

# Ocean Currents, Dune Hollows, and Mountain Peaks: Park Break as a Pedagogical Approach to Collaborative Experiential Learning in the National Parks

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PRESENT-DAY ISSUES FACING THE US NATIONAL PARK SERVICE (NPS) pose complex challenges for future management. Multidimensional pressures on a single park can include urban population growth emerging at the wildland–urban interface, fostering engagement of diverse and under-served populations, climate change, and invasive species challenges, as well as resource use conflicts. In addition, the current NPS employee base largely comprises individuals from the baby-boomer era who will retire within the next 10–20 years, creating job opportunities in the NPS workforce. Recruiting younger generations who are trained to take an integrated and multidisciplinary approach to protected area planning and management in the NPS is an imminent need.

To address these contemporary challenges, in 2008 and 2009 several agencies and academic institutions collaborated to form a potential solution. Colorado State University (CSU), Geological Society of America, George Wright Society (GWS), NPS, Student Conservation Association (SCA), Texas A&M University (TAMU), and US Geological Survey (USGS) financed, designed, and implemented an experiential learning program referred to as “Park Break.” Designed to bring undergraduate and graduate students from varied disciplines to the parks during their spring break, the Park Break program is a way of fostering collaborative approaches to resources management and inspiring future professional commitment to the parks. This paper will provide an overview of the first two years of the Park Break program—which were considered a pilot phase—by discussing the program pedagogy, operations, and outcomes, as well as consideration for potential future program directions.

## **Park Break pedagogy**

Grounded in NPS philosophy and the founding tenets of experiential education, the goals of the Park Break program are twofold. Specifically, the program aims to provide an educational experience in which NPS personnel and selected students can interact to exchange multidisciplinary information. In addition, students are encouraged to consider the challenges of

protected area management in their current or future research and career ambitions. Pedagogical practices to achieve these goals incorporate experiential education and NPS enabling legislation in the program design.

The practice of experiential education allows for students and educators to interact directly while focused on an experience that has the potential to improve knowledge, build skill sets, and cultivate program-inspired values (Association for Experiential Education 2009). Experiential education is learning through action, and involves a non-traditional educator–student relationship in which participants work together toward a common goal. Many fields encompass the founding tenets of experiential education, including environmental education, outdoor education, and service learning. In experiential education, the educational value flows from the experience, allowing for both the educator and student to benefit equally (Furco 1996). Since the learning is coming from the experience itself, the traditional educator is released from the responsibility of lecturing and thus able to more fully interact with the student. This pedagogical method was effective for Park Break program design, as it encouraged a highly interactive atmosphere in which students and agency personnel were engaged in considering new perspectives on recurring management issues. By taking a part in the experiential process outside of the traditional teacher–learner roles, student and agency participants discovered a new way to interrelate and approach communication and collaboration. In the setting of a NPS management unit, participants also had access to the educational value of the resources themselves. As is generally the practice in environmental or outdoor education, immersing participants in the reality of the resource, or the problem at hand, allowed for a greater commitment to addressing questions and resolving management issues. Also, by placing the agency personnel and students side-by-side in discussion, students were able to envision themselves as collaborative colleagues with agency personnel.

In both educational institutions and the corporate workplace, activities that draw on the experiential education philosophy have long been a part of small-group projects and team-building exercises (Wagner et al. 1992). Especially in higher education, where part of the educational focus is on preparation for the workplace, self-directed exercises are commonplace, but their effectiveness is quite varied. The most effective experiential education-based training occurs when there is a tight link between the planning organization's goals and the educational program design (Wagner et al. 1992). The NPS philosophy is clearly delineated in the 1916 National Park Service Act, which mandates that the NPS “promote and regulate the use” of the national parks, whose purpose is to “conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations” (16 USC 1). Additionally, each NPS unit must abide by its own enabling legislation, which defines the motivation behind the creation of the unit and mandates the future direction of management. The Park Break program attempted to tie the NPS mission and the enabling legislation of the host park unit into the program design by maintaining focus on the constraints under which management concerns must be handled. Facilitated largely by agency personnel throughout the extent of the program, it became the framework for student thought processes and a constant checkpoint for new ideas. By thoroughly explaining the NPS mission and the breadth under which it operates, students were able to keep sight of the

link between Park Break goals and program design, thereby increasing program effectiveness as an educational and personal development exercise.

The merging of the two pedagogical design tenets—inclusion of the NPS mission and principles of experiential education—provided a framework for implementing Park Break program goals. In addition, incorporating such foundational principles into current management concerns in an NPS park setting fostered meaningful discussions and a positive attitude about future collaborations between students and agency personnel.

