



HANDS ON THE LAND

A National Network of Field Classrooms Connecting Students, Teachers, and Parents to Their Public Lands and Waterways

FEATURED SITE

At **Wildwood Recreation Site**, Portland area students come to study stream and wetland habitats. The Salmon River's 33.9-mile reach is entirely protected as a National Wild and Scenic River and runs through the heart of Wildwood, which is located about 30 miles downstream from its headwaters on Mt. Hood. It is the only fully-protected river in the contiguous 48 states.

Wildwood, administered by the Bureau of Land Management, offers a variety of trails and a wetlands boardwalk for students and general visitors to enjoy. Explore Sixes Creek and a quarter-mile side channel of the Salmon River which provide habitat for steelhead, cutthroat and chinook salmon. Nearby wetlands and Huckleberry Mountain are the source of Sixes Creek, both of which provide habitat for juvenile salmon, waterfowl, amphibians, and other migratory species.

Wildwood's maritime climate is characterized by mild temperatures, wet winters and a long frost-free period.



Visitors enjoy watching juvenile and native salmon through the accessible in-stream viewing window.

Cascade Streamwatch

Watershed Science Education with Wolfree

The idea for Cascade Streamwatch was conceived in the 80's by US Forest Service fisheries biologists who recognized the need for the public, especially school children, to have the opportunity to view and learn about native northwest salmon and steelhead in their natural habitat. In 1990, the Forest Service and the Bureau of Land Management joined together to pursue this endeavor. The key was to find a place close enough to Portland that would support a multitude of hands-on science-based field activities focused on watershed science. In 1994, Wolfree, a Portland-based non-profit science education organization joined with the agencies to help bring the local area schools to this 600-acre site nestled in the foothills of the Cascade Mountains of western Oregon.

Today, visitors can learn about terrestrial and aquatic habitats as part of an award-winning interpretive trail system coupled with a watershed science education curriculum. The site's most unique feature is an accessible in-stream viewing window where visitors can see native northwest salmon and steelhead living in their natural habitat. Students, with help from private and public natural resource specialists, master skills in science inquiry, applied sciences, and geography. Cascade Streamwatch has become one of the most successful outdoor educational sites in the Northwest, hosting more than 80,000 visitors from all over the world annually.

More information:
<http://www.beoutside.org>
 Contact Dale Waddell
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A Student at Wildwood observes benthic macroinvertebrates and other stream habitat characteristics of the Salmon River.



US Forest Service biologist provides instruction and mentoring to a Cascade Streamwatch student.

POLLINATORLIVE - A DISTANCE LEARNING ADVENTURE



PollinatorLIVE is continuing last year's distance learning adventure that focused on monarch butterflies. This year's free distance learning adventure will feature pollinators, citizen science projects, and gardening. In addition, PollinatorLIVE will keep you up-to-date with the latest about monarch butterflies.

Join students and researchers for a series of live interactive web casts, web seminars, and satellite field trips about pollinators, gardening, and conservation. The website features resources that meet National Science Education Standards for the classroom. PollinatorLIVE is geared toward students in grades 4 - 8, but there are lesson plans and activities of interest to teachers and students in earlier and later grade levels.

More information:
<http://pollinatorlive.pwnet.org>



Partners in Resource Education

Partners in Resource Education (PRE) is a collaboration of Federal agencies, a non-profit foundation, schools and other private sector partners. PRE sponsors Hands on the Land (HOL). Through HOL, Federal agencies are providing a diverse array of hands-on learning opportunities for teachers and students on public lands and waterways. The program is being expanded to state and local lands.

More information:
<http://www.classroomearth.org/resources/pre>

CURRICULUM HIGHLIGHTS



The **Alaska Seas and Rivers** marine/aquatic curriculum, developed by Alaska teachers, provides high-quality units for use by teachers and homeschoolers, as well as interpreters, youth groups, nature tour guides, and anyone seeking fascinating content on marine science topics. The units for grades K-8 are complete and ready to use. The curriculum meets Alaska science content standards and grade level expectations.

More information: <http://seagrant.uaf.edu/marine-ed/curriculum/>



For Earth Science Week, the American Geological Institute (AGI) has created a comprehensive portfolio of **Geoscience Education Products and Services** for students and teachers—from kindergarten to high school and beyond.

More information: <http://www.earthsciweek.org/forteachers/>

UPCOMING EVENTS

USA Science & Engineering Festival
 Washington, D.C.

October 10-24, 2010

Expo on the National Mall: October 23 & 24

The Inaugural USA Science & Engineering Festival will be the country's first national science festival and will descend on the Washington, D.C. area in the Fall of 2010.

The Festival promises to be the ultimate multi-cultural, multi-generational and multi-disciplinary celebration of science in the United States. The culmination of the Festival will be a two-day Expo in the nation's capital that will give over 500 science & engineering organizations from all over the United States the opportunity to present themselves with a hands-on, fun science activity to inspire the next generation of scientists and engineers.



Earth Science Week 2010

Exploring Energy

October 10-16, 2010

Earth Science Week 2010 will encourage people everywhere to explore the natural world and learn about the geosciences. Earth Science Week offers opportunities to discover the Earth sciences and engage in responsible stewardship of the Earth. AGI hosts Earth Science Week in cooperation with sponsors as a service to the public and the geoscience community.