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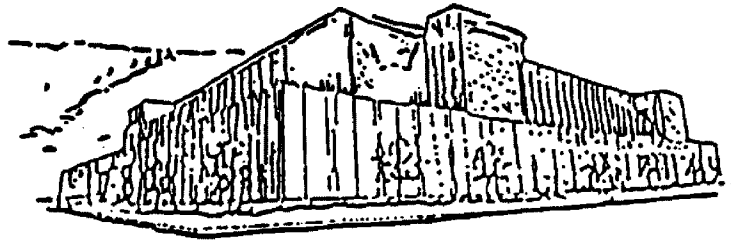
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**YELLOWSTONE NATIONAL PARK WINTER VISITOR STORIES: AN
EXPLORATION OF THE NATURE OF RECREATION EXPERIENCES AND
VISITOR PERCEPTIONS OF MANAGEMENT CHANGE**

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**Presented in partial fulfillment of the requirements for the degree of
Master of Science in Recreation Management**

**School of Forestry
University of Montana, 1999**

Approved by:



Chairperson



Dean, Graduate School

2-3-2000

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ABSTRACT

Davenport, Mae A., M.S., November, 1999

Yellowstone National Park Winter Visitor Stories: An Exploration of the Nature of Recreation Experiences and Visitor Perceptions of Management Change

Committee Chair: William T. Borrie *B.*

The study presented here challenges traditional recreation research perspectives and appeals to the dynamic, emergent, and complex nature of recreation experiences through an exploration of visitor stories. From this exploration we have learned that the unique opportunities to observe wildlife and view natural scenery are at the heart of the winter experience in Yellowstone National Park (YNP), regardless of the mode of experience (snowmobiling, cross-country skiing, or snowcoach touring). The study reveals that the mode of experience plays an important role in shaping the ways in which visitors experience wildlife and natural scenery within the Park. This examination also shows that few visitors feel crowded in YNP. Issues such as, behavior of other visitors and the presence of motorized use had more of an impact on social conditions than the sheer number of visitors in the Park. Finally, the data illustrate that in order for managers to gain support for management change in YNP, they must demonstrate good science as a basis for that change and clearly articulate how management actions will improve conditions within the Park.

The challenges YNP management faces in providing for quality experiences and past research findings pose several questions that served as the impetus for this study. First, what factors of YNP's winter setting are important to the experience and why? Second, what is the nature of recreation experiences within that setting? Finally, how do visitors perceive management change? Past research tells us that recreation experiences are highly complex, subjective and are inherently dynamic. These characteristics and the aforementioned guiding questions demand an in-depth and holistic exploration of the nature of the visitor experience in YNP's winter setting. To accomplish this a qualitative research approach was taken in this study.

Ninety-three visitor stories were collected on ten days at four sites in YNP. The interview followed a "directed conversation" format in which three themes; the nature of the experience, perceptions of conditions, and support for management actions; were addressed. The analysis included data organization, data interpretation and theory building. The results are broken into four broad themes embedded in the data: 1) YNP's unique winter setting, 2) the nature of recreation experiences in YNP's winter setting, 3) perceptions of social conditions, and 4) participant support for management actions.

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CHAPTER ONE--INTRODUCTION

Background

Upon its conception, Yellowstone National Park (YNP) was “dedicated and set apart as a public park or pleasure ground for the benefit and enjoyment of the people” (YNP Act of 1872, 17 Sta. 32). Currently, that means the National Park Service (NPS) is charged with promoting quality recreational experiences for around 100,000 visitors each winter season in Yellowstone (NPS 1996/1997). At the same time the YNP Act requires the NPS to “provide for the preservation, from injury or spoilation, of all timber, mineral deposits, natural curiosities, or wonders within... and their retention in their natural condition.” The management of YNP faces a great challenge in maintaining a balance between the values that these distinct and competing mandates express.

The diversity of visitor activities in and visitor expectations of Yellowstone in the winter, makes remaining faithful to the YNP Act a serious challenge to management. Surveys, such as the 1998 YNP Winter Use Survey (Borrie et al. 1999), tell us that distinct segments of visitors exist with respect to their motives and values. Many are drawn to the park for solitude and personal growth, some for adventure and challenge, and others are there to be with family and friends. A variety of activities and modes of transportation are sought to achieve these experiences in the Park. It has long been one of the Park’s objectives to create and maintain opportunities for visitors to have a spectrum of quality experiences. In the 1990 Winter Use Plan Environmental Assessment (NPS 1990), the NPS clearly defines its winter management objectives as to:

Preserve and emphasize the national park experience of viewing world renowned scenery, major concentrations of unique and unusual geothermal features, extensive populations of free-roaming wildlife, and nationally significant historic features...

Need for Research

Part of resolving the dilemma regarding how to “preserve and emphasize the national park experience” requires exploring the public’s perception of natural and social conditions. The voice narrating the National Park Service video presented every hour at Old Faithful Visitor Center puts it succinctly, “a complete, natural experience is what Yellowstone is all about.” The question management faces is, “what exactly does a complete, natural experience entail?”

It is difficult to quantify the range and complexities of experiences available to visitors in Yellowstone National Park’s winter setting. While one visitor is breaking snow on a ski trail up Bunsen Peak, another is climbing off a snowmobile to get a better view of a bull elk wading in the Madison River, and yet another is sharing stories about Old Faithful’s towering blast of water with family aboard a snowcoach. Although each of these visitors may have come to Yellowstone for very similar reasons, such as breathtaking scenery, abundant wildlife and peerless adventure, their experiences and perceptions of conditions are most certainly different. A “complete, natural experience” for one may be something quite different for another. Moreover, although visitors might share beliefs about the value of YNP, the nature of their experiences and perceptions of current conditions in the Park may give us greater insight into their support for particular management actions

Recent social science research has been conducted in YNP on visitor motivation, preferences, and satisfaction (Borrie et al. 1999). Outcome-based research on the visitor experience, like the 1998 visitor use survey, has often been the focus of recreation

research and has proven integral to the management of visitor use in recreation areas. We have learned a great deal about who YNP's visitors are, what they are looking for in YNP, and how they will respond to various management actions. However, many questions remain.

Do visitors' motives, preferences, and satisfaction adequately explain their attitudes and behavior? The 1998 Winter Use Survey conducted in YNP demonstrates the ambiguous relationship between motives and behavior. That study revealed that while the vast majority of winter visitors strongly value wildlife in the Park, they were relatively weak in their support of management actions to protect wildlife (Borrie et al. 1999). The question facing researchers is how are the social, environmental, and managerial dimensions of the YNP setting linked to attitudes and behavior? Schreyer and others (1984) challenged past studies by asking, is it in the external backdrop, or the "social milieu in which the recreation activity takes place and in the managerial policies controlling that social milieu" (p. 16).

While quantitative research allows us to investigate visitor motives, and verify motive groups, the richness and depth of personal experiences and perceptions are not captured. For example, Patterson et al. (1998) noted that while "individuals may report that 'enjoying nature' was an important aspect of the experience, the actual nature, meaning and consequences of the experience are more appropriately described in vastly different language" (p. 4).

The three arguments presented above: 1) the dual mandate requiring the NPS to provide for the enjoyment of the people while protecting the resource, 2) the range and complexities of the YNP experience, and 3) the ambiguity and limitations of earlier

quantitative research on the Yellowstone experience, clearly demonstrate a need for further research. Therefore, an in-depth qualitative study of the nature of the experience, perceptions of conditions, and support for management actions was proposed.

Guiding Questions

Some basic questions about the nature of the visitor experience in YNP's winter setting spurred this study. These questions arose out of findings from the 1998 winter use survey, management concerns, and a review of past qualitative research. They are:

- What makes YNP's winter setting unique from other places.
- What is the nature of the recreation experience in YNP's winter setting?
- What factors do visitors perceive influence that experience?
- What role does the activity of snowmobiling, skiing, or snowcoach touring play in the visitor experience?
- What are visitors' perceptions of social conditions in YNP?
- Why do visitors support or oppose management change?

These questions shaped each aspect of the study. The literature review was essentially an exploration of past research associated with understanding the nature of recreation experiences and examining social conditions in outdoor recreation. The research method chosen for this study was believed to best capture the visitor perspective of these issues. The interpretation focused on concepts and categories embedded in the visitor narratives with respect to these six guiding questions.

Thesis Organization

The second chapter, entitled Literature Review, explores the past research both quantitative and qualitative that influenced this study. It looks at how recreation

experiences have been studied and what advances have been made from innovative methodological approaches. Finally this chapter examines why a qualitative approach best suits the objectives of this study.

The third chapter illustrates the methodology in terms of the goals of the research approach, the in-depth interview, sampling frame, and the analysis. The research approach section outlines the four objectives of analysis in terms of perspective, context, depth, and range. The interview process is then discussed including the role of the interviewer, the development of interview themes, and the actual interviewing process. The next section highlights goals and characteristics of the sampling process. Finally, the analytical process consisting of three steps: organization, interpretation, and theory building is examined.

The Results chapter presents the data supporting four broad categories and includes a discussion of the range of concepts within these categories. The chapter first establishes elements of YNP's physical setting that are important to participants, it examines how these elements make YNP unique from other recreation areas and explores why these elements are important to the visitor experience in the Park. Then it presents and discusses factors influencing the nature of the recreation experience in YNP and examine how the mode of experience shapes the visitor experience in Yellowstone. Next, participants' perceptions of social conditions, such as the numbers of visitors, behavior of visitors, and road conditions are investigated. Finally, how participants contemplate management change and how this is related to perceptions and the nature of the recreation experience is explored.

The fifth and final chapter draws conclusions from the results about the nature of recreation experiences in YNP and discusses how this in-depth understanding can be put to use in managing recreation. This chapter outlines some management implications and makes recommendations about how managers can critically examine how management change will affect the visitor experience.

CHAPTER TWO--LITERATURE REVIEW

For some time now, the notion of leisure and recreation as a beneficial and sought after experience and not merely as activities performed during free time has been the fulcrum upon which recreation theory, research, and application has balanced (Mannell 1984, Mannell & Iso-Ahola 1987, Manfreda et al. 1996). The idea that recreation experience is a subjective state of mind has also been long accepted among those involved in the field (Tinsley & Tinsley 1986). Moreover, researchers are now beginning to agree that recreation experiences are not static but dynamic and highly complex in nature (Clawson & Knetsch 1966, Hammitt 1980, Mannell & Iso-Ahola 1987). The objectives of this study are to investigate the nature of recreation experiences in YNP, to explore perceptions of conditions, and to examine how those perceptions are linked to support for management actions. Before investigating and presenting these dimensions of the visitor experience in Yellowstone, it is necessary to gain a grasp on the past research on recreation experiences. In considering what kind of literature review would most benefit this study, many questions arise:

- What aspects of recreation or leisure experiences relevant to the YNP winter experience have been studied before?
- What have researchers and managers learned from these studies?
- How has this expanding knowledge of recreation experiences influenced research approaches?
- What kind of research approach is most appropriate for the purposes of this study?

This literature review will address these four broad questions. First I will examine three areas of recreation experience research that tap into some key issues in Yellowstone: motivation, norms, and conflict. Our understanding of recreation experiences has evolved along with this recreation research. The next section highlights some important characteristics of recreation experiences that have been revealed through research. Next, I will outline different methodological approaches and the theories behind them. As our understanding of the intricacies and complexities of recreation experience has matured, the need for creativity and innovation in research methodology has been exposed. The final section concentrates on the qualitative research approach. The approach this study takes is the culmination of advances in theory and methodology, and the new exploration of recreation experiences through narrative methods.

