

**Naturalness, Primitiveness, Remoteness and Wilderness:
Wilderness Visitors'
Understanding and Experience of Wilderness Qualities**

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ABSTRACT

The idea that wilderness visitors have a clear understanding of Wilderness Act (1964) concepts is often assumed in literature and in management practices. However, little empirical research has tested this assumption. This paper clarifies and elaborates upon public understanding of four key wilderness qualities (naturalness, primitiveness, remoteness, and wilderness). In-depth, semi-structured interviews were conducted with 201 visitors in three Pacific Northwest wilderness areas during the summer of 2002. Study sites represented a range of environment types and difficulty of access. Findings point to a generally consistent set of factors that constitute wilderness visitors' definitions of each concept, as well as considerable definitional overlap among the concepts. *Naturalness* is primarily affected by environmental features such as water, vegetation, and geological features, along with ecological impacts such as trail degradation and campsite impacts. *Primitiveness* deals largely with the absence of physical amenities, such as fire rings or toilets. It is also related to the absence of recreational impacts, especially to trails. *Remoteness* is considered a function of distance from population centers but also distance traveled from a trailhead into the wilderness. As such, it is affected by the amount of effort one has to expend. *Wilderness*, the most broad quality, was affected by natural environmental features, by social factors (especially use levels), and by human influences such as developments, roads, or motorized vehicles. It was experienced in personal terms as escape, self-reliance, and using all of one's senses. Despite commonality in the factors that influence experience of the four qualities, visitors displayed considerable variability in their judgments of whether or not they felt that they had experienced each quality. This was due in part to differences in the conditions actually experienced (e.g., the number of people encountered), but also largely to visitors' comparisons of their present trip with other places or trips. While nearly 60% said unequivocally that they had experiences of naturalness and wilderness, only about one third had such strong experiences of primitiveness and remoteness. Approximately 25% said they did not experience primitiveness or remoteness at all, compared to 16% for wilderness and only 2% for naturalness. Many respondents (16-39%, depending on the quality) said there were respects in which they both did and did not experience the qualities. In general, experience of the qualities did not differ dramatically across the three study sites, despite their considerable environmental differences. Reports of experiences were also largely consistent across days of the trip and between day and overnight visitors.

INTRODUCTION

Adhering to the intent of a legislative act requires translating congressional language, often expressed in abstract terms, into understandable and operational management terms that can be implemented in policy. In the Wilderness Act of 1964, the National Wilderness Preservation System was established with specific management directives. Section 2(c) of the Act states,

A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

The Wilderness Act recognizes human use and enjoyment of wilderness as central wilderness values. However, wilderness experiences are more than just whatever form of recreation might occur in wilderness; certain experiences are explicitly privileged (Borrie & Roggenbuck 1998). As seen in Section 2(c), naturalness, solitude, and primitive recreation are distinctive features. Management of wilderness must strive to protect these qualities. However, to do so, wilderness managers need clear definitions of each. The Wilderness Act itself provides some limited guidance in this regard, but developing an in-depth understanding requires consultation with various sources (Landres et al., 2005). Many popular and scholarly writings address the wilderness experience and its dimensions. However, to the extent that wilderness qualities refer to the experiences of those who travel in wilderness, visitors themselves are another appropriate source of conceptual understanding.

In looking at wilderness experience research literature, it becomes clear that the emphasis has been placed on the solitude descriptor, often to the exclusion of the other four descriptors. Moreover, solitude, when studied empirically, is often framed in limited terms as a function of use density or encounters. In contrast, the popular literature on wilderness and wilderness experiences highlights the multifaceted, complex, and rich nature of unconfined, primitive, and natural experiences.

In this study, we sought to understand how wilderness visitors assessed four concepts: overall "wilderness experience," as well as three subsidiary dimensions (or qualities) of naturalness, primitiveness, and remoteness. We solicited input from wilderness visitors about the defining features of each concept, as well as their sense of how much they attained an experience of each during the wilderness trip on which we talked to them. Although our study also addressed solitude – a key quality of wilderness – this paper discusses the other four concepts, because of the relative lack of research attention to them. For studies dealing directly with the experience of solitude and the factors contributing to it, readers should consult Cole and Hall (2005), Hall (2001), Stewart and Cole (2001), Hammitt, Backman, and Davis (2001), Hollenhorst and Jones (2000), and Hammitt (1982). Insight into how visitors define the core qualities of wilderness and the factors that affect the qualities should help managers better manage wilderness to protect opportunities for these experiences.

In the next section, background pertaining to each of the concepts is considered. This involves distilling conceptual definitions of each quality from the wilderness literature. Empirical findings related to visitors' definitions of the qualities and attainment of experiences is also included. This is followed by a discussion of our methodological approach, including interview questions, analytical procedures, and quality control measures. The results section illuminates how visitors define each quality and the extent to which they attained experiences of each. Finally, the paper concludes by summarizing and discussing our findings in the context of other research and wilderness management concerns.

Conceptual Background of the Qualities

The Wilderness Act lays out the types of experiences that managers should strive to promote in wilderness and admonishes managers to maintain conditions that foster them. The terms solitude, primitive, and unconfined are explicitly stated, along with the understanding that these are dependent upon natural conditions. Beyond this, though, the Act provides little in terms of concrete guidance (Hammit & Madden 1989). "The meaning of such terms as primitive, unconfined, or physical and mental challenge have largely gone unexplored" (Patterson et al. 1998, p. 446).

Early wilderness research (prior to 1975) on social aspects of wilderness focused primarily on describing wilderness visitors and assessing use levels (Lucas 1985). At the same time, there was much conceptual as well as empirical work being done on carrying capacity, based on the assumption that there was a relationship between use level and experience quality. Ultimately, this research established that visitor satisfaction depended on more than use levels. As research evolved, more complex models were developed to explain satisfaction and crowding, which included visitor motives, expectations, and a wide range of desired "experience preferences," in addition to encounters. Notions of absolute carrying capacity ultimately gave way to ideas of acceptability of and deviance from ideals, and the question was rephrased as "how much use creates unacceptable impacts to the visitor experience?" (Stankey et al., 1985).

Despite the recognition that many factors influence the nature of experiences people have in wilderness, many writers on wilderness management have concentrated specifically on solitude, evaluating the effect of use levels and encounters on the overall experience or on solitude attainment in particular (Cole, 2000; Hall, 2000, 2001; Cole & Hall, 2005; Freimund & Cole, 2000; Stewart & Cole, 2001). However, although solitude clearly plays an important role in the overall wilderness experience, experiences are more complex than just attainment of solitude. Managers need to understand how other proscribed qualities, such as primitive recreation, are defined and what factors influence their attainment.

In this paper, we focus on the less well researched aspects of the wilderness experience: naturalness, remoteness, and primitive recreation. We explore these specifically from the point of view of wilderness users. We recognize that all these elements are intertwined, and they may relate to solitude as well. In fact, researchers exploring the cognitive structure of solitude have found that it is a multidimensional construct. For example, Patterson and Hammit (1990) identified individual cognitive freedom, social cognitive freedom, intimacy, individualism, and natural environment as dimensions of solitude or privacy. The last of these – natural environment – illustrates the relationship of solitude to other qualities of wilderness experiences of interest to us. The authors concluded that "solitude also refers to remoteness, primitiveness, nonconfinement, cognitive freedom, and autonomy. In fact, many of these aspects of solitude appear to be more important than being alone" (p. 271).

Little comprehensive research has been conducted to determine how important each of these qualities is to wilderness visitors (Shafer & Hammitt, 1995a). We are interested in both how visitors define these qualities and the factors that influence their attainment of each experience. Like Shafer and Hammitt (1995a), we recognize that visitors' perceptions of conditions they encounter will influence their attainment of wilderness experience dimensions. Knowing that someone values a certain type of experience does not help the wilderness manager unless there is also information about the types of conditions that influence attainment of that experience. Thus, we felt it was critical to focus both on the definitional aspects of the qualities as well as the conditions that affect whether people attain particular experiences.

Before proceeding to investigate wilderness visitors' conceptions, we turned to the scholarly literature for guidance about the nature of each quality. We looked both for conceptual pieces that describe each quality as well as empirical studies that have investigated the importance of the qualities for wilderness visitors. Writers such as Thoreau, Muir, Leopold, Olson and others have been critical in shaping our cultural understandings of wilderness, and recently various scholars have consolidated key literary insights regarding wilderness qualities (e.g., Borrie & Roggenbuck, 1998; Kaye, 2000).

Defining the Four Qualities

Wilderness Experience

We understand wilderness experience to be the overarching umbrella concept within which naturalness, primitiveness, remoteness, solitude, and freedom from confinement are all dimensions. Much has been written about the wilderness experience, and we provide only a brief summary here.

We think it is potentially useful to distinguish between the idea of "wilderness" itself and the idea of "wilderness experience," although the latter should logically be influenced by the former. A considerable amount of work has been done to investigate wilderness visitors' understandings of meaning of wilderness itself, and these show that many wilderness visitors have a conceptual understanding quite similar to that expressed in the Wilderness Act. Definitions of wilderness focus on the physical features of the environment, whereas the wilderness experience describes these feelings and thoughts people have in wilderness environments.

Stankey, one of the most influential early scholars of wilderness, assembled several elements into an overall measure he called "wilderness purism" (1972). Based on the Wilderness Act, this scale assessed visitors' attitudinal agreement with the concepts of legally defined wilderness. The 14 items related to evidence of people, remoteness from cities or towns, developments (both recreational and other), natural environmental conditions, management of fish and game, absence of motorized travel or roads, encounters with other visitors, and size of area.

Apparently these elements of wilderness have become widely endorsed among those who visit wilderness, although perhaps not among the public in general. Early on, Lucas (1964) found that Boundary Waters Canoe Area visitors had "well defined notions of what constitutes wilderness" (Stankey & Shreyer 1985, p. 261). Similarly, in their study of visitors to three very different areas (Colorado River in Grand Canyon, wilderness in Shenandoah National Park, and a developed National Forest day use area just outside of Blacksburg, Virginia), Kendra and Hall (2000) found that nearly all respondents agreed that remoteness from cities, presence of wildlife, virgin forest, and rugged terrain characterized wilderness. Nearly all agreed that developed

campgrounds were not part of wilderness. Developed, wide trails and seeing many other people were generally considered inconsistent with wilderness among all respondents. In semi-structured interviews with hikers in Shenandoah's wilderness, Hall (2001) noted that several themes underpinned definitions of wilderness, and these were highly consistent with the legislative definition of wilderness. The first, mentioned by 47%, was wildlife. Lack of human influence, specifically the term "undeveloped," was mentioned by 32%. The word "natural" was used by 28%. Ten percent of respondents indicated remoteness from civilization as a defining feature of wilderness. Such findings lead us to expect that wilderness visitors will understand the term "wilderness" and share a definition largely consistent with the legislative definition.

Turning from the definition of wilderness to the wilderness experience (what people perceive, feel, or think when they are in wilderness), many themes have emerged throughout popular and scientific writings. As one would expect, the wilderness experience involves appreciation of natural environments, opportunities to travel and live in a primitive way in an undisturbed environment, chances to be alone or with intimate groups, and freedom from rules, regulations, and the press of daily activities. However, there are other elements that people find in wilderness experiences, including opportunities to learn about natural systems, heightened sensory awareness, aesthetic enjoyment, spiritual development, and development of an ethic of care and responsibility (Kaye, 2000; Borrie & Roggenbuck, 2001). Stankey and Shreyer (1985, p. 257) assert that "it is likely there is no such thing as THE wilderness experience in terms of objective criteria." Instead, they recognize that the experience is processed and interpreted through the filter of individual desires, past experiences, expectations, and perceptions. Stankey and Shreyer (1985) advocate research attention to all the dimensions of subjectivity involved in the wilderness experience, including level and focus of attention, emotion and mood, and thoughts or cognitions.

Hendee, Stankey, and Lucas (1990) contended that social, natural, and managerial conditions all affect the quality of a wilderness experience. Among natural conditions, they said that "the most important of these for visitor experiences probably is the impact caused by recreational use," namely impacts to campsites and trails (p. 470). However, they pointed out that very little research had been done on visitor perception of such impacts. They also noted that many visitors will not perceive alterations to ecological processes, so such changes are unlikely to create adverse impacts on the experience. Turning to social conditions, the authors believed that "social conditions affect experiences more than natural conditions," and they highlighted solitude, conflict, and behavior as key influences of the social environment (p. 471).

There is some existing research to support these contentions of wilderness scholars. In responding to a question about what factors influenced the attainment (or not) of a wilderness experience, Shenandoah hikers who said they had had a wilderness experience mentioned natural setting features (51%), lack of other visitors (44%), lack of developments (27%), challenging or remote access (22%), personal experiences such as escape or peace (15%), and natural sounds (12%; Hall, 2001). Most (83%) of those who felt they did not have a wilderness experience attributed this to the lack of remoteness or the high level of trail development in Shenandoah, where many trails follow fire roads or are within earshot of Skyline Drive. Just over half of this group (52%) said the presence of too many other people prohibited attainment of a wilderness experience. Interestingly, 26% reported that a safe, easy, or short hike meant that they did not feel that they had a wilderness experience. These findings suggest that all three types of factors – social, managerial, and natural – affect the experience, and that management factors may be more important than social or ecological conditions in some places.

These writings and prior studies lead us to anticipate a wide range of responses regarding the attainment of wilderness experiences, although we expect to find core themes related to naturalness and primitiveness. We will need to be attentive to a full range of influencing factors, including the natural, social, and managerial environments. Additionally, we expect people's discussions of the attainment of wilderness experiences to focus on particular themes, such as rejuvenation, aesthetics, challenge, and spiritual connection.

Naturalness

Naturalness is a defining quality of wilderness (Landres et al., 2005). Considerable scholarly attention has been paid, especially in recent years, to understanding what "natural" means in the context of the environment (Cole, 2000). Sorvig's (2002) review includes several dimensions or attributes of "natural": (1) things not made by humans; (2) unaltered products (e.g., natural flavorings); (3) inherent or innate skills (e.g., natural born leader); (4) order of things (e.g., naturally evolving); (5) laws and rights (e.g., "natural rights"); (6) primitive or uncivilized; and (7) birth (e.g., his natural son). Key features appear to be a lack of human influence and authenticity of process.

Currently there is a great deal of discussion in the literature about the differences between natural conditions and wildness (Cole & Hammitt 2000; Landres et al., 2000). Natural refers to conditions that are as they would have been without human influence. Landres et al. (2000) describe natural as synonymous with "native, aboriginal, indigenous, and endemic" (p. 377). Wild captures the essence of untrammelled – something allowed to determine its own course without human intervention (Foreman, 2000). Wild areas are unmanaged (Landres et al., 2000). Thus, human interventions to restore natural conditions by definition adversely affect wildness. Interestingly, the long-time, highly invested visitors to the Arctic National Wildlife Refuge (ANWR) studied by Kaye (2000) told him that they would not think to volunteer this quality of wilderness when interviewed about the meanings of ANWR, but that "it is always in the back of their minds" (p. 77). We are curious to see whether visitors make any distinction between wildness (meaning lack of human intervention) and naturalness (meaning lack of human influence).

Most interpretations of the Wilderness Act read "natural" to mean lands where "natural processes are allowed to operate as freely as possible" (Borrie & Roggenbuck, 1998, p. 35). Although natural biophysical organizations and ecological functions are typically highlighted for their intrinsic worth, scientific importance, or the benefits they provide to society, some wilderness writers also ascribe importance to these qualities for their effect on people. Natural conditions confer a sense of insignificance in the larger scheme of things, leading to humility (Borrie & Roggenbuck, 1998). With enough time, the traveler can arrive at a sense of harmony and one-ness with nature (Kaye, 2000).

Current constructivist treatments of "naturalness" in the resource management literature acknowledge this romantic definition, but they also emphasize that "natural" environments can have powerful and divergent symbolic meanings for different people, and the concept of natural itself is a social construction (Callicott, 2000). From a utilitarian value system, "natural resources" may be viewed as a resource for sustenance as opposed to something to be set apart. For example, the backpacker may look at a forested mountain as a camping destination, the forester as an unutilized timber source, and the hotel owner as a scenic backdrop for her guests. Scholarly discussion thus highlights the contemporary diversity in symbolic understandings of

“natural.” This raises interesting questions about how wilderness visitors will define and value “naturalness” and what they perceive as influences on naturalness.

Primitive Recreation

In much of the literature on wilderness, primitiveness is clearly associated with a pioneering life-style (Borrie & Roggenbuck, 1998; Roggenbuck, 2005) and frontier heritage (Kaye, 2000). In historical works, for example by Roosevelt, Marshall and Olson, it is invariably associated with manliness (Callicott, 2000). Scholars emphasize the reliance on one’s own skills as opposed to technological crutches that preclude direct contact with the elements. Primitiveness is experienced in areas without modern developments, although those associated with the historic past, such as trails and crude shelters, are considered consistent with primitiveness. The Forest Service’s Wilderness Monitoring Committee explicitly isolated the “undeveloped” quality as one of four distinctive aspects of wilderness character, the others being naturalness, untrammelled-ness, and opportunities for solitude or primitive and unconfined recreation (Landres et al., 2005). Thus, they recognize the absence of permanent or modern human developments as critical influences on the visitor experience. Because of the centrality of self-reliance, skill, challenge, and simple daily living, some authors (e.g., Roggenbuck, 2005) feel that primitiveness cannot be truly experienced except on multi-day trips.

Different explanations are offered for the source of the drive to experience the primitive. Currently prominent is the notion that Americans experience a nostalgic pull to experience raw nature as did the frontiersmen and early western explorers. Going to the wilderness forges spirit and moral character just as it did for our forebears. Interestingly, however, in the writings of many early wilderness advocates, primitive recreation was seen as an outlet for innate, violent tendencies. Marshall, for example, felt that men had an innate need for adventure that required a sanctioned outlet, a “moral equivalent of war.” Olson and others wrote that wilderness called us through some “blood” connection to our ancestral evolution. Kaye (2000) characterizes this as “connection to our species’ evolutionary past.”

Regardless of the origin in biological drive or romantic nostalgia, primitiveness is seen as having the dimensions of simplicity, lack of technology, and self-reliance. Additionally, there is the element of mystery or adventure, the feeling that no one else has set foot on a piece of land (Kaye, 2000). The conditions that influence the experience of primitiveness occur in natural, undeveloped environments that offer opportunities for long-distance, challenging travels.

It is important to note that the Wilderness Act specifies that wilderness should provide for “primitive and unconfined” recreation. Scholars have generally interpreted this phrase to mean that Congress’s intent was to equate primitiveness and lack of confinement (Hendee et al., 1990). However, others have interpreted unconfined to refer to regulatory controls over behavior, as opposed to “open expanses” of land (McCool, 2005). In this study, we did not ask our respondents specifically about “confinement,” but we will be able to ascertain whether such issues come up during our discussions of primitiveness.

Remoteness

Shafer and Hammitt (1995a) point out that, although remoteness was not specifically mentioned in the Wilderness Act, it was implicit and was used frequently by Zahniser in the legislative record. Previous research has identified remoteness as a characteristic that visitors spontaneously describe in association with wilderness (Hall, 2001). In general, they refer to the location of a wilderness as distant from population centers.

We chose to focus on remoteness in part because it has arisen in prior discussions of wilderness experience, but also for practical reasons. Many wildernesses we study are located very near growing urban centers. Other wildernesses are distant from population centers. In helping managers identify acceptable management policies for wilderness, we felt it would be important to know whether remoteness of a wilderness factors into the type of experience visitors have. Additionally, part of our larger project was to examine real or perceived differences among wildernesses that are near urban areas versus far from them.

Empirical Investigations of the Dimensions of Wilderness Experience

Our discussions above identify the dimensions of wilderness experiences in a conceptual way. A few studies have described or evaluated the different dimensions, and these shed light on what we might expect to find among the wilderness visitors we studied. These studies include a qualitative, hermeneutic investigation of the nature of experiences among canoeists through Juniper Prairie Wilderness in Florida, where visitors make their way down a narrow stream often blocked with logs and populated by alligators (Patterson et al., 1998). Another in-depth study was completed by Kaye (2000), based on lengthy interviews with a select group of ANWR visitors. There is also a pair of quantitative studies by Shafer and Hammitt (1995a, b), which investigated several dimensions of wilderness experience and the factors that related to their attainment. The final study was conducted by Borrie and Roggenbuck (1998; 2001) with canoeists in Okefenokee Wilderness. In that study, 47 overnight visitors and 15 day visitors completed short questionnaires about their immediate state of thought and feeling when prompted by a random signal from a beeper. We discuss relevant findings from each study below.

Patterson et al. (1998) explored the nature of experiences of canoeists in Juniper Prairie. Their paper argues against the idea that experiences are sequential events beginning with expectations and ending with an evaluation of outcomes based on a cognitive comparison of outcomes to expectations. Instead, they suggest that experiences emerge unexpectedly or fortuitously during recreation, which leads to the “not very well defined goal of acquiring stores that ultimately enrich one’s life” (p. 424). Of relevance for us, their findings pointed to four story-telling themes associated with wilderness experiences: challenge, closeness to nature, decisions that are not faced everyday, and stories of nature. Their study indicated that closeness to nature was a key meaning for respondents, particularly direct contact with dangerous features of the environment.

Borrie and Roggenbuck (1998; 2001) developed 10-point measures to assess the degree to which visitors experienced solitude and primitiveness, as well as related experiences such as timelessness (Table 1). “Oneness” was measured as feeling close to and immersed in nature. After solitude, the means for the oneness items were the highest observed among all the types of experiences. The importance of nature was also captured through humility, with respondents reporting relatively high levels of awe, humility, and glory of nature. Measures of primitiveness, such as “living like a pioneer,” emerged as quite low compared to other qualities. Their study confirms that visitors – at least those on overnight trips through a swamp – appear to achieve the types of experiences proscribed in the Wilderness Act, although not very intensely. However, this study did not ask visitors directly about their own personal definitions of wilderness experience qualities, not did it describe the features of the social or physical environment that influenced attainment.

Table 1. Intensity of Feeling During The Wilderness Experience

	Mean
The environment seems free of human-made noises	6.9
I was feeling a special closeness with nature	6.1
I was in awe of nature's creation	5.9
I was feeling totally immersed in nature	5.6
I feel the tranquility and peacefulness of this place	5.3
I felt humbled by all of nature around me	5.2
I felt the silence of the environment	5.2
I feel a part of wild nature	4.7
I felt the simplicity of life on this trip	4.5
I was feeling insignificant in the glory of nature	4.0
I felt connected with times long ago	3.5
I was feeling the heartbeat of the earth	3.5
I felt that life is simple	3.3
I felt like I was living like a pioneer	2.2

From Borrie & Roggenbuck (1998). 10-point scales; 0 is low, 9 is high

Kaye (2000) used a variety of techniques, including projective essays and depth interviews, along with popular literature, to uncover the primary elements of wilderness experiences for those who experience the wilderness of the Arctic National Wildlife Refuge. He identified fourteen primary themes. Four were commonly described in other literature: a place for wildlife, a place of scenic value, a place of scientific value, and a setting for recreation. The other ten were more “emergent” and “elusive” and addressed personal development and immersion in ANWR. These included connection to personal heritage; a place of mystery and unknown; a place to experience humility and exercise restraint; a connection to our evolutionary past (similar to primitiveness); a place where nature is uncontrolled (wildness); a place that provides benefits of solitude; a place of multiple values, including intrinsic and bequest; and a sacred place. Interestingly, Kaye found that his ANWR visitors all reported a sense of humility and oneness with nature, but that they did not set out with the intention of finding these experiences. Instead, through long and repeated trips to ANWR, they developed this sense of humility. This finding reminds us that different methodological approaches may be more or less likely to elicit different feelings and thoughts.

