

## Coping Behavior to Avoid Visitor Encounters: Its Relationship to Wildland Privacy

William E. Hammit  
Michael E. Patterson  
Department of Forestry, Wildlife, and Fisheries  
University of Tennessee

Too many visitor encounters can detract from the privacy sought in wildland environments. Coping behavior to avoid or adjust to visitor encounters is one procedure for reducing encounters and maintaining wildland privacy. This paper examines the degree to which backpackers in Great Smoky Mountains National Park used six physical and six social coping behaviors to avoid encounters/interactions with other backpackers. The influences of solitude importance, encounter norms, and level of backpacker experience on visitor use of coping behaviors were analyzed also. Most respondents used social coping behaviors infrequently, except for reducing social interactions with backpackers in other parties. However, physical coping behaviors were used more often than social coping behaviors. The importance of solitude to visitors was related significantly to adoption of all six physical coping behaviors but to none of the social coping behaviors. Visitors who had lower encounter norms and who were more sensitive to actual encounters experienced participated significantly more often in 10 of the 12 coping behaviors. Level of past experience had little influence on use of coping behaviors. The findings are interpreted in the context of coping behavior as a means of avoiding or adjusting to visitor encounters in wildland recreation areas. The role that coping behavior may serve to control environmental conditions and desired level of wildland privacy is discussed, also.

**KEYWORDS:** *Wildland recreation, privacy, coping behavior, encounters, wilderness.*

### Introduction

Wildland recreation settings, particularly wilderness, are valued because they provide opportunities for a remote and unconfined form of recreation behavior where high degrees of privacy are possible. Solitude and other forms of privacy are major attributes of wildland recreation experiences (Hendee et al., 1978). However, the increasing use of wildland areas has the potential to increase the number of visitor encounters in these areas, thus reducing the remote, unconfined, and privacy aspects of wildland recreation. Therefore, some wildland managers have assumed responsibility for controlling the magnitude and nature of visitor encounters through use permits and other means of managing visitor use. Each visitor

Financial support for this research was provided by the Intermountain Research Station of the U.S. Forest Service and the Agricultural Experiment Station of the University of Tennessee. The authors acknowledge the assistance of Mark Madden whose Masters Thesis data served as the basis for this paper.

also has alternatives for controlling encounter levels, human interactions, and degree of desired privacy on an individual basis by adjusting their own behavior.

Coping behaviors or adjustment mechanisms aimed at maintaining a desired level of privacy occur in many environmental settings (Altman, 1975, 1977). It is especially likely that they would be operating in wildland areas where privacy is a major goal. There are a number of coping behaviors that wildland recreationists may employ to decrease their chances of interacting, both physically and socially, with other backcountry users. These behaviors are sometimes aimed at control of the environmental setting (e.g. campsite), and sometimes at the behavior of other individuals (e.g. visitor encounters). However, little is known about the specific coping behaviors used to maintain privacy in wildland recreation environments, the frequency of their use, and whether they can be promoted among wildland recreation users. The purposes of this paper are to analyze the frequency with which backcountry visitors use some common physical and social coping behaviors and to examine characteristics of those visitors who are most likely to utilize these coping behaviors. Specifically, what influence do the desire for wildland recreation solitude, encounter norms, and past wildland use experience have on visitor use of various physical and social coping behaviors?

#### Privacy and Privacy-Maintaining Coping Behaviors

Privacy is commonly defined in terms of control over unwanted encounters with others or situations. Altman (1975, 1977) considered privacy to be the selective control of access to self or to one's group. Margulis (1977) defined privacy as the control of transactions between an individual and other people. Lauffer and Wolfe (1977) defined privacy as encompassing interactions with the non-human environment in addition to interactions with people.

Privacy is recognized as an important human need because of the many social and psychological functions it serves (Westin, 1967). In the absence of privacy, goal interference, cognitive overload, stress and tension, and lack of emotional release may result. Saegert (1975) suggests that these negative effects may be caused by an increase in social stimuli with which a person must cope, necessarily diverting energy and attention from relevant environmental stimuli.

