



Featured Site: Petrified Forest National Park

Petrified Forest National Park (PFNP) features one of the world's largest and most colorful concentrations of petrified wood, the multi-hued badlands of the Chinle Formation known as the Painted Desert, historic structures, archeological sites, and displays of 225 million year old fossils. The park is comprised of 218,533 acres.

In order to meet the needs of educators and to instill a sense of appreciation and knowledge for PFNP, park staff created *Rockin' Through the Ages: From Fossils to Petroglyphs*. The program is curriculum-based and is aligned with the Arizona Science and Mathematics Standards for Grades 4 through 8. It provides a scientific learning experience using paleontological and archeological resources. Major components of the program include: pre-visit lessons, in-park scientific field exploration, completion of a final school project related to the park.

Students enjoy learning about the park through the program's education modules. The Paleontology Module includes Petrified Tree Orientation, Fossil Excavation, and Studying Fossils in the Laboratory.



Ranger Marge Post works with students identifying archeological artifacts found during a mock excavation.



Students examine petrified wood during a ranger-guided program at Petrified Forest National Park.

The Archeology Module includes Monitoring Petroglyphs, Archeological Excavation, and Subsistence Lifestyle Study.

Each field exploration is conducted by a park ranger and requires at least two hours. Park entrance fees are waived for school groups. Materials for the field exploration are provided by the park. Teachers only need to copy the field guide for each student to use during the field exploration.

For more information, please visit <http://www.nps.gov/pefo/> or the Hands on the Land website, www.handsontheland.org.

*"The Stream beckons on to me,
wanting me to take the step,
into the world of water,
but I resist,
knowing what could happen."*

By: Fiona, Age 12

Member News

Keystone Science School, located in Keystone, Colorado has been buzzing this winter with many programs. They specialize in activities that challenge citizens—from children to adults—to develop critical thinking skills as they follow a path that explores nature and science education. Their Classroom Access to Science Education or CASE program allows schools to bring students to the White River National Forest for a truly outdoor experience learning science concepts, team building, and scientific research in a new theme-based way. 9th and 10th grade students from the Academy of Science and Technology in Conroe, Texas recently made the trip to Colorado for the Snow Science program. Learning the physics of snow from crystal formation in the sky to snow metamorphism on the ground, students collected data from their snow pack comparisons. Snow pack analysis includes crystal identification, density, temperature, thickness of snow layers, and

snow pack stability as it relates to avalanche dynamics. Analyzing the data using Snow Pro, students created power point presentations to share the information with classmates.

To learn more about the Keystone Science School and its partnership with White River National Forest, please visit www.keystone.org.



Students learn about snow layers in a snow science class in Keystone, Colorado.

Upcoming Events

Hands on the Land Awards

It's our turn to honor you! In the coming months, HOL will be honoring member sites in several categories including: collaboration with other sites, relevance to the real world and enhancing classroom teaching. It's not too late to show HOL your wonderful ideas, **activities, and projects on the website so that others can see the exciting projects at your site!** Your site will be notified by the end of March with notice of winning an award.

"A beautiful white blanket covering the ground, Crystal snow all around. A winter wonderland."

By: Kelsey Sager, Age 12

NSTA National Convention 2006

Partners in Resource Education (PRE) will sponsor three workshops at the National Science Teachers Association convention April 6-9, 2006 in Anaheim, CA. Topics are "Energy and our Public Lands," exploring traditional and alternative energy sources, "Silent Invaders," focusing on invasive species, and "Living with Fire," looking at natural hazards and the role of fire in ecosystems. Teachers will receive materials to assist in meeting learning standards at these 90-minute workshops. Look for specific dates and times in an upcoming newsletter. For more information about the national NSTA convention, please visit www.nsta.org.