In a laboratory study to refine measures of the dimensions of wilderness privacy, Hammitt and Madden (1989) focused specifically on privacy, not the full range of wilderness experiences. However, they identified natural conditions as very important contributors to “wilderness privacy.” For example, of their 20 items, “an environment free from man-made intrusions” ranked fifth (mean=2.00, on 7-point scale), and “being in a completely natural environment” ranked seventh (mean = 2.03). Interestingly, “tranquility and peacefulness of the remote environment” and “an environment free of man-made noises” were first (mean = 1.44) and second (mean = 1.71), which suggests that the opportunities for natural quiet contribute centrally to the wilderness experience.

Shafer and Hammitt (1995a, 1995b) conducted studies that captured all of the wilderness qualities of interest to us. They developed 24 items to assess the five experience dimensions of naturalness, solitude, primitiveness, unconfinement, and remoteness. Hikers to the Cohutta

Wilderness and canoeists in Okefenokee Wilderness indicated how important (7-point scales) each item was as part of their recreational experience in wilderness. In addition, the authors also developed 35 items related to conditions that visitors might experience, such as wildlife, litter, regulations, and encounters with other visitors. These items were selected because of their postulated impact on the experience dimensions. Visitors to the Cohutta Wilderness expressed their general level of concern about these items on 7-point scales.

In examining the factor structure of the conditions that might be relevant to experience, based only on the Cohutta sample, Shafer and Hammitt (1995b) found that instead of the five dimensions they hypothesized, the items factored into six domains. Human impacts (litter and damage to trees or vegetation) were of greatest concern (mean = 6.56). Of next most concern were natural features and processes (forest, ecosystems, species diversity), with a mean of 5.26. Solitude (mean=4.96) was next, and included conditions such as noise, distance between campsites, and number of groups encountered. Items dealing with management confinement (regulations) were fourth in concern (mean = 4.65), followed by primitive travel (assessed via amount of trailless area), with a mean of 4.47. The final factor, management-aided travel, was lowest in concern (mean = 4.45).

In their analysis of the same data relating conditions of concern to experience dimensions in both locations (Shafer & Hammitt, 1995a), naturalness (mean = 6.10) emerged as the most important experience for visitors, followed by primitiveness (mean = 5.53) and solitude (mean = 5.37). Remoteness emerged as the least important dimension, although its mean (4.28) was still above the midpoint of the scale. Turning to conditions, human impacts (such as litter) were of the most concern (mean= 6.37), followed by natural features and processes (mean = 5.50), and encounters with other visitors (mean = 5.14). As expected, the importance of conditions was related to the experiences obtained. These findings lead us to expect that natural environmental features and/or processes will emerge as centrally important to wilderness visitors' experiences. We also expect that visitors will mention lack of visible human impacts and the presence or absence of other visitors as important to their wilderness experience.

METHODOLOGY

Attaining a rich understanding of visitor conceptualizations about wilderness and its qualities requires a qualitative approach. We employed in-depth interviews, conducted inside wilderness, at three different locations in Oregon and Washington. The specifics of our methods are described below.

Study Area

Data were collected in three Pacific Northwest wilderness areas during the summer of 2002 as part of a comprehensive Region 6 (Oregon and Washington) U.S. Forest Service wilderness research initiative. In an effort to obtain a wide variety of participants, three unique locations that exemplify wilderness diversity, in terms of location characteristics, were selected for study. All three were known as high use destinations, although actual use during the study period varied depending on the day of the week and the weather. Unlike a more traditional quantitative approach, this research sought diversity rather than representativeness in order to capture a wide range of responses. Varying conditions would allow us to discern whether visitors tend to be generally consistent in their definitions of wilderness qualities and to identify how variations in the social and physical environment might affect the subjective experience of each

quality. Because of the past research emphasis on encounters and use levels, we selected three destination areas that had high and low use areas, with both day and overnight visitation, within close proximity to one another. Thus, the factors upon which locations were chosen were use density, environmental characteristics (type of forest and mountains), proximity to population centers, and the balance of day and overnight use.

Destinations in three different wilderness areas were identified that fulfilled the study plan requirements. The first study area, in Oregon, was Marion Lake (360 acres) in the Mount Jefferson Wilderness, located in the western Cascade Mountains (near Detroit, Oregon, approximately 1.5 hours southeast of Portland). Sampling at this heavily forested study location was unique from the other sites in terms of sampling period (late May through mid June), user type (early season anglers with a mix of day and overnight use), weather conditions (spring rains and cool early summer), trail conditions (initially snow covered), vegetation (dense old growth forest), and short distance to lake from trailhead (2 miles).

The second location, Pete Lake, was in Washington, approximately 90 minutes from Seattle, located in the eastern Cascade Mountains, in the Alpine Lakes Wilderness. Use was comprised of a mix of day and overnight visitors, with overnight visitors generally camping at Pete Lake (approximately 100 acres), nearly 4.5 miles from the trailhead. The environment at Pete Lake consisted of montane to subalpine forests. Sampling occurred in July, during generally pleasant weather but very buggy conditions.

The third study location was in the Eagle Cap Wilderness in northeast Oregon, at the Lakes Basin. This wilderness area is approximately seven hours from Portland, Oregon, nine hours from Seattle, Washington, and five hours from Boise, Idaho. Visitors to this wilderness area often hike or ride horses into the very popular Lakes Basin, which is approximately eight miles from the closest trailhead. Whereas the first two destinations were close to major population centers and relatively short distances from trailheads, the Lakes Basin provided an opportunity for a more remote type of wilderness trip, and nearly all use there is overnight. Day users were contacted along trails into the area, but usually not in the heart of the Lakes Basin itself. Additionally, whereas much of the Cascade Mountain wilderness areas are heavily wooded, the Wallowa Mountains and the Eagle Cap Wilderness provide a different type of environment with granite mountains and glacially carved valleys interspersed with subalpine vegetation. Sampling occurred during warm weather in August.

Each study location was sampled for a minimum of 15 days in order to ensure a wide variety of conditions that might affect responses (e.g., different use levels or weather). Sampling began at Marion Lake (Mt. Jefferson Wilderness) on May 25 and lasted until June 13, 2002. Initially the trail to Marion Lake was covered with packed snow to a depth of 6 feet in places, but by the end of the sampling period the trail was dry. This study site had a wide use level range; for instance during mid-week there were periods when as few as 4 other visitors were observed per day, while on busy weekends, as the weather and trail conditions improved, as many as 114 people were encountered on a single day.

The second period of sampling began on July 1 at Pete Lake (Alpine Lakes Wilderness) and lasted until July 17, 2002. Initially the trail to Pete Lake was partially covered with snow and required numerous stream crossings, and the access trail beyond Pete Lake to the Pacific Crest Trail (PCT) was inaccessible due to blow-downs. However, midway through the sampling the snow melted, streams receded, and the access to the PCT was open. The use levels observed during the study period ranged from a low of 3 people per day during mid-week to as many as 70

individuals on a weekend day. Mosquitoes were a significant problem during all Pete Lake sampling.

Finally, the third sampling period began on August 1 in the Lakes Basin (Eagle Cap Wilderness) and concluded on September 3, 2002. The trails to the Lakes Basin were completely accessible when sampling began in August. The number of people encountered in this area ranged from a low of 7 to a high of 81 per day; however, on average the use levels at the Lakes Basin were more consistent across the sampling period. Weather and mosquito levels were optimal during Lakes Basin sampling. However, there were a few unusual occurrences, namely a helicopter evacuation of an injured hiker, and a small plane supply drop of food to campers in the heart of Lakes Basin at Mirror Lake. These featured prominently in interviews on those days.

Respondent Selection

Our sampling approach was based upon theoretical sampling (whereby theoretical considerations, such as group size and trip length, guide respondent selection) and is referred to as convenience sampling, because we approached visitors we encountered on study days rather than drawing randomly from a list of visitors. This approach allows the research to “maximize opportunities to discover variations among concepts” (Strauss & Corbin, 1994, p. 201). It permits the researcher great flexibility in sampling individuals, places, and times to detect the range of responses and perspectives. Although this was technically a convenience sample, there was a large element of randomness in selection, because (like in other wilderness studies), we spoke with those who happened to be present on sample days.

Ideally, all groups encountered were interviewed as we moved throughout the study areas. However, when many groups were seen, interviewers had to select which to approach and interview. Selection of the respondents was guided by the open theoretical sampling approach; respondents were selected with the goal of interviewing people with varying demographic and group characteristics. Throughout the course of the study, effort was given to ensure equity in terms of day/overnight visitors and low/high use areas. Every day the interviewers would review and compare field notes, as well as demographic characteristics of respondents (e.g., gender, age, group size, trip length), and subsequently target from among groups encountered those that would add the most diversity. The overall goal of the data generation process was saturation (e.g., continue interviewing until no new information arises) of the topic areas, as well as addressing the research question from different angles and perspectives (triangulation). In all three areas, we achieved saturation well before the end of the sampling period.

Two interviewers worked as a team in each study area. The interview team concept worked especially well when wilderness visitors were in groups of two. In such cases the interviewers would separate the respondents by several feet (beyond earshot) and conduct two separate tape-recorded interviews. When additional members were present in the party, the interviewers would strive for diversity in terms of age and sex for inclusion in the interview, while the remaining members were given a written survey instrument to complete (results presented elsewhere). This approach worked well for most groups and provided a means of triangulation for some of the research questions. In instances where an interviewer worked alone, a similar goal of maximum visitor variation was applied. In these cases, the researcher always taped an interview with one group member and asked the others to complete written instruments.

We intentionally interviewed people individually, rather than as a group, for several reasons. By maximizing the total number of individuals, we were able to attain a greater level of diversity than would have been possible during a group interview. In group interviews it is

possible for a single member of the group to dominate a discussion and lead peers to similar conclusions, resulting in homogenous responses. People whose responses might run counter the group tend to be silent. In addition, group interviews can be difficult to analyze, because nonverbal “statements” (e.g., nodding and frowning) cannot be captured on tape, and silence cannot be interpreted as either agreement or disagreement.

Semi-Structured Interviews

Data were generated through in-depth semi-structured interviews with wilderness visitors, while in designated wilderness, as an attempt to understand the wilderness experience. The questions addressed in this paper were one small part of an overall project focused on the immediate conscious experiences of wilderness visitors, which used both qualitative and quantitative techniques. Much of the previous wilderness research had focused on assessments of experiential qualities using a post-hoc evaluation, often completed long after the on-site experience ended. In an effort to overcome potential limitations of post-hoc assessments (e.g., memory degradation, rosy recall, or schematic memory bias), this research sought to understand the more immediate experience. Therefore, an interview format that allowed informants to elaborate their thoughts, feelings, and understandings was developed to accommodate the nature of the interaction inside the wilderness. The semi-structured interview consisted of 38 questions plus an equal number of probing questions prompting responses across a wide range of wilderness experience concepts. The interview guide (Appendix A) went through several developmental iterations as interviewers gained insight about which questions elicited the most robust responses.

Given the need for the interview format to be flexible to the needs of the respondent (e.g., time constraints), questions were not necessarily asked in a specific order. Although the goal was to ask all relevant questions in each interview, this was not always feasible or appropriate, for several reasons. First, respondents were often constrained by time and wanted to conclude the interview before every question was asked. Knowing this about respondents allowed interviewers to pose a wide variety of a few questions, in a short amount of time, in order to obtain the highest quality of responses. Second, some respondents were unable or unwilling to openly discuss some types of questions. Questions relating to emotional states seemed to be questions some respondents were not comfortable discussing. In other cases, respondents appeared unable (or unwilling) to respond to the question we posed. For example, we asked a 20-year-old day hiker what she was just thinking about as she was walking up the trail, and she responded “I don’t know” (Eagle Cap, B12 08.31.01-2¹). Finally, interviewers may simply have failed to ask a question. Since the interview guide was not a script, there were times when questions were not asked, resulting in a lack of data for that specific question.

Initially we had considered two separate interview formats, one short-form (10 minutes) and one long-form (1+ hour), but after only a few interviews the plan was changed to include only the long-format, which could be shortened as required by the time constraints of the respondents. A limitation of the original plan (short and long interviews) became evident when some respondents initially indicated they only had a few moments to talk, prompting us to employ the short form. However, often the conversation grew beyond what was initially agreed upon, requiring a switch to the longer form. On the other hand, some visitors who were initially chosen for long-form interviews chose to opt out early, essentially making the interview a “short form” interview. Consequently, we decided to modify the interview guide and merge the two

¹ Interview excerpts are identified by the location, the interviewer (“B” or “E”), the date, and the interview number.

formats into a longer version with the flexibility to shorten as necessary. In the new longer version we would ask visitors certain key questions (e.g., are you having a wilderness experience?) and when time allowed we would expand on those questions (e.g., could you have a wilderness experience in a place that was not designated as wilderness?). Our goal was to balance our research needs with our respondents' time and ability to engage in the interview. As a result, interviews ranged from 15 minutes to more than 1.5 hours, averaging around 35 minutes.

In the field, interviewers would debrief each other, after interviews, in terms of the themes that emerged during the interviews. This information was noted in a reflexive journal designed to capture individual interviewer comments, as well as in post-interview comments recorded aloud on the tape recorder. Additionally, throughout the course of the research the interview guide was continually evaluated and fine tuned to achieve research goals. Several questions were added after interviews were completed at Marion Lake. Thus, some topics are not well represented for that site. Often interviewers would find certain interview questions or tactics were not eliciting deep responses; for example respondents may have been simply listing items (Patterson, 1996) and not giving the question serious thought. Thus, in-field adjustments to the interview guide in terms of questions and probes proved to be important.

The interview format for the larger study was designed to elicit responses related to the cognitive (thoughts), affective (feelings), and somatic (bodily sensations) realms of experience and factors respondents considered relevant in creating those experiences. Thus, we began by asking respondents to indicate what they had been thinking or feeling immediately prior to our approach. Responses to those questions are reported elsewhere, although responses that bear on the four qualities are incorporated here. For example, if a respondent mentioned thinking about "wilderness" or the natural environment, these responses were inspected for evidence of how respondents defined those terms or the elements that contributed to the feeling. The questions more central to this paper were asked after the general questions about thoughts, feelings, and sensations (Table 2). These questions asked directly about the qualities related to wilderness, naturalness, primitiveness and remoteness. After an initial question was posed to a respondent, a subsequent probing question followed. Probing questions were designed to draw out a deeper level meaning than may have otherwise been obtained.

Naturalness	Primitiveness	Remoteness	Wilderness
- What things have been key to your experience? - What is it about this environment that makes you want to be here? <u>Probe:</u> What do you think causes you to feel that way? - If you had to choose two specific things (or attributes that make you want to be here, what would they be? <u>Probes:</u> How about two specific things (about the environment or this place) that would make you not want to be here? - Does this place feel (natural, remote, and primitive, like wilderness) to you? <u>Probe:</u> what makes it feel that way to you? <u>Probes:</u> How about naturalness? Why? <u>Probes:</u> How about remoteness? Why? <u>Probes:</u> How about primitiveness? <u>Probes:</u> Can you describe (the quality)?			- Are you having a wilderness experience <u>right now</u> ? If yes, could you describe it? <u>Probe:</u> Have you had one since you've been here? If yes, could you describe it? <u>Probe:</u> What makes something a wilderness experience? - What things have been key to your wilderness experience? - Does this place feel like wilderness to you? - Why do you come to wilderness (in general, not this particular one)? <u>Probe:</u> Can you get that in a local non-wilderness area? Why/why not?

Interviews were recorded on micro cassette tape recorders, with each tape labeled to correspond to a log sheet. The log sheet tracked date, day of week, time of day, cross references to other interviews and surveys conducted, number of people in sight and sound (during the interview), number of refusals, number in party, wilderness location, specific location (e.g., at camp, on the trail, or at a destination), number of wilderness visitors we observed (during the entire day), visitor type (day or overnight), age, and sex.

Analysis of Interview Data

By the end of the summer, 201 interviews were conducted that consisted of 118 overnight and 83 day visitors from 158 groups (Table 3). The volume of interviews, with an average length of 35 minutes, totaled more than 2,500 sheets of transcribed text. This tremendous amount of data required a comprehensive analysis plan to achieve practical and useable outputs.

	Day	Overnight
Marion Lake	24	40
Pete Lake	36	22
LBMA	23	56

Coding Themes

As is typical of qualitative research, the analysis of the interview data began during the fieldwork phase, through the use of peer debriefing and memos. Upon the conclusion of the fieldwork phase a new process of data refinement, called coding, began in earnest (Flick, 1999). Each interview was individually transcribed verbatim with the log sheet information included. The coding process was iterative and took more than 4 months to fully develop a code list. At the conclusion of this process there were 24 main tree nodes with a total of 424 nodes (assignable codes). For example, the tree node called “quality/concept” was designated with a number (12) and represents text addressing any of the four concepts we are interested in understanding in this paper. The tree node (12) “quality/concept” has four sub-nodes or codes: wilderness (12.1), primitiveness (12.2), naturalness (12.3), and remoteness (12.4). Each of these nodes had its own “children,” developed by reading and rereading text to identify discrete themes. This process went on to include up to four sub-levels for each tree node and in this manner accounts for all 424 different codes (see Appendix B for code list for the entire project; only some codes are relevant for this paper.) The following example shows coding for the base data of interview location.

Base Data:

Level 1

1=base data

Level 2

1.7=base data/site

Level 3

1.7.3=base data/site/Eagle Cap Wilderness

Level 4

1.7.3.1=base data/site/Eagle Cap Wilderness/Lakes Basin Mgmt Area

Level 5

1.7.3.1.3=base/site/ECW/LMBA/Mirror Lake

Another less complex example follows:

Affect (emotion):

Level 1

2=Affect

Level 2

2.1=Affect/Positive

Level 3

2.1.1=Affect/Positive/Good, Nice, Enjoyment, Contentment, Happy

The assignment of codes to a particular interview can be given at one of three textual units: the word, sentence or paragraph. We chose to code the transcriptions at the paragraph level of specificity in order to maintain proper context when analyzing the data. That is, when coded text is retrieved, the entire paragraph (vs. just the word or sentence) appears. In this way, we could see the question asked as well as the full response.

All of the transcribed interviews were first printed and hand-coded on paper prior to entering the codes via qualitative software (QSR NUD*IST, V6). Although proceeding in this manner may have taken more time than simply assigning and entering the codes via the program interface, it provided more of an opportunity to conduct ongoing quality control as well as permitting us to observe the full context of the responses instead of the limited text that appears on a computer monitor. All of the coded interviews were subsequently entered into the qualitative program for analysis.

Because of the large number of interviews (n=201), the semi-structured nature of the questions, and the systematic approach, we believe the sample is unbiased. Therefore, the data were analyzed both quantitatively and qualitatively. Initial quantitative analysis provided an overall look at frequencies for key constructs of interest. The software program allows for quantification of the coded data in a variety of formats. For instance, we were able to generate numerical reports in the form of matrices and cross-tabulations. The reports served as a starting point for the analysis of the data, and from there additional depth was available through a variety of qualitative search protocols.

For this report, initial exploratory analysis began by creating matrices based upon the cross-tabulation of the four main concepts (naturalness, remoteness, primitiveness and wilderness) against all other codes. Matrices of the four key concepts, for example, were analyzed by base codes, such as gender, age, length of trip, and numerous other codes (e.g., affect, purpose of trip, solitude). Several reports, called “node searches” were generated reflecting the number of occurrences for each cross tabulation (e.g., achievement of wilderness experience by age). For each intersection of the node search, all “tagged” interview data (text units assigned both codes) are displayed in a matrix interface window. The interface allows access to the transcribed verbatim data for additional analysis, quality control, and report retrieval. Exploring these intersections highlighted themes that came up in relation to each quality, from which point we could look for prevalent themes. The results section provides the key themes that emerged from our analysis.

Interrater Reliability

Intercoder reliability, as defined by Neuman (1999), is “the agreement among or dependability of several different content analysis coders” (p. 512). The measures that quantify this agreement are generally known as interrater or intercoder reliability.

To understand how we chose to employ the process of interrater reliability (IRR) in judging our effectiveness to jointly comprehend concepts and assign codes, it is important to understand some background. As explained above, upon completion of the 201 interviews, the data were transcribed verbatim, initial code lists were established and substantially modified during course of five subsequent months, and after a series of IRR attempts, the final code list was created and coding initiated. As explained above, the code list is comprised of 24 main “tree nodes” containing such diverse information as base demographics, affective states, focus of attention, and qualities of wilderness experience. Captured within those highest 24 nodes are branches extending up to five levels with the 424 total nodes. Agreement among raters may be

evaluated at any of the levels. In general, agreement for the higher levels will be highest, while agreement at the lowest level may be lower. For example, two raters may agree that one text unit relates to environment/features but disagree about whether it should be further coded as “small scale.” We developed a scheme to depict these differing types of agreement, as explained below.

Periodically throughout the coding process randomly selected interviews were evaluated using an established interrater reliability process, adapted from Boyatzis (1998). Individual copies of code lists, definitions, and identical printed transcriptions were distributed to the raters (principal investigator and graduate research assistants) for coding. After independent coding was accomplished, a comparison of the coded material was conducted using a matrix to identify the absolute agreement, partial agreement, level 1 disagreement, as well as absolute disagreements. These are defined as follows:

A) **Absolute Agreement:** An absolute agreement occurs when raters code a particular unit of text precisely the same at all node levels. Examples of absolute agreements are (5.2 – 5.2; 3.92 – 3.92; 18.1.2.10 – 18.1.2.10)

B) **Partial Agreement:** A partial agreement occurs when raters code a specific textual unit identically within at least the top two levels but not at lower levels. Two examples of a partial agreement illustrate the point (5.5.1 – 5.5.2; 18.1.2.8 – 18.1.2.9).

C) **Level 1 Disagreement:** A level 1 disagreement occurs when coders agree at the top tree level, but fail to agree beyond that level (e.g., 5.6 – 5.5).

D) **Absolute Disagreement:** There are two types of absolute disagreements. In the first case, one rater will code the selected textual unit using a completely different top tree code (e.g., 5.1.1 vs. 2.1.1). The other instance occurs when one rater codes a textual unit and the other rater fails to code the specific text unit at all.