A REVIEW OF STUDIES RELEVANT TO FACTORS OF THE YNP WINTER EXPERIENCE

The study undertaken here examines the relationship between the visitor experience and the YNP winter setting by exploring the visitor perspective on social, physical, and managerial conditions. How has past research determined the extent certain attributes of a recreation environment affect the quality of visitor experiences? Moreover, how have empirical studies assessed the acceptability of social conditions in recreation areas?

I've identified four major themes relevant to the narratives of YNP winter visitors: 1) the experiences they seek in YNP's winter setting (or the motivations for their visit), 2) the factors that influence their interactions with that setting (such as their normative evaluation of conditions), and 3) their perceptions of environmental and social

impacts (such as conflict with other visitors). Visitors themselves have revealed these three themes as important dimensions of their experience and the themes are also directly linked to issues with which NPS management has voiced concern. The following consists of a review of the conceptual and empirical literature that has previously examined these issues. Exploring the visitor perspective on these impacts, has provided managers with an evaluative tool and has given them valuable insights into how future conditions might affect the visitor experience. Each of these themes has captured the attention of recreation researchers and managers for their potential as indicators of the quality of recreation experiences and as predictors of support for management actions. What dimensions of recreation experiences have been explored? What kinds of studies have tried to represent or elucidate the experience? I'll look at three dimensions salient to this research: motivations, norms, and conflict.

Motivations

Spurred by increased visitation in the 1960s and concerns related to crowding, researchers explored ways of representing desired recreation experiences by means of measuring motivations (Knopf 1983). Researchers believed that by identifying the experiences visitors seek in recreation, managers could better provide for these experiences, even as social conditions change. This movement, spearheaded by researchers such as Driver, Tinsley, and Hendee, focused on the psychological and physical benefits and satisfactions that people receive or expect to receive through certain behaviors in certain recreation settings (Manning 1986). Known as the "unmet needs" hypothesis, this principle is based on the work of psychologists Lawler, Azjen, and Fishbein (Driver, Tinsley, and Manfredo 1991). The hypothesis contends that leisure is

important because it helps people fill certain needs in their life. As recreational benefits were identified through extensive research on a diversity of leisure types, researchers needed to create reliable methods of measuring those benefits.

One example of a predominant motivation scale used to quantify the benefits of recreation is the Recreation Experience Preference (REP) Scale developed by Driver and his colleagues. Motivation scales, such as Driver's REP scales, measure the importance of certain motivations or experiences for recreation along different domains, such as creativity, enjoying nature and thrill seeking. These scales can easily be adapted to measure reasons, feelings and satisfaction (Crandall, 1980). Since the development of reliable motivation scales, recreation researchers have studied the behavioral elements of leisure in a variety of contexts. Past research has included the analysis of a wide array of recreationists involved in a diversity of activities in a variety of settings from river anglers to cross country skiers to backcountry hikers (Knopf 1983, Manning 1986).

Ultimately, the motive scales serve an important role in management by establishing "motive groups" and allowing managers to make decisions based on the experience preferences of these groups. Research from the outcome-based approach showed empirically that recreationists are better characterized by their experience preference than by their activity. Moreover, this line of research convinced managers that there is no "average visitor". Instead there are homogeneous subsets of visitors that should be explored and managed differently.

A 1998 winter use study of YNP established four motive groups or clusters within YNP visitors (Borrie et al. 1999). The motive groups were then analyzed with respect to demographics, satisfaction, and management action support. This research also

illustrated that visitors are perhaps better understood in terms of their experience preferences than their activity.

Norms

Over the last twenty years YNP has seen a dramatic increase in visitation imparting various challenges to management. Use levels have exceeded predictions and managers have been forced to fortify and expand research on both environmental and social impacts of visitor use. Part of examining the social implications of increased visitation, was establishing what visitors seek in YNP. That is, since winter use studies have revealed that opportunities for solitude and the desire to get away from the demands of everyday life were highly important to visitors, it makes sense that crowding is a major concern for YNP's managers. While it is fairly easy to keep track of the numbers of people visiting various sites throughout the Park and now with the help of computer simulation models managers can even map visitor travel patterns and predict crowding conditions, the subjective aspect of *feeling crowded* demands attention and gives rise to many rhetorical questions, such as: What conditions cause the feeling of being crowded? To what extent is the quality of the visitor experience threatened by crowding? Many variables factor into the study of crowding.

Visitor perceptions of crowding and tolerance levels for numbers of encounters has often been the litmus test in evaluating quality of visitor experience. The term carrying capacity, first applied to recreation values in the sixties, denotes the conditions at which any further increase in the density of visitors would negatively impact the recreation experience (Manning 1986). This concept has shaped empirical studies of crowding and has been implemented in management frameworks, such as Visitor

Experience and Recreation Preferences (VERP). Manning et al. (1995) in a paper on the theory and application of carrying capacity admit that the most challenging element of determining the carrying capacity of an area is in establishing “how much impact, such as crowding is too much” (p. 10). Wang and Manning (1999) tackled this question with computer simulation. The travel patterning model they developed simulated potential crowding situations of carriage road use in Acadia National Park. Visitors’ crowding perceptions were then assessed using photos of crowding situations consistent with the model. Participants were asked to rate the acceptability of the different crowding scenarios.

Perceptions of crowding were also recently assessed in YNP. Winter visitors were asked to rate the acceptability of computer generated photos of different numbers of snowmobiles on a trail. Then these data were compared to actual conditions to determine the affect of different levels of visitation on the visitor experience. Both the study in Acadia and in YNP, are extensions of normative theory. Past research has shown that visitor perceptions can increase our understanding of how change in a recreation environment affects the experience. But how does visitor perception translate into management actions? To address this issue many studies have relied on normative theory and the establishment of social norms. Social norms are evaluative standards for conditions shared by members of a social group (Roggenbuck et al. 1991). For example, under the social norm theory visitors to YNP might have common perceptions of the appropriate number of encounters with snowmobiles in one day. Social norms identified through empirical research have been traditionally used by management to ascertain the acceptability of certain conditions or to analyze visitor tolerance levels for changing

conditions. Management strategies are then shaped around these social norms, because managers can restrict use or maintain certain conditions in accordance with the norms. The normative approach has been used to set encounter norms for different activities, settings, within settings, and ecological impacts (Shelby et al 1996).

For example, Whittaker and Shelby (1988) explored the encounter norms of anglers, boaters, and campers at the Deschutes River in Oregon. Their findings indicated that social norms were different in different types of settings. In areas of higher use and development tolerance levels for encounters were generally higher. This variability of social norms suggests that standards set by managers should reflect setting differences.

Hall and Shelby (1995) also examined attitudes towards impacts, attitudes towards management actions, and encounter norms of hikers, stock users, and hunters in the Eagle Cap Wilderness of Oregon. Their study reported great variability in encounter norms among wilderness visitors, depending on group size, entrance site, and past experience. Overall, those visitors in smaller groups, entering at lower-use sites, and having more experience were likely to have more stringent norms for encounters. It is important to note, also that a substantial amount of visitors could not specify a norm for encounters (twenty nine percent of respondents) or felt like encounters did not matter to them at all (twenty-eight percent of respondents). These data imply that encounters may be less influential on wilderness experiences than other kinds of impacts.

Variations were also noted in Schreyer and Beaulieu (1986) study of attribute preferences. They asked “what type of attribute is most important in the selection of a leisure setting?” and “what variables are most helpful in explaining what variation?” (p. 232-233). Their examination of wildland visitors to Intermountain West and members of

the Utah Wilderness Association yielded information on attribute preferences with respect to respondent past experience and commitment. They hypothesized that experience and commitment are two variables that can account for variations in attribute preferences such as those found in the studies mentioned earlier. They found that respondents more committed to an activity or area (specialized) and more experienced were more specific in attribute preferences and indicated a greater number of those attributes as being integral to their selection of wildland settings.

Other studies have challenged the applicability of the social norms concept. Inherent in the notion of social norms is norm consensus or crystallization. That is, the standard must be shared by group members, for it to be considered a norm. For example, to designate some restriction on the numbers of visitors that can watch Old Faithful erupt in the winter based on a social norm, the standard should reflect a general consensus in visitor attitudes towards the crowds at Old Faithful. Could YNP visitors come to a consensus? Roggenbuck et al. (1991) questioned whether norms exist and whether there is actually social agreement with regard to those norms in recreation. They turned to private and commercial boaters on the New River Gorge National River in West Virginia for some answers. Their analysis revealed that not only were river encounter norms not prevalent, but consensus among norms was weak. They concluded that although encounters may be important to visitors, visitors lack enough information to identify specific numbers of encounters.

User preferences for social conditions were also examined in the Cohutta, Caney Creek, and Rattlesnake Wildernesses (Roggenbuck et al. 1993). This study focussed on identifying the factors that visitors perceive have the highest impact on their experience.

It was revealed that within wilderness areas, a great deal of variability exists as to the acceptability of standards for conditions. However, this research also illustrated that across wilderness areas, visitors agree as to the importance of certain factors such as: litter, tree damage, noise, and seeing wildlife over other factors, suggesting that these might have more of an effect on wilderness experiences than other factors. In fact, numbers of encounters was far less influential on the visitor experience than these kinds of site impacts. These findings suggest that in wilderness, visitors are less impacted by the amount of use than they are impacted by the behavior of other users. The authors add that, “managers might better protect the wilderness and provide wilderness experiences for more people by shaping behavior than by limiting use” (Roggenbuck et al. 1993).

One objective of this current study was to identify the factors that visitor’s perceive influence their winter experience in YNP and furthermore, to explore how those perceptions shape attitudes towards management actions. It is easy to speculate that perhaps the number of visitors encountered on the trails or the presence of NPS rangers might affect visitors, but to what extent are these important in their visit? If one visitor felt “crowded” while waiting for Old Faithful to erupt, did that have a major impact on her trip, would she support management actions that might restrict access to improve social conditions? While the 1998 winter use study illustrates that visitors are generally satisfied with their experiences, closer inspection reveals that items highly important to respondents, such as experiencing tranquility, peace and quiet, and getting away from crowds, garnered relatively lower satisfaction ratings (Borrie et al. 1999). This findings begs the question, “What factors are affecting these important elements of the experience?” and “why?”

While normative theory does have considerable value in recreation, especially in examining homogenous groups in specific sites; for the purposes of this study a more in-depth look is taken at the conditions that visitors associate with feeling crowded, and how feeling crowded affects the visitor experience. Because visitors to YNP are so diverse and seek such a wide range of experiences, a social norm for crowding, might not exist.

Conflict

Implicit in the review of the three studies presented above is the idea that numbers of encounters may not be as salient to the quality of visitor experience as other factors (Hall and Shelby 1995, Roggenbuck et al. 1993, and Roggenbuck et al. 1991). What other kinds of social impacts might influence experience? Many land managers have adopted the concept of multiple use, which reflects the desire to provide for a diversity of recreational opportunities. As conflict literature tells us, often times the multiple use tenet can have negative impacts on recreation experiences, especially when uses or activities seem incompatible. Yellowstone National Park is no stranger to multiple use conflicts. Until the 1960s the only motorized use Yellowstone saw during the winter months was that of NPS employees or researchers. Since visitors first toured the Park on snowmobile in 1964 winter visitation has skyrocketed from almost no visitor use to around 100,000 each winter season in thirty-five years. Approximately seventy-seven percent of Yellowstone's winter visitors toured the Park on snowmobile; eleven percent toured by snowcoach; and almost ten percent toured Yellowstone on skis (Borrie et al. 1999). How does this mix of motorized and non-motorized use affect the YNP winter experience for these kinds of users? This question highlights one focus of the study, to explore what factors of the YNP environment affects recreation experiences and is

examined further in the results section. Intuitively, motorized use brings elements to the environment that non-motorized users might be avoiding: engine noise, emissions, wear and tear on roads, and other less direct effects. Thus, competition for recreation space between these types of users may seem inevitable.

