# Park Break: Collaborative Opportunity Established for Graduate Students

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#### Introduction

Among the many topics discussed during the 2007–2008 George Wright Society (GWS) board meetings was the subject of how to inspire graduate students seeking careers in science and natural resource management to consider the Department of Interior (DOI) in general, and the National Park Service (NPS) and the US Geological Survey (USGS) in particular, as good options for future employment. Board members participating in these discussions included Suzette Kimball, now acting director of USGS, and Gillian Bowser, now a research scientist with Colorado State University, who envisioned a program that would offer an alternative to the break from classes that universities typically offer students in early spring.

Since those initial discussions among the GWS board members, Park Break sessions have been held in eleven different NPS sites across the country. Each session has sponsored six to eight graduate students in various stages of their university programs for a week-long seminar focused on a specific theme relevant to the host park, such as conservation policy and climate change. Sessions have varied in format but all generally have been composed of a week of field and classroom activity with participation from local, state, and national experts.

## History

The vision for Park Break was to offer graduate students an on-site experience in a national park where they would work with scientists and managers on real-life issues. The program would follow the DOI's Diversity and Inclusion Strategic Plan directives "to recruit and hire exceptional individuals from every background and every community" and encourage students of diverse backgrounds to apply (DOI Diversity & Inclusion Strategic Plan, March 2012, http://www.doi.gov/pmb/eeo/workforce-diversity.cfm).¹ Thus Park Break evolved as a unique cooperative venture pursued by GWS, NPS and USGS, presenting graduate students from all backgrounds with an unconventional opportunity for spring break activities in the form of a week-long, all-expenses-paid seminar in a national park. The students would be

exposed to land and resource management issues of ongoing concern with the ultimate goal of encouraging them to pursue careers within DOI.

In 2008, the first year of the program, Park Break sessions were held in four national parks in the eastern United States: Acadia National Park (ME); Delaware Water Gap National Recreation Area (PA and NJ); Gateway National Recreation Area (NY); and Indiana Dunes National Lakeshore (IN) (Table 1). While no set program was followed by all four parks, each park identified a specific theme to focus on for the week tailored its particular management concerns. Topics ranged from science and policy questions to the examination of interactions between the parks and their surrounding communities. The timing of the session was up to each park, but an emphasis was placed on trying to synchronize with the week-long recess scheduled in March by many universities in the United States.

After the initial year of the program, three sessions were held in 2009, two in 2010, two in 2012 and two in 2014. USGS originally provided three years of funding for the program, with total funding per year ranging from \$15,000 to \$45,000 per year. Funds and in-kind services were provided by each of the parks sponsoring a Park Break session and from GWS for advertising, evaluating applications, and coordinating session planning. Additional partners contributed funds and in-kind services and included Colorado State University, Geological Society of America, Student Conservation Association, and Texas A&M University.

In 2012, in addition to USGS funding a science-oriented Park Break session, NPS sponsored a session focused on cultural resources at Boston African American National Historic Site, Boston National Historical Park, and Lowell National Historical Park (MA). A similar schedule was agreed to for 2014, where USGS funded a science-focused seminar in Saguaro National Park (AZ) while NPS funded a week focused on cultural resources at Keweenaw National Historical Park (MI).<sup>2</sup>

Park Break sessions have been held most regularly at one park, Delaware Water Gap National Recreation Area (DWGNRA) in 2008, 2009, 2010 and 2012. The theme of the pro-

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Site	Date	Theme
Acadia National Park (ME)	2008	Civic Engagement
Delaware Water Gap National Recreation Area (PA, NJ)	2008, 2009, 2010, 2012	Conservation Policy
Gateway National Recreation Area (NY)	2008	Global Climate Change
Indiana Dunes National Lakeshore (IN)	2008	Wildland–Urban Interface
Great Sand Dunes National Park and Preserve (CO)	2009, 2010	Climate Change and Sustainability
Fort Vancouver National Historic Site / Mount Rainier National Park / Olympic National Park (WA)	2009	Natural Hazards
Boston African American National Historic Site / Boston National Historical Park / Lowell National Historical Park (MA)	2012	Cultural Resources Management
Saguaro National Park (AZ)	2014	Hydrogeology
Keweenaw National Historical Park (MI)	2014	Archaeology and Cultural Resources Management

gram at DWGNRA has remained the same over the years, focusing on conservation policy, but the week's activities evolved with the goal of increasing both teamwork among the participating students and involvement with investigation of a real-life problem being faced by the park. A more detailed look at specific changes in the DWGNRA program is covered below.