The interrater reliability process compared two raters’ coding of randomly selected transcripts to determine the percentage agreement. Using an interrater reliability form (see Appendix C) two transcriptions were compared side-by-side. The reviewer evaluated every code assigned in the entire transcription from each rater by top tree node in an attempt to ensure that any potential systematic biases of raters to focus on one or another topic were identified and examined. That is, this technique illustrates whether one rater pays systematically more attention to one top tree node than does the other rater. As the reviewer compares the two coded transcripts, tally marks were placed in appropriate node columns for each type of agreement/disagreement for later calculations. Once this was completed, calculations were conducted as follows.

A-Absolute Agreements: Add tally marks and multiply by 2

B-Partial Agreements: Add tally marks and multiply by 2

C-Level 1 Disagreements: Add tally marks

D-Absolute Disagreements: Add tally marks

Total Codes Given: A+B+C+D

Percent Agreements: $A+B/\text{Total Codes Given} \times 100$

The result of the final IRR process on this project found a high degree of correspondence (averaging approximately 80% absolute agreement) between the evaluators, based on a random sample of 12 fully coded interviews.

RESULTS

Visitor Attainment of Experience Qualities

Initially, with respect to the four qualities, visitors would respond to questions presented in terms of attainment. For example, we often asked, “thinking about this area, how natural does it feel to you?” and then further probed to determine definitional qualities or factors that enhanced or detracted from the naturalness. Illustrating another example, an interviewer might have asked the question, “do you consider this place to be primitive?” and then probed to determine the degree (e.g., very primitive, or 9 out of 10) as well as the factors (e.g., distance from city) that made it that way.

The total number of visitors responding to questions of attainment and definitions ranged between 90 and 143 (45% to 71% of all interviews). Our understanding of how visitors define the qualities was drawn from responses to specific direct questions as well as follow-up questions and spontaneous descriptions of concepts. For example, a visitor may have been asked “are you having a wilderness experience right now” and then probed to explain “what is a wilderness experience to you?” There were many instances where visitors volunteered responses before any questions were asked about concept definitional qualities, and those responses are also included in this report.

Readers will note that, in many excerpts, visitors give numeric ratings (1 to 10) for the various qualities. This was the result of the way we sometimes posed questions. Asking for numeric responses was an attempt to help visitors answer questions like “how primitive is this place?” In our first round of interviews, before we included this response option, answers to questions were often limited to brief, ordinal responses (e.g., “pretty primitive”) that were not very useful or informative. Many visitors seemed better able to respond with a number first, and then, when probed would provide a detailed response about the meaning of that number.

Looking first at attainment, many interviewees commented on all four qualities (Table 4), while some did not (primarily because they were not asked). We coded attainment into five categories. “Yes, absolutely” refers to definitive, unequivocal or firmly stated affirmatives. Interestingly, while only about one third of respondents felt adamant that their experience was entirely primitive or remote, nearly 60% strongly felt they had experienced naturalness and/or wilderness.

“Not at all” refers to those who were certain that they had not had a given experience. Although only 2% gave this response for naturalness, nearly one quarter said they definitely did not experience primitiveness or remoteness.

Oftentimes visitors were somewhat hesitant (referred to as “something in between”) to give a definitive answer, saying there were elements that both did and did not feel indicative of a given quality. Those accounted for about a third of all responses we found across the three wilderness areas. Some visitors were reluctant to give a straightforward answer, choosing instead to dodge the question or provide a neutral response (coded as “neutral”). In some instances respondents were unable to reply due to an apparent lack of understanding of the question.

Concept	Yes, absolutely	No, not at all	Something in between	Neutral	Unsure of meaning
Naturalness (n=98)	60 (61%)	2 (2%)	28 (29%)	6 (6%)	2 (2%)
Primitiveness (n=130)	45 (35%)	27 (21%)	46 (35%)	4 (3%)	8 (6%)
Remoteness (n=94)	29 (31%)	24 (26%)	37 (39%)	3 (3%)	1 (1%)
Wilderness (n=170)	96 (56%)	27 (16%)	27 (16%)	7 (4%)	13 (8%)

Values indicate total number and percent of respondents answering attainment questions. Respondents who gave more than one response to the same question are included under each relevant response (17 multiple responses). An example of the type of question posed was “would you consider this place to be natural?” “Are you having a wilderness experience?”

Overall, only about 4.5% of all respondents were unsure of the meanings associated with the four key concepts (naturalness, remoteness, primitiveness and wilderness). The following two examples illustrate this point. The first discusses whether the respondent felt the area to be natural and the second whether the individual was having a wilderness experience. (Note that “R” indicates respondent and “I” indicates interviewer).

1) R: “I don’t think I understand the question. Well, I mean, it’s a wilderness area, so (pause) it’s about as natural as I’m going to get unless I go to Alaska and get off the trail.” (Laugh). (Male, 50, Day, Mount Jefferson, E6 06.23.02-4)

2) I: “You just mentioned wilderness area, are you having a wilderness experience? R: I’m not sure what that means. I: For you, does it mean anything to you?” R: “It’s a big deal to me for some reason, I don’t know why.” I: “Are you having a wilderness experience right now?” R: “I’m still not sure how to define that.” (Male, 49, Overnight, Alpine Lakes, E10 07.12.02-2).

Some of the most challenging responses to interpret came from individuals who, as they continued to talk, eventually reversed their own earlier assessments. For instance, a visitor may have initially indicated, often within moments, that they were not able to experience wilderness, only to reverse their comments a moment later. Visitors qualified and altered many assessments throughout many of the interviews. (These were coded as “in between” in Table 5.) Here a 49-year-old female gives her thoughts after being asked if she thought she had had a wilderness experience.

R: No. (I: Okay) I’m, I don’t usually think of this as being wilderness. (I: Right) But, yeah, I suppose I did. I suppose if I had to qualify it, yeah, I did. (I: Yeah?) You know, I mean, there were certainly times when, you know, we were up in areas with rock falls (I: Um-hmm) and vistas and got away from other people, so sure I did. (Female, 49, Overnight, Mt. Jefferson, B3 06.15.02-4)

One of our goals was to evaluate whether experiences are reported differently across very different settings. Our findings paint a complex picture of this variation. In many respects,

visitors were consistent in attainment of each quality, regardless of the wilderness in which we contacted then, but some interesting differences emerged (Tables 5 to 8).

Regarding wilderness experience, approximately 60% of those contacted in Mount Jefferson and Alpine Lakes responded with a “yes, absolutely” answer, compared to 50% in the Eagle Cap (Table 5). However, 22% of Alpine Lakes visitors said they definitely did not have a wilderness experience, compared to only 13-14% of those in the other locations. Eagle Cap visitors were more likely than others to be unsure or neutral.

	Yes	No	In Btwn	Neutral	Unsure
MTJ	37 (61%)	8 (13%)	10 (16%)	2 (3%)	4 (7%)
ALW	29 (59%)	11(22%)	7 (14%)	0	2 (5%)
ECW	29 (49%)	8 (14%)	10 (17%)	5 (8%)	7 (12%)
Overall	95 (56%)	27 (16%)	27 (16%)	7 (4%)	13 (8%)

The differences for primitiveness were more substantial than the differences for wilderness experience (Table 6). Half of the Eagle Cap respondents said they definitely experienced primitiveness, compared to 23% of Mount Jefferson and 32% of Alpine Lakes visitors. These numbers are consistent with primitiveness being linked to distance traveled (Eagle Cap is more remote), but it is also important to note that Marion Lake in Mount Jefferson had toilets present, while neither of the other locations did. Forty percent of Mount Jefferson and Alpine Lakes visitors were equivocal about primitiveness, compared to only 24% of Eagle Cap visitors.

	Yes	No	In Btwn	Neutral	Unsure
MTJ	11 (23%)	12 (25%)	19 (40%)	2 (4%)	3 (6%)
ALW	14 (32%)	8 (18%)	18 (41%)	1 (2%)	3 (7%)
ECW	19 (50%)	7 (18%)	9 (24%)	1 (3%)	2 (5%)
Overall	44 (34%)	27 (21%)	46 (36%)	4 (3%)	8 (6%)

Although the majority of respondents at all sites said they experienced naturalness (Table 7), the number was highest for Alpine Lakes (71%). The reasons for the differences across locations are not immediately evident.

Table 7: Naturalness by Location (Number and Percent within Location)					
	Yes	No	In Btwn	Neutral	Unsure
MTJ	15 (50%)	0	13 (43%)	1 (3%)	1 (4%)
ALW	27 (71%)	1 (4%)	10 (26%)	0	0
ECW	17 (59%)	1 (3%)	8 (28%)	0	3 (10%)
Overall	59 (61%)	2 (2%)	31 (32%)	1 (1%)	4 (4%)

The quality of remoteness was added to our study after we completed interviews in Mount Jefferson, so we cannot know how respondents at that site (a two-mile hike from the trailhead) would have responded. Respondents in the Eagle Cap were more likely than Alpine Lakes respondents to say they definitely felt a sense of remoteness (Table 8). However, at both sites an equal number said they did not experience remoteness at all, and many were equivocal.

Table 8: Remoteness by Location (Number and Percent within Location)					
	Yes	No	In Btwn	Neutral	Unsure
ALW	10 (22%)	12 (27%)	22 (49%)	1 (2%)	0
ECW	18 (38%)	12 (25%)	15 (31%)	2 (4%)	1 (2%)
Overall	28 (30%)	24 (26%)	37 (40%)	3 (3%)	1 (1%)

We were also interested in how “immersion” (length of time spent in wilderness) related to attainment of the different qualities. In this, we combined day users with overnight users that we contacted on the first day of their trip. Small samples of people on longer trips preclude a definitive analysis, and it is important to note that those on longer trips were typically from the Eagle Cap Wilderness.

There was generally little difference in wilderness experience attainment by day of trip (Table 9). There was some indication that people on the second day of their trip felt more intense experiences of primitiveness (Table 10), but this did not increase on the third day, so it is difficult to know what to make of the findings. Those on the first day were much more likely to say they definitely experienced a sense of naturalness, while those on the second or third day were more likely to be equivocal (Table 11). Finally, there appeared to be little difference in remoteness by day of trip (Table 12). Thus, overall, few differences in experience attainment occurred with increasing immersion.

Table 9: Wilderness Experience by Day of Trip					
	Yes	No	In Btwn	Neutral	Unsure
Day 1	49 (57%)	16 (19%)	12 (14%)	4 (5%)	4 (5%)
Day 2	30 (63%)	6 (13%)	7 (15%)	2 (3%)	3 (6%)
Day 3	10 (50%)	3 (15%)	4 (20%)	0	3 (15%)
Day 4	1	0	2	0	2
Day 5+	1	0	0	1	0
Overall	91 (57%)	25 (16%)	25 (16%)	7 (4%)	12 (7%)

Table 10: Primitiveness by Day of Trip					
	Yes	No	In Btwn	Neutral	Unsure
Day 1	16 (26%)	15 (25%)	24 (39%)	2 (3%)	4 (7%)
Day 2	16 (42%)	6 (16%)	13 (34%)	1 (3%)	2 (5%)
Day 3	5 (31%)	3 (19%)	5 (31%)	1 (6%)	2 (13%)
Day 4	3	1	0	0	0
Day 5+	0	1	1	0	0
Overall	40 (33%)	26 (21%)	43 (36%)	4 (3%)	8 (7%)

Table 11: Naturalness by Day of Trip					
	Yes	No	In Btwn	Neutral	Unsure
Day 1	35 (70%)	0	14 (28%)	0	1 (2%)
Day 2	12 (44%)	1 (8%)	12 (44%)	1 (8%)	1 (8%)
Day 3	5 (50%)	0	4 (40%)	0	1 (10%)
Day 4	2	1	0	0	0
Day 5+	0	1	3	0	0
Overall	54 (57%)	3 (3%)	33 (35%)	1 (1%)	3 (3%)

Table 12: Remoteness by Day of Trip					
	Yes	No	In Btwn	Neutral	Unsure
Day 1	13 (28%)	15 (32%)	18 (38%)	1 (2%)	0
Day 2	7 (33%)	5 (24%)	7 (33%)	2 (10%)	0
Day 3	5 (36%)	1 (14%)	7 (50%)	0	1
Day 4	0	1	3	0	0
Day 5+	0	1	0	0	0
Overall	25 (29%)	23 (26%)	35 (40%)	3 (4%)	1 (1%)

In summary, visitors were largely comfortable answering questions about the four experiences, and for the most part they achieved a partial or complete feeling of each quality. Respondents were subsequently questioned to draw out the particular factors that

defined each concept or contributed to their attainment. Several common themes emerged that were shared across two or more of the qualities; the following section emphasizes factors that are common to each concept. The unique themes are discussed after that.

Common Themes

This section will focus on themes common among all four concepts. However, in those instances where a common concept seems more characteristic of one quality, this will be noted and discussed as well. There are two main themes that were common among all concepts: environmental features and social environment.

Environmental Themes

The environment theme (Table 13) was the first to arise during the interviews and had three sub-themes: mountains, water and flora. Respondents were likely to portray each of the four concepts (naturalness, remoteness, primitiveness and wilderness) by using environmental features as exemplifying the quality. Although the environmental theme emerged in response to questions about all four qualities, as is evident in Table 13, many respondents did not mention any of these themes. Instead, they gave answers that reflect unique themes, as will be discussed later.

	Mountains	Water	Flora
Wilderness (n=170)	9	20	14
Primitiveness (n=130)	2	4	5
Naturalness (n=98)	7	10	15
Remoteness (n=94)	2	3	2
<i>Values indicate the total number of interviews where a concept emerged.</i>			

The first common environment sub-theme was mountains. The following excerpts illustrate how people used the sub-theme “mountains” to describe each of the concepts. (It is probably important to note that all interviews took place in mountainous country, so the dominance of mountains in people’s responses is not surprising. Interviews in other types of environments might elicit different defining characteristics.)

Naturalness: “The contrast between the lake and the mountains is dramatic” (Female, 51, Day, Alpine Lakes, E11 07.14.02-2).

Primitiveness: “Well, I can see this huge mountain over here with the brown shell rock. That looks primitive to me” (Female, 43, Overnight, Eagle Cap, E20 08.12.02-1).

Remoteness: “...up at Glacier Lake it definitely felt more remote than down here. The mountains were sort of there and there was nobody” (Female, 35, Overnight, Alpine Lakes, E13 08.04.02-1).

Wilderness: “If I was with this group somewhere, not so mountainous, then it might not be so much of a wilderness experience. The terrain makes it a wilderness experience” (Male, 30, Day, Eagle Cap, E16 08.07.02-3).

Although not highly common to all four concepts, the next two environmental sub-themes, water and flora, were common to two concepts, wilderness and naturalness. The next set of remarks clearly shows the centrality of cleanliness and purity to the water sub-theme.

Naturalness: “I think that just almost any time you’re out and it’s clear and the river is clean and it, I don’t know, they’re all 10’s” (Female, 50, Day, Alpine Lakes, B4 07.04.02-2).

Remoteness: “It’s clean, not that many people come up here, it’s getting worse and worse but it’s usually way clean. The water, you can be 20 feet out on the lake and you can see the bottom. I look at that creek over there and you could drink out of it almost” (Male, 19, Overnight, Mt. Jefferson, E2 05.26.02-9).

Wilderness: “The thing that got me first was the river, as we started up. That comes right out of the snowfall that was my first thought of wilderness, cleanliness was the water” (Male, 60, Day, Alpine Lakes, B8 07.18.02-1).

Besides cleanliness, there were two other underlying themes which were often discussed in association with water. The first had to do with aesthetic qualities, expressed in terms of natural beauty, and was frequently discussed in relationship to water. In the next example, a day hiker explicitly talks about water’s aesthetic quality as well as contrasting the setting against a mountainous backdrop: “The natural beauty of it. I guess the lake with the mountain backdrop. That just does it right there” (Male, 43, Day, Alpine Lakes, B8 07.18.02-2). The second underlying theme related to focus of attention or the kinds of things that caught and maintained a visitor’s attention. Visitors were equally apt to mention large scale natural features, such as mountains and lakes, as small scale features, such as the rustling of the leaves or a small pebble in a stream. In the next example, a Pete Lake day hiker exemplifies a small scale focus of attention. When asked what catches her attention, she says, “kind of the stillness of the water, at the lake and how the trees above it reflect down onto the lake because it was so still” (Female, 27, Day, Alpine Lakes, E7 07.06.02-3).

Similarly, underlying themes related to flora were reported by respondents. Aesthetic qualities were often talked about in terms of the beauty of the forest, rich colors, size of trees, quiet nature of the area, and the pleasant scent of the forest. Focus of attention formed a central underlying theme of flora, including directing one’s attention to or thinking about flora (e.g., how pretty the flowers are), large scale focus (e.g., how the lake, trees and mountains interact together to form a scene), and small scale focus (e.g., flowers along a brook).

Social Themes

The social characteristics of the location (Table 14) – expressed as an evaluation of the presence of people (i.e., respondents would say positive or negative things about the presence of

other people), general use level (i.e., how busy the area feels), and the number of people actually encountered (i.e., references to the specific number of other visitors come upon) – formed the second common theme. Social factors were especially prominent in the context of the wilderness quality. Approximately half of respondents said that use related factors contributed to or detracted from their sense of wilderness. As is evident from the counts, use-related concepts were much more common to all four qualities than were specific natural elements.

	Evaluation of # of people	Overall Use-level “feel”	# of encounters
Wilderness (n=143)	61	16	2
Primitiveness (n=122)	18	15	1
Naturalness (n=96)	13	15	0
Remoteness (n=90)	20	19	4
<i>Values indicate the total number of interviews where a concept emerged.</i>			

Attempting to understand how use level affects solitude has been central to wilderness research for many years. Research continues to offer mixed accounts of this relationship, suggesting a consistent, yet weak link (Stewart & Cole, 2001). Although many visitors recognize use level as related to one of more of the qualities, our interviews showed considerable variation in terms of how visitors perceived use level and how those perceptions influenced their assessments. Illustrating this point are examples emphasizing the variation. In parentheses we show the number of people we observed each day (“tally”), to give a feel for the conditions visitors experienced.

Naturalness: “Probably a 9. It’s got traffic, so, not quite completely natural. There’s quite a few people that come” (Tally: 13, Female, 25, Overnight, Alpine Lakes, E6 07.04.02-1).

Naturalness: “Probably a ten, it’s pretty natural. Well maybe a 9, too many fishermen. Well, the people don’t make it less natural, so a 10” (Tally: 12, Female, 18, Day, Pete Lake, E12 07.17.02-2).

Primitiveness: “Hmm....well, I’ve been in some very primitive areas, but yes. Yes, I would say it’s primitive” (Tally: 51, Male, 41, Overnight, Mt. Jefferson, E1 05.25.02-2).

Primitiveness: “Primitiveness? No, I wouldn’t call this a primitive place. I’ve been in a lot of further hikes and there are always people here” (Tally: 17, Male, 40, Overnight, Marion Lake, E4 06.14.02-2).

Remoteness: “Very remote. Seems to be a lot of people up here, but in reality there are very few” (Tally: 41, Male, 63, Overnight, Eagle Cap, E19 08.11.02-2).

Remoteness: “I would say 5 because I have seen quite a few people today. The past few days I was on trails and I didn’t see a soul” (Tally: 6, Male, 25, Overnight, Pete Lake, E9 07.11.02-1).

Wilderness: “Yes, normally I wouldn't expect to see so many people. That would be the only thing that would detract from that. But it is definitely a wilderness experience” (Tally: 26, Male, 23, Overnight, Eagle Cap, E18 08.10.02-2).

Wilderness: “Uh, not so much today on this hike. I’ve seen a few more people and but yesterday, or the day before yesterday, and we were up towards Rachel Lake, I really felt out and away from everything” (Tally: 6, Male 47, Day, Pete Lake, B6 07.11.02-1).

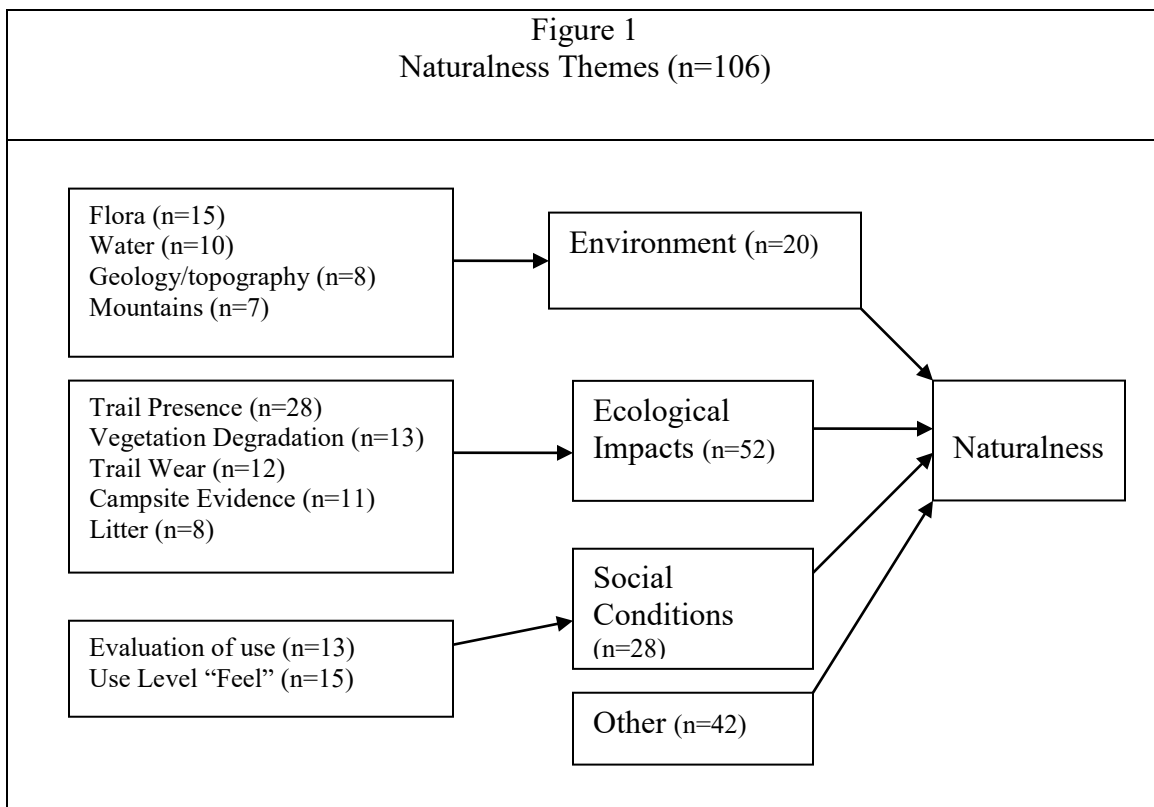
As is evident from these examples, respondents were generally aware of how busy the area “felt”; however, their assessments of use level and appraisals of a concept often did not always logically follow as suggested by the literature (i.e., that increases in use level equate to decreases in experience quality). Individual thresholds varied. Additionally, people evaluated different points in their trip differently, meaning that there was no single, global assessment of the overall trip.