To preserve or improve the probability of experiencing privacy, people may engage in a number of coping behaviors. Coping involves the use of control (action), ritual (symbolization), and interpretive (redefinition) strategies so that humans can function more effectively in an environment (Kaplan & Kaplan, 1982). Coping behaviors are often exerted in an effort to make an environment more suitable for an individual or group. They allow for securing a desirable environment and keeping it desirable. "Where

no desirable environment is available, coping mechanisms entail taking what is available and changing it to better suit one's requirements. In addition to securing a desirable environment, a major goal of coping behavior is to prevent change and to preserve some setting in its current form. The properties for which a given setting was chosen may subsequently be endangered, requiring control to maintain choice-worthiness" (Kaplan & Kaplan, 1982, p. 127). When applied to wildland settings, coping behavior to avoid or reduce the effects of visitor encounters provides a vivid instance of the potential use of control to preserve that which was preferred, namely wildland privacy.

#### Wildland Recreation Coping Behaviors

Research on encounters, crowding, and privacy in many types of settings (e.g., urban settings, dwelling places, public parks, wilderness rivers) indicates that people respond to increased encounters with a variety of adjustment mechanisms that decrease the probability of unwanted contacts. Hammit (1982) and Hammit and Madden (1989) suggested that it is appropriate to view wildland solitude as a form of privacy in a specific environmental setting where individuals experience an acceptable degree of control over the type and amount of information (including visitor encounters) they must process. Thus, wildland recreationists can be expected to engage in certain mental, social, and physical coping mechanisms for regulating interactions with other wildland users.

Previously, displacement, product shift, and rationalization have been suggested as three types of coping behaviors employed by wildland recreationists attempting to adjust to the unwanted and undesired effects of visitor contacts (Anderson & Brown, 1984; Heberlein & Shelby, 1977; Neilson & Shelby, 1977; Schreyer, 1979; Shelby et al., 1988).

Displacement occurs when individuals who are dissatisfied with encounter levels move to less crowded areas. Those with norms more tolerant of higher encounters will "displace" them (Heberlein & Shelby, 1977). Displacement is a form of coping behavior, a means of maintaining encounter level and other crowding variables within desired limits. Displacement may occur at the macro (wildland area) or micro (site) level. For example, one may adjust to crowding at a favorite lake-side campsite by selecting either another, less used park or a campsite within the same park that is several hundred yards away from the crowded lake's edge. The deliberate practice of using remote campsites, or of hiking less popular or unmaintained trails may result from being displaced from more popular campsites and trails.

Product shift involves a redefining of the encounter (and broader recreation) experience rather than the overt avoidance behavior of displacement. Shelby et al.'s (1988) description of product shift adjustment has application to our specific study. "For example, a person hiking on a trail in a national park may expect a wilderness experience, a product with

certain attributes including few encounters. If the visitor meets large numbers of other people, the possible reactions include leaving the situation (displacement), becoming dissatisfied, or re-evaluating the experience (product shift). In the latter case, the rational visitor might note the large number of other hikers, the wide and heavily trampled trail, and worn-out campsites, and conclude that maybe this isn't a place for a wilderness experience. If the new experience is defined as hiking on a developed trail, different criteria may be used to evaluate and thus cope with the number of visitor encounters" (p. 276). A similar analogy could be made for camping at shelters versus remote campsites, making certain types (e.g. intimacy) and degrees of privacy possible to users of both settings.

Rationalization is a coping process based on dissonance theory (Festinger, 1957). It suggests that because wildland recreation users have voluntarily selected the recreational activity and place, they will rationalize most activity and environmental conditions as satisfactory, including encounter and privacy levels (Shelby et al., 1988). A substantial investment of money and vacation time to participate might also lead to a positive evaluation of the influence of encounters on wildland privacy and the anticipated recreation experience. Rationalization is the least documented of the three coping behaviors in the wildland recreation research literature.

The purpose of this literature review on coping strategies in wildland recreation research was to illustrate the linkage and similar role that coping behaviors may play in human adjustment to others, whether in urban settings or wildland settings. Although the specific hiker behaviors investigated in our particular study are not classified according to displacement, product shift, or rationalization, they nevertheless can be viewed as potential adjustment mechanisms for coping with unwanted visitor encounters and a lack of privacy in wildland areas.

#### Methods

During July to September 1987, backcountry campers ( $N = 252$ ) in the Great Smoky Mountains National Park were surveyed with on-site contact and mail-back questionnaires. Sampling occurred primarily at backcountry shelters and on trails leading to shelters. Using a modified version of the Dillman (1978) technique (an initial questionnaire mailing and three follow-up reminders) resulted in a response rate of 73%.

