



National Park Service Rock Creek Park Environmental Education

Protecting Our Park

In 1890 the United States government made an oath to both preserve and protect Rock Creek Park and its unique cultural and natural resources. For over a hundred years, rangers and volunteers have worked to accomplish this pledge to the best of their abilities. Students will learn both what the major problems of the park are, and methods that can be used to eliminate them. At the end of the program, students will participate in a service learning project that will help the park.

TOPICS: Habitat Loss, Encroachment, Exotic Plants, and Water Quality

BACKGROUND INFORMATION:

Preserving the unique cultural and natural resources of Rock Creek Park is a constant struggle for the National Park Service and its dedicated park rangers. The three major threats are water pollution, exotic species, and habitat loss.

Rock Creek is 33 miles long. It originates in a spring in Laytonsville, Maryland and flows southward into the Potomac River. It is part of the Chesapeake watershed. Major pollutants include sewage runoff, pesticides, herbicides, as well as other urban chemicals. The National Park Service regularly tests the water quality of Rock Creek within the park boundaries. When pollution is detected, the park investigates its source.

Exotic plants are plants that are not native to the area. Most exotics are spread into the park unintentionally from local households or gardens. Exotic plants can have detrimental effects on habitats by out competing native plants for light or water, which therefore destroys the animals' food chain. The National Park Service regularly surveys the park's exotic species. The most invasive species are removed.

Rock Creek Park is the first and largest urban national reserve to be managed as a National Park. It preserves over 2,000 acres of plant and wildlife habitat, providing protection for a variety of species within a heavily urbanized area. As the city continues to grow and the park visitation increases, encroachment of neighboring lands and habitat loss also increase. The National Park Service regularly monitors its boundaries and park use. Whenever possible, encroachment is removed and legal action is taken.

This program was created to educate and actively engage students in the ongoing process the National Park Service undertakes to preserve and protect Rock Creek Park. As tomorrow's leaders, we value the students' ideas and assistance to ensure the survival of Rock Creek Park.

Where: Rock Creek Park Nature Center or specified location within Rock Creek Park

Length: 2 hours

Who: 4th- 5th grade classes

Students per group: maximum of 25

Chaperones per group: 4- 6

CURRICULUM BASE: Based on the District of Columbia Science Standards.

5th Grade; Describe what causes the extinction of a species and list ways to prevent extinction

6th Grade; Given a specific situation, the student will construct predictions about expected

outcomes of everyday occurrences in the environment

OBJECTIVES: By the end of the program, students will be able to:

- 1) Name two actions that resulted in habitat loss
- 2) Define "exotic species"
- 3) Give an example of a loss in bio- diversity
- 4) Explain how water pollution can affect animals
- 5) Explain one thing they can do to help the park

SAFETY AND MANAGEMENT MESSAGE:

- 1.) Avoid Poison Ivy
- 2.) Do not harm, harass, or remove anything naturally occurring in the park.



PROTECTING OUR PARK PRE AND POST- TRIP ACTIVITIES

We would really like to make **Protecting Our Park** an integral part of your lesson plan on endangered species, environmental issues, or the risk and benefits of actions. Therefore, we have included some pre and post- visit activities to introduce the idea of endangered species and how they came to be threatened as well as to encourage the students to think about how they may influence the future.

Pre- visit: Ask each student to research an endangered or recently extinct animal (no dinosaurs!) or plant. Make sure they each choose a different species. During their research, the students should find out why the animal is endangered or extinct. Have the students make present what they have learned to the class.

Post- visit:

- 1.) Using the same endangered species, ask the students to think of ways they could help (either directly or indirectly) prevent further extinction. Again, allow and guided discussion among the class to ensue.
- 2.) Have each student fill out the pledge card with an original idea.