

Human Values and Codes of Behavior: Changes in Oregon's Eagle Cap Wilderness Visitors and Their Attitudes

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ABSTRACT: A study of visitors to Oregon's Eagle Cap Wilderness in 1965 offered a baseline against which to evaluate how those who recreate in wilderness have changed their views of wilderness. A study of visitors to that same wilderness area in 1993 provided comparative data. Some characteristics of the visitors changed in ways that would suggest that the values visitors placed on wilderness and on the behaviors they would consider appropriate had changed as well. Specifically, visitors were better educated and were more likely to be members of conservation or outdoor recreation organizations. In addition, they were more supportive of actions to maintain the wilderness character of Eagle Cap, and they were more restrictive in the behaviors they considered appropriate in wilderness. Both manager-initiated education efforts and changes in society are believed to contribute to these changes in attitudes.

INTRODUCTION

In 1964, after many years of discussing and debating the values and uses of a National Wilderness Preservation System, the 88th U.S. Congress passed the Wilderness Act. This action secured "for the American people of present and future generations the benefits of an enduring resource of wilderness" (P.L. 88-577, Section 1[a]). As a result of the Wilderness Act, the states of Oregon and Washington had a combined total of just over 809,000 ha of wilderness newly protected by federal legislation. Just one year after passage of the Wilderness Act, in 1965, at a time of presumed high consciousness of wilderness issues, one of the earliest studies to determine how people feel about the values and appropriate uses of this "enduring resource of wilderness" was conducted. The study, by Hendee et al. (1968), so soon after passage of the Wilderness Act, provides a valuable baseline against which to evaluate changes among the people of this part of the United States in their relationships with wilderness.

Hendee et al. (1968) concluded, from studying the views of visitors to three wilderness areas in Oregon and Washington, that when strong wilderness values existed among the visitors, these values were the product of what these scientists referred to as "high sophistication" (worldliness, characterized by higher than normal educational attainment, association with friends who visit wilderness, and membership in one or more conservation or outdoor orga-

nizations). They also concluded that these values were typically developed early in life and were spread largely through social processes like club membership and association with close friends. At the time, Hendee and coworkers encouraged the stewards of our new National Wilderness Preservation System to become more aware of the social processes underlying trends in wilderness use and how these trends may influence the values which visitors ascribe to wilderness.

Now, just over 30 years after the original Wilderness Act was enacted, there are well over 2,400,000 ha of legislatively protected wilderness in these two northwestern states. Many people assume that wilderness is an established, stable presence in the lives of the residents of the Pacific Northwest. Clearly, though, the region is undergoing substantial social change due to in-migration, a national focus on the region's natural resource issues (e.g., depletion of old growth, endangered species, and economic dependence on timber), and a growing urban population. In 1993, we had the opportunity to examine some of the changes that have occurred in visitors, who mostly come from the state of Oregon, to one of the three areas studied in 1965: Eagle Cap Wilderness in Oregon. We asked a sample of visitors some of the same questions Hendee and coworkers had asked visitors in 1965. Our objectives were (1) to study how visitors typical to this one wilderness had changed in some of the "worldliness" factors found by Hendee et al. (1968) to influence strength of wilder-

today represent an older segment of our society than they did at the time of passage of the Wilderness Act. This finding is one of the few trends in wilderness visitor characteristics found consistently in previous studies (Cole et al. 1995).

Using the educational categories reported for the 1965 visitor survey for comparison, the 1993 sample differed from the earlier sample in educational attainment (Table 2). The proportion with a high school education, or less, decreased from 38% to about 11%. Accordingly, the proportion studying beyond high school increased substantially. In fact, in 1993, 69% had completed a 4-year degree and 39% had 2 or more years of graduate study. While these figures are not directly comparable to regional and national census figures owing to exclusion of those under 16 years of age in the visitor study and exclusion of those under 25 years of age in census data, it appears that this change corresponds to societal shifts in educational attainment. The level of educational accomplishment for Eagle Cap visitors remains much higher than that for the regional or national population, however.

The number of visitors who belong to conservation or outdoor recreation organizations also increased (25% in 1965, 44% in 1993). This change reflects the increases in membership reported consistently by membership organizations, though exact membership rates of the regional or U.S. population in national as well as local organizations are not known. These data describe important characteristics of Eagle Cap users, and changes are obvious. Both the magnitude and direction of change on these items suggest that these users are more "worldly" than the earlier group of visitors, to use the Hendee et al. (1968) term. Contrary to expectations (Roggenbuck and Watson 1989, Watson 1989), however, an approximation of the average length of stay in wilderness (3 days in 1965, 3.7 days in 1993) and the typical number of wilderness visits per year (5.5 trips in 1965, 5.6 trips in 1993) did not change over this time period.