In summary, there were certain elements raised by visitors that were common to the four concepts. Descriptions of environmental features, such as flora, water, and mountains as well as the underlying sub-themes of aesthetic qualities and focus of attention occurred with regularity across concepts. Additionally, social characteristics of locations were often talked about with respect to all four concepts in terms of the number of people and how busy the area felt.

Unique Themes

Naturalness

When wilderness visitors were probed to ascertain what factors contributed to making the specific area seem “natural,” several themes emerged. Figure 1 shows the primary themes that were relatively common across sites and people. As might be expected, one of the most common was related to the *environment/landscape*. The two other main themes related to *evidence of recreation* and *ecological impacts*. As noted above under common themes, social conditions were also important. There were also 42 individuals who gave responses that did not fit into one of the two primary themes. These were largely unique to individuals and did not show much commonality across sites.



Within the *environment/landscape* theme, four discrete sub-themes emerged (flora, geological/topographical features, mountains, and water) as visitors described what made an environment natural. In general, these were visible features of the environment, rather than factors such as natural processes.

The depth of responses across all three wilderness locations showed how people attempted to verbalize their reasoning.

“I would have to say there was some garbage at the campsite, there was some plastic there. That was sort of un-natural. Generally speaking for as used as this area is I think it’s pretty good. I don’t know, meadows, valleys, beautiful alpine trees, clean mountains and lakes, spectacular mountain view.” (Female, 47, Overnight, Eagle Cap, E18 08.09.02-4)

Features related to flora (e.g., plants, flowers, and trees) were often talked about by respondents when describing naturalness. This excerpt exemplifies how some visitors reported feelings of naturalness:

“I find it wonderful. I find it absolutely inspiring; you have these huge green leaves, and really delicate flowers. The contrast between the lake and the mountains is dramatic. You’ve got a lot of different things. You’ve got the tenderness of the plants and the glamour of the rocks and water.” (Female, 51, day, Pete Lake, E11 07.14.02-2).

Geographical/topographical features represent the second environmental sub-theme of naturalness. The following two excerpts, by two different Eagle Cap visitors, describe what it means for a place to be natural.

R1: “Well, it's raw and its carved granite with glaciers. In terms of naturalness, except for the trails and campsites this is as natural as it can be.” (Male, 47, Overnight, Eagle Cap, E18 08.10.02-1)

R2: “As far as the geology goes, I think that it is a very unique place. The only other place that I've ever seen like this is the other side of the Eagle Cap Mountain where you hike up. It kind of reminds me of Sequoia National Monument in California, a little bit, mostly just the granite.” (Male, 23, Overnight, Eagle Cap, E18 08.10.02-2)

As seen in the second example, the respondent relies on comparison to contrast the area to another place as a strategy to describe what naturalness means. We observed this routinely in discussion of all four qualities. Additionally, it often seemed easier for visitors to describe what a concept was not rather than what it was. For instance, when we asked whether the area felt natural to a day hiker in Alpine Lakes Wilderness, she said, “well, I wouldn't give it a 10 because if it was most natural, I wouldn't be able to walk in here” (Female, 50, Day, Alpine Lakes, E7 07.04.02-2).

The final two environmental sub-themes are mountains (e.g., ranges, alpine areas, peaks, and open landscape) and water (e.g., lake, stream, waterfalls). Even though these two sub-themes, particularly mountains, were associated with the other three qualities, they were especially relevant to the concept of naturalness. Here a visitor assesses and identifies naturalness factors in terms of the water sub-theme, when she says, “you know, I think that just almost any time you're out and it's clear and the river is clean and it, I don't know, they're all 10's.” (Female, 47, Day, Alpine Lakes, B4 07.04.02-2).

Ecological impacts comprised the second main theme related to naturalness. When discussing ecological impacts, wilderness visitors described five sub-themes: evidence of campsites, presence of trails, vegetation degradation, trail wear, and litter. These were often explicitly acknowledged by visitors as detracting from the natural quality. However, respondents frequently pointed out that, despite their “unnaturalness,” some of these features were desirable. For example, this backcountry visitor to the Mount Jefferson Wilderness talks about naturalness and selecting a campsite. As is evident from his words, the respondent distinguishes between what is natural and what is desirable:

“I think it's [this place] great. I mean, um, certainly not completely untouched, but if it was completely untouched, you've got a lot more work as far as, you know, finding a campsite and building a fire pit. And so, it's, um, just enough of the human touch to make it easy to experience.” (Male, 29, Overnight, Mt. Jefferson, E3 06.09.02-16).

The next example also shows how campsites and trails arose when visitors were asked about naturalness. However, unlike the above respondent, for this respondent, the wear of the trail as well as the number of campsites were obvious impacts, yet did not really affect naturalness. Her words indicate the types of things – in this case recreation impacts – that come to mind when asked about naturalness.

“It’s just a real established trail. A lot of, a lot of campsites in some spots. Um. I guess that doesn’t make it less natural but it makes it, you know, a little bit more shredded I guess.” (Female, 30, Day, Alpine Lakes, E7 07.06.02-4).

In the minds of many wilderness visitors, the lack of ecological impacts had more to do with naturalness than it did with the other concepts (remoteness, primitiveness or wilderness). Respondents often discussed the impacts to vegetation as they were telling their stories. For example, when this Lakes Basin (Eagle Cap) visitor was asked if the area felt natural, this is what she had to say:

R: “Yea it does. You can tell it’s worn and you see re-vegetation signs and stuff like that, but it still looks pretty good.” I: “Does that take away, distract from your experience?”
R: “It’s actually a little disappointing. I think it’s great that they are doing it, but it’s too bad it has to be done. It’s too bad that we weren’t able to balance it out differently so that you didn’t have to close sites.” (Female, 34, Overnight, Eagle Cap, B9 08.03.02-1).

Another example is given by a visitor to Marion Lake. When we asked this solo wilderness visitor if he thought the area felt natural, he responded with the following:

“Pretty natural, but I mean at the same time you look around and the whole area is pretty much beat down and stuff. If we were off trail there would be bear grass everywhere and stuff like that. This is about as natural you can expect it to be for an area of this high use. If you go a quarter mile off into the woods it’s pretty natural.” (Male, 28, Overnight, Mt. Jefferson Wilderness, E2 05.27.02-11)

This respondent, like many other visitors, qualified his response by pointing out that much of the wilderness is very natural and available to those who seek it. He also recognized that allowing recreation use necessarily entails a decline in naturalness. This type of reasoning (which might be considered cognitive coping) was present throughout the interviews in relation to all four concepts. It demonstrates that visitors are aware of the “ideal” conditions – no impacts, even trails – but accept this loss of naturalness as basically inevitable if use is to occur. Recreation use itself is not natural – instead it causes declines in naturalness.

Respondents also talked about trail wear or damage to trails by stock users or the total volume of use, and how those relate to naturalness. Although wilderness visitors from all three research areas talked about trail impacts, the majority of these comments came from the Eagle Cap Wilderness. This might be due to the fact that the location was studied during the latter part of summer (August and September) after a full season of use. Also, the Eagle Cap Wilderness had much higher levels of stock use than the other two areas. In this excerpt, an early season visitor to Mount Jefferson Wilderness talks about how well the trails are maintained in response to a question about naturalness:

“I think it’s been preserved pretty well. They’ve done a lot of work on the trails, but one thing the ranger told us up at Marion [Lake] is that last year they had over 5,000 people come through here. And I think for that much traffic, I think they’re doing a good job of keeping it natural.” (Female, 42, Day, Mount Jefferson, E4 06.15.02-5).

When talking to hikers at the Lakes Basin area of the Eagle Cap Wilderness, the discussion often revolved around the dusty nature of the trail, which was usually attributed to stock users. For example, an overnight backpacker, when asked about whether he thought the area was natural, said the following:

“Pretty natural, [but] the horse trails bug me. They are pretty worn down. I think it’s pretty natural, especially the further you get away from the general Lakes Basin Area. I think this [area] is very natural but it does have a lot of use. We found a fire pit up here and you’re not supposed to have fires next to the lake and that kind of stuff bothers me. I consider this pretty natural if you compare it to other places in Oregon that are really near population centers. They get a lot of use, where this is more isolated, not really near any major population centers. So I consider this a little more natural than some places.”
(Male, 27, Overnight, Eagle Cap, E15 08.06.02-4)

Litter was the final sub-theme of ecological impacts. In each case, people mentioned seeing litter and uniformly said it detracted from a feeling of naturalness.

One thing that stands out is that individuals do not simply give a list of attributes when asked about naturalness; instead wilderness visitors provided narratives of their on-site experience in a personal and meaningful way. They see naturalness as a continuum and evaluate the current level against knowledge of other places. They consider a variety of conditions, including types of impacts and the big picture, when forming an overall assessment. The following excerpt from a solo backpacker exemplifies the complexity of individual narratives, showing that they consider and weigh several different elements when forming an overall assessment.

“Well. (Pause) I’d characterize [this place] as somewhat impacted, but, um, definitely more natural than what you’d get in the cities or most of the places right near the roads. You know? Just hiking in a couple of miles makes a big difference. Um. There was a fair amount of trash and people, both of which I associate with not being natural. But, uh, and some clear impacts of people spending a lot of time – there are fire pits and, you know, wood being moved around and other things like that” (Male, 31, Overnight, Ann Lake, E6 06.23.02-6).

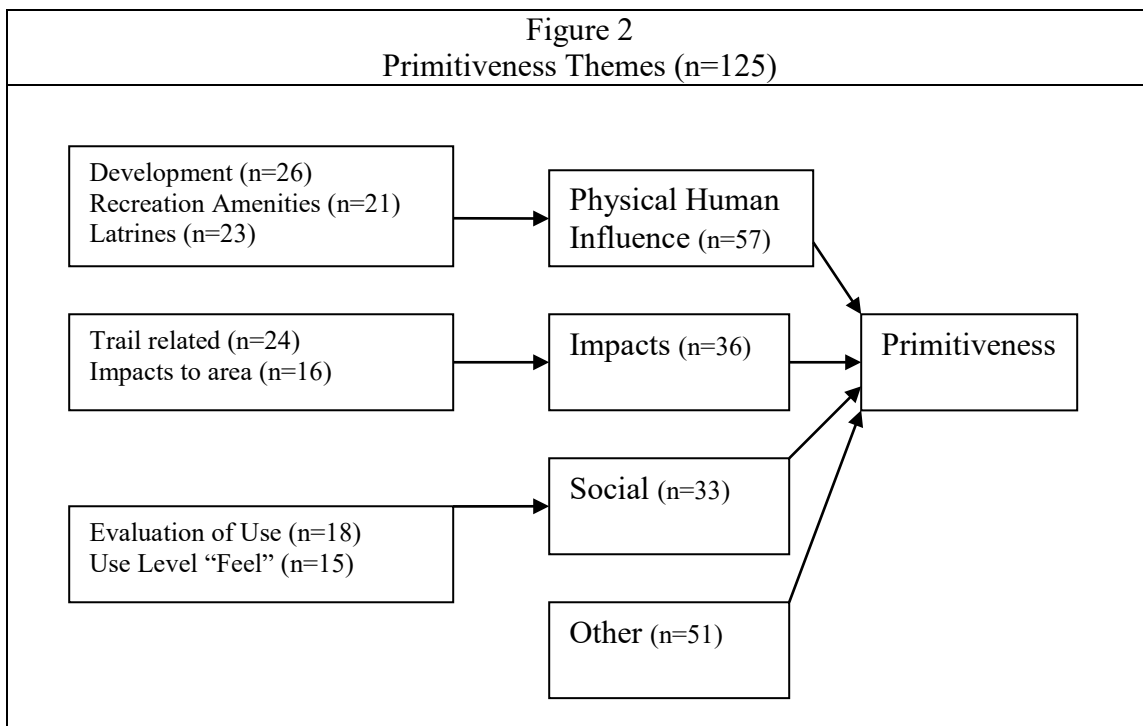
As a final note, the above excerpt and others show that visitors believe naturalness relates more to the things (vegetation, geography) they see than to natural processes. Respondents did not mention natural processes being given free rein when asked about naturalness. Thus, they see naturalness primarily as a lack of human influence or development.

In sum, although the concept “naturalness” means different things to different people, there are common features that wilderness visitors associate quite often and distinctly with naturalness, namely environment (flora, topographical/geographical, mountains, and water) and lack of ecological impacts (evidence of campsites, presence of trails, vegetation degradation, trail wear, and litter).

Primitive Recreation

As with naturalness, we asked visitors whether they considered the area to be primitive and then asked what made the area primitive or not. As previously stated, some factors were common to all four concepts (mountains, water, flora, and use level). Several sub-themes were unique to primitiveness.

The varieties of answers given by respondents to the question of what makes an area primitive were less extensive than those related to naturalness (Figure 2). Often the responses were specifically tied to recreation developments and related environmental changes. In particular, under the development impact theme, three distinct sub-themes arose, and under the impacts theme, two sub-themes emerged. At the same time, there was more unique variation in people's responses regarding this quality than for the other three qualities, with 51 people citing factors that were relatively unique.



The first sub-theme had to do with physical features created in the environment. Often visitors referred specifically to latrines in the backcountry. Many wilderness visitors, although appreciating and understanding the purpose of having latrines in the wilderness, felt they distracted from their overall experience. (At the time of our study, toilets were present at Marion Lake but not at Pete Lake or the Lakes Basin.) Having amenities, including latrines, in the backcountry was seen as being in opposition to primitiveness. In this example, a wilderness visitor discusses primitiveness in terms of amenities and then goes on to compare this area (Eagle Cap) with another study location (Alpine Lakes).

“It’s um, I’d say it’s pretty primitive, it’s uh, it needs to be personal. I don’t even think there’s really toilets up here. And when I go up to the Alpine Lakes in Washington, they

actually have latrines with toilet seats, so it's a little nicer for that. But this is uh this is about as primitive as you can get." (Male, 58, Overnight, Eagle Cap, E14 08.06.02-2)

This comparison based on his personal perspective allowed him to make a distinction – that this place (Eagle Cap) was primitive, whereas Alpine Lakes was less primitive. A similar theme was offered by a solo Mount Jefferson backpacker who said, “as far as primitive, I guess it depends where you’re coming from,” suggesting assessments are personal in nature and influenced by past experience (Male, 28, Overnight, Mount Jefferson, E2 05.27.02-11).

Just the presence of amenities, such as toilets, seems to take away from the sense of primitiveness. In this instance, a young backpacker describes what a primitive area “should not” possess, when he says, “Well there is a bathroom over there and there are signs all over the place, normally primitive areas don’t have those. No signs of civilization” (Male, 16, Overnight, Mount Jefferson, E2 06.07.02-13,14). It is interesting to note how, in this next excerpt, when an individual makes an initial assessment but is reminded about facilities, he amends his response.

I: “Okay. Would you consider this area primitive?” R: “Yes.” I: “What makes an area primitive?” R: “Um. No toilets. No, you know amenities that you would otherwise normally have.” I: “Okay. You mean like flush toilets because there are pit toilets up there?” R: “Oh yeah, there is pit toilets, isn’t there? (Chuckle) I forgot we passed those on the way in. Yeah. I guess it’s almost primitive.” I: “Okay.” R: “It would be ‘almost,’ more applicable.” I: “So, you’ve already even forgotten about those?” R: “Yeah. You know.” (Male, 26, Overnight, Mount Jefferson, E3 06.09.02-20).

These kinds of evaluations illustrate the complexity of wilderness visitor responses to concept definition questions. That is, like natural, primitiveness represents a continuum, with more development meaning less primitive. The type of development matters, with the more constructed and convenience-oriented developments being less primitive. Similarly, in this next example, a visitor is somewhat confused by what we mean when discussing primitiveness.

I: “I’m not sure what that [primitiveness] means. It’s primitive, there aren’t any facilities but there are areas to camp that are nice and flat. It’s kind of dusty. I guess there is a campsite over there. But it’s not like there’s picnic tables and outhouses and stuff.” (Male, 44, Overnight, Eagle Cap, E20 08.12.02-3)

Despite a quick initial response that he did not know what primitiveness means he goes on to describe what it means for an area to be primitive and then continues his assessment by stating what is missing from the environment that would compromise its primitiveness.

Impacts to the immediate area (created by visitors or management) represent the second development impact sub-theme. In this example, an overnight visitor to the Alpine Lakes Wilderness talks about how the area feels mostly primitive because of limited impacts. His statement illustrates that the magnitude and source of impacts is important in assessing primitiveness. (Note also the reference to technological “machinery.”)

“Yeah. I would call it primitive just because it feels untouched. It doesn’t feel like it’s been, you know, modified by man in any real way. You know, the only real hesitation is that this camp area on the other side of these rocks here is fairly well established and

there are a few fire rings and things like that, so people have been here and it's had some impact. But, uh, yeah, it hasn't really had, there's no, I don't think there's been any real machinery here, at least not for 100 years." (Male, 35, Overnight, Alpine Lakes, B4 07.05.02-1)

In the next illustration, an overnight visitor to the Lakes Basin in the Eagle Cap Wilderness talks about the absence of development or extractive uses (logging) as contributing to primitiveness. Note also how he specifically mentions wilderness.

"There is very little development in the area besides campsites. To my eye, I see original growth trees. There certainly isn't any logging in the area. No seen structures with the exception of that one area around Aneroid Lake where there is that big campsite, with cabins. Doesn't bother me but it is something that slightly detracts from the wilderness." (Male, 65, Overnight, Eagle Cap, E17 08.09.02-2).

As illustrated in both the previous excerpts, respondents oftentimes seemed to find it easier to describe concept sub-themes by talking about the absence of features. For example, in the above excerpt the visitor talked about the fact that the area hadn't been logged and the lack of structures. In another example, when we asked a 46-year-old overnight visitor to the Eagle Cap if he thought the area was primitive, he said "Very [primitive]. Obviously you don't have designated campsites" (Male, E20 0812-2).

The presence or condition of trails was the second development impact sub-theme to emerge. In this next example, a Mount Jefferson Wilderness visitor rates the level of primitiveness, on a scale from 1 to 10, by talking about how the area changes as the season progresses. Along with use level (which appears to detract), having a well-maintained trail keeps the area from feeling fully primitive.

"Primitiveness? (Pause) I don't know, 7? Um. And only because, you know, there's, I guess I view primitive as, you know, untouched by man kind-of-thing. And, Marion Lake is one of the more popular lakes, and so, not today, but later in the summer it's going to be more crowded so there's more people here and the trail is well maintained and so, I'd say 7. (Male, 26, Day, Mount Jefferson, E4 06.15.02-6).

When asked what would make this area completely primitive (a ten), another person responds by saying, "A ten, I don't think I would be seeing litter and so many criss-crossing trails. Overall it's a seven because it is mostly in its natural state. Only a little bit of trash and not too many people" (Male, 32, Overnight, Eagle Cap, E16 08.07.02-2). (This particular excerpt illustrates the multifaceted nature of concepts, including references to both litter and crowding.)

A visitor's ability to control whether or not s/he experienced a quality – the idea of being able to seek something out nearby if desired – pervaded many of the discussions for all four qualities. "Controllability" can be thought of as a coping behavior visitors used if the current situation was less than optimal. In this next example, an Eagle Cap visitor illustrates this point when asked if the area feels primitive.

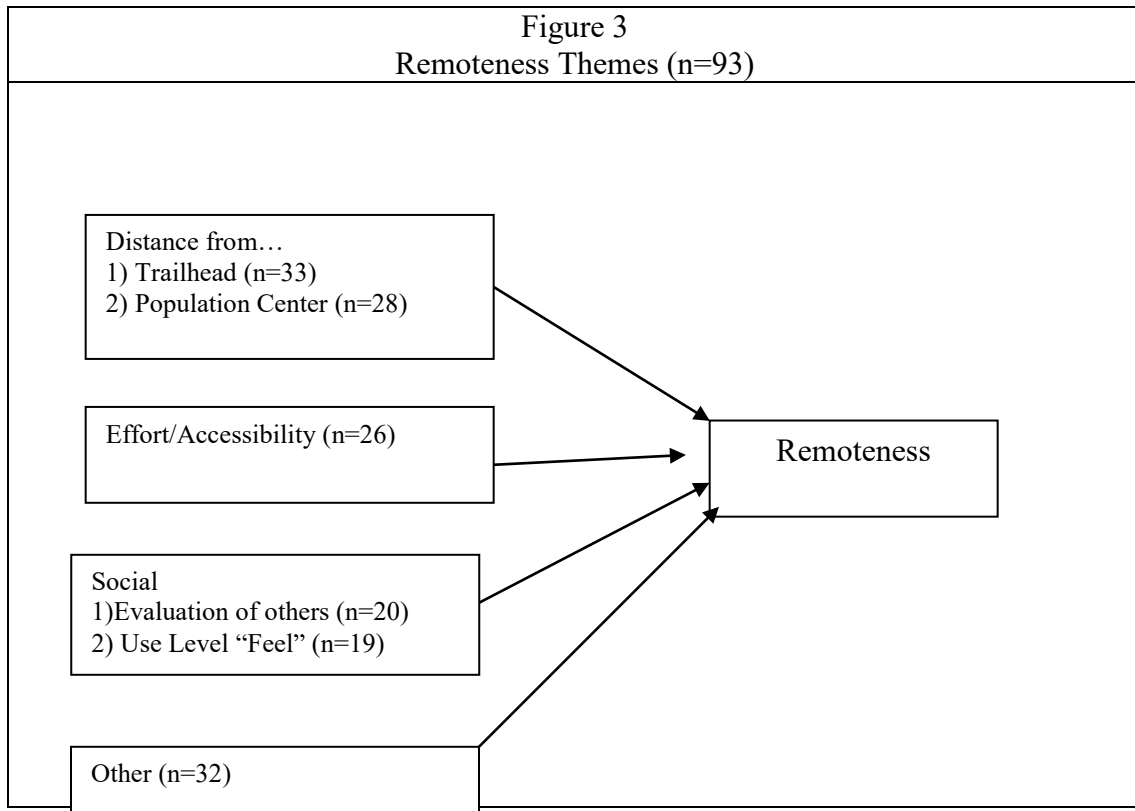
"Yea, it does. Trails are well maintained, when I think of primitive I think of places that are [unintelligible] that I usually associate with trails. The trails here are really well

maintained here and there are lots of them, but if you got away from main areas that I've been consistently going to you could be in some pretty primitive areas where the trails are only maintained by volunteers or people that come up once in a while, not enough for a ranger to keep them in control. You wouldn't see anybody." (Male, 23, Overnight, Eagle Cap Summit, B10 08.14.02-4)

More narrow in scope than the other three concepts, primitiveness was largely expressed in terms of development and recreation impacts. However, it is also important to recall that social elements were raised by a substantial number of people in reference to primitiveness (Table 14).

Remoteness

Three themes emerged (Figure 3) as central to the concept of remoteness: distance, accessibility, and the number of people present. Thirty-two people gave responses that did not fit into one of these three categories. Overwhelmingly the distance theme emerged as the most common aspect of remoteness to many wilderness visitors. Within this theme two distinct sub-themes emerged: distance from a population center and distance from the trailhead.