### Park Break programming

The program’s pedagogical framework allowed for effective execution of program operations. Such operations included implementation at diverse park unit locations and varied subject matter, collaborative participation by several public agencies, and effective on-site coordination.

The participating NPS units illustrated diversity in geographic location and designation, and, consequently, in topical areas of concentration. The inaugural implementation of Park Break was carried out in 2008 with field-based seminars at four park units, each addressing a theme-based topic. These topics represented subject matter within the scope of natural resource management. Following the success of the first round, organizers selected three more park units and three new focus areas for implementation of Park Break 2009 (Table 1).

Park Break has evolved as a collaborative effort through the participation of the institutions listed earlier. While the majority of funding is allocated on an annual basis through the USGS, other participating organizations help to ensure the program’s implementation at multiple locations. The procedural aspects of Park Break, including participant selection, program evaluations, and the facilitation of student-written papers, are coordinated by the GWS board of directors and Park Break planners, which consist of academic faculty and staff of CSU and TAMU. In addition, travel arrangements are made by supporting organizations such as SCA and CSU. The organization of the on-site experience, however, remains flexible for each respective host in that no template is given to the park. Rather, managers are open to plan the week for students and are given the option to seek guidance from Park Break planners in formulating itineraries. By leaving the operations to be synchronized at the park level, on-site coordinators are able to identify pertinent issues facing their own park and use these as a platform of discussion among student participants, resource managers, and scien-

**Table 1** Park Break program locations and topics, 2008–2009.

Year	Park	Topic
2008	Acadia National Park	Civic Engagement
2008, 2009	Delaware Water Gap National Recreation Area	Conservation Policy
2008	Gateway National Recreation Area	Global Climate Change
2008	Indiana Dunes National Lakeshore	Wildland Urban Interface
2009	Great Sand Dunes National Park & Preserve	Climate Change and Sustainability
2009	Fort Vancouver National Historic Site/Mount Rainier National Park/Olympic National Park	Natural Hazards

tists. The individual parks involved in Park Break can support this effort by subsidizing on-site costs such as lodging and food.

To become involved in the Park Break program, NPS units either self-nominate or are identified by GWS board members. A GWS board member is present for each Park Break session, as well as other representatives from supporting agencies such as USGS. These other agencies and organizations use the week as an opportunity to recruit and build awareness about their own mission and role in conservation. All of the contributors who maintain a presence throughout the week help to demonstrate the integrative role of multiple agencies and organizations in conservation management. The schedules at each session include discussions in a classroom setting where students exchange ideas with representative staff and field trips to outdoor destinations. The field component allows students to learn park resources first-hand, which fosters personal connections with the natural and cultural resources protected by the NPS. Such operational practices led to effective collaboration in programming for diverse park units, topics, and schedules.

A review of programs at Delaware Water Gap National Recreation Area and Acadia National Park illustrates the diversity in topics and operations.

Staff of Delaware Water Gap have hosted students both years of Park Break, focusing on issues of conservation policy at the park and agency levels. In these sessions, student participants heard perspectives on the Park Service's evolution over time as a land management agency, explored the major challenges facing the parks, and identified key tenets of the political system that affect everyday decision-making. John Donahue, the superintendent at Delaware Water Gap, played a primary role in supporting students at the park. He helped to facilitate the in-classroom component, which was held at Gifford Pinchot's summer home, Grey Towers. Students also participated in tours of the local community and a nature walk with a field naturalist.

Presenters at the Delaware Water Gap Park Break session traveled from local-, regional-, and national-level offices to offer their insights into conservation policy and interact with students from varied educational and professional backgrounds. One such presenter in the first year of the Delaware Water Gap program was Flip Hagood, vice president of the SCA. The premise of his presentation involved keeping the parks relevant to upcoming generations in the face of a diversifying user base. The conversation that followed tapped into students' perspectives of useful tactics that park managers can employ to maintain their appeal for younger visitors to the parks. One student emphasized the importance of technology, recounting the appeal of audio and video podcasts used to relay interpretive information.

A similar experience took place at Acadia in the inaugural year of the Park Break program. This session was largely organized by David Manski, the chief of natural resources at Acadia, and Christina Marts of Marsh-Billings-Rockefeller National Historical Park. These individuals coordinated meetings with scientists, resource managers, and citizen experts in civic engagement, allowing students to explore the idea of parks and their resources as a backdrop for engaging the public in conservation management. For example, student participants were asked to review the park website and offer suggestions on content and layout. This produced insights on techniques that would be most effective in engaging younger, technologically savvy people in parks for virtual visits from the home or classroom. In addi-

tion, students took a field trip to some of the park's top attractions to evaluate them and provide suggestions on how educational materials can be best conveyed to the visiting public.

