

# National Park Service Contribution to Increasing a Virtual Visitor's Appreciation of Wilderness

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## Introduction

This research project was designed to answer three questions about wilderness areas managed by the National Park Service (NPS). But rather than just list the questions, I want to begin by briefly discussing how each of them came into existence.

At the George Wright Society conference in 2001, I heard a high-ranking NPS official publicly admit that the agency may not be successful in protecting wilderness in the long run because it focuses on what wilderness is against rather than what wilderness is for. Hypothesis one: Wilderness messages focus on what wilderness is against, rather than on what it is for.

During my sabbatical last year, I took trips to several wilderness areas and areas recommended for wilderness designation. I also went on a patrol with an agency employee who was well intentioned, but woefully inadequately trained in wilderness management. I speculated on how the individual would manage the area differently had he/she at least been to the Carhart Center Wilderness training I had been to earlier in the year. The training included a powerful talk by Roger Kaye on the spiritual values of wilderness. You had the sense wilderness was unique.

On one of my trips, I talked to a man, his son, and their dog who got turned away from the ferry to North Manitou Island (part of Sleeping Bear Dunes National Lakeshore) because they wanted to bring the dog. I wondered why the family didn't know pets weren't allowed. Didn't they do their homework before their visit, or was the information missing on the NPS website (it turns out to be the former rather than latter). The man's question to me was, "We drove from Ohio to get here, is there another wilderness that we can go to?" Clearly there is a powerful allure to wilderness designation; it was a unique resource for this family (note: the island is recommended for wilderness; it has not yet been designated). Hypothesis two: NPS presents little information about the uniqueness of wilderness.

Last summer I read the latest (2002) edition of *Wilderness Management* by Hendee and Dawson in preparation to teach a new course in wildland recreation management.

Late in the book, the authors suggested that regulations are most effective if accompanied by explanation as to why they are needed. That didn't seem like an incredibly insightful recommendation. Then I thought about all the park brochures, newsletters, permits, and signs I've seen about wilderness areas, and I concluded that I had seldom seen an explanation as to why regulations exist. Hypothesis three: Wilderness regulations have little accompanying explanation.

If these hypotheses are correct, the following results can be expected:

- Compliance with existing wilderness guidelines and regulations will be low;
- Biophysical impacts will persist or increase;
- Social impacts will persist or increase;
- More management actions will be needed, which may lead to less primitive and unconfined recreation; and
- The enduring resource of wilderness may be eroded.

## Methods

A website analysis was conducted because official sources of information are viewed as highly credible and websites are accessible to many prospective visitors prior to their arrival. The reason NPS was selected rather than the other wilderness-managing agencies is three-fold. First, NPS has few wilderness areas. Second, NPS's preservation mandate suggests that it should be easier for the institutional culture to embrace wilderness than if it were

an agency with a multiple-use mandate. Third, over 75% of the National Park System is congressionally designated wilderness or recommended as wilderness.

The complete website for each NPS unit containing wilderness was downloaded using Adobe Acrobat. I searched on “wilderness” and then examined the information derived. Some of the information was compiled in a spreadsheet for quantitative analysis and the rest of the information was saved in a separate file for textual analysis.

### Results

The results are based on an analysis of 21 of the 44 NPS units with wilderness. The remaining sites will be analyzed later this year.

**Quantitative analysis.** Figure 1 indicates the wide range of wilderness sizes included in this analysis. Figure 2 shows that over half the NPS units examined contain more than 50% wilderness.

The wilderness areas were designated

between 1970 and 1994, with most being designated in 1978. Based on the age of designation, one would expect there to have been sufficient time to update websites to include information about the wilderness. Approximately 80% of the NPS units had detailed maps on their websites, but only 60% actually showed the wilderness boundaries on the map.

