

Grand Canyon

National Park Service
U.S. Department of the Interior

Grand Canyon National Park
Arizona



Educational Programs for teachers and students

September 2011 – May 2012



Greetings from Grand Canyon National Park

National parks provide outstanding outdoor classrooms that support and enhance your learning objectives in the classroom. The Environmental Education staff at Grand Canyon National Park conducts curriculum-based education programs that use this remarkable landscape as a teaching tool for a variety of disciplines.

Taking students into the field provides them with real-world examples of what they learn in the classroom. These activities encourage students to explore, experience, and engage in the learning process. Programs take place along the rim of Grand Canyon—an inspirational backdrop for learning.

All programs are aligned with Arizona Academic Standards. For a more detailed description of each program than is presented in this brochure and a list of standards addressed in each program, visit www.nps.gov/grca/forteachers.

Registration Information

To Register

1. All registration forms for Field Trip Programs, Teacher Workshops, Ranger Visits to Classrooms, and Distance Learning Programs, are available online at: www.nps.gov/grca/forteachers, or by calling 928-638-7931.
2. **STARTING ON THE APPROPRIATE DATE BELOW**, you may send the completed registration form to us by fax (928-638-7691) or mail (address on last page).

- **Fall Field Trips and Teacher Workshops:**

Registration begins Wednesday,
August 24, 2011, at 7:00 a.m.

- **Spring Field Trips and Ranger Visits to Classroom:**

Registration begins Wednesday,
September 7, 2011, at 7:00 a.m.

Cost

The National Park Service does not charge for the programs. A waiver for the park entrance fee is provided once your trip is confirmed.

Group size

All programs, except assemblies, are limited to a maximum of 35 students and require a student to chaperone ratio of 5:1.

All programs take place on the rim of Grand Canyon at an elevation of 7000 feet. Anyone with heart or breathing concerns should consult a physician before attending one of the programs.

**Questions? To contact us,
see back page.**

Travel Grants

For schools with restricted travel budgets, the National Park Service may have a limited number of travel grants available. Travel grants are available to schools with at least 50 percent of the students receiving free or reduced lunch.

To learn more about travel grants, call the travel grant coordinator at 928-638-7931.

Field Trip Program Topics

Geology Programs

Grand Canyon is one of the world's best-known geologic showcases. Using Grand Canyon as an outdoor classroom helps students gain a greater understanding of earth processes, the scientific method, and the amazing science of geology.

Dynamic Earth

Unravel the mystery of how Grand Canyon formed. In this program, students hike a half mile into the canyon to explore a fossil site and gain an understanding of how scientists determine environments in the geologic past. Afterwards, hiking along the rim, they stop to learn about the deposition of the colorful rock layers and explore the dynamic geologic processes that formed Grand Canyon.

Grade level: 3rd – 6th

Duration: 5 hours

Walking distance: 1.5 miles, moderately strenuous, paved and unpaved trails, some stretches are rough and rocky

Start time: 9:00 a.m.

Grand Canyon Rocks!

This program focuses on the canyon's rock layers and their environments of deposition. Through hands-on activities, learn about the dynamic geologic processes that formed Grand Canyon.

Grade level: 3rd – 6th

Duration: 2.5 hours

Walking distance: 1.5 miles, moderate terrain, paved trail

Start time: 9:00 a.m. or 12:30 p.m.

History Programs

Grand Canyon's fascinating human history spans 12,000 years from the paleo-hunters of the Ice Age to today's visitors. The canyon has attracted people for many different reasons throughout time, making it an ideal setting for studying human survival and success within this spectacular landscape.

Time Travelers

Students become archeologists and unearth clues about Grand Canyon's ancient inhabitants. By participating in an artifact sifting activity, exploring ancient ruins and a museum, and climbing the stairs to the top of the Desert View Watchtower, students learn about the native peoples who have shaped Grand Canyon's 12,000-year human history.

Grade level: 4th – 6th

Duration: 5 hours

Walking distance: One mile, easy to moderate terrain, paved trail

Start time: 9:00 a.m.

Rangers conduct this program at the Desert View Watchtower/Tusayan Ruins area, 25 miles east of Grand Canyon Village and Park Headquarters.

Rails and Tales

While exploring historic Grand Canyon Village, students discover the stories of people who have shaped Grand Canyon's pioneer history. Through scavenger hunts, participatory activities, and journaling, students learn about the changing ways people have valued Grand Canyon over time.

Grade level: 4th – 6th

Duration: 2.5 hours

Walking distance: One mile, moderate terrain, paved trail and optional dirt paths

Start time: 9:00 a.m. or 12:30 p.m.

Pictures of the Past, Photos for the Future

Historians use old photographs and maps of Grand Canyon Village to reveal stories of the past and help make management decisions for the future. By comparing old photos, maps and buildings to present day features, students learn about Grand Canyon's pioneer history. Students become historians, take pictures of historic places, and assist the National Park Service in documenting changes over time.

Grade level: 5th – 10th

Duration: 5 hours

Walking distance: 1 mile, moderate terrain, paved trails and dirt paths

Start time: 9:00 a.m.