Within the nine page mail questionnaire a "coping behavior section" contained 12 items that described six social and six physical behaviors that can serve as coping mechanisms for reducing interaction with other backcountry users. Respondents were asked to indicate how frequently they used the 12 behaviors to cope with visitor encounters in the backcountry. A five-point response scale was offered, where: 1 = almost always, 2 = usually, 3 = sometimes, 4 = seldom, and 5 = never. The overall importance of solitude to the backpacker's wildland experience was measured using a single item and a seven-point importance scale (1 = extremely

important, 7 = not at all important). Importance of solitude was then compared with frequency of coping behavior participation.

The relationship between coping behavior participation and sensitivity to encounters was evaluated by comparing respondents' stated tolerance norms for number of parties with their actual reported party encounters, and their reaction when these norms are exceeded by the encounters reported. Visitor encounter norms for acceptable number of parties encountered were determined using a single question: "In your opinion, about what is the *maximum number of parties* that you could tolerate before solitude reaches unsatisfactory levels?"<sup>1</sup> One item measured on-site encounter levels: "Estimate the number of parties you encountered." Backpackers' reactions to the number of parties actually encountered were evaluated by the question: "Did you feel the number of parties that you encountered: 1 = added greatly to your experience to 5 = detracted greatly from your experience?" Individuals were divided into two groups based on their responses to these questions. Backpackers who indicated that their wildland solitude experience was adversely affected when actual encounters exceeded stated encounter norms were described as having "congruent norms." Their reaction to actual encounters was congruent with their stated norms in that intolerable encounter levels had a negative effect on the wildland experience. People who did not react negatively when norms were exceeded or who did not have encounter norms exceeded were placed in a second group "others" (see Patterson & Hammit, 1990, for further explanation). Individuals with congruent norms were compared with those without for frequency of participation in the coping behaviors.

Past experience also was evaluated for its possible relationship to coping behaviors. Level of past experience was determined on the basis of four items: number of years of backpacking experience, number of trips taken per year, number of years of backpacking experience in the Great Smoky Mountains National Park (GSMNP), and trips per year in the GSMNP. These four experience measures were combined to form an index as follows: Experience Index = (number of years of backpacking experience  $\times$  number of trips taken per year) + (number of years of backpacking experience in the GSMNP  $\times$  trips per year in the GSMNP). This composite experience index was used because the relationship between use of coping behaviors and past experience is likely a multivariate relationship, influenced by a multitude of past experience situations. Rationale for multiplying years and frequency of experience, but only adding across locations was based on the assumption that the actual exposure/participation variables of years and frequency of use are more likely to influence coping behavior participation than the areas where experience has been acquired.

<sup>1</sup> One reviewer strongly contends that this question is ambiguous and that "it is not solitude that reaches unsatisfactory levels, but number of parties." The authors contend that the inverse relationship between maximum number of parties and solitude level leads to both approaching intolerable levels simultaneously.

The effect of perceived importance of solitude on coping behavior participation was analyzed using ANOVA and Duncan's Multiple Range Test. A Chi-square test was used to examine participation in coping behaviors and sensitivity to encounters. The Kruskal-Wallis test was used to analyze the effects of experience level because the data did not meet the assumption of homogeneous variance, a requirement for testing means with ANOVA. Kruskal-Wallis is a non-parametric test that does not require a homogeneity of variance assumption. The multiple comparison procedure for nonparametric tests described in Zar (1984, p. 199) was used to separate groups.

### Results

#### Frequency of Coping Behavior Participation

Backpackers of Great Smoky Mountains National Park (GSMNP) were quite social in terms of greeting and talking with other backpackers (Table 1). Over 90% reported that they almost always or usually initiate greetings to others. Respondents also frequently initiate social interaction with backpackers of their own party. However, while 83% said they almost always or usually initiate social interaction within the party, only 27% do so outside the party. In addition, over 30% of respondents indicated that they seldom/never initiate social interaction outside their own party. Although respondents were reluctant to initiate social interaction outside their party, they seemed willing to communicate with other parties. For example, nearly 80% of respondents reported that they seldom or never "purposefully avoid talking to other backpackers outside their own party." This behavior occurred about equally whether respondents were in camp or on the trail. In fact, 41% and 42% indicated that they never purposefully avoid talking to other party members when in camp or on the trail, respectively. Also, when asked if they "exchange ideas about equipment and trip plans with other backpackers outside your party," 49% said they almost always to usually do.