## Program development

In meeting one of the primary goals of Park Break—enabling graduate students to experience first-hand the challenges facing managers and scientists working in the host park—we have developed a set of general guidelines outlining typical events and activities to schedule for the week. By following these guidelines, our hope is that the students will be engaged in discussions with scientists, park managers, administrators, government representatives, naturalists, and other professionals, and will be exposed to the complexity of science and management issues from multiple perspectives. The Park Break program then becomes a unique experience, offering a week-long immersion in scientific and intellectual inquiry specifically related to land and resource management.

**Assigned science project.** A project relevant to current science and resource management issues affecting the park is assigned for the students to focus on during the week. Material is sent to students in advance of the session. Guidance is provided during the week on project objectives, methods, analysis, formal presentation, and final report.

Interactive sessions with park personnel. Interactions with personnel from the national park unit, including the superintendent, division chiefs, scientists and resource managers give the students multiple perspectives on day-to-day activities of DOI employees.

**Coordination with local USGS science centers.** Coordination with one or more nearby USGS science centers in discussing the assigned project as well as interaction with scientists currently working in the park exposes the students to specific research questions and ongoing fieldwork that provides information for management decisions.

Interactive presentations from local officials. Presentations by local nongovernmental organizations, elected officials, and personnel from other parks provide yet another perspective on issues facing the park, local politics, and current and historical conservation topics that are important to surrounding communities.

**Final presentation.** A presentation by the students on the last day of the session addressing the assigned project ensures that the students work as a team during the week, provide proposed solutions for discussion, and receive feedback from the session coordinators.

**Final papers.** A final report by the students based on the week-long work, to be submitted within a month after the session, helps the students reflect on their experience and can lead to a publication for the Park Break Perspectives series posted on the GWS website (http://www.georgewright.org/perspectives).

# Case study: Delaware Water Gap National Recreation Area

DWGNRA is a 27,000-ha (67,000-ac) park established in 1978 along a section of the Delaware River in New Jersey and Pennsylvania. The park is unique in being close to major urban centers in New York and New Jersey but still providing a place with high waterfalls, hemlock

ravines with rhododendrons, ridge tops with prickly pear cactus, the Middle Delaware river as a national scenic river, and wildlife populations of black bears, timber rattlesnakes, and bald eagles.

As one of the original parks selected to sponsor a Park Break session, and as the park which has now sponsored the most sessions in this program, DWGNRA staff viewed Park Break as an opportunity to prepare the next generation of professionals that would have responsibilities in park management and land stewardship. Author and DWGNRA Park Superintendent John Donahue recalls that "in the time it took Dr. Gillian Bowser and me to ride down an escalator at a George Wright Society Conference, we had agreed on the basic concept that would become the first Park Break at Delaware Water Gap."

In the first year of the program at DWGNRA, the sessions focused on local, national, and international conservation policy. Destry Jarvis, former special assistant to the director of NPS, highlighted the history of conservation in the United States, and was able to add the kind of personal, inside stories about important events and figures in the 19th- and 20th-century conservation movements that fascinate idealistic young people. Former assistant secretary of interior for fish, wildlife, and parks, Don Barry, highlighted important figures that had demonstrated the courage of their convictions at great personal sacrifice and were able to make a real difference through their efforts. Suzette Kimball, current acting director of USGS, provided her perspectives on the importance of science-based decisions in park management, and Bill Werkheiser, current acting deputy director of USGS, offered the students a comprehensive view of the science efforts within all of the agency's mission areas as well as a discussion on finding employment within DOI.