The first sub-theme (distance from a population center) is exemplified in this statement by a backpacker on the summit of Eagle Cap.

“Yea, I would think distance between here and a city is one of the big factors because that is where you are finding most of your people and it is easy for them to travel there. One place I haven’t been is the Steen Mountains in southern Oregon, you go there and you may never see another person. My friends went there this May and saw no one. It’s in the middle of nowhere. That’s a long drive from Portland, once you get out in that area it’s pretty barren.” (Male, 23, Overnight, Eagle Cap, B10 08.14.02-4).

Throughout many of the interviews respondents provided rich accounts of what remoteness meant to them. In the previous example, the visitor described remoteness in terms of distance from a population center, ease of access and comparison to another location, and he described other factors that influence remoteness (e.g., number of people) as well as the basic description of the area (e.g., pretty barren).

In this next example, a day hiker from Seattle, when asked to make an assessment of the remoteness of the area, said:

“Well, it’s not very remote. It’s pretty accessible; people can drive here in half a day or a couple of hours. It’s not very remote. But that’s an advantage too because it gives me the opportunity to come up.” (Female, 51, Day, Alpine Lakes, E11 07.14.02-2)

Placing this story in a proper context, the visitor traveled approximately 100 miles, mostly on paved roads, to the trailhead and then hiked a relatively easy flat trail 4 miles to a scenic lake in the wilderness. Again, the proximity of a population center and a secondary factor, ease of trail access, gave this visitor the opportunity to experience the environment. Here it is evident that the individual made a tradeoff, remoteness versus opportunity, and ultimately perceived lack of remoteness as an advantage.

The second, and most talked about, distance related sub-theme is “distance from trailhead.” Again, the reader will notice many of the conversations involved several aspects related to remoteness and not just simply trail distance. Illustrating this point is a day hiker who, when asked to evaluate the area in terms of remoteness, said this:

“Oh, in terms of remoteness? (I: Yeah) R: “No.” (I: No?) R: “No, I don’t think it’s very remote. Just because, the [other] backpacking that we’ve done, you hike in and you, it’s pretty intense uphill and so, I think, maybe [here] the degree of how flat it is and easy to get into – it’s really accessible. I think – in terms of driving, you can just drive, it’s only a 4-1/2 mile hike or 4 miles so, that’s nothing, in terms of weeding out the hard, hard core.” (Male, 50, Day, Alpine Lakes, B4 07.04.02-1).

In this example, the individual talks about the distance required to reach Pete Lake in comparison to other more challenging trips, as well as how long the hike takes, but also touches on another theme that we will discuss in more detail below: accessibility (effort required to reach a wilderness destination). Similarly, another visitor to the same location (Alpine Lakes Wilderness) suggests remoteness is a function of distance hiked (as well as use levels):

“It’s not remote, this isn’t remote.” I: “What would make it remote?” R: “Another 15 miles.” I: “Just distance?” R: “Sure, and how many other people you run into to. Four miles is not. It is connected with accessibility, how accessible it is. This is too accessible.” (Male, 65, Day, Alpine Lakes, E12 07.18.02-2).

When describing what it means to be remote, this wilderness visitor first says that it is a function of distance and then goes on to include two other factors, accessibility and number of encounters. The respondent, as did many others, uses the terms distance and accessibility interchangeably.

Not unlike other concepts, remoteness was often defined by contrasting or comparing it to other places. In this excerpt, a visitor compares Eagle Cap to Alaska to make sense of his assessment of the area’s remoteness.

“Well it’s certainly someplace you have to go out of your way to get to. It’s not on the main road to anywhere. Reasonably remote, there is no big population centers close. I would call it remote, it’s not Alaska but for the lower 48 it’s pretty remote.”
(Male, 45, Overnight, Eagle Cap, E17 08.09.02-2)

For a place to be remote, according to this visitor, an area must be a significant distance from a population center and must be away from roads; he then clarifies what remote “really is” by contrasting Eagle Cap to Alaska.

The second significant remoteness sub-theme, as mentioned in many of the previous excerpts, has to do with accessibility or effort required to reach a wilderness destination. As previously stated, respondents often used “accessibility” and “distance” interchangeably; however, in this conceptualization, visitors were talking about the level of difficulty or exertion required to reach their destination, not just the physical distance. In the following example, when we asked a day hiker if Pete Lake was remote, he said:

“Probably far enough away to keep the goofy people out. It’s far enough away to make it a good get away, and yet it’s so flat and easy to get to that it’s so inviting in its accessibility.” (Male, 52, Day, Alpine Lakes, E11 07.13.02-5).

For this wilderness visitor, access via a flat and easy trail, as well as being close to home were factors in making this experience not remote. Frequently, wilderness visitors would talk about other users as potential threats or nuisances and suggest that those kinds of threats were diminished with distance, as in this place being “far enough to keep the goofy people out.”

In another example, an equestrian visitor discusses accessibility in terms of his ability to complete a full trail ride in one day. When asked if the area was remote, he said, “[it’s] not that remote. I can ride through this whole area from one end to the other and be out in a good day” (Male, 46, Day, Alpine Lakes, E11 07.13.02-6). Another visitor suggested that simply having access to an area made it less remote, and his comments illustrate the range of opinion of what counts as “easy” access. At the time of the interview, this respondent was more than 8 miles from a trailhead in the Eagle Cap, at an elevation of nearly 7,600 ft., as well as hundreds of miles away from the nearest major metropolitan area. When we asked if the area was remote, this is what he said:

“I would say that honestly it’s not all that remote, being that you can access this area. I guess I think of remote as being not near a huge population center. At the same time it’s not all that remote because you can get here from many different roads. We are just a few miles from trailheads that can easily be accessed by car. So I wouldn’t say it’s all that remote in terms of difficulty to get here. It’s more remote in the sense that it’s not 20 miles from a town of 50,000 people. It’s a little hard to get to. As far as remoteness I would say it’s somewhat remote.” (Male, 26, Overnight, Eagle Cap, E15 08.06.02-5)

When we asked another wilderness visitor what she thought about the remoteness of the area, she responded by saying this:

“I think it is very accessible, great trails, easy trails. Three different trailheads that are close in, you could day hike in. So I think it is quite accessible.” I: Would you consider it remote?” R: “No, not at all.” (Female, 46, Overnight, Eagle Cap, E15 08.06.02-6)

Many respondents suggested that when an area is easily accessible it reduces the ability to be remote, in this case despite a 14 mile round trip hike. Other respondents, however, felt the Lakes Basin was remote. For example, a backpacker on the summit of Eagle Cap said “oh yea, I would say this place is really remote compared to going to Alpine Lakes or Glacier Peaks [Wilderness areas] where you know Seattle is just around the corner” (Male, 23, Overnight, B10 08.14.02-4).

The last of the three remoteness factors to surface had to do with use level or the number of people observed by respondents. Recall that this factor (use level) was common to all concepts (naturalness, primitiveness, remoteness and wilderness), with about 40 respondents mentioning the impact of use or crowding on their sense of remoteness (Table 14). However, a unique theme, raised by a small number of respondents, pertained to how use conveyed a sense of security or safety and thereby reduced the feeling of remoteness. This point is illustrated by a visitor from a group of nine that backpacked into the Lakes Basin. He described how remote it felt, yet appreciated the fact that help was nearby if needed:

“I would call it fairly remote. There are obviously a lot of people up here. You drive into the parking lot and it’s full. You realize you’re more than four and a half miles in. The other thing that makes it feel less remote, in a way it’s comforting, is the fact of the horses. If something ever did happen you would be able to contact someone, get help or get someone out. We aren’t that far out. We are only four and half from the trailhead. Only a couple hours hike to get help. Remote would be where you were a day or two before you get out.” (Male, 46, Overnight, Eagle Cap, E20 08.12.02-2)

“This is pretty remote except that people keep walking by. So it’s not like you’re out there wondering what if something happened and I’m stuck out here. It’s pretty close, we’re not way out there. So same thing, a lot of people are out there.” (Male, 39, Day, Eagle Cap, B12 08.31.02-1).

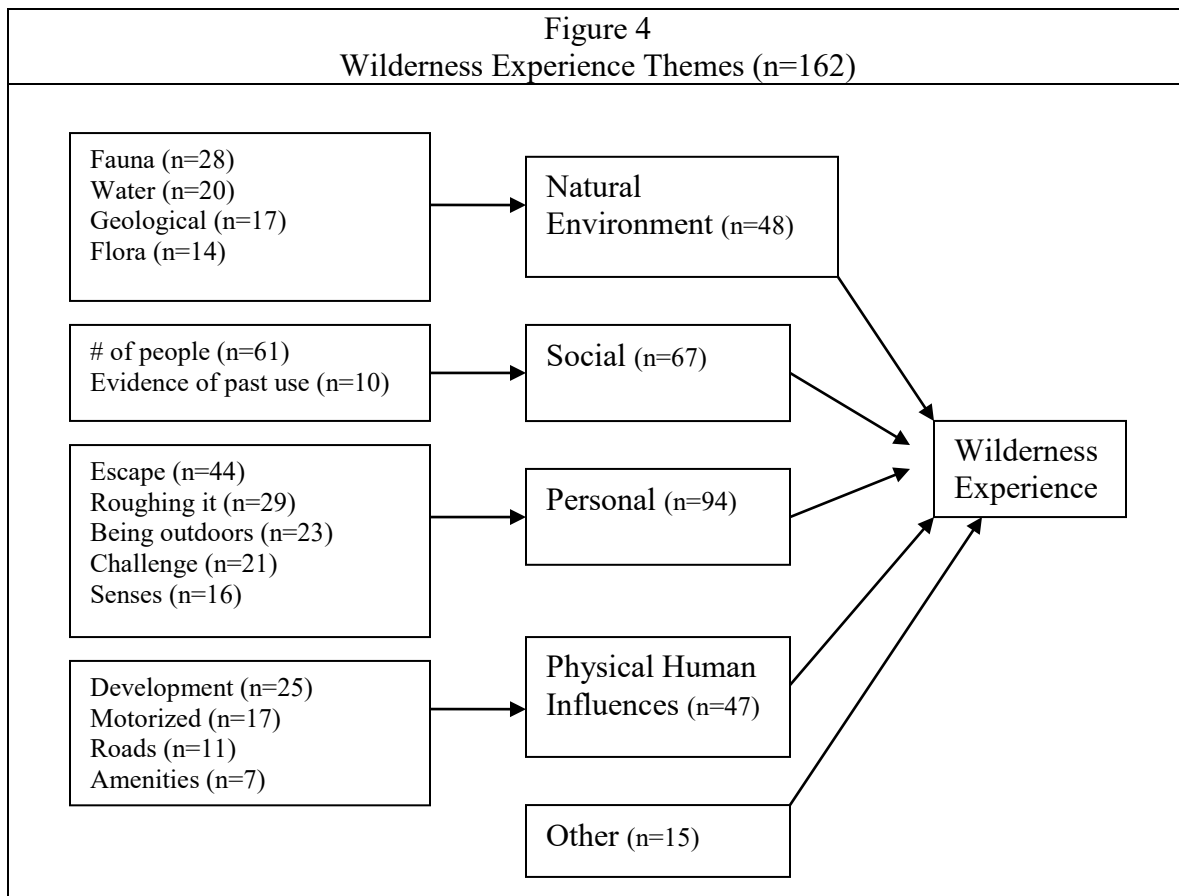
To these visitors, as for many others, remoteness seems to be enhanced by reducing the number of encounters with other backcountry visitors and the distance from trailhead, but also when there is an absence of a safety net.

The remoteness concept seemed to be better understood by respondents than the other qualities. There are certain key remoteness factors that pervaded discussions, for instance, distance away from population centers and distance from trailheads, accessibility or the amount of work required to reach a wilderness destination, and the level of use.

Wilderness

Experiencing wilderness is either an outright goal of many wilderness visitors or just assumed to happen by virtue of traveling in a wilderness. When asked about wilderness, oftentimes the ideas offered by respondents were similar to those mentioned in reference to the other three concepts. However, there were several themes that arose during interviews that stood out as prominent to people’s understanding of wilderness. The four primary themes, each with several sub-themes, were environment, social setting, personal experiential factors, and development. Only 15 respondents offered unique, individual insights that were not at least in part captured in one of these four categories.

An environment theme (Figure 4) was the theme to emerge during the interviews. Within this, four sub-themes – water, flora, fauna, and geology – were consistently brought up during interviews specifically tied to the idea of a wilderness experience. Even though the sub-theme of water was common, to some degree, to all four qualities (naturalness, primitiveness, remoteness and wilderness), it appeared to be particularly salient when discussing the wilderness quality.



As previously discussed, and illustrated in this next example, when respondents were talking about what defined a concept for them, they were apt to describe a complex array of factors. For instance, a Pete Lake day hiker illustrated this point when asked what makes a wilderness experience. She mentioned water, but also many other things.

“You can sit in the mountains, you can hear the stream, you can be hungry, and you don’t have the sounds of the city. The birds and all the little frogs that hop around, all those things you don’t get to see in the city. The sun coming through the trees is beautiful.” (Female, 47, Day, Alpine Lakes, E9 07.11.02-2)

It is interesting that, when individuals were discussing what made for a wilderness experience, the first things they often spoke of were environmental/landscape factors. Not surprisingly, water plays an important role in the conceptualization of wilderness as part of an individual’s multi-sensory experience. People talked about water as a destination, a place to hike to; water as setting off a scene, with a lake in the foreground and mountains in the background; water as a soothing sound; water as a sign of a healthy environment, or clean water; water as a drinking source; and water for recreation (swimming or fishing). The following excerpts illustrate the relation between wilderness experience and water.

R1: “My idea of a wilderness experience is like a smaller lake with like maybe one other camp on the other side of it.” (Male, 28, Overnight, Marion Lake, E2 05.27.02-11).

R2: “The thing that got me first was the river, as we started up. That comes right out of the snowfall -- that was my first thought of wilderness cleanliness was the water.” (Male, 65, Day, Pete Lake, B8 07.18.02-1).

In much the same way, wilderness visitors talked about flora and fauna, the second and third sub-themes. Although separate concepts, these are addressed in tandem for simplicity and clarity. The act of walking through a forest, smelling the scent of the pine forest, listening to the wind blowing through the trees, observing flowering plants, seeing animals and hoping to see large animals were important to a wilderness experience. Generally people hope to see wildlife, but oftentimes they do not. Yet the experience of walking through an old growth or intact forest provides for a unique experience, as discussed by this day hiker:

“To find wilderness, to find these kinds of experiences. You find experiences like that lots of places, but this kind of area is more likely to show you the unexpected. Not necessarily seeing a big critter but the old growth forests and snags.” (Male, 52, Day, Alpine Lakes, E10 07.13.02-2).

The idea of wilderness experience as being a multi-sensory experience was exemplified by another day hiker to the Mount Jefferson Wilderness. When talking about how the forest impacted her, she said, “the smell of nature, just the smell out in the woods. You get away from all the exhaust and pollution and just fresh air” (Female, 42, Day, Mt. Jefferson, E4 06.15.02-5).

In addition to the environment theme, two other related themes emerged as important to how visitors understood wilderness experience: social and personal. The social theme will first be discussed. Much of the past wilderness research has focused on solitude and how encounters

with other people affect wilderness experiences. There are two sub-themes under the social theme that were relevant to many wilderness visitors and illustrate the complexity of this concept. In keeping with the notion of the number of encounters (or the number of people observed) as being central to experiencing wilderness, we found that visitors often talked about the influence other people have on their experience. In fact, use levels and/or encounters were the most prevalent factors raised in reference to any of the four concepts. However, encounters alone do not seem sufficient to understand the totality of wilderness experience. First, many other elements were important as well. Second, although respondents were quick to note that encounters adversely affected their wilderness experience, they often suggested a positive side as well. The following few conversations illustrate the complexity of how people dealt with the effect of encounters and crowding on their experience. Here a day visitor to the Eagle Cap Wilderness was asked what she considered a wilderness experience to be:

“Not as many people. I’ve never been in a wilderness area that’s been abused. This was the first time. I’ve just never seen anything as crazy before. I totally get it, it’s an amazing place. Everybody was very nice and doing their own thing but somehow it’s disconcerting to me...It did have an impact on it’s not like I am irritated by them being here. Everybody was great and good and all that. It was just something unique in terms of my own experience.” (Female, 44, Day, Eagle Cap, B11 08.17.02-2)

In this example, the complexity of how visitors process information to arrive at their assessments is evident. Initially the visitor talked about how busy and abused the area is and then described how nice the people she met were. Furthermore, when later asked if the “busy, abused” place was crowded, she indicated she did not feel it was. Clearly the situation was not ideal and probably not expected, yet the woman was reluctant to classify it as an entirely negative experience.

Other wilderness respondents suggested encountering backcountry visitors is a positive experience. In this example, a day hiker during a moderately busy day at Pete Lake (Alpine Lakes Wilderness) said,

“I admire them for wanting to be out here. I feel that I want to help them with their experiences, because I think they go out with not much knowledge. I feel that I would really like to talk to them, but I never really open up a conversation other than ‘thank you for stepping off the trail’ or that kind of thing. You try to put them in a good mood if they’re straggling and have heavy packs on or something. I admire them for being out here. Something in the universe just brings them out” (Female, 60, Day, Pete Lake, E11 07.14.02-3).

This next excerpt sheds light on how visitors have changing degrees of on-site wilderness experience over the course of their trip, depending on the presence of others. Within the context of a short overnight backpacking trip, this visitor reported having both a “serious wilderness experience” and one that was “less than optimal.”

“I had a serious Wilderness experience yesterday up there. I was the first one this year on Marion Peak. I was the first one to go up that trail all the way, to the intersection with whatever it is, the temple? Uh, temple trail? And in fact, I reported to the rangers the

condition of the trail as well as the condition of the trail up to Lake of the Woods which I did last week. Um, you know, so. I come up and I have Wilderness experiences. At our campsite? (Wife: No) It was less than optimal.” (Male, 50, Overnight, Marion Lake, E3 06.09.02-17).

Apart from directly observing other people, evidence of past visitor use was another sub-theme to arise related to wilderness. Respondents talked about the size of the trail, litter, abused campsites, and fire rings, as well as the knowledge that they were not the first ones to have stepped on the land, as evidence of past use. In one example, a 43-year-old day hiker said a wilderness is “a place that is more or less devoid of signs of human activity or has minimal amounts of human activity. Yes, the low impact and activity. That’s definitely a key” (Female, Alpine Lakes, B8 07.18.02-2). However, references to these impacts came up much more in relation to naturalness, whereas references to encountering people came up more when discussing wilderness.

Personal experiences in wilderness made up the third wilderness theme and encompassed aspects inherent to the individual, including personal preferences and experiences. There were five key sub-themes that wilderness visitors talked about as part of their overall wilderness experience: escape, challenge, roughing it, being outdoors, and sensory elements of the experience.

Many respondents suggested wilderness should provide for challenging opportunities. Challenge was described in many ways; for example, visitors would talk about the challenge of being away from home, the exercise involved in reaching the destination, going off trail and “bush whacking,” and using a compass. In this excerpt, an early season backpacker explained what a wilderness experience would be for him, by saying,

“A complete wilderness experience would be, you know, just, I would say, off the trail where you’re, you know, just using, like you have a point, you want to get to a lake or something, in the complete wilderness where you’re using a compass and getting there and nothing, you know, there’s like no people around. I’d say that’s a complete wilderness experience to me.” (Male, 19, Overnight, Mt. Jefferson, B1 05.26.02-9)

In another example, a visitor talked about the determination required to achieve the wilderness experience. The idea of “roughing it” often appeared, as suggested by the following exemplar.

“You have to try everything, you have to be self-motivated, you have to push it, and you have to be able to handle it. Basically, there are no frills here. Everything is as it is. You have to adapt to it, work with it, and make it work for you. Sometimes you can’t have things go the way you want and you just have to accept that. That goes with the territory.” (Male, 28, Overnight, Alpine Lakes, B9 08.04.02-1).

His comments point to the fact that people use other related concepts, such as motivation and self-reliance, to describe what constitutes a wilderness experience.

As suggested in environmental psychology theories, such as Attention Restoration Theory (Kaplan & Kaplan, 1995), “being away” is a key construct that underlies many of the principles of psychological restoration. In this study, wilderness visitors may not have used this

precise terminology, but the idea was the same when they talked about “being out in nature.” Whether individuals used these general terms because they did not have a more specific vocabulary to express their feelings about wilderness remains in question. However, the phrases “being outside” or “being out in the woods” occurred with such regularity and in the context of psychological escape from the modern world that they appear to carry important meaning to many of the respondents. In this example, an overnight visitor to Marion Lake talks about what a wilderness experience is to him.

“Just being away from the things that you normally have. You know, being away from your car. Everywhere you want to go, you have to hike. Or if you had a boat, you could [get there] in your boat. You know, just being out in the woods. Even not necessarily in the woods but out of, out of where there are people and where society has changed things.” (Male, 19, Overnight, Mt. Jefferson, E1 05.26.02-7).

Throughout this paper there have been examples of how people use complex language to describe their wilderness experience. This next example illustrates how some visitors discussed sensory perceptions, using sense data to describe their wilderness experience. In this case, the use of senses other than vision, combined with descriptions of the environment and how it made him feel, contributed to the visitor’s sense of a wilderness experience.

“Just being in the outdoors. Smelling the fresh air, the sun glistening on the ripple in the lake. Just being out here. It’s not where I come to rejuvenate, but it is rejuvenating.” (Male, 65, Day, Alpine Lakes, E12 07.18.02-2)

Multi-sensory descriptions of the wilderness experience were common, as suggested in the previous exemplar. For instance, respondents were likely to talk about the scent of the forest when discussing wilderness. This idea is illustrated by a Mount Jefferson Wilderness day hiker, when she said, “the smell of nature. Just the smell out in the woods” (Female, 42, E4 06.15.02-5). Often visitors would describe different senses to capture aspects of the wilderness experience that are difficult to express through words, as suggested by this excerpt:

“Yeah. Oh, yeah. You know, the smells, the sounds, this trail when you hit it, you know, down there, it’s got a certain ring to it and you know right away. It’s like, we’ve been walking on this thing forever. So, yeah, the sounds of things and the smell of things.” (Male, 40, Overnight, Mt. Jefferson, E4 06.15.02-1)

The ability to consciously access and describe many of the cognitive, affective, and somatic states (physical sensations) that combine to make a wilderness experience proved difficult for some respondents.

The final wilderness theme has to do with development impacts. Respondents consistently talked about issues in the negative (absence vs. presence terms), for instance, about the lack of structures or the absence of some “thing.” Under this theme arose four related sub-themes: 1) lack of development (i.e., visitors used a general catch-all term denoting physical human influences upon the landscape); 2) lack of roads, in particular; 3) lack of recreation amenities; and 4) absence of motorized traffic. It should be no surprise that many of these ideas were talked about together when people were asked what made for a wilderness experience. In

this first of several exemplars, we find a 65-year-old day hiker talking about how difficult it is to express his definition of wilderness.

