WRI Field Days



Wenatchee River Institute Field Days provide the perfect mix of science, exploration and discovery. These interdisciplinary field trips are NGSS aligned, putting science tools in the hands of students while providing fun and experiential education in the outdoors.

Field Days take place at Barn Beach Reserve, 347 Division St, Leavenworth, WA. This 9-acre property is adjacent to miles of forested riverfront trails, all of which act as our outdoor science classroom. Field Days run from 9:00am-2:00pm with a 30-minute lunch. Grades and seasons are recommendations based on curriculum content, although we are open to working outside these parameters based on your needs.

Scheduling & questions: Rebecca Ryan, WRI Youth Education Director, at rryan@wenatcheeriverinstitute.org or 509.548.0181 x2

Habitat Detectives

Grades: K-3

Seasons: fall, spring

Can you find the five features of an animal's habitat? Develop your detective skills as we head out on the trails to discover signs of wildlife and explore the places animals call home. We'll use microscopes and hand lenses to compare the creatures we find on land to those that live in our river. Using our naturalist senses and artistic creativity we'll explore plants and animals of our local habitats and those from places far away.

NGSS: K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive. **2-LS4-1.** Make Observations of plants and animals to compare the diversity of life in different habitats.

Wild Birds

Grades: 2-5

Seasons: spring, fall

Have you ever been amazed by a colorful bird flying by or the beautiful song it sings? Explore Barn Beach Reserve and the wild birds that live here. Learn about their anatomy and behavior using scientific instruments, conducting research on a real bird specimen, using field guides and binoculars and learning bird songs through games. Come experience why birds are such incredible creatures of the sky.

NGSS: 1-LS1-1. All organisms have external parts. Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water and air.

4-LS1-1. Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.

Watershed Naturalists

Grades: 3-5

Seasons: fall, spring

Students discover just how connected our land and water are. The day is spent exploring the shores of the Wenatchee River, getting to know the native plants, collecting aquatic macroinvertebrates and embarking on design and engineering challenges. If the timing is right, they can even witness the spawning Chinook salmon. At the day's end, a health assessment of the riparian habitat will be made, and students will decide effective ways to keep our river system clean and healthy.

NGSS: 3-LS4-3. Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.

4-LS-1. Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior and reproduction



Earth Explorers

Grades: 4-5

Seasons: fall, spring

Ever wonder how mountains, plants, water and fire affect one another? To find out, students spend time exploring a physical model of our local watershed, designing and engineering solutions to erosion, building matchstick forests, hiking riverfront trails, and teaching one another about native ecology. Emphasis is placed on the interaction between the geo-, hydro-, bio- and atmospheres.

NGSS: 4-ESS2-2. Analyze and interpret data from maps to describe patterns of Earths features.

4-ESS3-2. Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans.

5-ESS2-1. Develop a model using an example to describe the ways the geosphere, biosphere, hydrosphere and/or atmosphere interact.

Snowshoe Adventures

Grades: 4-6 Seasons: winter

Students snowshoe the wintry trails of Barn Beach Reserve. They look for signs of wildlife and uncover adaptations plants and animals use to survive the cold. Along the way, students play games to develop their snowshoeing skills and explore the key design features that help snowshoes function. Back inside, students use natural materials to design and engineer their own pair of snowshoes. Emphasis is placed on the engineering process including research, team collaboration, managing resource constraints and specified testing criteria.

NGSS: 3-5-ETS1-2. Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

3-5-ETS1-3. Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

4-LS-1. Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior and reproduction

Traveling Planetarium

Grades: K-7 Seasons: all

Travel through space and time while exploring our solar system, and beyond. We bring the stars to your school or venue with our traveling planetarium dome. Witness the night sky during different times of the year, learn constellations and get to know our sun, moon and stars like never before. Please read these <u>special considerations</u> to see if a visit from WRI's Traveling Planetarium will work for your school.

NGSS: 1-ESS1-1 Use observations of the sun, moon, and stars to describe patterns that can be predicted.

1-ESS1-2 Make observations at different times of year to relate the amount of daylight to the time of year.

5-ESS1-2 Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky.