



Educational Programs - Secondary

January - November 2012

Discover an amazing outdoor classroom in the Heart of the Rockies



National parks preserve our most treasured natural places and provide us with some of the most amazing outdoor classrooms in the world. The environmental education program at Rocky Mountain National Park has been educating and inspiring students for over 17 years. Set against the backdrop of 72 peaks that tower over 12,000 feet, Rocky Mountain is home to four distinct ecosystems, 12,000 years of human history, and over 1.7 billion years of geologic history.

Taking students into the field provides them with real-world examples of what they learn in the classroom. The educational programs at Rocky Mountain National Park provide hands-on field experiences that can support and enhance your learning objectives. Each program is based on the real science, history, and/or geography of the area. The child-centered environmental education staff at Rocky Mountain National Park utilize the resources throughout the park to conduct curriculum-based education programs. The activities encourage students to engage, explore, and experience in the learning process. Come discover the learning opportunities and potential lessons that exist in this unique outdoor classroom!

Programs

Our environmental education program offers three types of learning experiences - field trips, classroom presentations, and self-directed park visits. All ranger-led programs are aligned to the 2010 Colorado State Academic Standards. The National Park Service does not charge for programs. A park entrance fee waiver is provided once your trip is confirmed.



Reservations

We are now accepting requests for 2012 programs. We recommend that you call to schedule a program at least one month before the desired date of the program.

To Register: Reservations are made on a first come, first served basis. Please contact Mark DeGregorio, Education and Outreach Coordinator, to request a program.
Phone: (970) 586-3777
Email: Mark_De_Gregorio@nps.gov

Self-Guided Visits

Many teachers choose to bring their students to Rocky Mountain to enhance their lessons with their own field experience. If you would like to visit the Moraine Park Visitor Center or Fall River Visitor Center during your visit to the park, please schedule your visit in advance through the education office. The facilities capacities are limited and your group will not be able to use them without a reservation. To request an educational entrance fee waiver and learn more about the educational resources available the park, please visit the Heart of the Rockies Website at <http://www.heartoftherockies.net>.

Classroom Programs



Can't get a bus? Worried about the weather? We can bring a program to your classroom! Choose from one of the many classroom programs that we offer for grades K-12. We request that only one class is scheduled at a time, however we can arrange to visit more than one classroom during a school day. The following list of programs is a general selection of programs that are offered for the classroom. All programs are limited to a maximum of 35 students/session. More than one session can be scheduled in one day. If what you need is not listed, we can create a program to fit your curriculum.

Grades 6-12

Issue Investigation

Students investigate one of the management challenges faced by the park. Students explore the issue, review the data, and share their own conclusions about how the issue could be managed. Current issues include elk management, pine beetle management, and climate change. 1 hr.

Careers in the Park Service

Students will learn about the career possibilities with the park service and about all the possibilities for getting a foot in the door, beginning with HS internship programs. 1 hr.

Writers of the Rocky Mountains

Students learn about some of the authors that were inspired by and shaped the destiny of Rocky Mountain National Park. Students read and reflect on writings by the authors, and write their own story to inspire people to visit a place that they love. 1 hr.

The Importance of Parks

Students will learn about our collection of national parks and the significance of our parks in preserving our natural and cultural heritage. 1 hr.

Field Trip Programs

Field trip programs are offered for grades K-12 during the months of January through November. Due to changing weather conditions, many programs are offered seasonally. Most programs are limited to a maximum of 60 students per day. The following list of programs is a general selection of programs that are offered in the field. All programs are inquiry based and many incorporate the scientific method. Programs vary in length and time of year that the program is available. If you do not see what you are looking for, we can create a program to fit your curriculum. Pre-site programs at your school can be scheduled to prepare for your visit.

W - Winter Sp - Spring Su - Summer F - Fall EF - Early Fall YR - Year Round

Grades 6-12

Mountain Pine Beetle Investigation (F, Sp, Su)

Students use the scientific method to investigate whether the beetles or the trees are winning the battle for the forest. To investigate the issue, they learn about the challenges and survival strategies that the trees and beetles each have and collect evidence along a transect line. They use their data to determine who will be the survivor. 4.5 hrs.

Elk Management 101 (F, Sp, Su)

Students investigate the elk issue in Rocky Mountain National Park. Student use transect lines to collect data about elk densities in the Park and their impacts on vegetation, participate in a town hall meeting to debate how the elk should be managed, and explore how the park is currently managing the problem. 4.5 hrs.

Aquatic Ecology (Su, EF)

Students survey the riparian ecosystem and collect data on the water quality and invertebrate population to determine the health of the watershed in Rocky Mountain National Park. This program includes a discussion about the watershed and challenges. The students to come up with ideas to help manage and protect the water resources in the park. 4 hrs.

Alpine Tundra Ecology (Su, EF)

Students explore the alpine tundra ecosystem. They lay out a transect line and plots to collect data about the identity and density of current tundra plants and animals. They will then discuss how scientists are using this information to help plan for the current and future management of this ecosystem in a changing climate. 4 hrs.

Fire Ecology (F, Su, Sp)

Is fire a friend or a foe? Students investigate fire scars to determine the fire history of an area. Students look for clues, collect data, and draw conclusions about the role of fire in the montane ecosystem. 3.5 hrs.

People and Plants (Su, EF)

Students take a botany hike through the montane ecosystem to investigate how people have used the plants in Rocky Mountain National Park for the last 10,000 years. Students use plots to inventory and identify plants. 3 hrs.

Writing in the Wilderness (YR)

Students learn about some of the authors that were inspired by and shaped the destiny of Rocky Mountain National Park. Students read and reflect on writings by the authors, and create their own poem, account, or story using the mountains as their inspiration. 2.5 hrs.

Hiking in the Balance (F, Sp, Su)

Students will go on a nature hike to discover the resources that are being protected within the boundaries of RMNP. The hike will focus on how the park is balancing its dual mission of protecting and preserving the resources and providing for the enjoyment of the people. 2.5 hrs.

Life's Not Always Easy (F, Sp, Su)

On this nature hike, students will explore how each plant and animal faces their own unique challenges and must be adapted to survive in the Rocky Mountains. 2.5 hrs.

Hiking in the Footsteps of Enos Mills (Sp - F)

Students will hike and learn about Rocky Mountain National Park through quotes from Enos Mills, the father of Rocky Mountain National Park, and explore the stories of the trail. Students learn several naturalist skills. 2.5 hrs.

Winter Ecology (W)

Students snowshoe from Bear Lake to investigate how plants and animals survive in the winter conditions that exist in Rocky Mountain National Park. Students will look for evidence of life, discuss the survival strategies of animals and plants, and explore how a changing climate might affect animals designed for 8 months of winter. 4.5 hrs.

Snow Science (W)

Students explore the science of snow in this hands-on snowshoe hike. Students learn about the characteristics of snow, dig a snow pit to look at layers, investigate and draw conclusions about the role of snow in Colorado's watersheds and in the subalpine ecosystem. Students learn how this resource may be affected by climate change. 4.5 hrs.

Winter Mountain Survival (W)

Students learn what materials to bring and what skills to know in order to survive a winter worst case scenario. They build snow pits to assess avalanche danger, use transceivers to locate a buried "person," and build a snow shelter. 4.5 hrs.

Winter Mountain Safety (W)

Students learn how to stay safe while exploring the winter environment of the Colorado Rockies. Students will snowshoe to Nymph Lake or Dream Lake, as they discover the risks and rewards of winter recreation. 4.5 hrs.

Grades 9-12

Ecosystem Transects (F, Sp, Su)

Students use transect lines to compare two of the ecosystems found within the park and identify the components or characteristics that differentiates one ecosystem from the other. 4 hrs.

Forestry (F, Sp, Su)

In this program students gain hands-on experience analyzing forest health and composition. They will investigate individual tree adaptations and discuss management issues faced by foresters today. 3.5 hrs.

Slope Aspect Comparison (F, Sp, Su)

Students use transect lines to compare north and south facing slopes in the montane ecosystem. Students use the scientific method to help them discover why these two sites have such notable differences in species composition. 4 hrs.