

An Interactive Educational Tool for Understanding Cultural and Natural Resource Preservation at Petersburg National Battlefield

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Introduction

The interpretive rangers at Petersburg National Battlefield and members of James Madison University's Department of Integrated Science and Technology have been working together to develop a virtual experience that highlights the historical significance of Petersburg National Battlefield and the challenges of preserving this battlefield landscape. The National Park Service's Natural Resource Information Division provided the technological foundation for displaying the content and creating an informative, exciting, interactive tool that can be used by students, teachers, visitors, and virtual travelers to more fully explore this historic park. The Petersburg *Views* project is accessible online, along with *Views* of other parks at www.nature.nps.gov/synthesis/views.

Cultural Resources

Petersburg National Battlefield preserves an important piece of Civil War history. Located just 25 miles south of Richmond, Virginia, Petersburg became an important supply center to the Confederate capital during the Civil War. With five railroad lines and key roads, both Grant and Lee knew that if these transportation lines could be cut off then Petersburg could no longer supply Richmond with much-needed food and supplies. Without this, Lee would be forced to leave both cities.

Grant was not able to capture Petersburg, and so the siege began in June 1864. Both sides constructed earthen fortifications and dug trenches to protect and shelter the troops. Nine and a half months later, the war ended when Lee evacuated Petersburg and surrendered at Appomattox a week later.

The lives lost at Petersburg, the unique fortifications, the extended siege, and the bravery and determination of many individuals that fought at this site make it a valuable cultural resource. Poplar Grove National Cemetery with its 6,148 Union graves and Grant's Headquarters at City Point are part of the Petersburg story as well.

Natural Resources

Preserving the cultural resources at Petersburg and managing the visitor experience at the park requires many natural resource management decisions. Some of the most important natural resource issues facing Petersburg National Battlefield include the maintenance of earthworks, management of invasive species, preservation of open space and vistas in the battlefield, erosion of the monuments and markers in Poplar Grove National Cemetery, and riparian restoration along the shores of the James and Appomattox rivers at City Point.

Features of the Project

Views of Petersburg National Battlefield explores both the stories of the past and the natural resource issues of the present. The battlefield can be explored through the eyes of a war general, a plantation owner, a soldier, a surgeon, an engineer, or a civilian to learn about the cultural resources at the park. To explore the current challenges in maintaining this historic landscape, the natural resources are viewed through the eyes of an interpreter, a biologist, a protection ranger, and a superintendent.

Petersburg National Battlefield contains 2,659 acres and is made up of five major units; Grant's Headquarters at City Point, the Eastern Front, the Western Front, Five Forks Battlefield, and Poplar Grove National Cemetery. A closer look at each unit within the park, whether in the historical context or the natural resource context, provides the viewer an understanding of the war and its causes, impacts, and legacies to all Americans.

The virtual experience was designed to teach people about the park using a variety of tools, at a level appropriate for upper elementary and middle school audiences. Video, interactive maps, virtual views, historic photographs and documents, interactive games, and primary-source scenarios provide access to the rich historical background of the park. Photos, diagrams, animations, and explanations layered for casual interest and deeper curiosity about the natural resource management issues and the scientific basis of the issues provide accurate information about management concerns and the technology of possible solutions.

Teacher Resources

The teacher guide will provide teachers with curriculum-based activities and lesson plans that can be used in the classroom and in the field. These teaching tools will include both history and science-based lessons on Civil War-related themes and battlefield preservation that can be printed or viewed on the computer.

A unique feature of the *Views* project and teacher resources is a series of scenarios (in development) that present information about resource management problems from a variety of viewpoints. The scenarios provide the background information and the viewpoints of the interpreter, biologist, protection ranger, and any others that are needed to explain the situation. Viewers (students) are asked to wear the superintendent's hat to make decisions

about what they would do. Engaging viewers in the decision-making process emphasizes the challenges of maintaining and preserving resources in the national parks. Teachers' resources will include further information about the ultimate resolution of some of the scenarios, such as the decision to replace rather than restore eroding monuments in Poplar Grove National Cemetery.

Partners in the Project

As this project has evolved, many people and groups contributed to its development. The 2001 Natural Resource Management class (ISAT 424) at James Madison University developed case studies for the project, and came up with the idea of "The Superintendent's Hat." In their example, users explore resource management issues from several viewpoints and then make decisions as the "virtual superintendent." The final product incorporates this idea, allowing the user to study the challenges of preservation at the battlefield through the eyes of an interpreter, a biologist, a protection ranger, and a superintendent. The dialogue between students and classes at James Madison University and the interpretive staff at Petersburg gave the project the added excitement of partners explaining new ideas to each other.

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