“Man these are hard questions. Well, the obvious, being outside, being away from an environment that’s been built up. No permanent structures, no running hot water, all those type of things.” (Male, Alpine Lakes, E12 07.18.02-1)

However difficult it was for many respondents to access their thoughts and feelings about wilderness, they often succeeded in providing a rich description. Wilderness visitors, even those with limited knowledge of a formal definition of wilderness, isolated issues that are central to the Wilderness Act. For example, this overnight visitor to Eagle Cap Wilderness said,

“I think what makes a wilderness experience is that you are able to get out and experience a very natural environment without seeing cars, roads, and buildings, stuff like that. To me a wilderness experience means an area that has had minimal impact on it by humans.” (Male, 26, E15 08.06.02-5)

As in the previous example, where the visitor talked about what the wilderness did not possess, this visitor expanded on the notion by including other relevant wilderness ideals.

“A wilderness experience is being away from a motor, a motorized vehicle, uh, being away from running water and all the conveniences of home, and making you a little more dependent on being creative. Roughing it, in a sense, uh, the solitude of being in an area that’s set aside, knowing that because it was set aside, it will probably be pretty much like this in another 100, 150 years, and your grandkids and great-grandkids could come up, and it would be pretty much the same way.” (Male, 58, Overnight, Eagle Cap, E14 08.06.02-2)

Lack of development, roads, amenities, and motorized traffic were consistently expressed by visitors as defining characteristics of the wilderness experience.

Overall respondents seemed better able to express themes related to their wilderness experience than the other concepts. Interviews point to four main themes: environment/landscape, including water, flora, and fauna; social aspects, namely presence of visitors or evidence of past use; personal aspects, relating to challenge, roughing it, multi-sensory experiences, and just being outdoors; and finally, development impacts often expressed in absence vs. presence terms (roads, amenities, motorized traffic, and development).

DISCUSSION AND CONCLUSIONS

Based on the literature on wilderness experiences and philosophy, we expected to identify several themes running through visitors’ discussions of the four qualities. In this section, we review those expectations and discuss how well our interviews conformed to our expectations. Then we summarize our findings about the extent to which visitors achieved experiences of the different qualities and possible reasons for our findings.

Dimensions of the Four Qualities

The theoretical and empirical literature we reviewed led us to expect that, when asked about wilderness experiences, visitors would describe social, natural, and managerial conditions as influences. As might be expected, given the definitions in Section 2(c) of the Wilderness Act, natural environmental qualities are considered a defining element of wilderness. Several authors also see a basic definitional link between primitiveness and wilderness. Therefore, we expected the three subsidiary qualities (naturalness, primitiveness, and remoteness) to be raised by visitors in their discussions, and we also expected solitude to be an important dimension.

Naturalness is typically defined as the absence of human influence, but also in reference to innate processes that occur in wild systems. Thus, we anticipated that wilderness visitors would mention a lack of human influence, but we were not certain about whether they would focus on any particular types of influences (e.g., buildings) versus those that might be seen as more acceptable (e.g., trails). Some scholars have argued that naturalness will instill specific types of sentiments, such as beauty, awe, and reverence (Kaye, 2000), and we examined interviews for such affective responses.

In the literature, primitiveness is associated with pioneering, virile lifestyles. It conjures up an image of the frontier and rugged individualism. Among wilderness visitors, then, we expected references to self-reliance and the lack of technology as key descriptors of the primitive experience. We also expected them to describe the absence of modern influences or permanent human features as influences on whether a place felt primitive.

Finally, although little work has been done specifically on the concept of remoteness in the context of wilderness, we expected that people would mention physical separation from population centers as a critical factor. Additionally, we expected remoteness to be mentioned as one of the qualities of a wilderness experience.

The ability of wilderness visitors to verbally express what each concept meant to them varied across respondents. We encountered individuals who were able to express themselves eloquently, while others simply gave one word responses. By and large, though, respondents were generally willing and able to talk to us about their wilderness experience and often gave thoughtful responses to our questions. The processes utilized by respondents to answer many of the questions provide insight into how wilderness visitors make sense of their experience.

In many respects, our findings aligned well with the expectations derived from other literature, and the in-depth interviews permitted us to refine our understandings about particular elements that affect the experience of wilderness-related qualities. There were certain shared, core themes that ran through visitors' definitions of the qualities, despite some variation in responses.

With respect to the wilderness experience itself, we found that visitors focused extensively on both natural and social influences. Among environmental features, water and animals contributed to a sense of wilderness, as did lack of developments. The overall "feel" of use levels at the place was also quite central to whether one did or did not experience wilderness. In describing the wilderness experience itself, people often made reference to being outdoors or away, to the challenges of roughing it, and especially to aesthetic qualities of the environment. These elements were all highly consistent with our expectations derived from prior research.

There were some respects in which our findings diverged from prior suggestions about wilderness experiences. For instance, some have suggested that site impacts from recreation would be primary biophysical influences. Instead, we found that lack of development, rather than more micro-scale recreational impacts, affected the feeling of wilderness, and the larger scope

and configuration of the environment (mountains, water, diverse panoramas) were more important than recreational impacts, even though impacts are extensive at all three sites. Additionally, others have suggested that conflict and visitor behavior would be central to wilderness experience. We heard few references to such factors (more attention was devoted to overall use levels), but this could be the result of the relatively infrequent nature of conflict in the first place, or a reluctance to sound “negative,” which sometimes occurs in face-to-face interviews. One element that was mentioned enough to warrant attention is the common references people made to the multi-sensory nature of wilderness experiences.

As expected, when asked about naturalness, people made reference to the lack of human impacts in the environment. People considered the overall landscape, the nature and extent of recreational impacts, and the relative levels of recreational use. We did not find evidence that visitors consider “naturalness” to be a social construction, nor did we find that visitors distinguish between what is “wild” and what is “natural.” We did not probe for these distinctions, so the most we can say is that such topics did not arise naturally in the course of visitors’ conversations about naturalness or wilderness. Nearly uniformly, then, wilderness visitors subscribe to the traditional conception of natural and human as antithetical. Any human use of wilderness detracts from its natural quality; humans themselves are not natural.

When discussing primitiveness, our respondents’ comments diverged the most from what we had expected based on other literature. Wilderness visitors appear to focus narrowly on the lack of permanent structures and the absence of conveniences such as toilets, as well as recreational impacts. We rarely heard references to the pioneering or frontier lifestyle. Self-reliance and challenge were raised more in responses about the wilderness experience than about primitiveness.

Our research considerably expands what visitors consider defining qualities of remoteness. Unlike naturalness and primitiveness, remoteness did not necessarily have to do with environmental conditions per se. Instead, judgments of remoteness were based on distances traveled and, by inference, distances from “civilization.” Having to work to get somewhere also led to feelings of remoteness. The judgment of how far is far enough to qualify as “remote” was highly individualistic. Overall, it seems that the experience of wilderness depends on naturalness, and also encompasses a sense of primitiveness. Solitude and other types of subjective experiences are perceived by visitors as central dimensions of wilderness, but they are not part of the other qualities.

Clearly there are other important wilderness experience qualities that the study did not explicitly address. For example, qualities related to freedom, challenge and solitude are often cited in the literature as being key ingredients to a wilderness experience. However, for the purposes of this paper we focused attention on those concepts that receive relatively less research consideration. (Within the context of our larger wilderness experiences study, questions about attainment and definitions of solitude were asked, and these results will be reported elsewhere.) Despite our narrow focus on the four concepts, we anticipated visitors would likely voluntarily respond to queries about other qualities such as challenge and freedom. As it turns out, visitors were more likely to talk about challenge with respect to wilderness experience, but the concept of freedom rarely emerged without an interview prompt. (It may be important to note that in none of the study sites was visitor freedom seriously curtailed, although the Eagle Cap Wilderness had restrictions on where people could camp – a certain distance from lakes – and also prohibited campfires in the Lakes Basin.)

Experiencing the Four Qualities

The above discussion shows that there are core features and conditions individuals see as relevant to wilderness-related qualities. However, a different question is how direct experience of such factors affect the actual attainment of the feelings associated with each quality. For instance, two visitors might both agree that encountering other people affects their sense of wilderness, but they might differ in how the same number of encounters affects the intensity of their wilderness feelings. They may also differ in how various factors combine to affect the overall experience of the four qualities.

When we asked people if they were experiencing wilderness, naturalness, primitiveness, and remoteness, sometimes responses were ambivalent or evolved during the course of the discussion. For example, when we asked a visitor if she was having a wilderness experience, she might respond by initially saying yes, then quickly change her own response by qualifying it with no (e.g., no, there are too many people), only to then reverse her assessment again by saying that overall she was having a wilderness experience to a large degree. This may suggest that impressions were being formulated on the spot – that it had not occurred to people to think of their experience in these terms prior to being questioned. It may also indicate the inherent complexity of the questions and the way individuals understood different factors to combine in complex ways. People generally experienced the qualities at some points of their trip more than others, and therefore had to decide what response to give regarding their “overall” experience.

The degree to which people attained experiences of each of the four qualities varied considerably. Although approximately 60% said unequivocally that they were experiencing naturalness and wilderness, nearly one third said there were elements that were both consistent with and inconsistent with experience of each of the four qualities. Nearly one quarter felt that they had not had an experience of primitiveness or remoteness at all. To complicate matters more, the same “objective” environmental and social conditions contributed positively to experiences for some people and negatively for others. For example, one person might say that the small number of people they encountered made it feel like wilderness, while another felt that the same number was too many for wilderness.

Unexpectedly, findings across the three quite different study areas were largely consistent within each of the qualities. Although all three sites experience high levels of use, they differ in remoteness, natural features, and degree of impact. Nevertheless, relatively similar proportions of respondents experienced any given quality. For instance, 49-61% said they definitely had a wilderness experience (while 13-22% said they definitely had not), and 50-71% said they definitely had an experience of naturalness (while 0-4% said they definitely had not). The greatest difference across areas was for primitiveness, where 23% (Mount Jefferson) to 50% (Eagle Cap) said they definitely experienced this quality. Overall, then, there was more variability across qualities than within each quality across sites or day of the trip.

Evaluation Versus Attainment of Experiences

Visitors responded to our queries about definitions and attainment of experiences with types of responses one might expect. However, they usually did not stop there. Instead, they often rationalized or justified their assessments, to indicate why lack of full achievement was not a problem. In other words, they knew and understood what we were trying to study, but for them the essence of their experience did not wholly hinge on achievement of naturalness, primitiveness, remoteness or wilderness. They felt it was important to explain this to us. In addition to telling us whether they experienced each quality, they provided evaluative

commentary on those assessments. There were several relevant considerations, including comparative evaluations, recognition of trade-offs, consideration of overall satisfaction, and concerns about self-efficacy and control over the situation.

The Importance of Comparison

Throughout the research visitors would often respond to our questions and probes by using a comparison process to qualify their responses about experiences. For instance, respondents would compare “this” location with “that” location, and the judgment about a place’s qualities was therefore relative. The type of comparison often depended upon a previous experience. Comparisons were made with respect to an idealized location (e.g., compared to Alaska, this is not primitive); a previous time (e.g., compared to last time I was here or when I visit during mid-week, this place isn’t wilderness); times long ago (e.g., compared to 100 years ago, this place is not natural); another location altogether (e.g., compared to Pete Lake, the Lakes Basin is wilderness); and another locale within the same area (e.g., compared to 4 miles down the trail, this is remote). Several kinds of comparisons are shown below:

- Naturalness:
 - “I consider this pretty natural if you compare it to other places in Oregon that are really near population centers.” (Male, 27, Overnight, Eagle Cap, E15 08.06.02-4).
 - “I would say that this area is just like it was, like I said, a hundred years ago” (Male, 49, Day, Mt. Jefferson, E4 06.15.02-7).
- Primitiveness:
 - “I would say that it is more primitive than a lot of areas. I’ve been up in the Three Sisters wilderness area and a lot of times they will have outhouses in different locations” (Male, 40, Overnight, Eagle Cap, E15 08.06.02-7).
 - “I think that the side of that mountain is primitive because we can’t impact that as much. So parts of it are primitive and parts of it aren’t.” (Female, 33, Overnight, Eagle Cap, E16 08.08.02-2)
- Remoteness:
 - “I would call it remote, it’s not Alaska but for the lower 48 it’s pretty remote” (Male, 65, Overnight, Eagle Cap, E17 08.09.02-2).
 - “Since I’ve never been anywhere where it’s been really remote, um, I would probably guess about a 6 or a 7. The Enchantments [a nearby high mountain area with limited access] would be really remote. You know, I’ve never been up there. Because there are a lot of people here, so it’s not, to me, that remote” (Female, 53, Overnight, Alpine Lakes, B5 07.06.02-1).
- Wilderness:
 - “I guess I would say I’m not sure I know what a wilderness experience is. Certainly in the lower 48 there isn’t no wilderness (Male, 32, Overnight, Eagle Cap, E15 08.07.02-1).
 - “I had a serious Wilderness experience yesterday up there, you know. I was the first one this year on Marion Peak...At our campsite? It was less than optimal” (Male, 50, Overnight, Mt. Jefferson, E3 06.09.02-17).

Recognition of Trade-offs

Respondents often would acknowledge that conditions were not “ideal,” that impacts from recreation detracted from their sense of naturalness, or that encountering others detracted from the sense of wilderness. However, this was not uniformly considered a bad thing. People value recreational access to wilderness, and they realize that to be able to visit, some compromise is required. People often said, in this regard, that the area was “as natural as one could expect.”

“Well, it’s not very remote. It’s pretty accessible; people can drive here in half a day or a couple of hours. It’s not very remote. But that’s an advantage too because it gives me the opportunity to come up.” (Female, 51, Day, Alpine Lakes, E11 07.14.02-2)

“Pretty natural, but I mean at the same time you look around and the whole area is pretty much beat down and stuff. If we were off trail there would be bear grass everywhere and stuff like that. This is about as natural you can expect it to be for an area of this high use. If you go a quarter mile off into the woods it’s pretty natural.” (Male, 28, Overnight, Mt. Jefferson Wilderness, E2 05.27.02-11)

When asked if she was having a WE, this Eagle Cap visitor said,

It’s close enough, it’s as close as I can get with the time I have. Better than not coming at all. (Female, 41, Day, East Fork Wallowa Trail, B11 08.17.02-1).

Consideration of Overall Satisfaction

Some visitors who felt that a place did not exhibit the qualities of wilderness, remoteness, primitiveness, or naturalness explained that it did not bother them, because the trip was so enjoyable overall or they were not seeking such experiences to begin with.

“I think it’s [this place] great. I mean, um, certainly not completely untouched, but if it was completely untouched, you’ve got a lot more work as far as, you know, finding a campsite and building a fire pit. And so, it’s, um, just enough of the human touch to make it easy to experience.” (Male, 29, Overnight, Mt. Jefferson, E3 06.09.02-16).

“I think it is very accessible, great trails, easy trails. Three different trailheads that are close in, you could day hike in. So I think it is quite accessible.” I: “Would you consider it remote?” R: “No, not at all.” (Female, 46, Overnight, Eagle Cap, E15 08.06.02-6)

This type of reaction sets up an interesting dilemma for wilderness managers. Wilderness managers are not directed to manage for overall satisfaction. Instead, they are to protect opportunities for solitude, primitiveness, and unconfined recreation, which may or may not always be satisfying experiences.

Consideration of Self-Efficacy or Control over the Situation

Respondents often said they did not experience a quality, but this did not present a problem because they knew they could find such and experience should they so desire. Thus, the

ability to exert personal control over outcomes was crucial. This sentiment was raised with respect to all four qualities, but especially wilderness and naturalness. The following two excerpts illustrate this reasoning with respect to primitiveness.

“The trails here are really well maintained here and there are lots of them, but if you got away from main areas that I’ve been consistently going to you could be in some pretty primitive areas where the trails are only maintained by volunteers or people that come up once in a while, not enough for a ranger to keep them in control. You wouldn’t see anybody.” (Male, 23, Overnight, Eagle Cap Summit, B10 08.14.02-4)

“It doesn't seem primitive when you see lots of people, horses, and camps, but you can get away from those if you want.” (Male, 47, Overnight, Mirror Lake, E18 08.10.02-1)

Another visitor contacted in the Eagle Cap said the following with respect to wilderness:

“I think if the area saw a lot more use, or if the whole wilderness area saw a lot more use, but there are plenty of areas in the wilderness that you can stay away from the more crowded areas.” (Male, 26, Overnight, Moccasin Lake, E15 08.06.02-5)

Management Implications

Little research has been conducted on the aspects of wilderness experience we studied. Therefore, our findings should help wilderness managers better understand the types of experiences people are having. Several points emerged from our study that can be of use in wilderness management. Understanding how visitors define and experience the recreational opportunities the Wilderness Act describes can help managers understand how their actions – and lack of action – affect people.

Attainment of Qualities

Overall, wilderness visitors to each of the three wilderness locations reported achieving each wilderness experience quality to some degree (i.e., naturalness 90%, primitiveness 70%, remoteness 70%, and wilderness experience 72%). There were subtle differences in attainment between qualities and locations.

In keeping with the goals of planning frameworks and the Wilderness Act, wilderness management aims to provide opportunities for high quality experiences. Findings in this report provide evidence to suggest that wilderness visitors are having high quality wilderness experiences. Despite varying use levels and encounter rates, visitors were able to have quality experiences in all three wildernesses. This finding does not suggest there is currently a perceived need for restrictive practices (e.g., restricting use through limits on entries) that would be taken with the intent of ensuring opportunities for the types of experiences we studied. Visitors’ experiences are affected by use levels, and use restrictions would probably improve the quality of the wilderness experience for at least some and perhaps many visitors. However, presently many visitors feel that the level and nature of quality experiences are very high.

Multifaceted Nature of Qualities

Each of the four qualities is multifaceted, meaning that each has more than one defining feature. The study identified a set of common factors related to all four qualities. Respondents

commonly referred to two main factors – environmental (mountains, water, and flora) and social (number of encounters, evaluation of use, and overall feel) – that were central to their definitions of each quality. Visitors were also clearly able to distinguish differences between the four qualities as well. All four qualities are addressed in the Wilderness Act, and managers should provide outstanding opportunities for visitors to enjoy all of them. In most wildernesses, the environmental conditions that seem most central to the experiences are largely protected, but the social setting may vary considerably and has the potential to deteriorate over time. Moreover, ecological impacts to trails and sites affect the sense of naturalness, primitiveness, and wilderness for many visitors. Thus, many things subject to management control affect the experiences people have.

An important example of this relates to toilets. In two of our study locations (Marion and Pete Lakes) wilderness managers, because of degrading environmental conditions, have installed pit-toilets in the busiest locations (generally near the lake) in an attempt to reduce the potential for health risks and evidence of visible human waste. Interviews clearly suggest that the presence of pit-toilets in the wilderness negatively affects how visitors perceive the primitiveness of an area. The Wilderness Act mandates opportunities for primitiveness and that the “imprint of man’s work [be] substantially unnoticeable.” Managers in these two wilderness locations have opted to make a tradeoff between providing a primitive experience and erecting an unnoticeable structure for the protection of the ecological health of the area, while allowing unfettered access to the area. There are going to be tradeoffs no matter how management interprets direction in the Wilderness Act. The balancing act of protecting resources and providing opportunities for wilderness experience will remain a challenge. Tradeoffs will ultimately preference some group, some location or some particular section of the Wilderness Act. Managers will need to carefully consider the ramifications of any decision they choose.

Operationalizing wilderness experience indicators into a set of meaningful measures is recommended in planning frameworks, but often not carried out in wilderness management practice (Merigliano, 1999). Results from this study suggest current social indicators (e.g., use-density or number of encounters) do tap into the qualities we investigated. However, it was rare for visitors to describe any quality in terms of a single dominant factor. According to Whittaker and Shelby (1992), good indicators 1) address specific conditions, 2) are easily and reliably measured, 3) are sensitive to impacts or changes, 4) relate to the causes of impact, 5) are responsive to management action, 6) reflect multiple impacts, and 7) signify meaningful impacts. With this in mind, managers need to consider whether and which social condition measures are the “best indicators” to monitor wilderness experience opportunities. Determining what “best” means remains a subjective management decision.

Traditionally, measures of use-density have served as the primary indicator for social conditions of wilderness solitude, naturalness, and remoteness. Recent research reports the relationship between use-levels and solitude to be consistently weak (Stewart & Cole, 2001). Given the saliency of use, as it relates to the four qualities, and the ability to reflect many characteristics of a “good indicator,” managers should continue using use-related (e.g., encounters and use-levels) items as social indicators representative of wilderness experience opportunities. Nevertheless, it might be a good idea for managers to adopt multiple indicators that tap into other aspects of the experience as well.

Explaining the Weak Use-Quality Relationship

Despite the consistently weak use-solitude relationship observed in quantitative wilderness studies (e.g., Cole & Hall, 2005), data from this study suggest visitors consider use-related conditions to be central to their definitions of all four qualities. Accounting for the weak use-solitude relationship has proven difficult. Clearly, use (density and encounters) influences the quality of experience and the ability for some people to attain wilderness experiences. What remains unclear is why the relationship does not appear stronger.

Interviews suggest that the use-experience relationship is attenuated by visitors' other cognitive processes. During the in-depth interviews, we noted visitors used a variety of cognitive maneuvers to reduce dissonance between current situations (often related to social conditions) and their preferred states. Responding to our questions, visitors used two dominant cognitive coping mechanisms to deal with the dissonance. First, when conditions did not match desired or ideal conditions, some visitors would reason that they could have the experience if they so desired (generally by moving to another nearby area). It is clear that personal control over the situation was critical to how people evaluated what they experienced.

Second, visitors also rationalized or justified their assessment of a condition. Respondents frequently would tell us that fully achieving a quality was not a problem because it did not hinder their ability to have an overall high-quality experience. About 15-35% of respondents articulated some type of coping or rationalization in their answers. Future research will need to uncover the full extent to which cognitive processes confound the use-solitude relationship.

An important issue for managers is whether coping and rationalization should themselves be considered indicators of problematic conditions. Typically, research measures experience quality (are people satisfied? Did they experience solitude?). If people rationalize their experience, they may respond affirmatively, even though conditions are less than ideal. Managers might consider, then, that if people are "forced" to rationalize, the opportunities proscribed in the Wilderness Act are being compromised.

Similarity of Day and Overnight Visitors

There are two key issues surrounding day and overnight visitors. First, it is assumed that day visitors are less knowledgeable than overnight visitors about wilderness. The claim suggests day visitors are less experienced, visit wilderness areas for shorter amount of time, and are generally less invested in wilderness, and as a result, know less about wilderness than overnight visitors know. Our study findings do not support this view of day and overnight visitors. Instead, both day and overnight visitors (on short or extended trips) were able to describe and define characteristics of all four qualities, and there were no notable differences in the type or depth of responses.