The standardized main page of each unit was analyzed to determine if wilderness showed up on the designation listing. Only 57% of the parks with wilderness listed it on their main page. The standardized page listing activities was also analyzed. Of the units that listed activities (two did not), all but Mesa Verde listed it. Less than 30% of the parks had clickable links that take a user to a separate page for more information. Of the NPS units that had any clickable links, less than half had a clickable link for wilderness.

**Qualitative analysis.** All the information that the public would access for trip planning

was analyzed; documents such as wilderness and backcountry plans, environmental impact statements, and fire plans were not evaluated. Some NPS units contained no information about wilderness, while a couple of sites contained the vast majority of information. What follows is almost all the information that exists about wilderness on the 21 sites examined.

**Values.** The first section deals with the values articulated in the Wilderness Act, i.e., that wilderness areas “may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.”

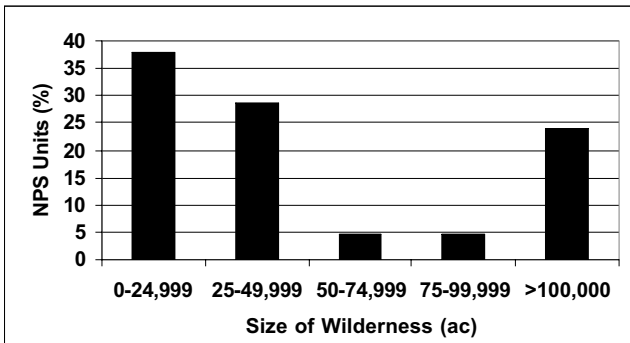


Figure 1. Amount of wilderness in each NPS unit (n=21)

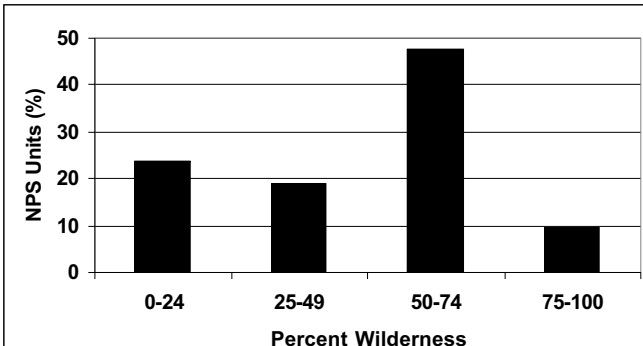


Figure 2. Percentage of NPS unit that is wilderness (n=21)

## Wilderness and Wildness

### *Ecological Values*

- “When trees fall in a wilderness area, they are left alone to provide food and shelter for plants and animals.” (Congaree Swamp National Monument)
- “... great diversity of wildlife in Katmai which encompasses millions of acres of pristine wilderness” (Katmai National Park and Preserve)
- “... the cougar is the symbol of wilderness, a large animal ranging freely in wild areas, independent of human interference. At the end of food chain they serve as an indicator of ecosystem’s health.” (Guadalupe Mountains National Park)

### *Scientific Values*

- “A prairie wilderness. As we attempt to assemble the great biodiversity puzzle, prairie is the heart of the piece.” (Badlands National Park)
- “... all objects at these sites are artifacts to be left in place for future study” (Badlands)
- “Wilderness Laboratory—National parks and wilderness areas are key places to conduct scientific studies because of their relatively pristine state.” (Lassen Volcanic National Park)

### *Scenic Values*

- “Look closely and you’ll see every color of the rainbow painted in delicate brush strokes across this dramatic wilderness” (Badlands)
- “The wild mountain beauty, the clean, clear water of the Buffalo, and the myriad of other sights are ideal subjects to be captured on canvas, film, in print or performance. This place can inspire creativity” (Buffalo National River)
- “Glacier-carved peaks towering over alpine meadows and sub-alpine forests make this a dramatic landscape” (Great Sand Dunes National Park and Preserve)
- “... experience the ... scenic beauty of these special places” (Mojave National Preserve)