However, as will be illustrated by this review of motorized vs. non-motorized conflict literature, there is more behind conflict than simply competition for space. Jackson and Wong (1982) outlined four principle characteristics of recreation conflict as found in the literature. First, conflict between mechanized and non-mechanized use historically is most intense. Second, mechanized use is perceived to be unilateral; to have more of an impact on non-mechanized use than vice versa. Third, differences in motivation and values rather than mere competition for land is at the heart of these conflicts. Finally, commonly the conflict is a result of both direct contact or encounters and indirect or more value related incompatibilities. In their study of perceived conflict among urban skiers and snowmobilers in Alberta, Canada, Jackson and Wong investigated recreation orientation, and motivations for participation. They found a more bilateral perception of conflict. While from the skiers' perspective snowmobiles impacted the quality of the experience or direct conflict, snowmobilers did express indirect negative attitudes toward skiers. These researchers concluded that in recreation conflict is perhaps the culmination of a "fundamental orientation of recreational preferences, expressed conceptually in terms of participation in other activities and motivations for participation" (p. 59). Snowmobilers are characterized as "machine-oriented" motivated to socialize, escape, and have adventure, while skiers seek solitude, tranquility, physical exercise, and a more intimate awareness of the natural environment.

My research expands upon this notion by examining how these motivations and perceptions and “orientations” are related to management action support.

Knopp and Tyger (1973) looked at the environmental orientation of skiers and snowmobilers. They focussed their examination on attitudes of skiers and snowmobilers towards various broad environmental issues and issues specifically related to public recreation and land management. A significant difference was found in the attitudes of snowmobilers and skiers for both kinds of issues, with skiers being more supportive of controlling use for preservation. And so, in examining visitor perceptions and support for management actions in YNP, I am interested in investigating how visitor’s inherent personal values with respect to preservation might affect management actions support.

Setting preferences of snowmobilers and skiers were used to discriminate between activity and experience types in a 1980 study by researchers McLaughlin and Paradice. This study underscores the importance of exploring user preference information related to physical, social, and managerial setting attributes to better determine how to provide opportunities for quality experiences.

This review of recreation conflict literature demonstrates the complex nature of conflict, especially under circumstances of motorized and non-motorized users sharing the same areas. This review also establishes that defining recreation conflict as merely competition for space does not do justice to the wide expanse of factors impacting recreation experiences. Other factors such as visitor: recreation orientation, attitudes towards preservation, and setting preferences may influence recreation conflict.

WHAT HAVE RECREATION RESEARCHERS LEARNED FROM THESE STUDIES?

What is leisure experience? In Tinsley and Tinsley's (1986) review of leisure experience theory in research, they explicitly discern leisure *experiences* from definitions of leisure. Their thesis is based not on the free-time element of leisure, but on an "individuals' subjective experiencing of leisure" (p. 5) and how that individual is influenced by those experiences. This study is likewise not concerned specifically with the characteristics of recreation activities but instead with YNP visitors' subjective experience of those activities. Leisure experience literature is germane to this study of recreation experience because the focus of the two fields are so closely related. Much of the theory in leisure experience can be readily applied to recreation experience.

Recreation Experiences Are a Subjective State of Mind

At first glance, it seems obvious to characterize recreation as an activity performed in one's spare time. Under this assumption, recreation could include everything from snorkeling to hang gliding. Remaining faithful to this notion of recreation, recreation management appears to be straightforward. Managers could fulfill their duties by simply providing more opportunities for recreation activities and establishing use limits only where needed. Yet, any review of recreation literature or a simple conversation with a manager would indicate that recreation management is more complex.

In fact, in their extensive examination of management techniques, Hammitt and Cole (1987) contend that while managing the physical presence of visitors is paramount, "managers must never forget the interests and desires of their recreational clientele" (p.

244). According to these authors, visitor satisfaction and the quality of experience must be carefully explored.

Researchers Driver and Tocher first conceptualized an “experiential approach” to leisure in 1970. This approach posited that recreation is a “psychophysical experience that is self-rewarding, occurs during nonobligated free time, and is the result of free choice” (Manfredo et al. 1996). Similarly, according to Mannell (1984) leisure is “an experience or state of mind” (p. 13). Researchers Mannell and Iso-Ahola support Driver and Tocher’s notion of leisure and contend that the examination of leisure should not focus on the activities themselves but on the quality of participation (Mannell and Iso-Ahola 1987). This expanded notion of leisure and recreation as a subjective experience set the stage for research attempting to explore dimensions of recreation experience and spurred studies investigating experience preferences and satisfaction.

Recreation Experiences Are Complex and Dynamic

We were out right at 8:00 and we went to the first kind of geyser area...and we parked and nobody else was there. We walked on the boardwalk and the bison would like appear almost in the mist as we got closer to them, and then it was kind of transcending, transporting. And then the coyotes, we could hear the coyotes in the distance. Then we noticed their calls were getting closer and closer, and then we saw one, and then we saw the other, and they were calling each other. And we were way away from our snowmobiles, but they came over and we had to back up. We wondered if they were going to rob our food, but they didn’t. So just watching them, and being in the absolute pristine...I mean you wondered what time is this with the geysers, and the bison, and the steam and the coyotes and nobody else was around. So that was definitely a highlight for us yesterday. So that’s what stands out for us....

This excerpt from Fanny illustrates clearly that there is more to recreation experiences than a simple desire to perform activities. Her words also demonstrate how the true nature of recreation experiences come not as an outcome, but as a process

influenced by events and imagery throughout the experience. Fanny revealed the feeling of hearing and watching coyotes in YNP's pristine setting. The sense she had of being transported in time was a factor of that particular experience and may not have been captured by any means other than storytelling.

In their theoretical review of the characteristics of leisure experience, authors Tinsley and Tinsley outlined attributes assigned to leisure experience from previous literature. First and foremost, they contend, leisure experiences are complex. According to their review, no single leisure experience exists, but rather a range of experiences and intensities exist with both cognitive and affective attributes. Mannell and Iso-Ahola (1987) add that "the range of needs and motivations people seek to satisfy during their free time can be fulfilled by a large number of different combinations and types of activities" suggesting that leisure experience is not unitary.

Not only was recreation experience widely accepted as subjective and complex, it had also been envisioned as multi-phasic. Clawson and Knetsch (1966) broke recreation experience down into five distinct phases of recreation: anticipation, travel to the site, onsite activity, returning home, and recollection of the experience. From this approach recreation satisfaction should be examined separately in each phase of the experience. This conception of a dynamic recreation experience was investigated by Hammitt in 1980. Hammitt measured the moods of students visiting a bog during all five of Clawson's recreation experience phases. He found salient changes in moods of the respondents over the duration of the experience and concluded that the experience was indeed multi-phasic and dynamic in nature.

HOW HAVE RESEARCHERS EXPLORED RECREATION EXPERIENCES

The element of recreation and leisure research that has undergone the most radical changes and generated the most controversy is not necessarily *what* recreation is, but rather *how* to study it. Three perspectives of leisure experience research are offered by Mannel and Iso-Ahola (1987) in their examination of leisure and tourism experience literature. These authors review theory and research derived from the “definitional”, “post-hoc satisfaction” or product-based, and “immediate conscious experience” or process-based paradigms. The “definitional” approach has been perhaps the least explored. Inherent in this approach is characterizing leisure in terms of the factors that tourists associate with a leisure experience, including a range of social and physical environments. Much of this line of research focuses on the perceptions of authenticity with regard to leisure experiences. Because of the paucity of research in this area, this review will concentrate on the “post-hoc” and “immediate conscious experience” approaches.

Challenges to the Outcome-Based Research Approach

Most of the work presented here on motivation, norms, and conflict falls into the category of outcome-based research, that is they address the outcomes of recreation experiences after the experience occurs. The limitations of outcome-based theory of recreation behavior have been the thesis of numerous recreation experience theoretical analyses (Patterson et al. 1998, Mannell & Iso-Ahola 1987, Schreyer et al. 1984, Williams & Patterson 1996, and Virden & Knopf 1989). These examinations have challenged the efficacy of this approach on three basic conceptual levels: 1) its inability to represent the dynamic, emergent, and perhaps multiphasic quality of recreation

experiences (Patterson et al. 1999, Williams & Patterson 1996, Mannel & Iso-Ahola 1987, and Hull et al. 1992), 2) its failure to directly link satisfaction and motivation to aspects of the environment or experience (Mannel & Iso-Ahola 1987, Schreyer et al. 1984, Virden & Knopf 1989), and 3) its reduction of meaning to behavioral utilities (Williams & Patterson 1996). These theoretical discussions suggest that the nature of recreation experience demands a more in-depth investigation.

According to Mannel and Iso-Ahola (1987) in satisfaction research “the anatomy of the experience, its intensity, duration, memorability, and meaning go for the most part unexamined” (p. 325). Patterson et al. (1998) argue that the motivational approach doesn’t allow for exploration of, for example, “what it means to ‘enjoy nature’ (i.e., the content of what is enjoyed, the process through which people attend to and perceive nature or the emotional responses)” (p. 426). Motivation and satisfaction scales are not designed to give researchers insight into these types of inquiries, yet these issues are central in understanding the nature of the visitor experience.

Process-Based Approach

Because the methodological goal of this study is to capture the dynamic, emergent, and multi-phasic quality of the recreation experience in Yellowstone, as well as to link aspects of the winter setting to the quality of the experience, a different conceptual and methodological approach is essential. For this need, we might turn instead to the process-based model of behavior. This model explores the content of the recreation experience and the characteristics and properties within the individual and the immediate environment that influence this experience (Mannell & Iso-Ahola 1987). Schreyer et al. (1984) encourage researchers to examine experience as a process-oriented

approach focused on the nature of the experience and the emotional states experienced during recreation rather than the products or outcomes of recreation.

Examining Recreation Experience in Context

Stewart's recent challenge to the traditional "snapshot" techniques of examining recreation experience demands more innovative research methods designed to capture the dynamic nature of experience (Stewart 1998). He charges researchers to be creative and contends that "to embrace leisure as a multiphase experience is to introduce, adapt, and develop unorthodox methodology for leisure research" (p. 396). Essentially, Stewart asks, how have researchers creatively examined the process of recreation experience?

As Clawson and Knetsch have postulated and other research outlined here supports, the recreation experience is not static but highly dynamic. Much research has contemplated the attitudes and perceptions of visitors before or after the actual experience. The "immediate conscious experience" (Mannell & Iso-Ahola 1987) is not addressed. Several researchers have risen to the challenge of analyzing the experience as it takes place.

Hull et al (1992) investigated the moods of ninety hikers in White River National Forest over twelve different stages of their experience using an "experience patterns" approach. At each of the twelve sites respondents reported in a questionnaire their moods, satisfaction, and perceptions of scenic beauty. Hull and others concluded that "experience patterns are meaningfully distributed over the duration of a recreation experience" and furthermore that recreation outcomes and psychological benefits may fluctuate according to the current experience.

Capturing the Complex Nature of Recreation Experience

Consumer researchers Holbrook and Hirschman (1982) maintain that an exploration of the true nature of experience warrants a qualitative research approach; “the investigation of these mental events requires a willingness to deal with the purely subjective aspects of consciousness...”(p 137). For example, Arnould and Price (1993) embarked on a white water rafting trip down the Colorado River basin to record the “subjective aspects of consciousness” of river rafters. Because of the complexity of the relationship between expectations and satisfaction, “the narrative of the experience is central to overall evaluation” (p. 42). Their study of the rafters narratives uncovered three interconnected experiential themes that were important in explaining trip satisfaction. They are communion with nature, connecting to others, and extension and renewal of self.