Second, it is sometimes assumed that the day of trip (e.g., days in wilderness – day visit, day 1, 2, 3+ of an overnight trip) affects the opportunity to attain high quality wilderness experiences. This study found, whether on a day trip, short overnight or extended trip, wilderness visitors tend to report similar levels of attainment of each type of experience. However, we want to remind the reader that, at least in the case of wilderness experience attainment, only 27 respondents were interviewed past day two. In fact, most of the visitors we encountered were day visitors or overnight visitors on a short one to two day backpacking trip. Therefore, if in fact, visitors do attain the highest quality experiences on extended backcountry trips, our data were unable to provide evidence to support such claims. Our data cannot completely refute the

assumption that higher quality experiences do occur on extended trips. Moreover, it is possible that elements of the experience not reported here – such as group bonding or emotions experienced – do change with time. The factors that affect people’s experience of the four qualities – the environmental conditions and number of people present – have no necessary link to the number of days a person has spent in the wilderness.

Subtle Quality Differences between Locations

One of the study goals was to determine whether experiences differed across different wilderness settings. The three locations were chosen specifically to provide a wide range of high-use settings. There were subtle differences in visitors’ experience of each of the four qualities between wilderness locations that warrant a brief discussion. Overall, many visitors (approximately 50% in the Eagle Cap to nearly 60% at Mount Jefferson and Alpine Lakes Wildernesses) indicated an unequivocal yes, when asked if they had had a wilderness experience. Visitors were more likely to report attainment of primitiveness in the Lakes Basin (Eagle Cap Wilderness) than the other wilderness areas, which may be related to remoteness (distance traveled). Most visitors considered all three locations to be quite natural; however, more than 70% of visitors to Alpine Lakes Wilderness thought the area to be very natural.

Visitors did say that distance affected their sense of remoteness. Therefore we might expect the Lakes Basin to be reported as feeling more remote than the other areas we studied. Unfortunately, the remoteness question was added after we concluded interviewing at Marion Lake, but there were no marked differences in responses of Lakes Basin and Alpine Lakes visitors. This appears to be due to the subjectivity and individual difference involved in deciding how “far” counts as remote.

It is difficult to point to any specific set of factors that uniformly account for differences in visitor reports of the four qualities from one location to another. Although we can point to several influencing factors that contribute to our understanding of each quality, we are less able to speculate why subtle differences appear between locations. Counterintuitively, the most widespread reports of wilderness experience and naturalness occurred at Marion Lake, an easily accessible wilderness location (90 miles from Portland, and a two-mile hike to a heavily used camping area).

Methodological Considerations

We used a semi-structured in-depth interview process to elicit responses from wilderness visitors while they were in the midst of their trips. This approach differed from many previous investigations by interviewing wilderness visitors in the wilderness, specifically framing questions and encouraging elaborate responses, probing for detail, and allowing respondents time to fully consider their answers. We found that some wilderness visitors had not given a great deal of prior thought to many of the questions we presented. However, given enough time they seemed quite able to express their thoughts in a meaningful way. Questions about certain qualities (e.g., wilderness experience) seemed to be easier for visitors to discuss, whereas other qualities (e.g., primitiveness) required more time and contemplation. For example, many visitors were able to easily explain why they come to wilderness and what they get from their experiences. Conversely, there were others that required a substantial amount of time and probing to elicit their responses.

We found if given enough time to consider each question, respondents were able to describe the salient factors for each quality. However, we also discovered in a few instances that

immediate responses were sometimes reversed later during the interview. Furthermore, some respondents, when given enough time and probing by interviewers, were able to deeply consider influencing factors for each quality and gave very insightful responses. The implications of these findings are particularly intriguing for management. Namely, they call into question the reliability of responses elicited during survey research where visitors read a series of questions and respond immediately and with little depth of thought. This potentially troubling finding suggests management and researchers may want to consider multiple approaches to assess experiential qualities of wilderness.

Overall, our research approach allowed visitors as much time as they were willing to share with us, often in excess of 30 minutes, to talk about these qualities and other aspects of their wilderness trips. Findings suggest that immediate responses may not fully capture the complexity of how visitors arrive at their decisions. When given enough time, visitors were able to express their viewpoints in a meaningful way, allowing us to build a more complete picture of the factors underlying for each quality. Furthermore, although parsimonious and suggestive of the overall social wilderness condition, survey research using a single-item immediate response approach may be of limited utility in trying to understand the multifaceted, complex nature of wilderness experiences.

Conclusions

The qualitative research approach we used reduces our ability to generalize to all wilderness areas. However, the data contained in this report are based upon a systematic sample of visitors to three wilderness areas during the summer of 2002. Given the large sample size, diversity of respondents, and range of research locations, we believe the findings – particularly those that were consistent across all three locations – may be considered reflective of other Pacific Northwest wilderness visitors.

The purpose of this study was to assess qualities related to wilderness experiences and identify factors in the immediate experience that affected the degree to which people felt they experienced thoughts and feelings associated with the different qualities. Three lesser-studied wilderness experience qualities (i.e., naturalness, primitive recreation, and remoteness) and overall wilderness experience itself were investigated. Examinations were undertaken to understand 1) how length of trip affected experience; 2) how wilderness location affected experience; 3) how visitors assessed each quality in terms of attainment; and 4) how visitors described and defined each quality. There are several take home messages we have learned as a result of the in-situ wilderness research project we conducted in 2002.

First, it became quickly apparent that many of the wilderness visitors have not given much previous thought to these concepts, or at least had not tried to verbalize them. Perhaps the one exception is that it seems visitors have a better idea of wilderness than the other three concepts. However, despite the lack of preparation for the in-depth interview, respondents were able to provide assessments and on-site definitions of concepts. The in-depth interview format allowed visitors to refine their thinking during the course of a discussion until such a time as they were satisfied with their final response. The process of questioning and probing for clarity brought about a depth of response about the concepts that visitors may not have considered before.

Second, wilderness visitors were largely consistent in their definitions of the four concepts, identifying a small number of factors. Consistency was expressed within concepts, for example naturalness (environment, recreation evidence, and ecological impact); primitiveness

(development impacts); remoteness (distance, accessibility, and number of people); and wilderness (environment, social, personal, and development impacts). Additionally, there was consistency across concepts, with certain environmental (mountains, water and flora, with emphasis on aesthetic qualities and focus of attention) and social (number of people present and how busy the area felt) themes common to all four qualities.

Third, most of the concepts are multidimensional; more than a single factor represents the concept. While people shared some core meanings associated with each quality, there was a large degree of individuality in understandings, as exemplified by the large number of “unique” themes identified. Hence, managers and investigators should be alert to the possibility of such differences in other places.

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APPENDIX A

Backcountry Experiences

Interview Guide



Initial Version of Interview Guide

Long-Form Interview Sheet (1+ hour interview) *[Italics indicate verbatim statements]*

Hello, my name is _____. I am from the University of Idaho, and am working on a study about experiences in wilderness and am interested in your thoughts. Could I take some of your time for us to talk awhile? It will probably take about an hour or so.

If yes, *I would like to tape record our conversation. It makes things go quicker and I won't hold you up so long. Is that okay?*

If no, *thank you for your time. Would you be interested in taking part in a mail or Internet survey in the upcoming year?*

If yes, take respondent information (Respondent Information Sheet & Consent Form).

If no, thank you.

Ice Breaker Questions

First I'll start off with some general kinds of opening questions and then we'll talk about more specific kinds of experiences you've had, okay?

1. What do you think of this place?
2. How long have you been here during this trip?
3. How long are you planning on staying?

Content Questions: Cognition, Affect, and Somatic Components of Experience

For the remainder of the interview I want you to think about each of these questions in terms of the time just before we met (or within the past 5 minutes). These questions are about your thoughts, feelings, and physical sensations that you have had during this past hour.

4. *If you stopped for a moment and thought, what kinds of things have been key to your experiences? I mean those things you think about and feel.*

Affective Process (emotions)

5. Could you describe to me the kind of mood that you've been in?
6. How does this place make you feel?
7. If you wanted to describe how this place makes you feel to your friends or family, what would you say?

Probes: "why do you feel that way?"

Cognitive Process (thoughts)

8. What kinds of things have you been thinking about?
Probes: (if not mentioned) How about (work, family, your safety)?
9. Just before we met, what sorts of things were you been paying attention to?
Probes: (if not mentioned). How much have you been focusing on (nature/animals, campsite/destinations, physical impediments (e.g., snow, high water, etc.)
10. What kinds of things have been impacting how your day is going?
11. How would you describe the experiences have you been having?

Somatic Process (physical sensations)

12. How are you feeling physically?
13. How has this trip affected how your body feels or your physical state?
14. How would you describe your level of fitness?

Context Questions: Spatial, Temporal, Individual, & Social Factors

Again, as we continue talking, I want you to think about the time just before we met (about the past 5 minutes) and consider the following:

15. If you stopped for a moment and considered what kinds of things have been influences or factors that affect your experiences? Or those things that make it was it is.

Spatial Factors

16. What is it about this environment that makes you want to be here?
Probe: What do you think causes you to feel that way?
17. If you had to choose two specific things (or attributes) that make you want to be here, what would they be?
Probes: How about two specific things (or attributes) that would make you not want to be here?
Probes: (if not mentioned). How about naturalness?
Probes: (if not mentioned). How about primitiveness?
18. How does the scenic beauty of this view compare with other places you have seen along the trail?

Temporal Factors

19. Have you experienced any moments where it felt as if time stood still? If yes, can you tell me about that (e.g. “what were you doing”)?

Social Factors

20. Thinking about the people in your own group, how have they impacted your experience?

21. How about others outside of your group, such as other visitors, how have they impacted your experience?
22. Would you say the area felt crowded? Why/Why not?

Individual Factors

23. Can you think of anything in particular that this area personally does for you?
24. How would you describe a sense of solitude?
Probe: To what extent have you experienced that here?
25. Are you having a wilderness experience?
Probe: What makes something a wilderness experience?
26. If you were to speculate, how do you think the rest of your trip will go?

Managerially Relevant Questions

27. Have you ever had any problems in a wilderness?
Probe: Where was that?
Probe: Can you recall what caused the problem?
Probe: How about any problems with other visitors?
28. How often do you come here?
Probe: How many times have you been here before?
Probe: What are your reasons for coming here today/Taking this trip?
29. What would make you want to come back to this place?
Probe: How do you make that decision?
Probe: What would make you not want to come back?
30. Why do you come to wilderness (in general, not this particular one)?
Probe: Can you get that in a local non-wilderness area? Why/why not.
31. What would be the single most important reason for coming here?
32. What would be the single most important reason for NOT coming here?

Final Question -

33. *Ok, just one more question. I would like to switch gears and talk about how your experiences have changed over the course of your entire trip? How would you describe your experiences during this trip? Probe: is it what you expected? Probe: how do you think it will progress?*

CONCLUSION – *That is all of the questions I have for you. Is there anything else you feel is important for me to know about the experiences you've had? Thanks for your time!*

Short-Form Interview Sheet (~10 minutes)

[Italics indicate verbatim statements]

Hello, my name is _____. I am from the University of Idaho, and am working on a study about experiences in wilderness. Could I take a while of your time. It'll probably take about 10 minutes or so.

If yes, *I would like to tape record our conversation. It makes things go quicker and I won't hold you up so long. Is that okay?*

If no, *thank you for your time. Would you be interested in taking part in a mail or Internet survey in the upcoming year?*

If yes, take respondent information (Respondent Information Sheet & Consent Form).

If no, thank you.

Ice Breaker Questions

First I'll start off with some general kinds of opening questions and then we'll talk about more specific kinds of experiences you've had, okay?

1. What do you think of this place?
2. How long have you been here during this trip?
3. How long are you planning on staying?

Content Questions: Cognition, Affect, and Somatic Components of Experience

For the remainder of the interview I want you to think about each of these questions in terms of the time just before we met (or within the past 5 minutes). These questions are about your thoughts, feelings, and physical sensations that you have just had.

4. If you stopped for a moment and thought, what kinds of things have been key to your experiences? I mean those things you think about and feel.

Affective Process (emotions)

5. If you wanted to describe how this place makes you feel to your friends or family, what would you say?
Probes: "why do you feel that way?"

Cognitive Process (thoughts)

6. What kinds of things have you been thinking about?
Probes: (if not mentioned) How about (work, family, your safety)?
7. Just before we met, what sorts of things were you been paying attention to?
Probes: (if not mentioned). How much have you been focusing on (nature/animals, campsite/destinations, physical impediments (e.g., snow, high water, etc.))

Somatic Process (physical sensations)

8. How are you feeling physically?

Context Questions: Spatial, Temporal, Individual, & Social Factors

Again, as we continue talking, I want you to think about the time just before we met (about the past 5 minutes) and consider the following:

9. If you stopped for a moment and considered what kinds of things have been influences or factors that affect your experiences? Or those things that make it was it is.

Spatial Factors

10. Are there any things about the environment that affect how you feel or what you're thinking about?

Temporal Factors

11. Have you experienced any moments where it felt as if time stood still? If yes, can you tell me about that (e.g. "what were you doing")?

Social Factors

12. Thinking about the people in your own group, how have they impacted your experience?
13. How have others outside your group impacted your experience?

Individual Factors

14. Are you having a wilderness experience?
Probe: What makes something a wilderness experience?
15. How often do you come here?
Probe: Where else do you go for this kind of experience?

Managerially Relevant

14. What would be the single most important reason for coming here?
15. What would be the single most important reason for NOT coming here?

CONCLUSION – *That is all of the questions I have for you. Is there anything else you feel is important for me to know about the experiences you've had? Thanks for your time!*

Final Combined Version of Interview Guide

Interview Sheet *[Italics indicate verbatim statements]*

Hello, my name is _____. I am from the University of Idaho, and am working on a study about **hiking and camping** and am interested in your thoughts. Could I take some of your time for us to talk awhile? It will probably take about fifteen to thirty minutes.

If yes, I would like to tape record our conversation. It makes things go quicker and I won't hold you up so long. Is that okay?

If no, thank you for your time. Would you be interested in taking part in a mail or Internet survey in the upcoming year?

If yes, take respondent information (Respondent Information Sheet & Consent Form).

If no, thank you.

Ice Breaker Questions

First I'll start off with some general kinds of opening questions and then we'll talk about more specific kinds of things, okay?

1. *What have you been thinking about?*

PROBES: *If you were to rate how much you were thinking those things, where 0 means not at all and 4 means all of the time. How would you rate how much you were thinking about: a) work/school, b) family, c) relationships, d) environment.*

2. *What do you think of this place?*

Content Questions: Cognition, Affect, and Somatic Components of Experience

For the remainder of the interview I want you to think about each of these questions in terms of the time just before we met (or within the **past few minutes**). These questions are about your thoughts, feelings, and physical sensations that you have had during this past hour.

3. *How would you describe this place and your feelings right now to someone who hasn't been here before?*

4. *If you stopped for a moment and thought about what kinds of things have been key to your experiences? I mean those things that are central to what you think about and feel what would they be?*

Affective Process (emotions)

5. In the past few minutes, can you describe to me the kind of mood that you've been in? *(Concentrate on immediate here & now). Probe for detail.*
6. What feelings are you having right now? *Probe for detail.*
7. How does this place make you feel?

Cognitive Process (thoughts)

8. -If you were writing in your journal or diary, what would you be writing about?
-Imagine a person sitting over there (describe feature). What would they be thinking about?
9. Just before we met, what sorts of things were you been paying attention to?
Probes: (if not mentioned). How much have you been focusing on (nature/animals, campsite/destinations, physical impediments (e.g., snow, high water, etc.)
10. What were you just talking about? (If with companions) Probe: Is there anything else?
11. What kinds of things have been impacting how your day is going?
12. How would you describe the experiences have you been having?

Somatic Process (physical sensations)

13. How are you feeling physically?
14. How has this trip affected how your body feels or your physical state?
15. How would you describe your level of fitness?

Context Questions: Spatial, Temporal, Individual, & Social Factors

Again, as we continue talking, I want you to think about the time just before we met (about the past 5 minutes) and consider the following:

16. What things make your experience positive/negative?
17. If you stopped for a moment and considered what kinds of things have been influences or factors that affect your experiences? Or those things that make it was it is.

Spatial Factors

18. What is it about this environment that makes you want to be here?
Probe: What do you think causes you to feel that way?
19. If you had to choose two specific things (or attributes) that make you want to be here, what would they be?
Probes: How about two specific things (about the environment or this place) that would make you not want to be here?
Probes: How about naturalness? Why?
Probes: How about remoteness? Why?
Probes: How about primitiveness? (Compare the differences with above)

20. How does the scenic beauty of this view compare with other places you have seen along the trail?

Temporal Factors

21. Have you experienced any moments where it felt as if time stood still? If yes, can you tell me about that (e.g. “what were you doing”)?
- Have you experienced any moments where you lost track of time? Probe.
 - Have you felt like it doesn't matter what time it is? How so? Why?

Social Factors

22. Thinking about the people in your own group, how have they impacted your experience?
- If you had to rate on a scale of 1-10 where 1 means no effect at all to 10 where it makes the trip what it is...how has having your companion(s) with you affected your experience? Why that number?
23. How about others outside of your group, such as other visitors, how have they impacted your experience?
- Probe: How would the experience have been if there were no other people around?
- Probe: Have you or your group talked about the other people you've seen up here?
- Probe: Did you notice or pay attention to other people?
- Probe: How many people have you seen today? Best guess.
- Probe: If you have had problems, why did you come back?
24. Would you say the area felt crowded? Why/Why not?

Individual Factors

25. Can you think of anything in particular that this area personally does for you?
26. How would you describe a sense of solitude?
- Probe: To what extent have you experienced that here?
27. Are you having a wilderness experience right now? If yes, could you describe it?
- Probe: Have you had one since you've been here? If yes, could you describe it?
- Probe: What makes something a wilderness experience?
28. If you were to speculate, how do you think the rest of your trip will go?
29. What have you been up to? OR What have you been doing?
30. How long have you been here during this trip?
31. How long are you planning on staying?

Managerially Relevant Questions

32. Have you ever had any problems in a wilderness?
- Probe: Where was that?
- Probe: Can you recall what caused the problem?
- Probe: How about any problems with other visitors?
33. How many times have you been here before?
- Probe: When was the first time you came here?

- Probe: What are your reasons for coming here today/Taking this trip?
34. What would make you want to come back to this place?
Probe: How do you make that decision?
Probe: What would make you not want to come back?
35. Why do you come to wilderness (in general, not this particular one)?
Probe: Can you get that in a local non-wilderness area? Why/why not.
36. What would be the single most important reason for coming here?
37. What would be the single most important reason for NOT coming here?

Final Question -

38. *Ok, just one more question. I would like to switch gears and talk about how your experiences have changed over the course of your entire trip? How would you describe your experiences during this trip? Probe: is it what you expected? Probe: how do you think it will progress?*

CONCLUSION – *That is all of the questions I have for you. Is there anything else you feel is important for me to know about the experiences you've had? Thanks for your time!*

APPENDIX B

Coding Scheme (Node Report) for Wilderness Experience Study

QSR N6 Full version, revision 6.0.

Licensee: Brad Johnson.

PROJECT: WE2003v1, User Brad Johnson, 4:30 pm, Aug 24, 2004.

NODE REPORT

- (1) /Base Data**
- (1 1) /Base Data/Day of Week
- (1 1 1) /Base Data/Day of Week/Week-END or Holiday
- (1 1 2) /Base Data/Day of Week/Week-day
- (1 2) /Base Data/Time of Day
- (1 2 1) /Base Data/Time of Day/Morning
- (1 2 2) /Base Data/Time of Day/afternoon
- (1 2 3) /Base Data/Time of Day/Evening
- (1 3) /Base Data/Refusals
- (1 3 1) /Base Data/Refusals/0 refusals
- (1 3 2) /Base Data/Refusals/1-2 Refusals
- (1 3 3) /Base Data/Refusals/3+ Refusals
- (1 4) /Base Data/# in Sight
- (1 4 1) /Base Data/# in Sight/0 in sight
- (1 4 2) /Base Data/# in Sight/1 gp in sight
- (1 4 3) /Base Data/# in Sight/2 gps in sight
- (1 4 4) /Base Data/# in Sight/3+ gps in sight
- (1 5) /Base Data/# in Sound
- (1 5 1) /Base Data/# in Sound/0 gps in sound
- (1 5 2) /Base Data/# in Sound/1 gp in sound
- (1 5 3) /Base Data/# in Sound/2 gps in sound
- (1 5 4) /Base Data/# in Sound/3+ gps in sound
- (1 6) /Base Data/# in Group
- (1 6 1) /Base Data/# in Group/1 - Solo
- (1 6 2) /Base Data/# in Group/2 in group
- (1 6 3) /Base Data/# in Group/3 in group
- (1 6 4) /Base Data/# in Group/4 in group
- (1 6 5) /Base Data/# in Group/5-7 in group
- (1 6 6) /Base Data/# in Group/8+ in group
- (1 7) /Base Data/Site
- (1 7 1) /Base Data/Site/Mt. Jefferson Wilderness
- (1 7 1 1) /Base Data/Site/Mt. Jefferson Wilderness/Marion Lake
- (1 7 1 2) /Base Data/Site/Mt. Jefferson Wilderness/Ann Lake
- (1 7 2) /Base Data/Site/Alpine Lakes Wilderness
- (1 7 2 1) /Base Data/Site/Alpine Lakes Wilderness/Pete Lake
- (1 7 2 2) /Base Data/Site/Alpine Lakes Wilderness/Creek Crossing
- (1 7 2 3) /Base Data/Site/Alpine Lakes Wilderness/Outlying Areas
- (1 7 3) /Base Data/Site/Eagle Cap Wilderness
- (1 7 3 1) /Base Data/Site/Eagle Cap Wilderness/Lakes Basin Mgmt Area
- (1 7 3 1 1) /Base Data/Site/Eagle Cap Wilderness/Lakes Basin Mgmt Area/Sunshine Lake
- (1 7 3 1 2) /Base Data/Site/Eagle Cap Wilderness/Lakes Basin Mgmt Area/Moccasin Lake
- (1 7 3 1 3) /Base Data/Site/Eagle Cap Wilderness/Lakes Basin Mgmt Area/Mirror Lake
- (1 7 3 1 4) /Base Data/Site/Eagle Cap Wilderness/Lakes Basin Mgmt Area/Outlying Lakes