Response to the wilderness values and codes of behavior questions showed con-

sistent increases in evidence of a deep commitment to "an enduring resource of wilderness" and a purist attitude toward appropriate behaviors by the visitors of 1993. For example, when appropriate be-

haviors were explored, visitors were asked if they should be able to camp wherever they please in the wilderness. Nearly two-thirds of the 1965 visitors agreed with that statement; less than one-fourth of the 1993

Table 2. Distribution of education levels for Eagle Cap visitors, compared to general census data for 1960 and 1993.^a

	Percent Finished High School or Less		Percent Finished Above High School	
	1965	1993	1965	1993
Eagle Cap visitors	37.9	11.3	62.1	88.7
	1960	1993	1960	1993
U.S. Population	92.3	57.8	7.7	42.2
Oregon Population	80.3	47.4	19.7	52.6

^a Eagle Cap figures represent those visitors over 16 years of age; census data represent persons 25 and older, and therefore are not directly comparable to visitor data.

Table 3. Comparison of wilderness codes of behavior, 1965 and 1993, Eagle Cap Wilderness.^{a,b}

Code of Behavior	% Agree		% Neutral		% Disagree	
	1965	1993	1965	1993	1965	1993
<i>Visitors should be able to camp wherever they please in the wilderness.</i>	64	22	8	7	28	71
<i>In the wilderness, a person should be free to cut brush or limbs for his or her bed, and for wood for a campfire.</i>	53	17	13	10	34	73
<i>Noncombustible trash (e.g., tin cans, aluminum foil, unburned garbage) should be buried.</i>	87	9	1	2	12	89
<i>Camping isn't complete without an evening campfire.</i>	76	37	16	16	8	47
<i>Radios should not be brought into the wilderness.</i>	23	67	41	17	36	16
<i>If a person sees a shorter route than the trail maker used, he or she should have the right to decide whether to stay on the trail or not.</i>	35	10	15	7	50	83

^a All codes of behavior responses changed significantly from 1965 to 1993 (chi-square $p < 0.01$).
^b Measured on a five-point scale from Strongly Agree to Strongly Disagree. Agreement and disagreement categories are collapsed for comparison.

CONCLUSIONS

From their 1965 study of wilderness users and their values, Hendee et al. (1968) found that people with the greatest educational levels who were also members of organized groups involved in conservation or wilderness, or were friends with such members, exhibited the most wilderness-minded values. The 1993 replication of this study found that educational attainment levels and membership in conservation groups had increased substantially among visitors to Eagle Cap Wilderness. As Hendee and coworkers may have predicted, along with these increases in educational attainment and conservation group membership, came dramatic increases in the strength of wilderness values and standards for behavior in wilderness for this group.

Although visitors to Eagle Cap Wilderness are even more highly educated and more active through organization memberships today than those of 28 years ago, there are other factors that influence their wilderness-related values. Managers have had the opportunity to inform visitors about the negative effects of their behaviors in wilderness for over 30 years, something that was not a common practice before 1964. In fact, Eagle Cap was the focus for early visitor education programs. Such behaviors as selecting a campsite in a responsible manner, reducing campfire building, carrying out trash, and avoiding trail shortcuts were strongly and early emphasized in "Leave No Trace" educational messages at Eagle Cap, as they are today throughout the National Wilderness Preservation System.

Not only have managers emphasized these potentially impact-reducing behaviors in

wilderness, but regional and national media have brought to the public's attention such issues as the role of natural fire and natural insect infestations in wilderness. The most dramatic effect is the proportion of people now demonstrating a neutral attitude toward these issues, versus the strong negative attitude observed in 1965. The amount of protected wilderness has grown threefold in the extreme Pacific Northwest. The documentation and visibility of loss and threat to nonwilderness, nonroaded lands are of regional and national importance and have the potential to influence attitudes about the value of protecting areas as wilderness. The apparent increase in value for Eagle Cap Wilderness as a place where natural forces dominate is supported by this stronger support of natural fires and insect infestations and concern about impact-causing human behaviors. This support probably reflects greater understanding of the role of fire and insects as natural forces. These shifts in values show growth in acknowledgment of the many nonrecreational values of wilderness specified in the Wilderness Act.

In the future, as old-growth forest and nonroaded places become more scarce outside of designated wilderness, we may see increased concentration of those who value these natural amenities among visitors to wilderness areas. While the increasing educational level of our general population may lead to increased awareness of the value of wilderness to society, visible impacts on nonwilderness lands, such as have occurred in the Pacific Northwest, may also encourage understanding and appreciation for the range of opportunities provided by creation of the National Wilderness Preservation System.

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