Nancy Shukaitis, a writer and former elected official, shared with the class how she first became involved in conservation because of her outrage with the plans to dam the Delaware River. Her tales of evolving from homemaker to Supreme Court litigant and stopping the proposed dam impressed upon the students the difference that one person can make in the development of a protected area. Panels also included local township planners and supervisors along with conservation district officials and environmental education experts sharing their experiences and approaches to issues facing the park and surrounding residential communities.

The fact that the meetings took place in Grey Towers National Historic Site, the ancestral home of US Forest Service founder Gifford Pinchot, added to the overwhelming sense of responsibility for stewardship that was conveyed in many of the discussions. Learning and engaging in discourse in the same rooms where Pinchot entertained intellectual and environmental giants of his time helped to make the experience all the more memorable.

As the program for Park Break at DWGNRA evolved, an on-site project was added to the week's activities. The first project centered on developing a proposal for establishing a national scenic byway for US Route 209, a highway running parallel to the Delaware River through the park. The second project involved the Pocono Environmental Education Center (PEEC), a nonprofit center within the park, in the design of new environmental education programs for park visitors. Each one of the DWGNRA Park Break sessions also has included interactions with USGS scientists currently conducting research projects within the park,

which have ranged from vegetation mapping to studies monitoring eel populations in the Delaware River.

In looking broadly at the program since 2008, author and DWGNRA Park Break Coordinator Debbie O'Leary notes several important lessons learned that may be helpful to future parks involved in the program:

- Students have tended to respond best to presenters who engage the group in an interactive discussion as opposed to a lecture format.
- If presentations are given by invited speakers, it is important to make sure there is plenty of time for questions and answers. The students never run out of questions, so you can never have too much time for interactive discussion.
- Organizing a social get-together early in the week for the students, presenters, and local
  park employees provides an opportunity for the students to get to know each other and
  the people they will work with throughout the week.
- Since the Park Break session will be a first-time visit to the park for the majority of the participants, an early tour of some of the park's special features is a useful way to start the week. If the project involves field work, the students may be able to experience the park in ways not always available to other park visitors. If the majority of the project involves lab and classroom work, there should be time scheduled outside. We had a local naturalist lead a hike through one section of the park and USGS scientists led trips to their field sites, so the students were exposed to a representative portion of the park and its natural and cultural features.
- Inviting all of the speakers, panel members, local officials, and scientists to stay for lunch or dinner is another opportunity for the students to interact with professionals and engage in more personal or one-on-one exchanges.

The Park Break experience at DWGNRA was developed for students interested in spending their limited spring break from college classes to learn about the history of conservation in a unique setting. John Donahue sums up his experience with Park Break as one charged with enthusiasm: "Add a multitude of high-powered speakers, a project that talented graduate students complete in record time, stir in some case studies that include local, state and federal complexities, and you have a recipe that can stimulate graduate students not only in conservation policy—or other topics covered in Park Break sessions—but in potential careers in science and park management."

# Program benefits and evaluation

Park Break participants are encouraged to collaborate with their fellow participants in writing professional papers and contributing to activities that build on their Park Break experience (see Monzon et al. 2011). As noted above, the Park Break Perspectives series was established by GWS as a web-based site dedicated to research papers and essays prepared by student participants. Papers have been developed on topics specific to projects investigated during the week as well as on topics of particular interest to an individual's graduate work but related to their Park Break experience.

Each Park Break participant receives a complimentary one-year membership to the GWS as well as preference for travel scholarships to the next GWS biennial conference. Park Break participants are encouraged to organize sessions at this conference as a way to become more involved with professionals at the meeting and to gain experience in participating in formalized panel discussions. During recent GWS conferences in Portland OR (2009), New Orleans LA (2011), and Denver CO (2013), Park Break sessions have been organized and moderated by former Park Break students.

