



# Hands on the Land

A National Network of Field Classrooms Linking Students, Teachers, and Parents to their Public Lands and Waterways

## Featured Site

### Grand Canyon National Park

Grand Canyon National Park visitation slows in the cold months of the year but the Environmental Education Branch staff isn't hibernating. We all enjoy this season as it gives us time to review the previous year's work and make plans for the upcoming months. A nice blanket of snow signals that most of nature has slowed; repairing, renewing and storing energy for an explosive burst in spring. We follow a similar process as we take vacations, tweak exiting programs, fix and patch props, order supplies and tools and prepare for the burst in March. One big difference is we are also in the midst of our very busy outreach season.

As the deep freeze discourages outdoor educational opportunities, we shift from hosting students in the park to conducting outreach in school classrooms throughout Arizona. This winter, we are traveling to 64 schools and visiting 250 classes located across the state. We enjoy bringing the Canyon to the kids and getting them prepared for their upcoming fieldtrip to Grand Canyon. We also like the opportunities to visit other education facilities, park sites and centers and expand our network of friends and colleagues.

As an extension of our outreach program, we are developing our "Canyon in Your Classroom" Distance Learning program. These presentations will be free and will focus initially on Geology. We have our first programs scheduled for April; a school district in Massachusetts signed up seventeen 7<sup>th</sup> grade science classes for the entire first week. There seems to be



A Grand Canyon park ranger shares the natural history of the Canyon with students.

quite a demand out there and it will only be growing. Rachel Brown, our new Physical Science Technician knew her way around rocks and computers and took on a multimedia education project called "Views of Our National Parks" which had been a on again-off again project until her arrival. She and Education Specialists Andy Pearce, are working with JPL (Jet Propulsion Laboratories), NASA Goddard Space Center, and our regional headquarters located in Denver, CO. to assemble an interactive DVD focusing on the geologic story of Grand Canyon. One of the highlights of the "Views" DVD is a virtual fly through of Grand Canyon. Using NASA satellite imagery combined with three-dimensional rendering from JPL, we are able to take the viewer from outer space to the depths of Grand Canyon. All along the fly through, the narrator discusses points of interest and geologic features. Teachers and educators will be able use the product as a pre-visit education tool, helping their students become familiar with Grand Canyon as well as with geologic terms, concepts and processes.

The warming of the weather will bring busloads of students beginning in early March. Here are new opportunities to enlighten and educate the future generations about our amazing planet. We will help prepare them to be careful stewards of our National Treasures and, in turn, some of them will become the next ranger or biologist or teacher. And the cycles continue. Contact Jay Johnstone at 928-638-7931 or [jay\\_johnstone@nps.gov](mailto:jay_johnstone@nps.gov) for more information.



Nature comes indoors through the Grand Canyon's outreach program.

## Member News

### West Eugene Wetlands Education Center

Known as one of the most livable cities in the country, Eugene, Oregon is also home to the 2,500-acre Hands on the Land site, West Eugene Wetlands. This land was acquired due to the important botanical and wildlife species in residence, including the threatened Oak Savanna Woodlands; Willamette Wet Prairie and various waterfowl. Since acquisition, the land and its stewards have become the heart of the hands-on environmental education effort in Eugene.



Artist's Rendition of the Education Center

Although already active in environmental outreach in schools and the community, the West Eugene Wetlands site is planning to go one step further. They were identified as one of only 18 proposed BLM Environmental Education Support Centers nationwide. Their goal is to create a world-class education center that provides the following:

- An outdoor education center for the whole community and a Field Science Laboratory for all ages;
- Highest standard of sustainable design;
- Wetland and science exhibits;
- Natural resource library;
- West Eugene Wetlands Gift Shop;
- New for home for Rachel Carson Center for Natural Resources.

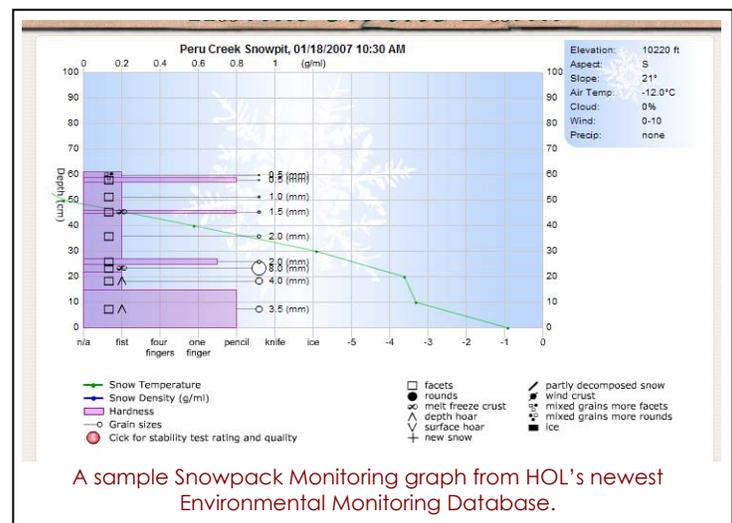
Based on fundraising efforts and community support, it looks like the West Eugene Wetlands Education Center is well on the way of achieving its goals. For additional information, contact Holly McRae at (541) 683-6494 or [hmcr@wewetlands.org](mailto:hmcr@wewetlands.org).

## Web Corner

### Snowpack Monitoring Database

Check out HOL's newest Environmental Monitoring Database: Snowpack Monitoring. Created in partnership with HOL's member site, Keystone Science School (KSS), the new database allows students to observe the winter's weather history through the various snowpack layers and the degree of change in snow grains. From these observations, students can calculate the amount of water available for homes, industry and agriculture. Students at KSS are also learning more about avalanche risks through the study of the winter's snowpack.

After spending time studying the snowpack in Keystone, students can return to their classrooms and continue monitoring via the HOL website. Learn more about the science involved in snowpack monitoring and the benefits it could offer your site by visiting the HOL website's Environmental Monitoring link or: <http://www.handsontheland.org/monitoring/projects/snow/search.cfm>. Contact Andy McIntyre at Keystone Science School, 970-468-2098 or [amcintyre@keystone.org](mailto:amcintyre@keystone.org) for additional information.



## Upcoming Events

### National Science Teachers Association (NSTA) National Conference

March 29-April 1, 2007

St. Louis, Missouri

This year's annual NSTA conference is sure to be of interest to HOL sites as the theme is *Science: A River of Connections*. Workshops are grouped by strands—Literacy and Science Instruction; Science Assessment; Technology; and Wetlands, Coastal Processes, and River Systems. To learn more, visit the NSTA website, [www.nsta.org](http://www.nsta.org).