Patterson and others (1998) utilized an experience-based approach in their qualitative study of the nature of wilderness experiences in the Juniper Prairie Wilderness Area, Florida. They examined the meaning of the experience visitors had and how that recreation experience is recollected immediately after its conclusion. According to these researchers, the experience as a whole is more valuable than the sum of its parts. In addition the particularly interesting concept of situated freedom surfaces here. Situated freedom is defined as “the idea that there is structure in the environment that sets boundaries on what can be perceived or experienced, but that within those boundaries recreationists are free to experience the world in highly individual, unique and variable ways” (p. 3). This concept might readily be seen in the YNP recreation experience. Although there are constraints, such as mode of transportation, climate, and management

regulations, on visitors as to where they can go and how they can travel throughout the park, they exercise freedom in that they may experience Yellowstone's winter setting in unique and personal ways.

EXPERIENCES AS STORIES

Why study recreation experiences through stories? For this discussion, I will turn to the roots of sociological studies in religion, since the power of studying experiences through narratives evolved from early examinations of religion. Religion in essence, is based on and carried on in stories. Religion is maintained through stories, because storytelling is how religious experiences are expressed.. Three sociologists, Wiggins, Novak, and Crites find great value in exploring cultures through the stories that are told.

Wiggins (1975) sees strength in studying experiences through narratives, because stories express the interdependence of the objective and subjective world. He believes that "stories present us with gifts," in which we find "symbol, metaphor, image in incarnated speech and action" (p. 18-19). Thus, because these are our aims in studying the YNP winter experience, then a narrative or storytelling approach is called for.

Novak (1975) describes storytelling as the fruition of real experiences and thinking. According to his essay entitled "Story and Experience", thinking is influenced by two constraints, 1) "the 'world' of images, symbols, and mythical forces by which we each structure our experience" and 2) "inner intention: our drive, our will, our interest, what we are looking for and working toward" (p. 176-177).

Crites (1975) submits that "narrative form is so integral to experience that a figure encountered in a story may choose its moment to manifest itself in the 'world' of our life

experiences as well” (p. 24). He discerns the value of stories from theory. According to

Crites, a story’s

validity does not depend, like that of a theory, on its explanatory power. It is no less complete a response to the life of experience, but its completeness does not consist in its generality. It consists, rather in the immediacy with which narrative is able to render the concrete particularities of experience. Its characteristic language is not conceptual, but consists typically in the sort of verbal imagery we employ in referring to things as they appear to our senses of figure in our practical activities. Still more important, the narrative form aesthetically reproduces the temporal tensions of experience, a moving present tensed between and every moment embracing a memory of what has gone before and an activity projected, underway. A theoretical construction can of course be attuned to temporal movement, may presuppose it or undertake to explain it, but it cannot in its own formal structure reproduce the very feel of lived time in this way (p. 26).

Thus to summarize, the recreation experience has typically been investigated using an outcome-based process, such as determining social norms for crowding, investigating motivations or preferred experiences, and exploring perceptions of conflict. However these approaches have been seen to have limitations, such as their inability to directly link perceptions and preferences to the environment or experience, their inability to represent the subjective, complex, dynamic, and multi-phasic qualities of recreation experiences, and their reduction of meaning to behavioral utilities. Thus, in order to explore the link between perceptions and preferences and to examine the true nature of recreation experiences, an approach anchored in the immediate conscious experience and based on the narratives of YNP visitors is called for.

CHAPTER THREE--METHODOLOGY

This chapter begins by presenting how the research approach undertaken here will address issues posed in the literature review. The following section explains the objectives of the interview and describes the interviewing process. The next section illustrates the sampling strategy and data collection technique. The chapter ends with an explanation of how data analysis was performed and outlines the three stages of analysis.

RESEARCH APPROACH

As demonstrated in the previous chapter, recreation experiences are subjective, dynamic and complex in nature. These qualities lend themselves to a qualitative approach. From past recreation experience studies we have developed a clear picture of the general kinds of experiences outdoor recreationists are seeking. In the previous literature review I examined research on motivation, norms, and conflict that have expanded our understanding of recreation and influenced management practices.

A recent investigation of YNP winter visitor experience preferences, satisfaction, and support for management action has given managers a clear picture of what winter visitors in Yellowstone are seeking in their recreation experiences. The winter use study also illustrates how managers might gain a more accurate understanding of visitors by characterizing them by their motivations, rather than merely their activity style. YNP winter visitors, we have learned, are satisfied overall with their experiences in Yellowstone (Borrie et al. 1999). However, the researchers also found a considerable lack of support for many of the management actions presented to visitors.

The insights that research like the 1998 Winter Use Study gives management are integral, because they tell management *who* YNP's winter visitors are (demographic

information), *what* they are seeking in the Park, and *how* visitors might respond to various management actions. Yet what eludes researchers and managers still is an understanding of *why*: understanding why people chose YNP over other winter recreation sites, understanding why winter visitors find wildlife and natural scenery so important to their YNP experience, understanding why visitors prefer different types of winter experiences, and understanding why YNP visitors are or are not supportive of certain management actions. The goal of this study is to explore visitor stories and to understand these *why*'s. Each of these considerations suggests that certain relationships or patterns exist in the whole YNP experience. They imply that motivations, preferences, perceptions, and support for management actions are interrelated in some way.

How do we answer “why”? Because recreation experiences are subjective, dynamic, and complex; a more holistic and intensive approach is needed. The qualitative research approach adopted here addresses these issues in four ways:

- perspective
- context
- range
- depth

Perspective

If this study was primarily concerned with identifying and measuring motives and support for management actions, a quantitative approach would be appropriate and sufficient. However, the goal of this study is to explore more of the meanings behind the motives and attitudes, and to identify relationships between motives, perceptions and support for management actions. One could speculate as to the relationship of these

issues, but examining them from the visitor perspective brings the researcher closer to the actual visitor experience. All of the data collected for this study was taken directly from the visitor perspective. All of the interpretations made and theories postulated are products of YNP winter experiences based on the visitor perspective.

Social sciences have long studied cultural experiences from the narratives of subjects. For example, in ethnography, the study of cultures, the researcher is not concerned with “the commonplace or the extraordinary in and of themselves, but in the ways in which the commonplace and the extraordinary--all of the actions and events comprising the life of the people--are oriented and responded to, comprehended and guided by, the interpretations of the group members” (Emerson 1983: 22). The focus of research in ethnographies is not the phenomenon itself, but the ways in which members understand and take into account a phenomenon within a culture and within nature.

Similarly, the main objective of the data collection here is not merely to study the specifics of wildlife watching, snowmobiling, or support for management actions in YNP, but to examine the meanings ascribed to and relationships between these particular phenomena from the visitor perspective. Howe (1988) argues that only qualitative interviews allow this kind of exploration. The researcher can “describe personal outcomes or the meaning and role of leisure in the lives of subjects as expressed in their own terms and from their own perspective” (p. 305).

Without investigating the subjective experience from the visitor perspective, we can only speculate as to the meanings of and relationships within recreation experiences. Rose (1962) adds that while researchers may not be able to presuppose classifications, “uniformities may arise out of natural human observations and classificatory agreements

of people putting culture to use” (pg. 159). Applying this notion to the visitor experience in Yellowstone, a qualitative approach from this tradition uncovers the patterns or relationships in the perceptions and attitudes of visitors putting culture to use in Yellowstone.

Context

Each interview of this study was conducted onsite in YNP during the actual recreation experience. Since I am more interested in the process of experience than the outcomes of that experience, all of the interviews were done in the context of the experience. Clawson posited that recreation experiences are dynamic and consist of multiple phases (for reference see Chapter 4). Consistent with this theory, I interviewed some visitors in the early stages of their experience, others in the middle, and many were interviewed in the final stages of the experience. This strategy is more likely to capture the immediate experience of visitors in a range of experience phases.

Mannell and Iso-Ahola (1987) contend that only an “immediate conscious experience approach” directly examines and determines the nature of recreation experiences. According to these authors this approach asks, “what is the actual content of the experiences accompanying leisure behavior and what are the factors within the individual and the immediate environment that influence these?” (p. 325). Stewart (1998) contends that recreation research has a long tradition of not directly addressing the actual lived experience. Stewart sees leisure as an emerging story and challenges researchers to “be sensitive to evolving situational contexts and embedded experiences and meanings” (p. 396).

Range

Capturing a broad range of responses is integral to understanding the nature of the experience. Because recreation experiences are subjective, dynamic, and complex, responses from interviewees with respect to their perceptions and reactions are diverse. As many stories exist as there are visitors to tell them. However, common themes surface throughout the stories. For example, access is a common theme among visitors. Access is important to many of the Park's visitors, however, the extent to which it is important varies greatly. For some, having complete access to YNP is essential to their experience and for others access does not prevail over preservation. Several participants saw access as a personal right, while others viewed it as a conditional privilege.

Just as a diversity of perceptions and attitudes exist, so do actual experiences. Yellowstone offers a variety of recreation opportunities from skiing to snowcoach touring to snowmobiling. Social conditions such as traffic and crowding at sites of interest vary with the time of season. Wildlife viewing opportunities, geothermal activity, and the weather in YNP also are variables that may influence the experience. All of these variables in concert produce different experiences and perceptions for each visitor on each visit. To ensure a range of experiences were represented in this study, ninety-three interviews were conducted and the sample was stratified across certain variables (see section entitled Sampling Frame).

Depth

Depth comes from the qualitative approach in that participants are not merely checking boxes or listing events of an experience. The approach used in this study encourages storytelling and evokes rich detail. A successful qualitative study reveals an

emerging story of the experience (Patterson et al. 1998; Arnould & Price 1993) and presents the researcher with thick descriptions of the experience. “Thick descriptions,” a notion developed by ethnographer Geertz, “present in close detail the context and meanings of events and scenes that are relevant to those involved in them” (Emerson, 1983: 27). While not every interview was a complete success as far as eliciting thick descriptions, most participants, as the following excerpt from Fanny’s interview demonstrates, provided stories rich in detail.

We did the whole loop, so I got to see all of that and the swans and the wildlife. Because we saw a bald eagle, and then I’m a bird watcher, and the Clarkston Hatch and the Golden Eye. So the fact the snowmobile allowed us to get around, although at first, to me they’re like screaming in church. ...But I don’t know how else you would really get to see the Park in the way that we did, because that was really an exceptional experience.

INTERVIEWS

Interviewer Role

An in-depth qualitative interview is defined by Marshall and Rossman (1989) as a conversation in which a researcher “explores a few general topics to help uncover the participant’s meaning perspective” while remaining faithful to how the participant “frames or structures the responses”. A review of conceptual discussions with respect to the qualitative interviewing approach establishes three main functions of the interviewer: 1) guiding themes, 2) allowing freedom in responses, and 3) probing for details. According to Kvale (1983) the role of the interviewer is to “focus upon, or guide towards, certain themes, but not to guide the interviewee towards certain opinions about these themes” (p. 176). The interviewing strategy in this study follows the tradition of phenomenology and hermeneutics. An interview guide consisting of open-ended questions designed to elicit talk about certain themes was used in this study (see

Appendix A & B). In this format, participants in this study identified a range of issues central to the themes, the YNP experience, perceptions of conditions, and willingness to support management actions. Participants were given freedom to express individual attitudes and were encouraged to expound upon these attitudes. Several participants offered up their perceptions of aspects of the experience not directly addressed in the interview guide, which only added to the depth and range of the data.

Charmaz (1991) identifies this strategy as “directed conversations”. The interview guide enables the interviewer to frame the topics and keep the participant on track, while giving the participant freedom to express observations, perceptions, and attitudes. Howe (1988) offers a continuum of interviewing styles from the most structured to the least structured. Her definition of a *qualitative structured interview* falls somewhere in between the two extremes.

Since a qualitative interview’s pace is largely influenced by the interviewees willingness and degree of involvement, the amount of prompting and probing from the interviewee varies. Some of the participants I interviewed were eager to express their perceptions, observations, and attitudes in depth, while others required more direction and probing. Howe (1988) contends that “the qualitative structured interview affords the researcher the ability to adjust to the respondent while still covering the research concerns, areas, or questions” (p. 308).

