HIGH-USE DESTINATIONS IN WILDERNESS: VISITOR IMPACTS AND RESPONSES

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Background & Management Issues: Amid increasing recreation use, wilderness managers are challenged to comply with the Wilderness Act's mandate that wilderness provide "outstanding opportunities for solitude or a primitive and unconfined type of recreation." The frequent encounters that occur in a heavy use environment are generally assumed to have a negative effect on the user's opportunity for solitude. In order to provide opportunities for solitude, and diminish the ecological impact of heavy use, many wilderness managers have instituted use limits. However, questions remain about the effect encounters in the backcountry have on the wilderness experience, and when restrictions on access are justified in order to

Project Objectives:
❖ To better understand resource and social conditions of high-use destinations, as well as visitors' characteristics and preferences.
❖ To outline potential consequences of management responses to high levels of

reduce crowding.

Project Description: The study was conducted at six high-use destinations in three wilderness areas in Washington and Oregon. These wildernesses are large, near urban areas, and receive heavy use. Physical recreation impacts and encounter rates were quantified. Visitors were surveyed to determine personal characteristics, responses to physical and social impacts, and preferences for management.

Results:

Recreation Impacts: Physical impacts were highly localized. A large number of "social trails" existed, especially in camping areas, where most of the visible recreation impacts exist. Lakeshore disturbance at some of these camping areas was also prevalent. Even in the most impacted area, however, disturbance was relegated to less than 2% of the land area.

Visitor Encounters: Encounters in all areas surveyed were frequent (up to an average of one every 3.2 minutes on trail), but highly variable both temporally and spatially. On-trail encounters were more frequent than campsite encounters, and off-trail encounters were rare. Encounter rates were typically about three times higher on weekends than on weekdays.

Visitor Characteristics: Visitors were quite diverse. They generally reported higher than average amounts of previous wilderness experience and a strong commitment to wilderness. The frequent stereotype of visitors to high-use areas as novices not highly attached to wilderness doesn't fit the visitors surveyed.

Visitor Responses to Conditions: Most visitors reported that the number of people and physical impacts they encountered was about what they expected. They also reported that the high levels of use didn't significantly detract from their experience. Campsite encounters bothered users more than other encounters.

Visible physical use impacts were more bothersome to visitors than encountering other people. Users were most bothered by litter, vegetation loss on campsites, and horse manure. A sizeable minority didn't notice any physical impacts, however.

Most visitors noticed management actions (such as closing campsites) designed to minimize physical

impacts, but few felt these actions detracted from their experience. A majority of visitors rated their trip as more enjoyable than most trips. The destination where trip quality ratings were lowest was also where visitors reported feeling more crowded, and having more encounters than they expected.

Visitor Preferences for Management: Few visitors thought that current use levels warranted use limits, but a majority expressed support for the concept of use limits in the future. Most people who supported the idea of use limits at some time thought use should be capped at current levels. Other management actions supported by users were in line with current management of those areas, i.e. education and intensive site management to reduce impacts without reducing use levels.

Management Implications:

❖ The combination of experienced users, small groups, and intensive site management probably accounted for less severe recreation impacts than expected from the level of use.

❖ Recreation impacts were visible but localized, covering only a very small percentage of the total wilderness. Under the Wilderness Act, ecological integrity and visitor experiences should determine the managers' level of concern over these impacts.

❖ Visitors to high-use areas aren't necessarily wilderness novices with little commitment to wilderness. They are often experienced, longtime users.

❖ Campsite encounters were more objectionable to visitors than trail encounters. In areas with designated camping areas, managers can take steps to limit campsite visibility, and reduce the perception of crowding.

❖ Visual degradation of the resource had a greater negative effect on experience quality than visitor encounters. Visitor education and intensive site management may prove as effective in reducing physical impacts as instituting use limits.

❖ Use would have to be curtailed severely to make an appreciable difference in encounter rates or physical impacts. Use restrictions would have a greater effect in less heavily used areas.

❖ Use limits have repercussions beyond the area where they are instituted. Displaced visitors may be barred from wilderness access, or choose to recreate in another area, perhaps contributing to crowding problems there.

Publications / Products:

❖ Cole, David N.; Watson, Alan E.; Hall, Troy E.; Spildie, David R. 1997. High-use destinations in wilderness: social and biophysical impacts, visitor responses, and management options. Res. Pap. INT-RP-496. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station. 30 p. **Leopold Publication Number 308.** Read the abstract here.

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Three Sisters Wilderness, Oregon. NWPS photo

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