

Use Rationing In Two Southern California Wildernesses

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ABSTRACT—A majority of applicants supported visitor quotas in two wildernesses on the San Bernardino National Forest in southern California. Even persons who did not obtain a permit agreed rationing was needed. The most common problem was inadequate advance knowledge about the rationing system. People obtained information about the system chiefly from the Forest Service, but also from other visitors, conservation organizations, and news media.

Do visitor quotas and campsite regulations in the backcountry signal an impending "police state" to wilderness enthusiasts (Behan 1974)? Rationing of wilderness use has sparked debate among resource management professionals (Hendee and Lucas 1973) and users (DeFelice 1975), alike. Opinions range from the belief that wilderness will be irreparably damaged unless use is controlled, to the conviction that rationing is governmental intervention in the affairs of private citizens. Because citizen opinion about new programs is important to resource managers, a systematic assessment of visitor reactions to rationing programs is important.

This paper reports on an investigation of a rationing program in two southern California wildernesses administered by the Forest Service. In particular, we sought to determine visitor acceptance of the program as well as areas where improvements could be made.

The Problem

The San Gorgonio (34,718 acres) and San Jacinto (21,955 acres) wildernesses on the San Bernardino National Forest in southern California are small tracts of wildland, islands in the midst of one of America's major population concentrations. About 12 million people reside within a 3-hour drive. Use of the two areas has increased steadily, rising by one-third between 1970 and 1972. On a visitor-day-per-acre basis, the two areas are among the most heavily used in the National Wilderness Preservation System (4.99 visitor-days per acre in the San Gorgonio, 4.03 in the San Jacinto).

Steady increase in use has brought a host of problems. One day in 1972, 1,400 hikers moved through the South Fork area of the San Gorgonio Wilderness. In some areas, vegetation was destroyed by trampling and erosion; sanitation problems were serious. Al-

though the South Fork area comprises only about one-tenth of the wilderness, it received about two-thirds of total use. Similar problems plagued the San Jacinto Wilderness. Consequently, the forest supervisor announced in 1973 that use of the two wildernesses would be rationed.

The Rationing Program

To implement rationing, it was necessary to establish visitor capacities. On the San Jacinto, only overnight use was restricted. In the two management zones, the Meadows Zone and the Plateau Zone, capacities were set to provide a certain level of solitude at each campsite. First, wet meadows, trails, steep slopes, and areas otherwise unusable for camping were subtracted from the gross zone acreage. Second, a minimum spacing of 500 feet between each campsite was established, thus eliminating some potential sites. This separation (one campsite every 4.5 acres) limited the number to about 20 in the Meadows Zone and 60 in the Plateau Zone. Multiplying the number by the average party size of five (determined from permits issued in preceding years) provided an overnight capacity of 400 persons.

Overnight permits were issued by mail, by phone, or in person. Advance reservations were accepted until 75 percent of the capacity for a given day had been allocated; the remaining 25 percent was held for personal requests to accommodate trips planned on short notice or by persons unaware of the advance-reservations system.

In the San Gorgonio Wilderness, use was rationed only in the popular South Fork Meadows travel zone, but both overnight and day use were controlled. Overnight capacity, based on the number of campsites, was set at 23 parties. Overnight occupancy was estimated to average 150 persons (average party size of 6.5) but may have been as high as 345 (maximum permissible party size of 15 persons).

Day-use capacity was based on an assumed separation of one-half mile between each hiking group. Thus, the figure rested on an assumption that use would be evenly distributed over the area's 13 miles of trail and that no overnight groups would hike the trails during the day. Both assumptions are highly questionable; nevertheless, by this procedure the day-use capacity was estimated to be 26 groups, with the number of people ranging as high as 390 if all groups contained the 15-person limit. This method at least provided an approximation for estimating trail capacity.

All permits in the San Gorgonio were issued on a first-come, first-served basis, although personal application was not required (mail or phone applications were accepted).

The Study

The names and addresses of all applicants for 1973 permits were randomly arranged, and a systematic interval sample of 300 permittees was drawn—150 from each wilderness. Also drawn were names of 87 persons denied permits to the San Gorgonio because capacity for the day of application had been reached. This population was of particular interest because, in a sense, it was most affected by the permit system. While support was anticipated from those who received a permit, it was uncertain how the unsuccessful

applicants would feel. Also sampled were 150 persons who had applied for entry to the South Fork Meadows Zone in the San Gorgonio, but who had been diverted to nonrationed locations.

A five-page questionnaire was mailed to the sample. Two follow-up reminders, including questionnaires, were mailed at 2-week intervals. A total of 435 usable questionnaires were returned from the original mailing of 537, an 81-percent response rate.

Visitors' Opinions of the Rationing Program

Wilderness visitors generally agreed that crowding and resource damage had brought the need for rationing. Many reported that use was heavier and physical-biological damage was worse since their first visit (75 percent of the sampled visitors had been in the area before); nearly one-half felt that the areas had become overused and one-quarter cited examples of serious damage. Sixty percent believed that use prior to rationing had exceeded capacity. Clearly, visitors and managers agreed that both wilderness areas had been seriously overused.