Theme Development

Three main themes addressed in the interview guide are the fruition of an analysis of past research, unanswered questions generated by the 1998 winter use study, and concerns voiced by YNP management. The broad themes include:

- the nature of the YNP winter experience
- perceptions of conditions
- and support for management issues.

The NPS had a desire to know what it is about the YNP experience that makes it unique from experiences in other winter recreation settings. We already know that wildlife, natural scenery, and getting away from the usual demands of life are important to its visitors, but how do these aspects of the Park's setting shape the experience and how is this unique? In this study we learned not only that wildlife is important to the YNP experience, but precisely what it is about wildlife that is important and why. This kind of investigation more closely links visitor motivations with particular elements of the YNP winter setting or experience than past research, yet this type information is essential to a comprehensive understanding of the motive/environment link (see Schreyer et al. 1984).

Social conditions are also a major concern of YNP management. One objective of this study is to explore what factors influence the visitor experience both in a positive and negative manner. How would visitors change the social conditions in Yellowstone to improve their experience? This investigation taps into visitor perceptions of wildlife, other visitors, and the facilities and services provided by the NPS.

Motorized use in YNP has been a source of debate in recent years. Many speculate that the mix of snowmobilers, skiers, and snowcoach riders engenders both direct and indirect conflict. While this study does not specifically focus on Yellowstone as a place of conflict, I was interested in finding out how these different modes of transportation or activities impact the experience. The snowmobiling, skiing, and snowcoach touring experiences in YNP are unique and obviously revered by many

visitors. I wanted to explore what it is about these activities that are so important to the experience and how restrictions on access might affect the snowmobiling, skiing, and snowcoach riding experience.

On the verge of management change, YNP planners are concerned as to how the visitor experience will be impacted by different kinds of actions. By exploring each of the aspects of experiences mentioned above, YNP's uniqueness, elements of the Park's winter setting that impact the experience, perceptions of social conditions, and support for management actions, we can develop a clearer understanding of how management change will affect visitors and the visitor experience.

Conducting the Interview

After a visitor was contacted and I introduced myself, the interview commenced with a brief description of the study objectives. I told each participant that the study was an examination of visitors' winter experiences in YNP, their perceptions of conditions, and support for management actions. Participants were asked to read a cover letter and sign a letter of consent (see Appendix C). By signing the consent letter, participants agreed that they had read the cover letter, understood the nature of the project, and were willing to participate in the project. Each interview was tape recorded and interviewees were given pseudonyms to protect their anonymity. Interviews progressed according to the responses of the participants. Three themes were addressed beginning with broad open-ended questions and then focusing in with more direct questions. Several probes were available on the interview guide to help in eliciting rich detail and insight.

SAMPLING FRAME

The goal of sampling in this study was not to represent all visitors to YNP, but instead to represent a range of experiences and perceptions that visitors have in YNP's winter setting*. The sample objective was to identify and describe a range of visitor experiences and management issue perspectives. The sample size was representative of a diversity of visitor characteristics (mode of transportation, age, and location) and experiences revealed in the data collection. See Appendix D for a table of participant name, mode of transportation/activity, interview date/time, and interview location. Ages were not obtained from each interviewee and therefore are not presented here.

I conducted on-site interviews on ten sample days in January, February, and March of 1999. Visitors were interviewed at the Park's warming huts, visitor centers, and trailheads. The sample size was not predetermined, but established by the length of interviews, the involvement of the subjects, and the range of visitor characteristics and experiences obtained. Ninety-three total interviews (both single participant and group interviews) were conducted at interview sites which include: Mammoth Terraces, Madison Junction, Old Faithful, Canyon, and trailheads along U.S. Highway 191. Interviews lasted between five and thirty minutes, allowing for richness in detail of a

* Another caution in qualitative research is that because of the nature of the sampling procedure and data collection in qualitative studies, the results are not *statistically* generalizable to other populations. The goal of the qualitative approach is not to determine the extent and intensity of attitudes and perceptions across a population, but to explore the nature of these attitudes and perceptions. In this sense, the results from this study are generalizable across different recreation settings. While the perceptions and attitudes are directly associated with recreation experiences in YNP, this study does have management implications beyond this setting.

range of issues. Eighty-five of these interviews were analyzed under the procedure described in the next section.

DATA ANALYSIS

The analysis of the qualitative data collected in this study can be broken down into three stages: data organization, interpretation, and theory building. Qualitative data in its rawest form includes pages and pages of text that as a whole can be overwhelming and difficult to interpret. However, the text becomes more manageable and familiarity is increased as the researcher codes and categorizes phenomena and concepts embedded within the text. Following data organization, the concepts and categories are analyzed for common themes and interrelations. Once the data are organized and interpreted, the researcher begins to build theory based on those themes, patterns, and relationships. The final stage addresses these questions. What role do the themes, patterns, and relationships play in understanding the culture or phenomena being studied? How do they help predict or explain the phenomena or culture in examination?

Organization

My approach for organizing the textual data followed the open coding procedure outlined by Strauss and Corbin (1990). After conducting the interviews, the data were transcribed by a professional transcriptionist. Each of the long and short interviews were reviewed with attention to common themes and topics of conversation*. Initial concepts and categories were tentatively developed to aid in the organizing process. However, the categories were continually expanded or revised as common themes were revealed.

* Translating the meanings when the data is changed from verbal to written is always a challenge. To avoid losing the meanings behind the words spoken, I often referred back to the original recordings.

Nud*ist, a qualitative content analysis software program, was used to code and organize the data under the categories*.

The open coding procedure includes first labeling phenomena embedded in the visitor perspectives and then developing categories. Labeling phenomena means giving each event or idea a name that represents a phenomenon. For example, a description of a trip in terms of the bumpiness of groomed roads could be labeled “road conditions.” Any subsequent talk of bumps or the smoothness of the roads or even snow depths on the roads could be labeled as “road conditions.” In concert with other stories of experiences and perceptions of roads, the category “groomed roads” could be developed. Several properties could fall under the category “groomed roads,” such as road conditions, length, width, number or design. This conceptualization system allows the analyst to organize and make comparisons between phenomena. The data were examined for similarities and differences between subjects with particular attention given to concepts related to the visitor experience, management issues, and support for potential management actions.

Interpretation

The concepts and categories were interpreted with special attention given to common themes, interrelationships, and patterns. Analysis focused on underlying themes or patterns present in the data and led to insights into visitor:

- frustration or satisfaction with their experience in YNP
- support and understanding of different management actions
- awareness of and agreement with various winter use impacts

* Note: Nud*ist’s hierarchical structure building was not utilized in the analysis, because I wanted to use analytical means that better promoted theoretical sensitivity and allowed for more creative analytical strategies.

- ability or willingness to change the logistics of their visit; other mechanisms for coping with proposed management actions.
- experiences in YNP's winter setting (environmental, social, and managerial), in contrast to other recreation experiences

Strauss and Corbin's (1990) tools for enhancing theoretical sensitivity were used to stimulate creative ways of thinking and to help uncover meanings in the text.

Discoveries came about from strategies outlined below, such as questioning, single word or phrase analysis, comparisons, and recognizing signal words.

Questioning's main purpose is to open up the data. Basic questions such as who? what? where? when? and why? frame any interpretations and stimulate further more detailed questions. This tool forced me to consider all of the data from the mundane to the extraordinary. For example, one interviewee called snowcoaches "wimp wagons". In this type of analysis, I would ask, who is saying this? What does this term reveal about the speaker? When did the speaker come to this judgement about snowcoaches? I questioned the data in a variety of dimensions, which moved the analysis beyond predetermined ideas or expectations. This can be seen in the discussion of the nature of recreation in YNP and how the mode of experience shapes the visit. Categories such as interaction with the environment, freedom, and relaxation are products of this type of *questioning* analysis.

Single word or phrase analysis can reveal hidden meanings within the data. By focussing in on a word or phrase that caught my attention in the data, such as "the bison don't seem bothered", I was able to consider all possible meanings and challenge my initial assumptions. How might the interviewee define bothered? Does the phrase "seem

bothered” imply that the interviewee needs visual proof? What influence might this perception have on the interviewees attitudes about wildlife preservation in Yellowstone? This strategy brings the researcher closer to the intended meanings of the participant.

Comparisons help the researcher transcend standard ways of thinking. For example if I compare the cross country ski experience with the snowcoach experience at first I might say that skiing is physically challenging and snowcoach touring is far less challenging. Comparisons take this thinking further. All skiing is physically challenging? What about front-country skiing? Isn't skiing also about getting around under your own power? Independence? Freedom? Snowcoach tourists are sitting in a vehicle driven by a guide. They are on a tour with little freedom and independence. So what do they get? They have a tour guide who identifies wildlife, explains geology and history, and takes them to the scenic “hot spots”. Is this about nature study? Relaxation? As illustrated above, comparisons lead the researcher to insights beneath surface judgements and assumptions.

Recognizing *signal words* aid the researcher in seeing beyond the obvious in questioning cultural assumptions. When participants used words like “always” or “never” or phrases such as “I’m always for the animals, and whatever they need”, I would ask, does this interviewee mean she’d be in favor of closing the Park to visitors if researchers had a hunch that the animals were threatened? Would she need solid proof of impacts? Does she support restrictions for just any animal, say the porcupine or the shrew? These signal words are indicative of cultural assumptions and demand a closer look.

Theory Building

Will a holistic understanding of the nature of the winter experience in YNP aid managers in providing for and maintaining quality opportunities for recreation? Will the discovery of relationships between experiences, perceptions, and support for management actions give managers better tools for gauging how management change will impact visitor experiences? The answers to these practical questions lie in the theories that come from the organized and interpreted data. These inquiries demand the researcher to put the literature review, data collection, and data analysis to use in the real world*.

Glaser and Strauss (1967) highlight what they believe to be the objectives of theory in sociology, most of which apply here. First, theory should guide the researcher toward prediction and explanation of behavior. Why are visitors in favor of or against management actions? What would be the consequences of certain management initiatives?

Second, theory should expand theoretical knowledge in the field. How does the qualitative approach improve our understanding of recreation experiences? Third, theory should have real world applicability. How do the theories from this research help managers?

And finally, theory should lend toward an appreciation for a methodological perspective and conceptual style. How should recreation experiences be examined in the future? What new ways are there to understanding recreation behavior? The theories

* Like all forms of scientific observation, qualitative studies are not unbiased. In qualitative studies the interpretation is shifted from the respondent to the researcher. The analysis in qualitative data depends on the skill of the researcher and his or her commitment to the data. The role the researcher plays in the analysis should be that of a faithful interpreter of the data. Still, it is difficult to draw the line between where the researcher ends and the data begins.

developed from the stories of YNP winter visitors should expand, as well as concentrate our understanding of recreation experiences in both practical and conceptual terms. The themes, patterns, and relationships discovered in the data interpretation should be developed and applied to real world situations and concepts.

The following chapter presents the results of the qualitative analysis and includes a discussion of these results. Sections of this chapter are organized according to four broad categories developed from the organization and interpretation processes of the analysis: YNP's winter setting, the nature of the recreation experience in YNP, perceptions of social conditions, and perceptions of management change. Within each section are different concepts representing a range of perceptions and attitudes from the visitor perspective.

The Conclusions and Management Implications chapter takes the analysis one step further into theory building. The theory from this study came not as a product of the analysis, but as a process. Throughout the steps of the analysis a notebook was kept in which theoretical questions and ideas about what's really going on in the data were recorded. As I became more immersed in the process and more familiar with the participants stories, patterns and relationships embedded in the data emerged. This holistic picture of the narratives served as the foundation upon which conceptual and practical theories were built. By the end of the three steps of analysis, the theoretical discoveries proved to have real world implications. These ideas and discussions are presented in the final chapter of the thesis.