Backpackers of GSMNP were more likely to employ physical means of avoiding visitor encounters than social coping strategies (Table 1). The most common strategy used was to camp out of sight of other groups whenever possible. Forty-four percent almost always or usually do this; however, 29% seldom or never do. Between one-half to two-thirds of visitors seldom to never use the strategies of purposefully avoiding popular trails and of using difficult or unmaintained trails that may contain fewer visitors. Surprisingly, only 21% of hikers said they commonly avoid popular trails and trail attractions.

Two other ways backpackers could avoid visitor encounters are to start their backpacking trip at particular times of the day when use levels are low and to avoid the Park during peak use times such as summer, weekends, or holidays. However, 68% of respondents seldom to never use the first of these coping strategies, and 51% seldom to never use the second.

TABLE 1  
*Participation of backpackers in encounter coping behaviors at Great Smoky Mountains National Park, 1987.*

Coping Behavior	Frequency of Participation <sup>1</sup> (% of Respondents)	
	A-U	S-N
<b>SOCIAL COPING:</b>		
Purposefully avoid talking to backpackers outside your own party in camp	5.2	78.4
Purposefully avoid talking to backpackers outside your own party on the trail	4.5	86.4
Initiate greetings to other parties	1.9	91.6
Exchange ideas about equipment and trip plans with other parties	15.6	48.1
Initiate social interaction with backpackers in your own party	2.6	82.8
Initiate social interaction with backpackers in other parties	26.8	30.7
<b>PHYSICAL COPING:</b>		
Camp out of sight of other groups whenever possible	44.2	29.2
Plan your trip for a particular time of day when there may be fewer encounters	15.6	68.2
Purposefully avoid trails which are known to have popular vistas and other attractions	21.4	51.9
Avoid park during peak use times such as summer, weekends, and national holidays	27.1	51.0
Purposefully use trails which are more difficult because of fewer parties encountered	20.0	49.7
Purposefully use a trail that has not been well maintained because there may be fewer parties encountered	14.2	60.6

<sup>1</sup>A-U = Always - Usually, S-N = Seldom - Never. Percent of respondents indicating 'sometimes participated' not shown.

*Importance of Solitude to Coping Behavior Adoption*

It was hypothesized that there would be a positive relationship between perceived importance of wildland solitude and the likelihood that visitors would use coping behaviors to avoid encounters. Table 2 shows that this was true for the physical coping strategies. All six of the physical coping behaviors showed that the more important respondents felt wildland solitude was, the more they engaged in behaviors to avoid other backpackers. However, none of the social coping behaviors showed a significant relationship with perceived importance of solitude. This might be explained by the fact that there was little variance in adoption of social coping behaviors (Table 1); thus, there was little variance to differentiate by importance level for solitude.

TABLE 2  
*Relationship of importance of wildland solitude to backpacker participation in encounter coping behaviors, G:SMNP, 1987*

Coping Behavior	Participation Frequency <sup>1</sup>	Importance of Solitude	
		Mean <sup>2</sup>	p-value
Physical Camp out of sight of other groups whenever possible	A-U	2.15 A	0.002
	S	2.41 AB	
	S-N	2.78 B	
	A-U	2.14 A	
	S	2.11 A	
	S-N	2.70 B	
Avoid using park during peak use times such as summer, weekends, and national holidays	A-U	2.10 A	0.001
	S	1.96 A	
	S-N	2.62 B	
	A-U	2.12 A	
	S	2.15 A	
	S-N	2.68 B	
Plan trip for a particular time of day for fewer encounters	A-U	1.90 A	0.002
	S	2.23 A	
	S-N	2.73 B	
	A-U	1.90 A	
	S	2.12 A	
	S-N	2.67 B	
Purposely use trails which are more difficult because there may be fewer parties encountered	A-U	2.15 A	0.002
	S	2.68 B	
	S-N	1.90 A	
	A-U	2.23 A	
	S	2.73 B	
	S-N	2.12 A	
Purposely avoid trails with popular vistas or other popular attractions	A-U	1.90 A	0.000
	S	2.12 A	
	S-N	2.67 B	
	A-U	2.12 A	
	S	2.67 B	
	S-N	2.67 B	
Purposely use a trail that has not been well maintained because there may be fewer parties encountered	A-U	1.90 A	0.000
	S	2.12 A	
	S-N	2.67 B	
	A-U	2.12 A	
	S	2.67 B	
	S-N	2.67 B	

<sup>1</sup>Coping Behavior Participation Ratings: A-U = almost always-usually; S = sometimes; S-N = seldom-never.