At Acadia, students also were presented with multiple conservation issues that directly involve the local community. This was an opportunity for students to obtain a behind-the-scenes look at how the NPS fosters public involvement from local and national levels. Community partners as well as park staff and scientists were invited to the workshop to present their perspective on the effectiveness of these interactions in helping to achieve conservation and management goals. Students were given the opportunity to converse with these individuals and provide potential solutions to park staff on how to further engage the community. Through this forum, the Park Break program explored civic engagement beyond academic theorizing to real-world applicability.

### **Program outcomes**

Two years of hosting Park Break, with its pedagogical framework of experiential education within NPS units, has resulted in successful program implementation. Since its inception, the Park Break program has achieved a variety of beneficial outcomes: diversity in park units and topics, collaborative participation, and effective coordination. By way of these successes, clear program outcomes are evident.

One requirement made of all Park Break participants was to collaborate on a journal article reflective of their learning during their Park Break experience. The intention was to provide students the opportunity to collaborate on contemporary management challenges by researching key topics from the week's program and offering their own insights. This experience was beneficial for students by providing them with an opportunity to draw on the personal experiences of managers and scientists, witness first-hand how to link research and practice, and re-think the theme-based topics explored at each Park Break site. Collaboration on 14 papers was achieved from the 2008 Park Break program and papers from the 2009 Park Break participants are currently in progress.

In addition to collaboration, employment and research opportunities emerged as student-based outcomes of the program. Specifically, several past Park Break participants have taken temporary or student employment with the NPS and USGS, as well as having written proposals to conduct research at the national parks. After participating in Park Break 2008 at Acadia, one student returned to the park for a summer internship. After graduating in the spring of 2009, two Indiana Dunes 2008 Park Break participants accepted seasonal jobs with the NPS. These examples illustrate the effectiveness of Park Break programs in assisting student professional networking and providing strategies to navigate job opportunities in the DOI.

An anticipated student-related objective of the Park Break program was to encourage student participation with the GWS, including the Society's biennial conference. Such engagement was evident as ten students from the 2008 program attended the 2009 GWS conference. In addition, three students who were selected for participation in the post-conference 2009 Park Break program also attended the conference. Student participants of the 2008 program made oral and poster presentations on their Park Break experiences and col-

laborated on a panel discussion that provided future program hosts an opportunity to discuss the outcomes of the program with the students. Attendance at this conference benefited student professional development by providing opportunities to discuss their experiences in formal and informal forums as well as establish networks with professionals and other Park Break attendees for potential future collaboration.

In fact, many student participants cited networking as one of the most important outcomes of the program. In program evaluations, participants were asked to comment on what they learned about their specific program theme. One Park Break participant responded, "Quite a bit. Almost as important I believe are the other things I learned and personal/professional contacts I made through the week." Another participant commented that Park Break creates "networks that are long lasting," as such relations are fostered beyond the program experience.

The Park Break program offered additional student-based benefits by providing the opportunity for student leadership. During the second year of the program, several first-year participants attended each Park Break site to serve as a group mentor. In particular, six of the 2008 participants were granted the opportunity to participate in the 2009 program as group mentors. Such participation included assistance with pre-program coordination, site coordination, program evaluations, and facilitation of paper submissions. The incoming student participants were appreciative of peer mentorship as illustrated in the following quote taken from a program evaluation of a second-year participant: "The mentors were a *huge* help and really made the Park Break program better/smoothen."

Park Break is designed to be an integrative experience that benefits both the students selected for participation and the NPS units involved in the program. Benefits to participating DOI personnel include opportunities for sharing information on contemporary management techniques, recruiting, and obtaining fresh perspectives on challenging issues within the parks. First, park managers are able to engage in conversations and learn about management techniques that are both effective and appealing for the upcoming generation of resource managers. Second, Park Break is a valuable opportunity for DOI staff to recruit young professionals. Third, the interdisciplinary research articles produced from each session are shared with managers, offering fresh new perspectives and graduate-level research conducted on pertinent issues in the parks.

As the Park Break experience evolved, planners made adjustments to the program. For instance, the original intention was to host Park Break in even-numbered years so that it would alternate with the GWS conference to allow student involvement in the conference. After an effective implementation in 2008, program planners chose to offer the program again in 2009, closely following the GWS conference.