CHAPTER FOUR--THE RESULTS

This chapter presents the results of the research conducted under the methodology described in the previous chapter. The analysis conducted focussed on the visitors' perspective of the visitor experience in Yellowstone National Park. The following sections provides the textual data supporting various themes within the narratives and addressing the objectives of the study. This includes, the visitor perception of YNP's winter setting, the nature of the recreation experience in that setting, visitor perceptions of social conditions within YNP and their effects on the experience, and finally, common factors in visitor contemplation of management actions.

YELLOWSTONE NATIONAL PARK'S UNIQUE WINTER SETTING

Well, there isn't any other place on earth like Yellowstone. So everything here is unique just like other national parks. And for us, this particular visit, it has to do with the wintertime and the snow and the wildlife sightings. -Sarah*

What does YNP's winter setting offer visitors? Time and time again, visitors describe the YNP environment as unique. Visitors often explained their visit in terms of what Yellowstone offers them that they can't get at home. One objective of this study was to establish what aspects of YNP's winter setting makes the Yellowstone experience so unique.

For example, in the following excerpt, Hal indicates the importance of the uniqueness of the winter experience in Yellowstone:

Our trip, okay, well it's kind of hard to describe because it's such an incredible place...it seems like once you come out here, you have to come out again, because there's just so many things that we're not used to. We're from Rochester, New York. We don't have hot springs, we don't have geysers, we don't have bubbling mud. We don't have sulfur springs,

* Note: Each interviewee was assigned a pseudonym to protect anonymity.

like that. We don't have buffalo. We don't have elk. So it's some different things that we don't have.

Whether visitors were asked to describe what makes YNP unique or just asked to talk about their visit, many of the interviewees focused on two particular dimensions of the Yellowstone setting, wildlife and scenery. To many visitors the wildlife and natural scenery in the Park are what make Yellowstone unique. Some of the most colorful and richest dialogue came from talk about wildlife observations or encounters and the Park's scenic beauty. The next two sections present the results of my examination of how visitors describe the wildlife and natural scenery in YNP's winter setting. I will also investigate what it is about the wildlife and natural scenery in Yellowstone that is so special to visitors, as revealed through their stories.

Importance of Wildlife in Yellowstone's Winter Setting

Yellowstone National Park's winter setting is teeming with wildlife. Scientists, photographers, and visitors have long recognized the abundance and diversity of animals throughout Yellowstone, including bison, elk, deer, moose, coyote, wolves, otters, eagles, trumpeter swans, and waterfowl. It's no wonder that when asked to tell the story of their experiences in YNP visitors almost immediately describe their observations and recount their encounters with wildlife. Whether it's on snowmobile, skis, or by snowcoach, the Yellowstone winter experience inherently involves seeing and being near wildlife.

As a 1998 winter use study revealed, observing wildlife and viewing bison in a natural setting is highly important to visitors. In fact, these experiences were rated by respondents among the top five reasons for their visit to Yellowstone (Borrie, 1999). Respondents were also asked about the role of YNP. On average, visitors highly agreed with the importance of the Park as a wildlife sanctuary and a place of protection for fish

and wildlife habitat, which underscores the significance visitors place on wildlife in Yellowstone. The stories shared by the visitors in this study support these findings.

For example, when asked what kind of things he saw out in the Park, Guy immediately recalled the bison, elk, coyote, eagles, swans, and ducks his group observed. When asked what experiences or events were particularly important to his visit, he replied,

Seeing the animals was probably most key to the success for the trip, at least for me.

Many other participants in this study also ascribed importance to seeing wildlife in Yellowstone. When asked what it was like seeing the bison, elk, swans, and ducks he described, Roger explained,

Oh, we enjoy it. We've always enjoyed it. We've seen one nice big bull elk. That's kind of why we come.

Belinda remarked in a short interview conducted at Old Faithful, that wildlife was number one to her experience. She said,

I love animals, just love animals.... Nature, natural, them doing their thing and us being able to watch them

Significant Characteristics of the Wildlife Opportunity in Yellowstone

Now that the importance of wildlife in general to visitors has been established, the next question becomes: "What is it about wildlife and seeing wildlife at Yellowstone that makes that opportunity significant to visitors?" Throughout visitors' stories about the wildlife in YNP, certain key characteristics continued to surface such as,

- uniqueness

- diversity and abundance
- naturalness

The following presentation of results and discussion concentrate on participants descriptions of the wildlife in Yellowstone with respect to these characteristics.

Uniqueness

Just seeing wildlife was a different experience for many of the visitors, especially those coming from regions unlike YNP. Max and Nora characterized their experiences with bison as a “treat”, primarily because they don’t have those kinds of wildlife opportunities where they live, even though they may have similar winter recreation opportunities:

It was gorgeous. All these people had their cameras and we had our camera, taking pictures. They [bison] were standing in the hot springs, steam rising. We were right there. It was awesome, beautiful. We don’t have them in California. And the elk, we don’t have elk either, very awesome. It’s just a treat because in California, we don’t have this. When we’re snowmobiling [in California] there’s no animals around. It’s just really neat seeing the wildlife.

Abundance and Diversity

When asked to describe their visit to YNP, many participants listed the species of animals they saw. Visitors seem to keep track of their wildlife observations, similar to avid birdwatchers or other wildlife enthusiasts. The abundance of bison, elk and waterfowl was noted by a number of visitors I interviewed. While talking about the “outstanding scenery” in the Park, Kelsey and her aunt Roberta excitedly reported the different wildlife they saw,

Kelsey: Oh, I couldn’t believe the ducks,

Roberta: and swans, I guess the trumpeter swans. They were beautiful.

K: I didn't even know they stay.

R: And the little ducks that go under water and swim around.

K: We saw a bunny rabbit.

R: Uh, huh, and coyotes and elk, of course, and mule deer that looked kind of neat over there.

Stan also listed off the kinds of wildlife he saw, when asked what the highlights of his observations in the Park were,

We saw more animals. From the littlest to the biggest, a lot of buffalo, a swan, coyotes. The coyotes are funny when you come to a stop. They just look at you, and they wanted to stay and stop and [they] had a buddy, a raven, that looked like they were working that particular stop. We saw a couple of swan, a lot of elk, but I was impressed with the buffalo.

Cross-country skiers, Isaac and Anne commented on seeing elk by the hotel in Mammoth. I asked them what remarkable kinds of things they saw in the Park.

Isaac: Saw one set of tracks.

Anne: And we saw one elk this morning.

I: Yeah, we really enjoy the elk all over the place. Down there around the hotel and such...really nice.

Here Alice describes her wildlife experiences while touring the Park on snowcoach:

Well, our first day here we took a wonderful snowcat trip to Mammoth and back and saw more wildlife that I would have ever imagined and very, very close. And our guide was marvelous. And we saw bison very close up, we saw elk very close up, we saw bald eagles, we saw those special swans...

Naturalness

Many of the respondents value YNP for the opportunities it offers to view a diversity of abundant and unique types of wildlife. For many visitors, however, it is the natural conditions accompanying that opportunity that are most remarkable. The thrill of watching wildlife interact in their natural habitat resounds from many of the participants'

stories. Those who observed such interactions felt lucky to have those opportunities in Yellowstone. The following excerpts are examples of some impressions participants had with regards to wildlife and natural conditions.

Watching the bison migrate in the winter made Eve think about how bison adapt to winter conditions. Eve, who toured the Park on snowmobile, remarked

Oh, gosh, all the things you see and the wildlife and how they move around, depending upon the weather conditions. ... It's so great to see the animals in their natural setting without disturbing them.

Alice and her boyfriend took a wildlife tour guided by a naturalist into the Lamar Valley, where they got a rare glimpse of wolves feeding on an elk carcass. She described the fierce scene as thrilling and more than surpassing her expectations.

Yesterday we took the wildlife tour guided by a ranger, naturalist...and we saw a whole wolf pack. And we saw them, either they had killed a bull elk or a ranger had shot a bull elk who was injured, but she set up her scope so that we could see the kill site. And then we saw a bald eagle that was munching away on something. And we saw the various wolves as they were coming to take turns. The whole pack, you know, sitting up like a quarter of a mile away and then they take turns coming down... kind of in priority of their, I suppose their hierarchy. And then we saw a bunch of them, you know, just lolling on their back, probably with very full bellies, but that was very thrilling. So the Park... I think in the winter has more than fulfilled our expectations. We're really having such a good time here.

Fanny also recalled her experience with wildlife, hearing then seeing two coyotes calling each other, as the highlight of her day. She felt transported to another time and place as bison and coyotes appeared before her in the mist of a geyser. Though evoking much different emotions, both Alice and Fanny regarded the opportunity to experience wildlife events as exceptional.

We were out right at 8:00 and we went to the first kind of geyser area... and we parked and nobody else was there. We walked on the boardwalk and the bison would like appear almost in the mist as we got closer to them, and then it was kind of transcending, transporting. And then the coyotes, we could hear the coyotes in the distance. Then we noticed their calls were getting closer and closer, and then we saw one, and then we saw the other, and they were calling each other. And we were way away from our snowmobiles, but they came over and we had to back up. We wondered if they were going to rob our food, but they didn't. So just watching them, and being in the absolute pristine... I mean you wondered what time is this with the geysers, and the bison, and the steam and the coyotes and nobody else was around. So that was definitely a highlight for us yesterday. So that's what stands out for us....

Importance of Scenery in Yellowstone's Winter Setting

“Winter wonderland”, “heaven”, “breathtaking”, “picture perfect”, “pristine”, and “unbelievable;” those are just some of the words visitors in this study used to describe the natural scenery in YNP. For many the beauty of the Park seems almost ineffable. Yellowstone National Park has over two million acres of rugged mountains, rolling meadows, winding rivers and seemingly boundless plains. In the Park lies the world's largest concentration of geothermal activity, including a reputable collection of hot springs, geysers, and mud pots.

Visitors ranked a place for scenic beauty and a display of natural curiosities first and fifth of the most important values of YNP in last year's winter use study (Borrie et al 1999). Moreover, respondents in this study rated the experience of enjoying natural scenery as the number one reason they chose to visit Yellowstone. The narratives collected from the interviewees also demonstrate the role of natural scenery in the visitor experience. These narratives elucidate, as well, what particular aspects of the natural scenery are most striking and why. The general beauty and picturesque nature of the

winter scenery in Yellowstone, the geological or geothermal features, and even the areas burned by the 1988 fires caught the attention of visitors.

Aesthetic Beauty

In the long interviews I asked visitors the question, “if a friend of yours was choosing between coming to Yellowstone to snowmobile (ski or snowcoach tour) or going somewhere else, what would you tell them about Yellowstone to help them decide?” For Andrea it was the overall beauty of the Park that caught her eye. She replied,

I guess again, the beauty of the Park, the National Park. Being able to have access to be in it on snowmobiles, on the trails. Its picture perfect everywhere you look. It just ...kind of reminds you of heaven.

When asked to describe her experience in the Park so far, Fanny adds,

And this for us is among the most beautiful places we've ever seen in winter. Absolutely. Both my friend and I have had an opportunity to travel, so we really feel like it's saying something. It's just breathtaking. Every view of every scene, it's just absolutely breathtaking.

The following women had a particular scene in mind while attempting to explain the natural scenery in the Park. Betty thought Yellowstone was a winter wonderland:

...It's like Courier and Ives, it's even better than Courier and Ives. ... The snow on the trees... yesterday... we were really south in West Yellowstone and the trees, the snow was hanging on the trees and the trees were bent down and I mean, like I say the Courier and Ives. ... It was like a winter wonderland.

Kelsey and her aunt Roberta envisioned a similar scene in their description:

Kelsey: It must have snowed last night, the roads were smooth and there was a lot of powder on the roads too. It was nice.