### *Historical Values*

- “In the early part of this century, goat and sheep ranchers constructed small checkdams at many seeps. Remains from these activities ... can still be seen” (Carlsbad Caverns National Park)
- “... remnants of these 20th century homesites. Remember that all objects at these sites are artifacts to be left in place ... for other visitors to discover and reflect on the difficulty in living in this beautifully barren place (Badlands)
- “... cultural/historical sites and artifacts are strictly protected and will remain undisturbed” (Guadalupe)
- “Visitors found hiking away from designated trails ... are subject to penalties.... [R]egulations are necessary to protect the fragile and irreplaceable archeological sites and artifacts” (Mesa Verde National Park)

**Recreation and solitude.** The second section of the analysis focused on recreation and solitude based on the Wilderness Act verbiage: “has outstanding opportunities for solitude or a primitive and unconfined type of recreation.”

### *Recreation*

- “Traveling by canoe is a great way to enjoy this primeval wilderness” (Congaree)
- “... primitive qualities provide ... rustic backpacking, wildlife watching, horseback riding” (Badlands)
- “... offer superb opportunities for backcountry hiking and camping.” (Great Sand Dunes)

Some of the NPS units have trails in the wilderness:

- “Former roads in wilderness provide many outstanding trails.” (Mojave)
- “There are miles of trails to explore.” (Great Sand Dunes)“
- Wilderness trails receive no maintenance and have no signs.” (Craters of the Moon National Monument)
- “Stay on established trails, and as you

## Wilderness and Wildness

enjoy the view, remember it would not be as pretty if each of us trammed [sic] wherever we chose.” (Guadalupe)

Some of the areas don't have wilderness trails:

- “... cross country travel without the presence of established trails ... forces its explorers to be self-reliant and prepared.” (Badlands)
- “Trails have been left undeveloped to preserve and enhance the wilderness experience” (Carlsbad)
- “There are no maintained or marked trails.... [R]outes are difficult to follow.... [H]ikers are expected to find their own way and to be prepared for self-rescue” (Black Canyon of the Gunnison National Park)

### *Solitude*

- “... never encounter another person, hear traffic, or smell car exhaust.... places for quiet contemplation as well as for friends to get away together.” (Carlsbad)
- “... offers outstanding opportunities for solitude and primitive recreation” (Carlsbad)
- “You will have the sense of being truly alone” (Craters of the Moon)
- “Some value solitude and hike into the wilderness (80% of the monument) for an overnight camp out” (Craters of the Moon)
- “... experience the solitude ... of these special places.” (Mojave)
- “Popular with hikers, equestrians, and fishermen.... [H]ike midweek to find solitude.” (Great Sand Dunes)

Wilderness users often confront regulations (i.e., wilderness is “against”), although it is seldom clear as to why they exist:

- “Pets are not permitted in the wilderness” (many sites)
- “... wheeled vehicles are not allowed” (Badlands)
- “No motorized vehicles (including ATVs) are permitted” (Buffalo River)

- “Bicycles and other mechanized equipment are not allowed” (Craters of the Moon)
- “... no roads or permanent structures can be built” (Craters of the Moon)
- “Firearms are prohibited” (Hawaii Volcanoes National Park)
- “Pets, hunting, bicycles, and motorized vehicles are not allowed” (Lava Beds National Monument)

Many wilderness areas do not allow fires, but only two provide a rationale as to why their use is banned:

- “Due to high winds and dry grasses, fires are not permitted.... Coached by the Great Plains wind, a simple dropped match can trigger a massive wildfire in seconds.” (Badlands)
- “Why can't I have a campfire? Dams upstream prevent a natural flow and cycle of driftwood entering the lower canyon. What little organic debris makes its way through the canyon is a vital resource for the recycling of nutrients back into the riverbank and the earth.” (Black Canyon)

Many areas require a free camping permit, but only two explain the value of permits:

- “Permits help us monitor use of the wilderness.... [H]elp us identify potential emergencies by letting us know your expected itinerary.” (Black Canyon)
- “... monitor how many people are using the wilderness, to inform them of regulations, and to make sure that they return safely.” (Craters of the Moon)