<sup>2</sup>Solitude Importance Values: 1 = extremely important, 2 = very important, 3 = somewhat important, 4 = neutral, 5 = somewhat unimportant, 6 = unimportant, 7 = not at all important. Means with different letters are significantly different. Duncan's Multiple Range Test,  $p = 0.05$ .

*Relationship of Congruent Encounter Norms to Adoption of Coping Behaviors*

It was hypothesized that those individuals most sensitive to encounters would be more likely to engage in coping strategies to avoid encounters. All six of the physical coping behaviors and four of the social behaviors substantiated this relationship (Table 3). Backpackers with congruent encounter norms (reflected by a negative evaluation when encounter norms were exceeded by reported encounters) employed strategies to cope with encounters significantly more often than did other backpackers. In particular, backpackers with congruent norms were more likely to camp out of the sight of other groups, to avoid the park during peak use times, and to plan their trips for a particular time of day to avoid other backpackers. Concerning social coping behaviors, backpackers with congruent encounter norms were more likely to avoid talking to backpackers outside their party both in camp and on the trail, and they were less likely to exchange ideas about equipment or initiate social interaction with other parties.

*The Influence of Past Experience on Coping Behavior Participation*

More experienced backpackers were expected to be more sensitive to visitor encounters, to be more familiar with coping strategies, and therefore to engage more often in coping behavior as a means to avoid visitor encounters. Results showed only a weak relationship (Table 4). Participation in only 4 of the 12 coping behaviors was significantly affected by level of backpacker experience. Interestingly, three of the four behaviors were social coping strategies. However, the relationship between use of coping behaviors and experience level was not as predicted: that is, more experienced backpackers did not always employ avoidance behaviors more frequently. For example, those who always-usually initiate social interactions with backpackers in other parties had a higher experience level than those who seldom to never initiate such interactions. Likewise, those who seldom to never purposefully avoid talking to backpackers in other parties on the trail had a higher experience level than those who sometimes use this coping strategy. Thus, little can be said for the strength and consistency with which past experience influences coping behavior participation.

*Discussion*

Physical coping behaviors were used more commonly than the social behaviors as mechanisms for controlling visitor interactions and maintaining wildland privacy. Likewise, use of physical coping behaviors was more strongly influenced by the importance of wildland solitude and congruent encounter norms. These findings might be explained by the fact that physical coping behaviors are the primary and most direct means of avoiding other backpackers. If visitors never come within visual and social distance of others, they certainly do not need to be concerned with social coping behaviors. Physical coping behaviors in wildland areas offer the first line

TABLE 3  
Relationship of congruent encounter norms to backpacker participation in  
encounter coping behaviors, GSMNP, 1987

Coping Behavior	Participation Frequency <sup>1</sup>	Congruent		p-value <sup>2</sup>
		Norm Participants (%)	Other Partic- pants (%)	
Physical				
Camp out of sight of other groups whenever possible	A-U S	71.1 17.8	33.3 30.3	0.000
Avoid park during peak use times such as summer, weekends, and national holidays	A-U S	46.7 15.6	36.7 24.5	0.002
Plan trip for a particular time of day when there may be fewer encounters	S-N S	37.8 34.1	56.4 8.2	0.000
Purposely use trails which are more difficult because of fewer parties encountered	A-U S	43.2 33.3	78.2 14.5	0.017
Purposely avoid trails which are known to have popular vistas and other attractions	S S-N	33.3 40.0	16.5 56.9	0.051
Purposely use a trail that has not been well maintained because there may be fewer parties	A-U S	31.1 24.4	7.3 25.5	0.000
Social				
Exchange ideas about equipment and trip plans with other parties	A-U S	33.3 51.1	54.1 30.3	0.036
Initiate social interaction with other parties	A-U S	17.8 37.8	30.6 44.4	0.046
Purposely avoid talking to backpackers outside your own party in camp	S-N S	44.4 13.3	25.0 85.3	0.001
Purposely avoid talking to backpackers outside your own party on the trail	A-U S	13.3 8.9	0.9 9.2	0.003
	S-N	77.8	89.9	

<sup>1</sup>Coping Behavior Ratings: A-U = almost always-usually; S = sometimes; S-N = seldom-never.