Measuring success of a program such as Park Break is challenging since metrics may vary depending on the parks, students, and staff involved. In the past, students participating in Park Break sessions have been asked to provide feedback either verbally before they leave the session or in post-session questionnaires. In 2011, Park Break participants from Clemson University conducted a post-session survey, receiving responses from 23 students who attended Park Break sessions in different locations and years (Mora-Trejos et al. 2011). Topics covered in this survey ranged from motivations for participating in the program to satisfaction with preparatory materials, accommodations, and speaker selection. In responding to overall satisfaction with the Park Break experience, over 95% of the respondents were satisfied or very satisfied with their experience. Knowledge gained by participating in the program included different perspectives on natural and cultural resource management issues and greater understanding of how federal managers try to balance monetary, political, and social aspects of resource management concerns. The demographic analysis in their survey showed that at least 30% of Park Break participants were of African American, Native Hawaiian, Hispanic, or Asian heritage.

Some of the most encouraging feedback regarding the success of the program is in direct quotes we receive from past participants. We include two of these comments below.

I think about our Park Break session often. It was one of the best organized meetings I've attended. I came to Park Break from a fairly narrow focus on the 'natural' in natural areas, and it was beneficial to meet with folks with broader interests (e.g. interpretation, history and archeology). It really opened my eyes to how complex decisions can become when all of the stakeholders are considered. The national scenic byway project was a great practical way to get our cohorts involved in making management decisions, and I still use quotes from John Donahue with my students (e.g. 'If your decisions aren't upsetting anyone, you're probably not making a difference').

— Heath Garris, Park Break participant, 2010

I was in the first Park Break session in 2008 and then was a mentor for 2009. I am in my second term as a botanist for Denali National Park. Park Break was a great introduction to upper-level positions in the NPS. Despite my five seasons working with the NPS, Park Break was the first time I was really allowed behind the closed doors of upper management, and recognized as a potential contributor to management in the future. It helped me view my role in the NPS a bit differently,

and motivated me in my studies to stay true to my management interests and not get bogged down too much in the esoteric aspects of academia.

— Sarah Stehn, Park Break participant, 2008; Park Break mentor, 2009

For 2014, we developed two surveys for Park Break students to complete regarding their experience with the program: one survey to fill out before the program and a second survey to fill out once the program is complete. The intent is not only to get feedback on the week's program but also to have some measure of knowledge gained from the experience.

## Recent developments

For the 2014 Park Break session, a new process was initiated for selection of the host parks. In September of 2013, notice was provided to park units regarding availability of funds and a call for proposals. Each park interested in serving as a host was asked to fill out an online application posted on the GWS website that included a description of the proposed Park Break session, the topic for a special project focus, and the availability of on-site housing for up to eight students.

Two parks were selected as hosts, one with a science focus to be funded by USGS and one with a cultural resource focus to be funded by NPS. The science-focused session was held in Saguaro National Park and involved students in a project that examined the special hydrogeological resources of the park's desert environment. The cultural resources session was held in Keweenaw National Historical Park along the Lake Superior shoreline with a focus on archaeology and cultural resources management.

For 2015, we hope that we will be announcing another year of Park Break with sessions to be held in March or April of 2015. Protected area managers interested in the program should watch for a request for proposals announced by the George Wright Society.

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## **Endnotes**

- The term "diversity" is used broadly to refer to many demographic variables, including, but not limited to, race, religion, color, gender, national origin, disability, sexual orientation, age, education, geographic origin, and skill characteristics. America's diversity has given this country its unique strength, resilience and richness (from US Department of Interior's Compliance and Programs Division website: www.doi.gov/ pmb/eeo/workforce-diversity.cfm (accessed March 17, 2014).
- 2. With the expansion of Park Break into the realm of cultural resources, the program now engages with historians, archaeologists, and other scholars and professionals outside the

realm of science. However, because the subject of this theme issue of *The George Wright Forum* is USGS–NPS collaboration, the remainder of this article will focus primarily on the scientific aspects of Park Break.

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