Stories in Stone

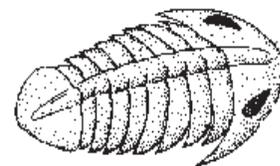
Using the eyes of a paleontologist, students discover fossils preserved in the rocks of Grand Canyon. Through close observation of the 270 million-year-old Kaibab Formation, students record the fossils they find and interpret the environment in which the animals lived.

Grade level: 3rd – 6th

Duration: 2 hours

Walking distance: One mile, moderate terrain, paved trail

Start time: 9:00 a.m. or 12:30 p.m.



Field Trip Program Topics

Ecology Programs

Grand Canyon's depth and size result in a remarkable variety of ecosystems in close proximity to one another, making it an outstanding place to study ecological concepts.

Life on the Edge

Using their senses of sight, touch, smell, and hearing, students explore the forest and rim ecosystems of Grand Canyon. Activities, games, and journal entries help students learn about plant and animal adaptations. Students make wildlife observations, look for evidence of animals, and learn the role of national parks in protecting wildlife and plants.

Grade level: 3rd – 5th

Duration: 5 hours

Walking distance: 2.5 miles, moderate terrain, paved trails and dirt paths

Start time: 9:00 a.m.

Making Sense of the World

Animals at Grand Canyon use their senses to survive. Using their own senses, students explore the forest, compare the properties of objects in nature, and draw connections between the use of senses and survival in the animal world.

Grade level: Kindergarten – 2nd

Duration: 2 – 3 hours

Walking distance: Up to 1.5 miles (varies depending on age and abilities of students), moderate terrain, paved trail and dirt paths

Start time: 9:00 a.m. or 12:30 p.m.



New Programs!

For the 2011-2012 school year, we are piloting a number of new programs. Please call us for scheduling, or to ask further questions regarding the following programs.

Endangered! Designed for **4th grade**, this program helps students understand Grand Canyon's biodiversity and human impacts through time.

Fire Ecology: Designed for **7th grade**, this program helps students understand the role of forest fire in maintaining healthy ecosystems.

High School Programs: We now offer high school versions of the following programs:

- *Grand Canyon Rocks!*
- *Eco Explorers*

North Rim Programs

For schools located in the Arizona Strip and southern Utah, we offer education programs in the fall on the North Rim of Grand Canyon. Contact us for details. Programs available on the North Rim:

- *Grand Canyon Rocks!*
- *Life on the Edge*
- *Eco Explorers*

Eco Explorers

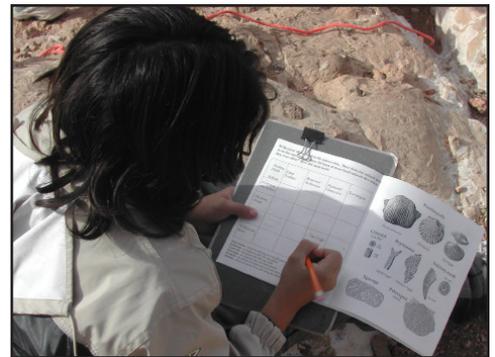
A shorter version of Life on the Edge for groups that would like a half-day program.

Grade level: 3rd – 5th

Duration: 2.5 hours

Walking distance: 1.5 miles, moderate terrain, paved trails and dirt paths

Start time: 9:00 a.m. or 12:30 p.m.



Human Physiology Program

Hike Smart!

Into the Canyon: A Journey of the Mind and Body

During a three-mile, round-trip hike into the canyon on the Bright Angel Trail, each student measures and records his or her pulse, breathing rate, and blood pressure to understand our body's physical responses to strenuous exercise. Additionally, students learn how to properly prepare for a canyon hike, why hiker emergencies happen in the canyon, and how to hike safely.

Grade level: 5th – 8th

Duration: 5 – 6 hours

Walking distance: 3 miles, very strenuous, steep unpaved trail, rough and rocky, some sheer cliffs

Start time: 9:00 a.m. (varies by season)

This program is limited in its availability and requires advanced preparation, including two pre-visit classroom presentations by a ranger (two hours each). Not recommended for people with heart or respiratory problems, difficulty walking, or extreme fear of heights.

Invite a Ranger to Your Classroom

Would you like a ranger to visit your classroom? Rangers travel throughout Arizona and surrounding regions to conduct engaging, hands-on activities that support your course curriculum. In-class programs focus on geology, ecology or human history. Additionally, assembly programs are available for groups of up to 300 students, parents, and teachers.

Distance Learning

Do you live hundreds or thousands of miles from Grand Canyon National Park, but wish you could bring your class to the canyon? Why not invite a virtual ranger to your classroom? For schools with video-conferencing equipment, we offer geology and ecology-based educational programs via two-way conferencing over the Internet.

Teacher Workshops

Teacher workshops are designed to help you understand how to use the resources available at Grand Canyon National Park as a teaching tool in your classroom. During the workshop, rangers conduct activities related to the field trip programs we offer and to the classroom-based lessons plans available on Grand Canyon National Park's web site.

Contact Information

For information on education programs and teacher workshops:

School Group Coordinator
Environmental Education Program
National Park Service
P.O. Box 129
Grand Canyon, AZ 86023

Phone: 928-638-7931

Fax: 928-638-7691

E-mail: Amala_Posey@nps.gov

Web site: www.nps.gov/grca/forteachers



National Park Service
Division of Interpretation,
Environmental Education
P.O. Box 129
Grand Canyon, AZ 86023

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