Much of the wilderness information on NPS websites deals with camping:

- “Camp in wilderness area of park 100 feet away from backcountry trails and water, 500 feet away from visitor center and boardwalk. Primitive camping—no facilities.” (Congaree)
- “Backcountry camping is restricted to the designated wilderness area.” (Craters of

the Moon)

- “Camping limited to 14 days per year” (Lassen)
- “No person may camp in a nondeveloped or wilderness area with a group size of more than twelve, including horses and pack animals.” (Lava Beds)

A few websites explain why camping rules exist:

- “Be considerate of others. Camp at least 400 yards from other campers” (Badlands)
- “To minimize impact on fragile wetland areas, group size is limited to 6 people” (Congaree)
- “In order to restrict human impact to a limited area, please camp at Echo Crater... [I]f you do select other campsites, use them for only one night and then move on.” (Craters of the Moon)
- “The desert is fragile and recovers from human impact much more slowly than many other ecosystems. Roads, trails and campgrounds leave lasting scars. To minimize these scars, designated campgrounds with hardened tent pads have been established.... [R]espect the land—do not camp outside these designated areas.” (Guadalupe)

**Unique aspects.** The third section of the analysis focused on the unique aspects of wilderness.

- “Wilderness offers itself to each of us on our own terms. Some of us are content to experience wilderness of the mind—it’s enough to know wilderness exists in the world. Others are compelled to explore designated wilderness to take on its challenges. Hopefully, we do not aspire to conquer wilderness. The legal concept of wilderness has a companion inside all humans: wildness. It is this primitive quality of life that causes innovation, wonder, and exploration. Valuing the wildness in ourselves and wilderness as an American landscape brings us closer to becoming active members in the in the “community

of life” described in the Wilderness Act.” (Badlands)

- “It is now up to us to accept the challenge of wilderness: to come to the edge of forever and feel complete.” (Badlands)
- “... Wilderness Areas are of immeasurable value to our natural and spiritual well-being, and are special places that should be treated with reverence and respect.” (Carlsbad)
- “... these areas have as the last best untrammelled landscapes in the nation. Whether we go there for recreational, spiritual, educational, or scientific reasons—or simply to take refuge from the paved and ordered domain of our daily lives—we can find quiet contemplation and solitude in the deep canyons and tree-lined mesas.” (Carlsbad)
- “The remote dunes lend themselves to panoramic views of the heavens. Immerse yourself for the night surrounded by swirls of sand. Watch for shooting stars. Listen to the amazing quiet.... [I]t takes effort ... to reach a sandy wilderness campsite, but it’s a worthwhile experience to discover the reality of a night surrounded by sand. Listen for the howl of the coyote and the whisper (or gale!) of the wind.” (Great Sand Dunes)

## Conclusions and Recommendations

NPS websites are only one method of communicating with visitors about wilderness. Despite the fact that the wilderness areas of most of the NPS units analyzed had been designated over 30 years ago, many of the park websites do not list wilderness on their main page, most don’t have clickable links from the wilderness section on the activities page, and a few do not show wilderness boundaries on their map.

All three hypotheses seem to be supported: websites discuss what wilderness is against rather than for, regulations seldom have explanations, and there is little information about how wilderness is unique.

Four main recommendations can be gleaned from this preliminary research.

## Wilderness and Wildness

- Wilderness designation should be listed on the main page;
- The wilderness link on the activity page should be “live”;
- The wilderness link should lead to a page that presents the positive *and* unique aspects of wilderness; and
- Maps should show the wilderness boundary.

NPS should increase the information about wilderness on its websites for each unit containing wilderness, or it is likely that the enduring resource of wilderness will be lost.

### Reference

Hendee, John C., and Chad P. Dawson. 2002. *Wilderness Management: Stewardship and Protection of Resources and Values*. 3rd ed. Golden, Colo.: Fulcrum.