Roberta: The sun came out...

K: It's sparkly, the snow's more sparkly today than it was yesterday because of the sun.

R: It's beautiful, the trees, it's kind of like a holiday, you know, a Christmas card every where you look.

K: It looks like marshmallows on the trees.

Geological Features

Yellowstone visitors were attracted to a few aspects of the scenery in particular, like the geothermal and geologically unique areas or the places once ravaged by fire in the Yellowstone fires of 1988. Brian described the geothermal scenery as unique. He says,

Then a lot of the thermal structures, too. I think is what attracted me to want to come here because...I've never been to any other place where geysers and just...the warm river and the hot pots and stuff everywhere has been accessible like this.

Brian admitted that he and his travelling partner wanted to see some of the popular and more famous spots like Old Faithful. Fanny's interest was sparked by the geology of the area. She was struck by the feeling of timelessness:

...here, it's different because it's like when the geysers go off so you want to know that's happening. But then here we are on this dormant volcano, maybe the biggest in the world, and 600,000 years ago it erupted and we're right on time. So it's interesting to think about the time aspect of where we are, what happens here from geology and all.

Fire Affected Landscape

Several interviewees mentioned the scenery with respect to the fires. Here are some excerpts about their perceptions of the change in scenery due to the 1988 fires.

Kelsey and Roberta described what it was like to be in the middle of the burned areas:

Kelsey: It was kind of neat on Canyonland, because we got to ride between where it was burned, where the fire was and...we were right in the middle. Where on our right there was a lot of evergreens and then on

our left was just sticks. That was kind of neat to see the fire damage even though I wish it wouldn't have happened.

Roberta: And it's all coming back.

K: See the little baby trees coming out, they're just cute.

R: And what's the name of that tree, that the pine cone has to burst open in the fire? Oh, well, I don't know, but we love it.

Lynette in her interview believed that the fire was good for the scenery. When asked if there was anything about her experience she'd change, she replied,

No. I'd even keep the fire, because things have gotten just beautiful because of it. It's just totally different. Yeah, there was one ugly black summer, so much green and so much vegetation is coming out of that.

The natural scenery not only added beauty to the Yellowstone experience, but many times it sparked thought about natural processes and change. Both Fanny and Lynette were struck by the natural changes in YNP. Several interviewees talked about the differences in the Yellowstone's winter scenery compared to the scenery in the summer. One felt that the winter scenery was less spectacular because of the gray skies and pale hues. Another interviewee deemed winter's scenery more spectacular because the animals are easier to spot in the white snow. Most agreed that the natural scenery in Yellowstone greatly added to their enjoyment of the Park.

Discussion

YNP offers visitors the opportunity to be in a place where unique, diverse, and abundant wildlife roam free in their natural habitat. It is also a place that provides opportunities to view unique types of scenic beauty and geological formations. The importance of these elements of Yellowstone's setting to the YNP experience was a common theme among the interviewees, regardless of the means of experiencing these things.

Many interviewees gave specific details of what it is about the wildlife in Yellowstone that is so special. Several felt like the abundance and diversity of unique species of wildlife in Yellowstone is what makes it stand out. While many recreation areas might provide opportunities to view wildlife, in Yellowstone the abundance and diversity of species almost assures visitors of spectacular wildlife viewing.

If a trip to YNP assures spectacular wildlife viewing, what makes this experience distinct from a trip to the zoo? That's where the natural conditions and habitat come in to play. The narratives clearly demonstrate that seeing wildlife interact in their natural habitat is an important part of experiencing wildlife in the Park. Rich and highly detailed accounts of wildlife "events" such as watching a wolf pack devour an elk, observing bison foraging in deep snow, and seeing ducks dive under water for food were frequent in interviewees' discussions of the wildlife in Yellowstone.

The wildlife and natural scenery YNP's winter setting offers visitors is revered by all kinds of visitors. The consensus from narratives of participants, whether they toured the Park on snowmobile, snowcoach, or skis, is that the opportunities for viewing natural scenery and observing wildlife are what make the YNP setting special. However, the means by which a visitor experiences the Park, varies. The next section reflects a diversity of perceptions as to how to experience Yellowstone's wildlife and natural scenery and what factors influence how visitors experience the Park.

THE NATURE OF THE RECREATION EXPERIENCE IN YNP'S WINTER SETTING

This section is entitled "The Nature of Experiencing YNP's Winter Setting", because it deals with the factors identified by visitors that influence the visitor experience in Yellowstone. Perceptions about these factors and the extent to which they influence

the experience were common topics of conversation among interviewees. This section is derived directly from the interviewees' stories about those factors that have influenced their ability to experience YNP. The preceding sections have established through the rich narratives provided by YNP visitors that observing and encountering wildlife and viewing natural scenery are at the crux of the nature of the Yellowstone winter experience. To most visitors I interviewed these opportunities are paramount to the quality of that experience. If the nature of the YNP experience is primarily about the opportunities to view natural scenery and observe and encounter wildlife, then examining elements of the experience that influence those opportunities is essential in understanding how visitors perceive this experience is achieved.

The experience in YNP's winter setting is largely shaped by the activity or mode of transportation that a visitor chooses. The next section establishes the various roles of these *modes of experiences* in the experience and then examines how they frame the visitor experience in Yellowstone, with special attention to the major themes revealed in the text.

The Snowmobiling, Skiing, and Snowcoach Touring Experiences in Yellowstone

Yellowstone offers a variety of recreational opportunities to its winter visitors. Around 100,000 visitors each winter take advantage of the deep snow and hundreds of miles of groomed and backcountry trails. Over seventy percent of winter visitors experience the Park on snowmobile, nearly eleven percent tour the park by snowcoach, and almost ten percent are on cross-country skis (Borrie et al. 1999). The same study also reported that respondents ascribed high importance to snowmobiling or skiing in Yellowstone's natural setting. According to the narratives, the role that snowmobiling,

skiing, and snowcoach touring plays in the visitor experience is twofold. Participants talk about these elements of experiencing YNP's winter setting, reflect their importance as both a recreational activity and as a mode of transportation. To reflect that dual role in the YNP winter experience, snowmobiling, skiing, and snowcoach touring are from here on out labeled modes of experience, rather than recreation activities or modes of transportation.

For some participants these elements of the experience were viewed as recreational activities in and of themselves, just as important as being in Yellowstone. For others, snowmobiling, snowcoach touring, and skiing were perceived as merely the means of accessing the wildlife and natural scenery in the Park. It should be stressed, however, that these values are not mutually exclusive. In fact, perceptions of their value as activities or modes of transportation frequently overlapped. Snowmobiling, skiing, and snowcoach touring were commonly described as "fun ways of seeing the Park". The predominant theme in the data is not the value of snowmobiling, skiing, and snowcoach touring in the Park itself, but in what these modes of experiences allow them to do and how they enable them to experience Yellowstone. However, just because these modes of experiences shape the ways in which the winter setting is experienced, their value in and of themselves should not be overlooked. For example, Lynette gave this perspective on snowcoach travel:

I think it's fun. It's very comfortable, for sure, because we sit there. We take our coat off and everything. ... [The guide] mentions things, the rivers. He knows the names, and where the animals hang out.

Kelsey sees value in snowmobiling for the excitement it offers.

Excitement. I'm not real good at snow, well, I'm good at snow skiing, but when I'm standing still, I'm not real good at going, so I didn't think cross-country skiing would be for me. It's exciting. It's just exciting and fun and you get to go at your own pace. And I'm from Georgia and I never see snow, so, I will never probably ever get to snowmobile again. Unless I come back out here.

The next excerpts illustrate how skiing can be viewed both as recreation and as a way of accessing the beauty of Yellowstone. When asked what skiing in Yellowstone was like

Isabell and Jack replied,

Isabell: We've had so much snow, a ton of snow. First couple of days we didn't do much because there was so much snow. But it's beautiful, especially the burn areas. We're from back East and you don't see many areas like that and it makes it really nice backcountry skiing. It was all thinned out and beautiful.

Jack: Some of the snow pack has been tricky. Originally we were going to go down back and go to Shoshone Lake, but one day we went up and broke trail... it was pretty weary. ... It was really beautiful skiing yesterday up to Mallard Lake and hike on the ridge for a while and did some downhill runs.

Gina called skiing in Yellowstone the "focal point" of her trip. She explains,

It's not just to ski but to ski among beautiful things in Yellowstone. To ski here is special. ... Lifelong love of Yellowstone, and the geysers and the animals are just beautiful. I grew up in Georgia. It's about as far different as you can get.

Several participants were explicit in the distinctions they drew between snowmobiling as *sport* and *touring* the Park on snowmobile. The following explanation from Doug demonstrates this difference.

... snowmobiling in the Park is really not snowmobiling. It's just touring. My idea of snowmobiling is going up in the mountains and running up and down steep mountains and seeing how far you can get up and how far you can't and having fun. In the Park, instead of a car, it's your snowmobile, but it's still enjoyable. We toured outside the Park and that was a nice thing. ... But this is for family. We've got our family and little kids with us, so that makes it different for them because they don't like to go in the mountains and get lost. So for a family, I think that would it be great. If you're going on a snowmobiling trip, just to snowmobile, I don't think this

is the place. But if you want to see everything that's here, animals, the geysers and all that, in the wintertime, which I'm sure is different than summer, then it's a great place to bring a family, not specifically for snowmobiling.

Greg agreed that in Yellowstone the focus of the experience is more on seeing the Park and less on snowmobiling. When asked what he would tell a friend about snowmobiling in Yellowstone he replied,

I'd say a lot of what you hear, because you hear people talking about how the all the trails are bad and there's a lot of people and everything and I'd tell them that you're not really here to snowmobile so much. You can ride fast anywhere and ride good trails. You're here to see the sites and see nature and all that.

Wendy also saw a difference in the snowmobiling experience in Yellowstone as opposed to other places. When asked what she would tell a friend who was deciding whether to snowmobile in YNP or another place she answered,

I think it depends on what you want to do. Some people like to-the reason they go snowmobiling is to play on the machine and to jump around and to play around, and I've done that too-but I think if you're going to come up here, the purpose would be to see the bison, see the wildlife.

The significance of the mode of experiences visitors chose varied. For some the mode of experience played an integral role in the enjoyment of YNP's winter setting. For others the mode of experience was far less important than the setting itself. All of the participants' recreation experiences were influenced by these modes of experiences, whether directly or indirectly. While most describe their mode of experience as a way of enjoying the Park, this fact does not in anyway diminish the importance of these activities or modes of transportation to the YNP experience. Snowmobiling, skiing or snowcoach touring in Yellowstone shaped the kinds of experiences these interviewees had.

Many visitors combined activities or modes of transportation during their visit to YNP. This element of the experience can be characterized as the means by which a diversity of visitors can access a variety of experiences within Yellowstone's winter setting. It is important not to assume that visitors can be lumped into categories according to their activity choice. Many snowmobilers, for example, seek very different kinds of experiences. This is demonstrated in the winter use survey of 1998, where visitors were categorized not by their activity style, but by their motivations or experience preferences. The study suggests that these visitors should not be managed merely by activity, but by what they seek in the Park (Borrie et al. 1999). Likewise, the study undertaken here explores a range of experiences in Yellowstone and how those experiences influence visitor perceptions, rather than merely what snowmobilers, skiers, or snowcoach riders think about the experience. All in all, interviewees of every activity or transportation type expressed a reverence for the Yellowstone winter experience and demonstrated that wildlife and natural scenery are the loci of that experience.