<sup>2</sup>Chi square test result.

of control concerning unwanted encounters with others and the most direct line of feedback concerning coping behavior to promote privacy (Kaplan & Kaplan, 1982). Also related to participation in physical coping behaviors may be the remoteness aspect of wildland privacy. Wildland environments offer privacy from the everyday living environment by their geographical remoteness and unconfined structure. In addition, physical coping behaviors offer a means of extending this remoteness element by further geographically removing oneself from others once within wildland areas.

How does one explain the lack of a relationship between past experience and physical coping behavior participation? Perhaps the importance attached to privacy, and therefore coping behaviors to ensure it, is not entirely an experience determined phenomenon. Many young people and individuals with few years of backpacking experience may have a human need for the privacy available in wildlands just as much as more experienced individuals. Product shift is another possible explanation. More experienced individuals have a broader range of past experiences and alternative definitions of products to draw upon when evaluating a specific experience. Camping in the heavily used Great Smoky Mountains National Park and at shelters along the Appalachian Trail may cause more experienced users

TABLE 4  
Relationship of past experience to backpacker participation in encounter coping  
behaviors, GSMNP, 1987

Coping Behavior	Participation Frequency <sup>1</sup>	Experience Level Medians	p-value <sup>2</sup>
Social			
Purposely avoid talking to backpackers outside your own party on the trail	A-U S	8.0 AB 12.0 A	0.032
Initiate social interaction with backpackers in your own party	S-N S	20.0 B 9.5 B	0.049
Initiate social interaction with backpackers in other parties	A-U S	35.0 A 16.0 B	0.006
Physical			
Purposely use trails which are more difficult because there may be fewer parties encountered	A-U S	20.0 AB 33.5 A	0.002
	S-N	12.5 B	

<sup>1</sup>Coping Behavior Ratings: A-U = almost always-usually; S = sometimes; S-N = seldom-never.

<sup>2</sup>Results of Kruskal-Wallis test. This nonparametric test was used because an analysis of variance test of the means did not meet the test of homogeneity of variance, an assumption necessary for using parametric analysis of variance procedures.

to re-define the criteria required for an acceptable level and type of wildland privacy, and thus the need for coping behavior. In a sense, they have a richer set of product experiences to compare the current product situation and can make definitional adjustments more readily than perhaps less experienced users.

Lee (1977), p. 14) found that many wilderness backpackers can symbolically interact (social greetings) with others on the trail and that "social interactions with other wilderness users were unrelated to visitors' interpretations of success in achieving a desired degree of privacy." Lee's research was restricted primarily to greetings among trail users. Our research attempted to evaluate potential coping behaviors toward some social interactions that go beyond trail greetings. While social behaviors permit backpackers to adjust the degree and type of encounters with others, few individuals made use of them. Also, established norms concerning general social and communicative behavior in other environments appear to be operative in many wildland environments.

Once at campsites, Hendee et al. (1977) found that fishermen using high-mountain lakes showed an affinity for companions of their own party and an obvious aversion to members of other parties. The aversion for social contacts outside one's party was demonstrated by the distance maintained between parties and lack of conversation between groups. Both actions demonstrate privacy-avoidance behaviors that systematically minimize contact with people of other parties. At another high mountain lake study in Bridger Wilderness, Heberlein & Dunwiddie (1979) found that more experienced individuals tended to select campsites farther from other groups. Our data, of course, showed that experienced backpackers tend not to camp out of sight of other parties more often.

