



ALDO LEOPOLD WILDERNESS RESEARCH INSTITUTE

<http://leopold.wilderness.net/>

DESOLATION WILDERNESS CASE STUDY: VISITOR RESPONSE TO FEES

Keywords: user fees, visitor response, parking fees, camping fees, recreation fees, visitor perceptions, visitor experiences, fee demonstration program

Background & Management Issues:

Historically, access to undeveloped recreational sites on public lands in the United States has been available free of charge to the general public, paid for by tax dollars as a public good. In particular, the protection of wilderness areas has been financed almost solely by the public-at-large, reflecting the belief that wilderness values are realized by society as a whole, not solely by wilderness visitors.

With concerns about increasing recreational use of public lands and efforts to control federal spending, the U.S. Congress authorized the Recreation Fee Demonstration Program in 1996. Under this program, federal land managers around the country initiated fee projects including charges for permit reservations, use of campsites and trails, and vehicle parking. This case study assessed visitors' perception of and response to user fees for use by wilderness managers in their decisions to implement fee programs.

Project Objectives:

To assess wilderness users' response to recreation fees.

To define issues surrounding the fee demonstration project for further study.

Project Description: A team of social scientists and land managers with varied backgrounds collaborated to address a range of issues surrounding user fees for wilderness. Surveys were delivered to a sample of visitors who acquired permits shortly after camping and parking fees were instituted at the Desolation Wilderness in northern California. The survey asked respondents 14 basic questions to gather

information about visitor demographics, trip characteristics, and visitors' attitudes toward user fees or the solicitation of donations. The resulting data were analyzed to determine how different users react to fees, how public support differs depending on the nature of the fee and the rationale behind it, what fee levels visitors consider appropriate, and the implications for future research and monitoring.

Results: The survey results suggest that a majority of visitors accepted the fees instituted at the Desolation Wilderness. The survey population was drawn from visitors who had already bought a permit, however, and thus did not reflect the opinions of those who chose not to visit due to the institution of user fees.

User fees appeared to have little effect on user enjoyment across all categories of visitors, and trip satisfaction among respondents was high even among those opposed to fees. Those who demonstrated a "higher place attachment," and those with more wilderness experience, were considerably less accepting of user fees, however. Income levels influenced users' attitudes toward fees, with those respondents reporting a lower income generally indicating less tolerance for the fees than those with higher incomes. Fees for parking or day use were considerably less acceptable to visitors than fees for front- and backcountry camping.

Whatever the nature of the fee, visitors stated they would be more apt to support it if the money was directed toward maintaining and restoring wilderness conditions, rather than funding development or initiating new programs. Respondents were most supportive of using fee dollars to reduce human impacts, restore camping sites, and remove litter. These results suggest that these visitors value "wilderness values" (i.e. solitude and wildness) more highly than facility improvements.

A majority of users accepted the fees at current levels, but "acceptance" did not necessarily indicate "support." The most common complaint about the fee system was no option existed for visitors to pick up a permit after business hours. A majority of visitors felt the fee levels in the Desolation (\$5 for overnight permit, \$5/person/night for camping, \$3/day for parking for those without overnight permits) were

appropriate. A majority also stated the fee level they felt was appropriate was less than the amount they would be willing to pay. However, the percentage of visitors saying they would choose not to participate in a recreational activity increased quickly with even a dollar increase in fees.

Slightly more than half the visitors surveyed reported making donations when donations were requested at the trailhead. Visitors who used the area more frequently, or had the longest history of use, were the least likely to donate. Although visitors with a higher place-attachment were less likely to make a donation, they donated more when they did donate.

Management Implications:

- ❖ Trip satisfaction is not correlated with visitors' opinions about user fees. Therefore, measuring user enjoyment says little about the public's acceptance of fees.
- ❖ Managers should be cautious about public response when user fees may disproportionately limit access for those with lower incomes, or any other demographic group because access to undeveloped public land, and specifically wilderness, traditionally has been available to the general public free of charge
- ❖ The extent to which individual users support fees depends on their personal recreation history, their "place attachment," and whether the activity the fee applies to has historically been available free of charge.
- ❖ Public acceptance of fees appears to vary considerably depending on the nature of the fee and how the fee money will be spent.
- ❖ Although donation requests at trailheads may not generate as much revenue as fees, they could be used to meet other goals without engendering negative feelings among visitors.
- ❖ The respondents in this survey indicated an appropriate fee level was less than what they would be willing to pay. A greater percentage of visitors can be expected to participate in the fee program if they generally agree with fee levels, however.
- ❖ One of the greatest frustrations visitors cited with the fee program was the difficulty of obtaining permits. The development of more convenient means of obtaining a permit will likely result in less visitor opposition to fees and a higher participation rate.

Publications / Products:

- ❖ Puttkammer, Annette; Christensen, Neal A. November 1998. Desolation Wilderness visitor study. Unpublished report. Aldo Leopold Wilderness Research Institute, Missoula, MT.
- ❖ Richer, Jerrell Ross; Christensen, Neal A. 1999. Appropriate fees for wilderness day use: Pricing decisions for recreation on public land. *Journal of Leisure Research*. 31(3): 269-280. **Leopold Publication Number 370.** [Abstract](#).
- ❖ Vogt, Christine A.; Williams, Daniel R. 1999. Support for wilderness recreation fees: The influence of fee purpose and day versus overnight use. *Journal of Park and Recreation Administration*. 17(3): 85-99. **Leopold Publication Number 373.** [Abstract](#).
- ❖ Watson, Alan E. 2001. Sustainable financing of wilderness protection: An experiment with fees in the United States. *International Journal of Wilderness*. 7(3): 12-16. **Leopold Publication Number 442.** [Abstract](#).
- ❖ Williams, Daniel R.; Vogt, Christine A.; Vitterso, Joar. 1999. Structural equation modeling of users' response to wilderness recreation fees. *Journal of Leisure Research*. 31(3): 245-268. **Leopold Publication Number 369.** [Abstract](#).
- ❖ Martin, Steven R. 2000. Donations as an alternative to wilderness user fees-the case of the Desolation Wilderness. In: Cole, David N.; McCool, Stephen F.; Borrie, William T.; O'Loughlin, Jennifer. comps. *Wilderness Science in a Time of Change Conference*. 1999 May 23-27; Missoula, MT U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station: Ogden, UT Proc. RMRS-P-15-Vol-4: 142-147. **Leopold Publication Number 429.** [Abstract](#).

For additional information...

Alan Watson, Leopold Institute Investigator

phone: 406-542-4197

email: awatson@fs.fed.us

Christine Vogt, Michigan State University

phone: 810-494-0239

email: vogtc@msu.edu

Daniel R. Williams,

Rocky Mountain Research Station

phone: 970-498-1984

email: drwilliams@fs.fed.us

Steven R. Martin, Humboldt State University

phone: 707-826-5637

email: srm1@axe.humboldt.edu