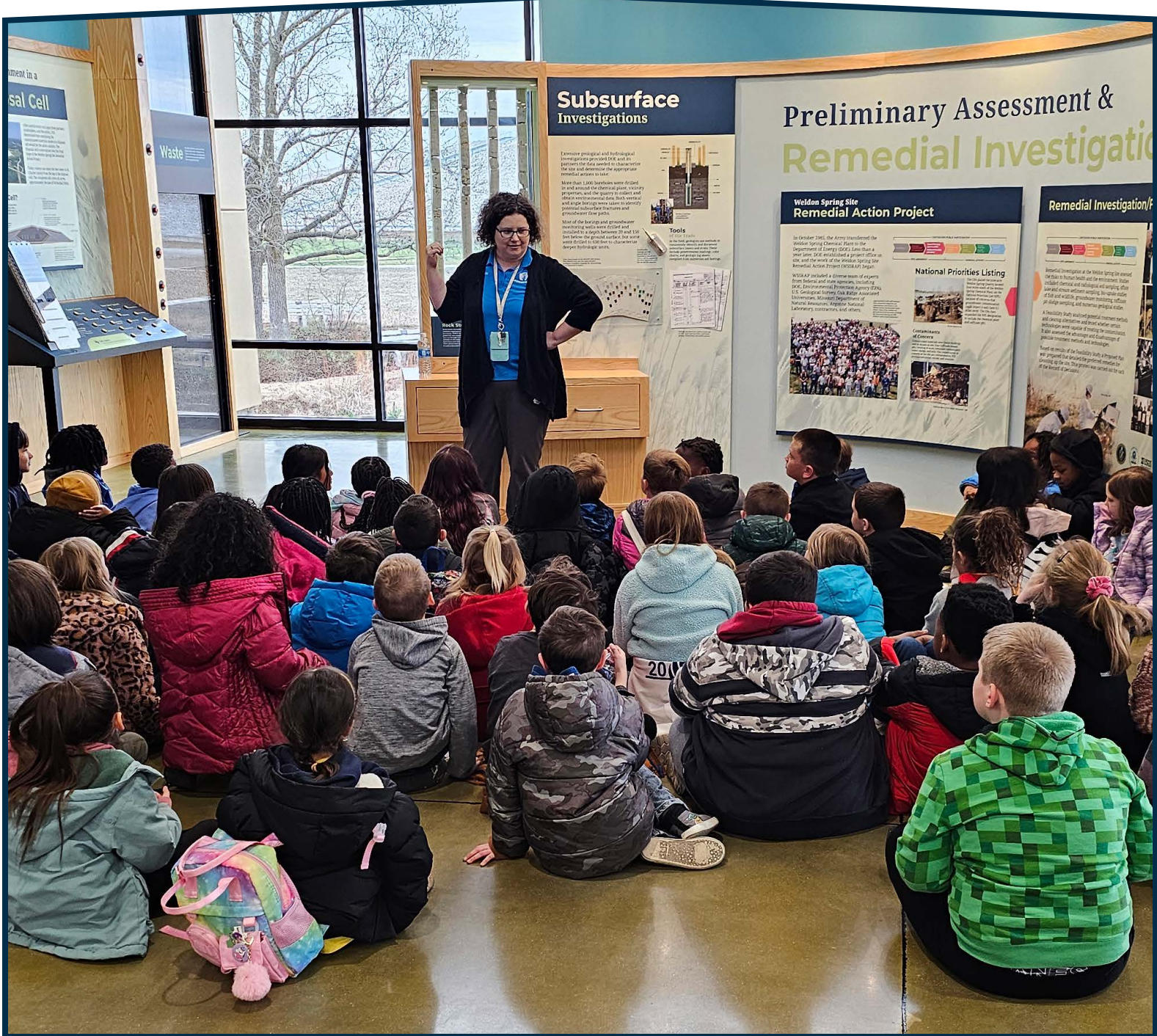


ATTENTION: COLLEGE PROFESSORS AND STUDENTS!

Colleges and universities: we have scientists, engineers, geologists, hydrologists, and many more professionals on staff, we'd love to cater a program or career mentoring opportunity for you.

Contact us for more information!





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