In summary, it appears that physical coping behaviors are the primary and most often used line of defense against visitor encounters in wildland recreation areas. They are the most likely group of coping behaviors to promote among wildland users for self-regulating the effects of visitor encounters. Social interactions do not seem to be as much of an encounter concern, and people may have learned to cope symbolically with greetings and other passive social interactions under one's control. Privacy and wildland solitude are also tied to geographic remoteness and unconfinement, perhaps even more so than to passive social encounters with others. To get away to a more controllable environment is a privacy need. Wildland users can engage in physical coping behaviors once there to further ensure a desired degree of remoteness from encounters. But should encounters occur, backpackers seem willing to accept the passive social demands examined in this study. It must be remembered that the need and decision for engaging in coping behaviors has to be interpreted in light of the multivariate nature of privacy (Hammit & Madden, 1989). Privacy goes beyond number of visitor encounters and coping behaviors to reduce their impact is only one of the variables at play.

## Literature Cited

- Altman, I. (1975). *The environment and social behavior: Privacy, personal space, territory, crowding*. Monterey, CA: Brooks/Cole.
- Altman, I. (1977). Privacy regulation: culturally universal or culturally specific? *Journal of Social Issues*, 33, 66-84.
- Anderson, D. H., & Brown, P. J. (1984). The displacement process in recreation. *Journal of Leisure Research*, 16, 61-73.
- Dillman, D. A. (1978). *Mail and telephone surveys: The total design method*. New York, NY: Wiley-Interscience.
- Festinger, I. (1957). *A theory of cognitive dissonance*. New York: Harper and Row.
- Hammit, W. E. (1982). Cognitive dimensions of wilderness solitude. *Environment and Behavior*, 14, 478-493.
- Hammit, W. E., & Madden, M. A. (1989). Cognitive dimensions of wilderness privacy: A field test and further explanation. *Leisure Sciences*, 11, 293-301.
- Heberlein, T. A., & Dunwiddie, P. (1979). Systematic observation of use levels, campsite selection and visitor characteristics at a high mountain lake. *Journal of Leisure Research*, 11, 307-316.
- Heberlein, T. A., & Shelby, B. (1977). Carrying capacity, values, and the satisfaction model: A reply to Greist. *Journal of Leisure Research*, 9, 142-146.
- Hendee, J. C., Clark, R. N., & Daily, T. E. (1977). Fishing and other recreation behavior at high-mountain lakes in Washington State. USDA Forest Service Research Note PNW-304.
- Hendee, J., Stankey, G., & Lucas, R. (1978). *Wilderness management*. USDA Forest Service #1365, Washington, D.C.
- Kaplan, S., & Kaplan, R. (1982). *Cognition and environment*. New York, NY: Praeger Publishers.
- Lauter, R. S., & Wolfe, M. (1977). Privacy as a social issue: a multidimensional developmental theory. *Journal of Social Issues*, 33, 22-42.
- Lee, R. G. (1977). Alone with others: The paradox of privacy in wilderness. *Leisure Sciences*, 1, 3-19.
- Margulis, S. T. (1977). Conceptions of privacy: Current status and next steps. *Journal of Social Issues*, 33, 5-21.
- Neilson, J. M., & Shelby, B. (1977). River-running in the Grand Canyon: How much and what kind of use. Pages 168-177 in: *Proceedings: River Recreation Management and Research Symposium*. USDA Forest Service General Technical Report NC-28.
- Patterson, M. E., & Hammit, W. E. (1990). Backcountry encounter norms, actual reported encounters, and their relationship to wilderness solitude. *Journal of Leisure Research*, 22, 259-275.
- Saegert, S. (1975). Stress inducing and reducing qualities of environments. In H. Proshansky, W. H. Itelson, and L. Rivlin (Eds.), *Environmental psychology: People and their physical settings*. New York: Holt, Reinhart, and Winston.
- Schreyer, R. (1979). Succession and displacement in river recreation. Paper presented for River Recreation Project. USDA Forest Service North Central Experiment Station, St. Paul, MN, 45 pp.
- Shelby, B., & Heberlein, T. A. (1986). *Carrying capacity in recreation settings*. Corvallis, OR: Oregon State Univ. Press.
- Shelby, B., Bregenzler, N. S., & Johnson, R. (1988). Displacement and product shift: Empirical evidence from Oregon rivers. *Journal of Leisure Research*, 20, 274-288.
- Zar, J. H. (1984). *Biostatistical analysis*. Englewood Cliffs, NJ: Prentice Hall.

Received September 14, 1989

Accepted August 20, 1990