(1 7 3 2) /Base Data/Site/Eagle Cap Wilderness/Glacier Lake and Pass
 (1 7 3 3) /Base Data/Site/Eagle Cap Wilderness/Eagle Cap
 (1 7 3 4) /Base Data/Site/Eagle Cap Wilderness/Lostine Trail
 (1 7 3 5) /Base Data/Site/Eagle Cap Wilderness/Hurricane Creek Trail
 (1 7 3 6) /Base Data/Site/Eagle Cap Wilderness/Wallowa Trail
 (1 7 3 7) /Base Data/Site/Eagle Cap Wilderness/Tree Node
 (1 8) /Base Data/Location
 (1 8 1) /Base Data/Location/In Camp
 (1 8 2) /Base Data/Location/On Trail
 (1 8 3) /Base Data/Location/At Lake
 (1 8 4) /Base Data/Location/Summit or Pass
 (1 9) /Base Data/Visitors
 (1 9 1) /Base Data/Visitors/Day Visitor
 (1 9 2) /Base Data/Visitors/Overnight Visitors
 (1 10) /Base Data/Age
 (1 10 1) /Base Data/Age/-20's
 (1 10 2) /Base Data/Age/20's
 (1 10 3) /Base Data/Age/30's
 (1 10 4) /Base Data/Age/40's
 (1 10 5) /Base Data/Age/50's
 (1 10 6) /Base Data/Age/60's+
 (1 11) /Base Data/Sex
 (1 11 1) /Base Data/Sex/Male
 (1 11 2) /Base Data/Sex/Female
 (1 12) /Base Data/Trip #
 (1 12 1) /Base Data/Trip #/1st time
 (1 12 2) /Base Data/Trip #/2nd time
 (1 12 3) /Base Data/Trip #/3-5th time
 (1 12 4) /Base Data/Trip #/6-10 times
 (1 12 5) /Base Data/Trip #/11+ times
 (1 12 6) /Base Data/Trip #/Unknown
 (1 12 7) /Base Data/Trip #/Lots
 (1 13) /Base Data/Length of Stay
 (1 13 1) /Base Data/Length of Stay/1 day
 (1 13 2) /Base Data/Length of Stay/2 days
 (1 13 3) /Base Data/Length of Stay/3 days
 (1 13 4) /Base Data/Length of Stay/4 days
 (1 13 5) /Base Data/Length of Stay/5 or + days
 (1 14) /Base Data/Day of Trip
 (1 14 1) /Base Data/Day of Trip/day 1
 (1 14 2) /Base Data/Day of Trip/day 2
 (1 14 3) /Base Data/Day of Trip/day 3
 (1 14 4) /Base Data/Day of Trip/day 4
 (1 14 5) /Base Data/Day of Trip/day 5 or +
 (1 15) /Base Data/# of years
 (1 15 1) /Base Data/# of years/1st year here
 (1 15 2) /Base Data/# of years/2-3 years
 (1 15 3) /Base Data/# of years/4-5 years
 (1 15 4) /Base Data/# of years/6-10 years
 (1 15 5) /Base Data/# of years/11-20 years
 (1 15 6) /Base Data/# of years/20+ years

(1 16) /Base Data/Interviewer
 (1 16 1) /Base Data/Interviewer/Brad
 (1 16 2) /Base Data/Interviewer/Erin
 (1 16 3) /Base Data/Interviewer/Shannon
 (1 17) /Base Data/Weather
 (1 17 1) /Base Data/Weather/Not mentioned
 (1 17 2) /Base Data/Weather/Pleasant
 (1 17 3) /Base Data/Weather/Not Pleasant
 (1 18) /Base Data/Children in group
 (1 18 1) /Base Data/Children in group/0 kids
 (1 18 2) /Base Data/Children in group/1 kid in group
 (1 18 3) /Base Data/Children in group/2 kids in group
 (1 18 4) /Base Data/Children in group/3-4 kids in group
 (1 18 5) /Base Data/Children in group/5+ kids in group
 (1 19) /Base Data/People Present During Interview
 (1 19 1) /Base Data/People Present During Interview/Only Interviewee - 1 person present
 (1 19 2) /Base Data/People Present During Interview/Other members present
 (1 20) /Base Data/Use Level
 (1 20 1) /Base Data/Use Level/Low Use
 (1 20 2) /Base Data/Use Level/Med Use
 (1 20 3) /Base Data/Use Level/High Use
(2) /Affect
 (2 1) /Affect/Positive
 (2 1 1) /Affect/Positive/Good, Nice, Enjoyment, Contentment, Happy
 (2 1 2) /Affect/Positive/Peace, Quiet, Relaxed
 (2 1 3) /Affect/Positive/Freeing or Freedom
 (2 1 4) /Affect/Positive/Awe
 (2 1 5) /Affect/Positive/Sentimental
 (2 1 6) /Affect/Positive/Joy
 (2 1 7) /Affect/Positive/Rejuvenated
 (2 1 8) /Affect/Positive/Inspiring
 (2 1 9) /Affect/Positive/Achievement
 (2 1 10) /Affect/Positive/Novelty
 (2 1 11) /Affect/Positive/Privacy
 (2 1 12) /Affect/Positive/Humility/Privilege
 (2 1 13) /Affect/Positive/Perspective on life/Psych distance
 (2 2) /Affect/Excited
 (2 2 1) /Affect/Excited/Excitement
 (2 2 2) /Affect/Excited/Exhilaration
 (2 3) /Affect/Negative
 (2 3 1) /Affect/Negative/Anxiety or Apprehensive
 (2 3 2) /Affect/Negative/Danger or Risk
 (2 3 3) /Affect/Negative/Irritation
 (2 3 4) /Affect/Negative/Sad
 (2 4) /Affect/Connection
 (2 4 1) /Affect/Connection/Closeness to Nature
 (2 4 2) /Affect/Connection/Spiritual Connection
 (2 4 3) /Affect/Connection/TBD - VACANT
 (2 5) /Affect/Neutral or Ambivalent
 (2 6) /Affect/Favorite Place or Place Attachment

- (3) /Personal - Social**
- (3 1) /Personal - Social/Family, Friends, Relationships, Group
 - (3 2) /Personal - Social/TBD - VACANT
 - (3 3) /Personal - Social/Life, Goals, Future
 - (3 4) /Personal - Social/Escape
 - (3 5) /Personal - Social/VACANT
 - (3 6) /Personal - Social/Tradition
 - (3 7) /Personal - Social/Self
 - (3 7 1) /Personal - Social/Self/Moods and Feelings
 - (3 7 2) /Personal - Social/Self/Memories or Thoughts
 - (3 8) /Personal - Social/Home
 - (3 8 1) /Personal - Social/Home/Yes
 - (3 8 2) /Personal - Social/Home/No
 - (3 8 3) /Personal - Social/Home/Scale
 - (3 9) /Personal - Social/Work
 - (3 9 1) /Personal - Social/Work/Yes
 - (3 9 2) /Personal - Social/Work/No
 - (3 9 3) /Personal - Social/Work/Scale
 - (3 10) /Personal - Social/Experiences
 - (3 10 1) /Personal - Social/Experiences/Adventure
 - (3 10 2) /Personal - Social/Experiences/Formerly Novelty -- VACANT
 - (3 10 3) /Personal - Social/Experiences/Being off Trail
 - (3 10 4) /Personal - Social/Experiences/Difference, Change, Novelty
 - (3 10 5) /Personal - Social/Experiences/Challenge or Level of Difficulty
 - (3 10 6) /Personal - Social/Experiences/Roughing it, Self-Reliance, Pioneering
 - (3 10 7) /Personal - Social/Experiences/Danger or Risk
 - (3 10 8) /Personal - Social/Experiences/Freedom
 - (3 10 9) /Personal - Social/Experiences/Mystery
 - (3 10 10) /Personal - Social/Experiences/Being Outside or In the Woods
 - (3 11) /Personal - Social/People
 - (3 11 1) /Personal - Social/People/Number of people, few, absence
 - (3 11 2) /Personal - Social/People/No evidence of rangers
 - (3 11 3) /Personal - Social/People/No Evidence of Visitors
- (4) /Activities**
- (4 1) /Activities/TBD - VACANT
 - (4 2) /Activities/Action
 - (4 2 1) /Activities/Action/Backpacking or Camping
 - (4 2 2) /Activities/Action/Camp related, duties, site selection, food
 - (4 2 3) /Activities/Action/Fishing
 - (4 2 4) /Activities/Action/Hiking
 - (4 2 5) /Activities/Action/Photography
 - (4 2 6) /Activities/Action/Leaving or Going Home
 - (4 2 7) /Activities/Action/Exercise
 - (4 2 8) /Activities/Action/Way finding
 - (4 2 9) /Activities/Action/Exploring
 - (4 2 10) /Activities/Action/Other
 - (4 2 11) /Activities/Action/Sitting, watching, kicking back, etc.
 - (4 2 12) /Activities/Action/Diversity of Activities
- (5) /Environment or Landscape**
- (5 1) /Environment or Landscape/Evaluation
 - (5 1 1) /Environment or Landscape/Evaluation/Scenery, Beauty, View

- (5 1 2) /Environment or Landscape/Evaluation/Untouched, Pristine, or Clean
- (5 2) /Environment or Landscape/Features
- (5 2 1) /Environment or Landscape/Features/General "Nature"
- (5 2 2) /Environment or Landscape/Features/Mountains or Valleys
- (5 2 3) /Environment or Landscape/Features/Water
- (5 2 4) /Environment or Landscape/Features/Trees or Plants
- (5 2 5) /Environment or Landscape/Features/Small Scale
- (5 2 6) /Environment or Landscape/Features/Geological or Topological
- (5 2 7) /Environment or Landscape/Features/Ecosystem Processes
- (5 2 8) /Environment or Landscape/Features/Diversity or Variety
- (5 2 9) /Environment or Landscape/Features/Weather or Atmosphere
- (5 2 10) /Environment or Landscape/Features/Snow
- (5 2 11) /Environment or Landscape/Features/Unique Place
- (5 2 12) /Environment or Landscape/Features/Open Landscape
- (5 2 13) /Environment or Landscape/Features/Size of Area
- (5 2 14) /Environment or Landscape/Features/Other
- (5 2 15) /Environment or Landscape/Features/Moon or Stars
- (5 3) /Environment or Landscape/Conditions
- (5 3 1) /Environment or Landscape/Conditions/"Natural"
- (5 3 2) /Environment or Landscape/Conditions/"Primitive"
- (5 3 3) /Environment or Landscape/Conditions/"Remote"
- (5 3 4) /Environment or Landscape/Conditions/"Wilderness"
- (5 4) /Environment or Landscape/Senses
- (5 4 1) /Environment or Landscape/Senses/Sound
- (5 4 2) /Environment or Landscape/Senses/Smell
- (5 4 3) /Environment or Landscape/Senses/Colors
- (5 4 4) /Environment or Landscape/Senses/Focused attention
- (5 5) /Environment or Landscape/Trail or Site
- (5 5 1) /Environment or Landscape/Trail or Site/Condition
- (5 5 2) /Environment or Landscape/Trail or Site/Steps
- (5 6) /Environment or Landscape/Recreation Amenities
- (5 6 1) /Environment or Landscape/Recreation Amenities/Easy Access
- (5 6 2) /Environment or Landscape/Recreation Amenities/Site, Campsite
- (5 6 3) /Environment or Landscape/Recreation Amenities/Toilet
- (5 6 4) /Environment or Landscape/Recreation Amenities/Trail
- (5 7) /Environment or Landscape/Designated -vs.- Nondesignated
- (5 8) /Environment or Landscape/Distance
- (6) /Ecological Impacts**
- (6 1) /Ecological Impacts/Tree Damage
- (6 2) /Ecological Impacts/Vegetation or Campsite Damage
- (6 3) /Ecological Impacts/Trail wear
- (6 4) /Ecological Impacts/Litter
- (6 5) /Ecological Impacts/Wildlife
- (6 6) /Ecological Impacts/Horses
- (6 7) /Ecological Impacts/Historical Evidence
- (6 8) /Ecological Impacts/Management or Harvesting
- (7) /Wildlife**
- (7 1) /Wildlife/Large
- (7 2) /Wildlife/Small
- (7 3) /Wildlife/Fish or Aquatic
- (7 4) /Wildlife/Birds

- (7 5) /Wildlife/Insects
- (7 6) /Wildlife/Pests
- (8) /Planning and Decisions**
- (8 1) /Planning and Decisions/Plan for Today
- (8 2) /Planning and Decisions/Leaving or Going Home
- (9) /Somatic**
- (10) /Domain**
- (10 1) /Domain/Thinking or Focus of Attention
- (10 2) /Domain/Talking About
- (10 3) /Domain/Purpose, Reason, Motivation
- (10 4) /Domain/Key Effects, Factors, Influences on Experiences
- (11) /Common Codes**
- (11 1) /Common Codes/Immediate Conscious Experience
- (11 2) /Common Codes/Controllability
- (11 3) /Common Codes/UN-Prompted
- (11 4) /Common Codes/Rationalizing
- (12) /Concept**
- (12 1) /Concept/Wilderness Exp
- (12 2) /Concept/Primitiveness
- (12 3) /Concept/Naturalness
- (12 4) /Concept/Remoteness
- (13) /Concept Evaluation**
- (13 1) /Concept Evaluation/Yes - Absolutely
- (13 2) /Concept Evaluation/No, Not at all
- (13 3) /Concept Evaluation/Something in between
- (13 4) /Concept Evaluation/Neutral or Ambivalent
- (13 5) /Concept Evaluation/Unsure of term or meaning
- (14) /Comparison**
- (14 1) /Comparison/Area
- (14 2) /Comparison/Time
- (15) /Crowded**
- (15 1) /Crowded/Evaluation
- (15 1 1) /Crowded/Evaluation/Yes - Crowded
- (15 1 1 1) /Crowded/Evaluation/Yes - Crowded/Expectations
- (15 1 2) /Crowded/Evaluation/No - Not Crowded
- (15 1 2 1) /Crowded/Evaluation/No - Not Crowded/Expectations
- (15 1 3) /Crowded/Evaluation/Neutral or Ambivalent
- (16) /Solitude**
- (16 1) /Solitude/Evaluation
- (16 1 1) /Solitude/Evaluation/Seeking Solitude?
- (16 1 1 1) /Solitude/Evaluation/Seeking Solitude?/Yes, Seeking Solitude
- (16 1 1 2) /Solitude/Evaluation/Seeking Solitude?/Not Seeking Solitude
- (16 1 2) /Solitude/Evaluation/Achieved Solitude?
- (16 1 2 1) /Solitude/Evaluation/Achieved Solitude?/Full Solitude
- (16 1 2 2) /Solitude/Evaluation/Achieved Solitude?/Partial
- (16 1 2 3) /Solitude/Evaluation/Achieved Solitude?/None
- (16 1 2 4) /Solitude/Evaluation/Achieved Solitude?/Ambivalent
- (16 2) /Solitude/Factors
- (16 2 1) /Solitude/Factors/People
- (16 2 1 1) /Solitude/Factors/People/Out Group
- (16 2 1 1 1) /Solitude/Factors/People/Out Group/Behavior

- (16 2 1 1 2) /Solitude/Factors/People/Out Group/Presence
- (16 2 1 2) /Solitude/Factors/People/In Group
- (16 2 1 3) /Solitude/Factors/People/Absence of People or Alone
- (16 2 1 4) /Solitude/Factors/People/Solitude w People
- (16 2 2) /Solitude/Factors/Peace & Relax
- (16 2 3) /Solitude/Factors/Quiet & Nature Sounds
- (16 2 4) /Solitude/Factors/Alone
- (16 2 5) /Solitude/Factors/Escape
- (16 2 6) /Solitude/Factors/Human Noise
- (16 2 7) /Solitude/Factors/Distance, Challenge
- (16 2 8) /Solitude/Factors/Sporadic nature
- (16 2 9) /Solitude/Factors/Psych Distance
- (16 2 10) /Solitude/Factors/Environ. Features
- (16 2 11) /Solitude/Factors/Dev Impacts
- (16 2 12) /Solitude/Factors/Fear & Danger
- (16 2 13) /Solitude/Factors/Coping & Compare
- (16 2 14) /Solitude/Factors/Freedom
- (16 2 15) /Solitude/Factors/Solitude Anywhere
- (16 2 16) /Solitude/Factors/Time
- (17) /Negatives or Why NOT come here?**
- (17 1) /Negatives or Why NOT come here?/Weather
- (17 2) /Negatives or Why NOT come here?/Other People
- (17 2 1) /Negatives or Why NOT come here?/Other People/Type of People
- (17 2 2) /Negatives or Why NOT come here?/Other People/Behavior
- (17 2 3) /Negatives or Why NOT come here?/Other People/# of people
- (17 3) /Negatives or Why NOT come here?/Management
- (17 3 1) /Negatives or Why NOT come here?/Management/Fees or charges
- (17 3 2) /Negatives or Why NOT come here?/Management/Permits
- (17 3 3) /Negatives or Why NOT come here?/Management/Prohibit Fire
- (17 3 4) /Negatives or Why NOT come here?/Management/Trail Maint or Conditions
- (17 4) /Negatives or Why NOT come here?/Impacts
- (17 4 1) /Negatives or Why NOT come here?/Impacts/Over use
- (17 4 2) /Negatives or Why NOT come here?/Impacts/Litter
- (17 4 3) /Negatives or Why NOT come here?/Impacts/degraded trails
- (17 5) /Negatives or Why NOT come here?/Nothing
- (17 6) /Negatives or Why NOT come here?/Bugs, Mosquitoes
- (17 7) /Negatives or Why NOT come here?/Changed Trip Plans
- (17 8) /Negatives or Why NOT come here?/Health
- (17 9) /Negatives or Why NOT come here?/Other
- (18) /Other Groups, People**
- (18 1) /Other Groups, People/Effect
- (18 1 1) /Other Groups, People/Effect/Evaluation
- (18 1 1 1) /Other Groups, People/Effect/Evaluation/Positive
- (18 1 1 2) /Other Groups, People/Effect/Evaluation/Negative
- (18 1 1 3) /Other Groups, People/Effect/Evaluation/Neutral or Ambivalent
- (18 1 2) /Other Groups, People/Effect/Explanation of Effect
- (18 1 2 1) /Other Groups, People/Effect/Explanation of Effect/Number of Groups, People
- (18 1 2 2) /Other Groups, People/Effect/Explanation of Effect/Proximity
- (18 1 2 3) /Other Groups, People/Effect/Explanation of Effect/Horse
- (18 1 2 4) /Other Groups, People/Effect/Explanation of Effect/Nature Ethic
- (18 1 2 5) /Other Groups, People/Effect/Explanation of Effect/Stress, Worry

- (18 1 2 6) /Other Groups, People/Effect/Explanation of Effect/Friendly
- (18 1 2 7) /Other Groups, People/Effect/Explanation of Effect/Safety
- (18 1 2 8) /Other Groups, People/Effect/Explanation of Effect/Type of Group
- (18 1 2 9) /Other Groups, People/Effect/Explanation of Effect/Respect
- (18 1 2 10) /Other Groups, People/Effect/Explanation of Effect/Behavior
- (18 1 2 11) /Other Groups, People/Effect/Explanation of Effect/Changed our Behavior, Coping, Displacement
- (18 2) /Other Groups, People/Social Characteristics of Place
- (18 2 1) /Other Groups, People/Social Characteristics of Place/Level of Use
- (18 2 2) /Other Groups, People/Social Characteristics of Place/Type of People
- (18 3) /Other Groups, People/# of Encounters
- (18 4) /Other Groups, People/Non-Eval Ref of Groups Met
- (18 5) /Other Groups, People/Projective. How would it be with other people?
- (19) /My Group, People**
- (19 1) /My Group, People/Evaluation
- (19 1 1) /My Group, People/Evaluation/Positive
- (19 1 2) /My Group, People/Evaluation/Negative
- (19 1 3) /My Group, People/Evaluation/Neutral or Ambivalent
- (19 2) /My Group, People/Explanation
- (19 2 1) /My Group, People/Explanation/Safety
- (19 2 2) /My Group, People/Explanation/Sharing Experience
- (19 2 3) /My Group, People/Explanation/Enhances
- (19 3) /My Group, People/Children Related
- (20) /Flow or Time**
- (21) /Expectations**
- (21 1) /Expectations/Yes
- (21 2) /Expectations/No
- (21 2 1) /Expectations/No/People
- (21 2 2) /Expectations/No/Environment
- (21 2 2 1) /Expectations/No/Environment/Weather
- (21 2 2 2) /Expectations/No/Environment/Trail
- (21 3) /Expectations/No Expectations
- (21 4) /Expectations/Exceeded
- (22) /Camp Fire**
- (22 1) /Camp Fire/Tradition & Bonding
- (22 2) /Camp Fire/Regulations
- (22 3) /Camp Fire/Enhances Experience
- (23) /Management**
- (23 1) /Management/Regulations
- (23 1 1) /Management/Regulations/Fire Restrictions
- (23 1 2) /Management/Regulations/Camp site set-backs / Designated Sites / Restoration
- (23 1 3) /Management/Regulations/Group Size
- (23 1 4) /Management/Regulations/Permits
- (23 1 5) /Management/Regulations/Fees
- (23 1 6) /Management/Regulations/Use Limits
- (23 2) /Management/Ranger Opinions
- (23 2 1) /Management/Ranger Opinions/Positive Comments
- (23 2 1 1) /Management/Ranger Opinions/Positive Comments/Safety
- (23 2 1 2) /Management/Ranger Opinions/Positive Comments/Information
- (23 2 1 3) /Management/Ranger Opinions/Positive Comments/Education
- (23 2 2) /Management/Ranger Opinions/Negative Comments

- (23 2 2 1) /Management/Ranger Opinions/Negative Comments/"Big Brother"
- (23 2 2 2) /Management/Ranger Opinions/Negative Comments/Arrogant
- (23 3) /Management/Issues
- (23 3 1) /Management/Issues/Democratic Values, Equity, Fairness
- (23 3 2) /Management/Issues/Balance between users & uses
- (23 3 3) /Management/Issues/Timber harvest
- (23 4) /Management/Improvements
- (23 4 1) /Management/Improvements/No Roads
- (23 4 2) /Management/Improvements/No Amenities
- (23 4 3) /Management/Improvements/No Motorized or Mechanized
- (23 4 4) /Management/Improvements/No Evidence of Management
- (23 4 5) /Management/Improvements/No Development, Improvement, or Extractive Uses
- (24) /General**
- (24 1) /General/Not Thinking
- (24 2) /General/No Specific Reason
- (24 3) /General/Safety
- (24 4) /General/Story Telling
- (24 5) /General/Horses
- (24 6) /General/Temporal Displacement
- (24 7) /General/Spatial Displacement
- (24 8) /General/Spontaneity
- (24 9) /General/Being in Study
- (24 10) /General/Equipment/Comfort
- (24 11) /General/Phases of Trip
- (24 12) /General/Useable Quote
- (24 13) /General/Changes in place
- (24 14) /General/Dogs
- (24 15) /General/Moving Campsites

Appendix C

Interrater Reliability Tally Sheet

NODE:	2	3	4	5	6	7	8	9	10.1
Agree									
Partial									
Miss X									
Miss X.X									
Totals									
	10.2	10.3	10.4	11.1	11.2	11.3	11.4	12.1	12.2
Agree									
Partial									
Miss X									
Miss X.X									
Totals									

	12.3	12.4	13.1	13.2	13.3	13.4	13.5	14	15
Agree									
Partial									
Miss X									
Miss X.X									
Totals									
	16	17	18	19	20	21	22	23	24
Agree									
Partial									
Miss X									
Miss X.X									
Totals									