In addition, a comparison of 2008 to 2009 programming reveals a broadening in Park Service unit interest in program participation. Of the four park units that participated in the 2008 program (i.e., Acadia, Delaware Water Gap, Gateway National Recreation Area, and Indiana Dunes National Lakeshore), one chose to host the program again in 2009 (Delaware Water Gap), while one new park unit (Great Sand Dunes National Park and Preserve) and a network of three others (Fort Vancouver, Mount Rainier, and Olympic) joined the 2009 program.

Moreover, 2009 programming expanded to include undergraduate students in addition to graduate students. The 2008 program specifically targeted graduate students as many alternative spring break opportunities currently exist at the undergraduate level. The decision to expand the 2009 program to include undergraduate students occurred out of interest in and success of the 2008 program. The 2009 program at Great Sand Dunes offered programming for a mix of undergraduate and graduate students.

Lastly, a process for facilitating paper mentoring and review has been delineated. Specifically, several researchers and academics have dedicated themselves to shepherding these deliverables through the publication process.

### **Future program directions**

We believe that the successful implementation of Park Break for two consecutive years merits program continuation. As Park Break, there are some ways in which the program can improve.

In its infancy as a program, Park Break has already achieved noteworthy accomplishments. However, organizers and participants must contemplate future programming directions for continued program success. In particular, recommendations for future Park Break implementation center on diversifying the Park Break product. Based on the inherent flexibility in programming, diverse topics, locations, student disciplines, and student recruitment methods would be wise to consider.

Growing demands and challenges faced by NPS units warrant diversified theme-based topics. For instance, future subjects might include contemporary cultural resource management challenges, consensus-building in park management and planning, adaptive management in the DOI, resource economics and environmental impacts, transborder management challenges, and renewable resource management.

Diverse topics such as these should be matched by a diversity of geographic areas and types of park units as host sites. In particular, park units such as national heritage areas, national historic landmarks, park units along the borders of Canada and Mexico, national lakeshores, and national seashores, as well as national preserves with high-impact uses such as mineral extraction, may provide effective platforms for future programs. Encouraging the participation of students from broad disciplines would also prove instrumental in fostering program goals and future outcomes. Disciplines such as anthropology, climatology, communications, economics, environmental education, geography, and history would aid in fostering multidisciplinary dialogue and future collaboration in addressing NPS management challenges.

Furthermore, student recruitment could be expanded to include an approach that spans academic disciplines at both the university and individual student levels. Current strategies for student recruitment include discipline-level marketing in which program descriptions and applications are distributed across Internet listservs. As an added measure of efficiency, university- and student-level strategies could be employed. These could include establishing contacts at various natural resource management programs across U.S. undergraduate and graduate degree-granting institutions, or linking the program with existing student clubs. In

addition, student-level marketing could be employed by relying on Park Break alumni to recruit at their individual schools. Implementing such strategies might aid in generating student involvement from diverse disciplines as well as promoting the continuation of the program.

Diversifying the Park Break product by way of topic, location, student discipline, and recruitment method may prove worthy as a focus of future programming. Integrating these suggestions may be useful in accomplishing program goals and achieving unanticipated program outcomes.

Contemporary issues such as multidimensional pressures on park resources and concerns over an aging workforce are complex challenges for future NPS management. With two years of implementation, the Park Break program has tried to address these challenges by combining the tenets of experiential education and the philosophy of NPS. Park Break has fostered multidisciplinary student involvement in protected area planning and management as well as facilitated connections for future employment. In addition, a wide array of outcomes have been achieved over the last two years. The flexibility of the program to incorporate improvements is foundational to ensuring that the Park Break program continues into the future as a successful effort that challenges students to think critically about resource and visitor management while fostering future professional commitment to the national parks.

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[*Ed. note; The authors are all Park Break students. Park Break will be offered again in 2010, and the GWS Board is considering making the program permanent. Also, the GWS soon will be launching a web-based series, Park Break Perspectives, as a venue for the student papers.*]

## References

- Association for Experiential Education. 2009. *What is Experiential Education?* On-line at [www.aee.org](http://www.aee.org). (Accessed May 20, 2009.)
- Furco, A. 1996. Service-learning: A balanced approach to experiential education. In *Expanding Boundaries: Service and Learning*. Corporation for National Service, ed. Washington D.C.: Corporation for National Service.
- National Park Service. 2009. *The National Park System: Caring for the American legacy*. On-line at [www.nps.gov/legacy](http://www.nps.gov/legacy). (Accessed May 18, 2009.)
- Wagner, R.J., D. Scharinger, and J. Sisak. 1992. Enhancing teaching effectiveness using the experiential techniques: Model development and empirical evaluation. In *Proceedings of the Annual Meeting of the Midwest Region of the Academy of Management*. St. Charles, Ill.: Midwest Region of the Academy of Management, 2-9.

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