Was rationing needed.—The numbers and percentages (in parentheses) of visitors for, against, and unsure of the rationing system were:

	Successful applicants	Unsuccessful applicants
Against	11 (5)	10 (5)
For	199 (82)	151 (81)
Not sure	31 (13)	27 (14)
	241	188

Overall, 82 percent of the respondents felt that rationing was needed. Many who had failed to obtain an entry permit agreed; 75 percent of the turnaways and 82 percent of those diverted to alternative trailheads in the San Gorgonio supported rationing. These figures are very similar to those obtained by Fazio and Gilbert (1974) in Rocky Mountain National Park, where 86 percent of the successful and 80 percent of the unsuccessful applicants supported rationing.

The reasons why visitors supported or opposed the rationing program are listed below (figures indicate number of times each opinion was mentioned):

Opposed

Excessive regulations	11
Other control techniques more appropriate	4
Doesn't control the problem	3
Discriminatory	1
Other, or no reason	4

Supporting

Protect resource	176
Protect experience	166
Save for future generations	35
Good idea, but needs modification	13
A necessary evil	6

Not sure

Uncertain about need	26
Needed in some areas and some conditions	5
Concerned about personal impact	2
Rationing is arbitrary	2
Vague, miscellaneous	6
No reason	15

To opponents, rationing represented another example of government regulation over private behavior. Sup-

porters endorsed the program largely because it would protect the wilderness and quality of experience. Protecting the area for future generations was also a common concern.

Although 75 percent of the users surveyed had visited the areas prior to rationing, only 40 percent of these previous visitors had made more than five trips into the areas. More than one-half of those who had used the areas prior to rationing reported that conditions had improved: use intensities had declined, site quality had improved, littering was less common, and the wilderness environment had been generally upgraded. About 20 percent of the users reported that conditions seemed about the same.

Nearly one-half (46 percent) of the respondents said the system was being administered well; about 40 percent offered some criticism. In general it was thought that ranger district personnel were helpful and polite but often gave inaccurate information about specific locations within the wildernesses. The major complaint was that the purposes and procedures of the rationing program were poorly publicized. Many visitors to both wildernesses were poorly informed; nearly 40 percent found out about the rationing system only after arriving. There were very few charges of "big brother," and few people thought the Forest Service was acting as police in enforcing the program.

Two-thirds of the visitors obtained permits in person; the remainder applied by phone or mail. Typically, trips were planned a short time in advance: about one-third were decided upon a week before departure, about one-half between 1 week and 1 month before departure, and only about 20 percent more than a month ahead. Forty-eight percent of the visitors had obtained information about the rationing program from the Forest Service, 21 percent from other people, and less than 10 percent from commercial media. Although one-third of the respondents were members of a conservation or outdoor club, only about 10 percent obtained any information about rationing from their organization.

Most visitors (63 percent) supported existing methods for issuing permits, 25 percent suggested alternatives, ranging from a fee system to a proficiency test. In the San Gorgonio, the first-come, first-served system was favored substantially more than in an earlier investigation (Stankey 1973), where only 28 percent of users supported the system. First-come, first-served favors local users because of easy access to the office where permits are issued. In both the San Gorgonio and San Jacinto, virtually all (97 percent) visitors were from five adjacent counties.¹

Most of those turned away or diverted to another location in the San Gorgonio felt that although rationing was unfortunate, it was necessary. About a quarter of the respondents (28 percent) were disappointed at being refused a permit, but most accepted the situation.

Nevertheless, nearly one-quarter of those refused permits expressed anger, dismay, and frustration, emotions summed up by one individual's remark, "Wilderness is a right, not a privilege." Some thought

¹G. Elsner. 1972. *Wilderness permit data for California*. Unpubl. rep., Pacific Southwest For. and Range Exp. Stn., USDA For. Serv., Berkeley, Calif.

poor administration of the program, particularly poor advance notice, caused their failure to obtain a permit. It seems clear, however, that some users see regulation of wilderness use as unjustified and will not accept it even if flaws in administration and publicity are corrected.

Management Implications

On the whole, rationing in the San Gorgonio and San Jacinto wildernesses was successful. Most of the problems were administrative and easily corrected, and do not require further research.

It should be noted that both administrators and users generally agreed that the areas were being seriously overused. In areas where visitors do not agree with management, rationing may encounter strong public resistance, and information programs to make the public aware of problems may be prerequisite.

What advice can be offered to managers confronted with rationing? First, a rationing program means additional administrative costs. Extra personnel, extended office hours, and informational literature are essential

to success. To the extent possible, managers should make it easy for applicants to obtain information about the system, to pick up permits, and to choose alternative times or places.

Second, because most permits are picked up in person, personnel issuing the permits influence visitor attitudes and knowledge (Hendee and Lucas 1973). Part-time staff and clerical personnel represent the agency to those with whom they deal. Such employees must understand the reasons for the rationing system, and its mechanics. They must have accurate information about conditions within the wilderness. When visitors find conditions at an intended location to be quite different from what they have been told, respect and cooperation are quickly ended.

Third, reservation systems can lead to a large number of "no-shows." Unless the system accommodates this fact, actual use will fall below capacity.

Fourth, it is important to remember that direct rationing is only one way of managing visitors in overcrowded areas. Less obtrusive and regimenting actions should be preferred whenever possible (Stankey and Baden 1977). ■

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