The U.S. Wilderness Act gives wilderness managers a challenging stewardship responsibility: to provide and/or protect opportunities for certain types of human experiences. The act states that wilderness “shall be administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness.” The significant clause that they are to be enjoyed “as wilderness” is further defined under the definitional characteristics of wilderness. Here wilderness is defined, in part, as an area that “has outstanding opportunities for solitude or a primitive and unconfined type of recreation.” This is all the guidance the Act provides regarding the responsibilities of wilderness managers regarding recreational experiences in wilderness.

Since their primary responsibility is to preserve wilderness character, managers need clear objectives regarding human experiences in wilderness, as well as an understanding of how well those objectives are being attained. Several of the other articles in this issue provide perspective on concepts of solitude, primitive recreation, and unconfined recreation. My concern is whether stewardship objectives should relate most directly to the kinds of experiences people are having in wilderness, their evaluations of those experiences, or their opportunities for certain kinds of experiences. The answer to this question is relevant to how we should monitor and assess wilderness character, as well as the indicators we might adopt in a Limits of Acceptable Change or similar type of wilderness management plan.

Settings, Experiences, and Evaluations
To address this question, it is helpful to consider a model that illustrates relationships among four possible assessment domains: settings, experiences, evaluations of experiences, and evaluations of setting attributes (see Figure 1). The setting describes the conditions that visitors experience on a wilderness trip. Commonly, attributes of the setting are classified as being biophysical, social, or managerial. Some of these attributes are subject to managerial control but many are not. Biophysical attributes that manager can control include how much recreation impact is present and whether there are bridges over rivers. Biophysical attributes managers cannot control include scenery, weather, and bugs. The social setting is more subject to managerial control and includes such attributes as amount and type of use. However, even more important than amount or type of use can be the behavior of other visitors, something managers have less control over. Finally, managers have substantial influence over managerial attributes such as the degree of restriction of free, unconfined, and spontaneous behavior.

Visitor experience is a concept that is frequently articulated but seldom defined. Here I use the term to refer, as McIntyre (1998) does, to what visitors do in wilderness, what they focus on and think about, and how they feel while they are there. What visitors experience is influenced by the setting conditions that the visitor encounters. However, as Figure 1 suggests, the experience is also substantially influenced by how each person appraises and responds to the conditions that are encountered. Different people encountering similar biophysical, social, and managerial conditions often have very different experiences. This variation ultimately stems from

Figure 1—A conceptual model of the relationships between setting attributes, the personal characteristics of visitors, their experiences, and their evaluation of those experiences and of setting attributes.
differences in personal characteristics, such as norms and expectations. One person may be so motivated by a need for some quiet time that a high degree of solitude is experienced despite crowds of people all around. Another similarly motivated person, less tolerant of crowds, may experience resentment and stress while attempting to get away from crowds to find a suitably quiet interlude. Finally, someone else out for exercise and social interaction might never slow down or experience tranquility the entire time—and yet be perfectly satisfied.

Visitors also appraise and respond to what they actually experience in wilderness, creating longer-term meanings and outcomes from the wilderness visit. Survey researchers commonly attempt to evaluate overall experience quality by asking visitors how satisfied they were with their experience. Alternatively, visitors can be asked for evaluations of specific setting attributes, from the adequacy of parking to how crowded they felt.

**Basis for Assessment**

Clearly, information about each of these four domains has value and can contribute to improved wilderness stewardship. However, which of the four provides the most meaningful basis for assessing wilderness character or for indicators within a planning process such as Limits of Acceptable Change? If the goal of wilderness management is to provide high quality experiences, it would seem that experience evaluations would be most important. The problem is that experience evaluations are almost invariably positive regardless of the conditions that were encountered or what was experienced. Substantial research has been conducted showing that variables such as the number of other groups encountered have relatively little influence on the quality of people’s experiences (Manning 1999; Stewart and Cole 2001). The experience-quality evaluations of most people are likely to be roughly equivalent whether a wilderness provides a wild experience or one more reminiscent of Disneyland.

Visitors are more likely to negatively evaluate specific setting attributes than their entire experience. Survey results often indicate that the number of people encountered detracted somewhat from experience quality or that signage was considered a problem. However, the large number of attributes that might be evaluated and lack of consensus on their relative importance makes this type of information difficult to interpret. Importance-performance measures have been developed to deal with this complexity; but the shortcomings of this approach include the tendency (1) to aggregate measures across users to develop evaluations of “the average user” and (2) to treat the wilderness experience as a collection of individual attributes rather than as a whole that is more than the sum of its parts (Borrie and Birzell 2001).

The Wilderness Act does not direct managers to provide high quality experiences. It directs them to provide opportunities for wilderness to be enjoyed as wilderness. This suggests that a better criterion than evaluations of experience quality would be the type of experience that people have in wilderness. There are two problems with this approach. The first problem—which conceivably could be overcome—is that the nature of experience has seldom been studied and is poorly understood. We do not have more than a rudimentary vocabulary for describing experiences in terms that might be arrayed from more to less desirable for wilderness. Recently, interest in describing what visitors experience in wilderness has increased (e.g., Borrie and Roggenbuck 2001). This work should ultimately provide new insights related to effective stewardship of wilderness regarding visitor experiences.

The other problem with using experience as a primary assessment domain is the fact that it is largely determined by factors that are not subject to mana-
Conclusions

Monitoring wilderness character and managers’ success in meeting stewardship objectives are important. Monitoring of setting attributes that are subject to managerial control and related to desired wilderness experiences seems to provide a better basis for assessment than measures of the wilderness experience itself or of visitors’ evaluations of the experience. However, our ability to select good indicators of the setting will clearly increase as we learn more about the nature of human experience in wilderness and how that experience varies with setting attributes. In addition, visitor evaluations and opinions about appropriate setting attributes, along with those of other stakeholders, need to be considered when setting management objectives.

REFERENCES


From DIGEST on page 47

**Proposed New Idaho Wilderness Area Would Allow Motorized Access**

An unlikely coalition of ranchers, off-road vehicle enthusiasts, politicians, and environmental groups has, after years of discussion and negotiation, united to propose the first new federal wilderness area in Idaho in more than 20 years. The official wilderness designation would give protection from almost all development to 511,000 acres (206,882 hectares) of land in and around the Owyhee-Bruneau Canyonlands. Access would be ensured for off-road vehicles that stay on designated routes; just 40,000 acres (16,194 hectares) would be off-limits to ranching. Senator Mike Crapo, who helped shepherd the negotiations, said the agreement “should set a standard for collaborative decision-making”; he is “very optimistic” that it will pass through Congress. In 2000, the Clinton administration proposed setting aside a much larger 2.4 million acres (1 million hectares) of southwest Idaho as a national monument, which would have placed it under much tighter restrictions, but, said Idaho Rivers United Director Bill Sedivy, “That was a different time, a different place.”

**Figure 3—Crown Lake and Slide Mountain in the Hoover Wilderness; managed by the U.S. Forest Service (CA). Photo by Peter Druschke.**

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