The next section presents the characteristics of each mode of experience. I will begin by examining the snowmobiling experience in Yellowstone, then the snowcoach touring experience, and finally the skiing experience. It is important to note that the characterizations given are not those of the visitors, but those of the experience. I am not describing snowmobilers, snowcoach riders, or skiers, but the nature of those experiences. Some common themes surfaced in visitors' narratives about their mode of experiences. They are:

- access
- freedom

- **interaction with the environment**
- **relaxation**
- **escape**

Careful consideration will be made as to how modes of experiences framed the opportunities participants had with respect to these themes and how these themes in turn influenced the overall recreation experience.

The Snowmobiling Experience in Yellowstone

Yellowstone National Park has over one hundred miles of groomed roads for snow vehicles. The roads from the four entrances join a loop, referred to as the Grand Loop. The loop is around one hundred miles and takes visitors past waterfalls, rivers, hot springs, mud pots, and the popular Old Faithful geyser and visitor center. Many visitors circle the whole loop in one day on snowmobile, stopping at sites of interest along the way.

Visitors can bring their own snowmobiles or they can rent from concessionaires near the entrances or at the Old Faithful visitor center area. Snowmobile guided tours are also available to visitors. The Park's groomed roads are open day and night, but amenities such as dining services and gas stations are only open in the daytime. Snowmobiles are restricted to the groomed roads and cannot go off trail anywhere within the Park's boundaries. Yellowstone Park Rangers on snowmobile enforce the rules and regulations of the roads in the Park, such as speed limits and stop signs.

The Yellowstone experience on snowmobile is unique, according to visitors. As mentioned earlier, snowmobiling in the Park served different roles for different visitors. Some viewed snowmobiling as a fun and exciting activity integral to their enjoyment of

Yellowstone, while others saw it more as a means of getting around the Park.

Regardless, the snowmobiling experience offers visitors a unique way of travelling in the Park. Three common themes surfaced among the narratives of those who were on snowmobile. First, being on snowmobile allowed visitors the freedom to set their own schedule and travel at their own pace. Second, snowmobiling gave visitors access to the whole Park. Third, snowmobiling gave visitors the opportunity to interact with their environment in unique ways.

Freedom to Design Experience

If you want to go slow, you go slow. If you want to get it fast, you can get it fast. You go at your own pace. -Kevin

Setting one's own schedule and pace while visiting the Park on snowmobile was a common theme in many of the narratives. Several of the interviewees chose to snowmobile in Yellowstone because they wanted the freedom of coming and going as they please and travelling at their own pace. Valerie chose snowmobiling over touring the Park on snowcoach for these reasons. She said, "you can't stop and see things on the snowcoach, and I see something and we stop. We can take our time on the snowmobiles." Gavin, who also traveled in YNP by snowmobile, had similar perceptions about what that experience gave him.

I don't think I could enjoy it half as much from the inside of a vehicle looking out. I think it gives you a sense of freedom and ability to guide your own destiny with the stopping at certain sites and seeing different animals and so forth.

Olivia said the freedom in YNP on snowmobile is consistent with the type of person she is. When asked why she chose snowmobiling over other ways of getting around Yellowstone she answered,

Freedom. You can go at your own pace, stop where you want, but then I'm like that anyway. I don't want anybody telling me what to do. ... This is perfect. Just beautiful. Can't wait to come back next year now.

Brian agreed that an advantages of snowmobiling is being able to pick what you want to see in the Park. I asked him why he chose snowmobiling and he replied,

... we just felt like we could pick a couple of places we wanted to go, go directly there with our snowmobiles and not be stuck on a tour that maybe had some things we wanted to see but some things we didn't. ... There's kind of a limited amount of time. Have to be back by 5:00. So we wanted to try and see maybe one or two other places but pick them out now and see if we could get there in time or not.

Many visitors on snowmobile perceived that these opportunities, like setting your own schedule, aren't available on a snow coach tour. Two interviewees in a group preferred the snowmobile experience over a guided trip on a snowcoach for the following reasons.

Kyle: We really enjoy the snowmobiling through the Park. It is just an experience that you can't get anywhere else. Much different than being in a vehicle. ... I mean you're riding the snowmobiles, better than being inside of a little tourist-type bus. This way you're kind of doing your own thing, independent, you can stop and go when you want. And you can ride on whatever trail you want to ride on. You know, if you see an animal at this spot, you stop.

Jerry: Riding a snowmobile is much more fun. I mean it's having a double plus. You're more in the outdoors, you're having the enjoyment of riding a snowmobile and then like he was saying, the availability to stop and go when you want, not depending on a large coach.

Patrick had been in the Park before on a guided snowmobile trip, but he now prefers going on his own. For Patrick being able to come and go as he pleased was important.

Well, these guys [his group] have been coming up here, I guess that's testimony... We call the snowcoaches the wimp wagons. ... Well, the first two years, we went up on Togwatee with guides and after two years we said we're not doing this again. Last year, well, we rented our own machines in Jackson Hole and came on our own. Snowmobiling is for the scenery and the wildlife. And I want to be able to stop and go when I want. I want to be able to leave my truck when I want and get back when I want...

When I asked visitors why they chose snowmobiling rather than other modes of experiences, they often contrasted snowmobiling with being in a vehicle on a tour.

Visitors perceived the advantages of snowmobiling as being the freedom it allows them to set their own schedule and travel at their own pace. Another important characteristic of snowmobiling is the ability to access the many attractions within Yellowstone.

Access to the Park

I think what's so much more unique is to be here in the wintertime. You can be in the middle of it and almost feel like you're in another world. The wildlife, of course, and the lack of people and the snow, it makes it pretty big. And I think also because you can be on a snowmobile and get around and see it.

-Bart

At 2.2 million acres, it's virtually impossible to see all that Yellowstone has to offer in one visit. However, on snowmobile visitors can experience many of the popular frontcountry attractions such as the Grand Canyon of Yellowstone, Hayden Valley, Mammoth Hot Springs, Norris Geyser Basin, and Old Faithful in one day. Having access to these places was an important factor in the snowmobiling experience for many participants. For example, Laurie valued snowmobiling in Yellowstone for "just being able to get through the Park and see everything".

Fanny also felt like snowmobiling is really the only way to see the whole Park. Here she explains how she appreciated the chances to see a diversity of wildlife, "We did the whole loop so I got to see all of that and the swans, and the wildlife of course. ... So the fact [is], the snowmobile allowed us to get around..."

Jake admits that he couldn't get to certain places on skis. Here's what he had to say about why he chose snowmobiling.

Well, I'm not aware that there are a whole lot of other ways to actually see the Park in the wintertime. I guess there are tour coaches, but with

snowmobiling, you're on your own and it's a lot of fun. ... You're sort of on your own. You're under your own control and it just is a lot of fun. I like cross-country skiing, but obviously I couldn't get over here cross-country skiing.

Many participants believed that snowmobiling had advantages over other modes of experiences in that it allowed them to see the sites and experience the whole Park in one visit. Another common theme was the ways in which a visitor interacted with the Yellowstone environment on a snowmobile.

Interacting With the Environment

...first of all, it gives you some freedom because you can go by yourself and stop where you like...and take photos. And it gives you a closer, you know, feeling of being with nature than if you're on one of the tour buses, I think. -Elaine

Participants perceived snowmobiling as giving them “more of a feeling of being in the Park” (Bart), a sense of being “more in the outdoors” (Kyle), and an experience of being “right there” with the animals (Olivia). Donna liked snowmobiling, because she likes to be outside and unconstrained.

...I really like the wind blowing through my hair and all that type of thing. No I really like snowmobiling. I wouldn't want to be in one of the coaches. That's too confining for me. I like to be outside. I like motorcycle riding, so I like snowmobiling.

The first section of this chapter demonstrates how important wildlife is to the winter experience in Yellowstone. The narratives of many participants on snowmobile indicate that not only observing wildlife, but actually having the opportunity for *close encounters* with wildlife makes the snowmobiling experience special. Often times this experience was much more intimate than merely observing wildlife from a distance. Encounters between visitors and wildlife in the Park are not unusual. Bison frequently migrate across groomed trails and occasionally travel some distances or just mill around

in groups on the roads. National Park Service regulations advise visitors to keep their distance, but oftentimes snowmobiles are forced to navigate their way around or through groups of bison.

Much of the talk about wildlife led to lively accounts of these types of *close encounters* with bison. Several of the interviewees showed fervent emotion while recounting these experiences. Close encounters evoked several kinds of affective responses from visitors. Many felt adventurous, some were in awe, others admitted to fear.

As Henry illustrated why he called his Yellowstone experience “unbelievable”, he mentioned that being so close to the wildlife was important:

The hot springs and everything. All the rivers are running. The wildlife crossing the trails. I mean, being four feet away from the wildlife is really interesting. It’s really nice.

Stan also felt close to wildlife, here he describes his experience with bison on the groomed roads:

But I was impressed with the buffalo. I’ve never been that close to them. Although I’ve been to the zoo a lot, I’ve never been right up where they could breathe on me. We had to sit still while they walked by. We had to wait today, one time an hour, for the herd to get by.

Olivia contends that getting close to wildlife in the Park is “the whole thing” and is the main reason she comes to Yellowstone in the winter. Her experience navigating through a herd of buffalo on the groomed roads was an event that particularly stood out in her mind.

There’s tons and tons of buffalo. They’re right in the road, you don’t even have to look very far for them. They’re right there. It’s just beautiful.

Well, just trying to get through the buffalo. When they're on the roads and stuff you have to be kind of careful, because the mothers will come over so you can't get by. So that's just been fantastic to even watch that in action. You know that kind of nature. So it's beautiful. It's just wonderful.

Olivia recalled having many *close encounters* with bison,

All the way up. About every, at least every mile you saw herds of them. So there's tons of them out there.

and when asked if being close to bison was important she added,

Yeah, that's the whole thing. That's really the reason that I would want to come up here and see nature and wildlife. Especially in the winter, you can always see it in the summer it seems like, but in the winter it's just a whole different world.

For these interviewees encountering wildlife on the groomed roads was "interesting", "impressive", and beautiful. Others, on the other hand had thrilling close encounters that evoked a sense of adventure, fear, and trepidation.

Kelsey and her Aunt Roberta, recall getting caught between three bison. While they felt unsafe at the time, in retrospect they appreciated the photography opportunities.

Kelsey: Today, it scared me to death. We're on the road and there are two buffalo ahead of us and then one off the road behind us, so we got in between the second one and then the third on got behind us and started following us. And I tried to get next; I tried to get past the second one, but he wouldn't let me pass.

Roberta: He turned around and gave us the evil eye.

K: He'd like, I'd go to the left and he'd like turn around and look at me and go to the left and then I'd go to the right. So we ended up just stopping and letting him go on.

R: We got great pictures though, they were fine, they didn't do anything to us.

Patrick and his travelling companions had a similar scare with a close encounter. His story suggests that not knowing what to do scared him.

Seeing the buffalo come running down the road at us, scared the living boonies out of me. There were about six or seven of them coming down the road and they were running, so we just stopped. And they just ran right by us. Didn't do anything. And I wasn't sure what to do, because I've never been snowmobiling before. It scared me. And they just stayed on their side and just moved right by us. They had their heads down, looked down. Once they were on the other side of us, behind us, I was gone.

Like the other folks in the examples provided above, Valerie was unsure about her safety.

Thoughts of agitating the bison and possibly provoking a charge went through her mind.

Undaunted by her fear, however, she and the others present pushed past the herd.

We saw several animals. In fact yesterday the bison were on the road, kind of a herd walking on the road, and we had read all the literature that said to stop and let them go through. I said we'll be here all day, they're taking the road home. So we were like, I don't know, fifteen snowmobiles and the snowcoach. The snowcoach got in front and kind of led the way, and we went past them that way. We were scared, because we were right beside the animals and that was kind of a thrill. I didn't know if they would charge or get mad or not, and there was a baby in the group and I thought the mom's probably going to get mad because we're too close to it. They pretty much ignored us.

Nadine, who admitted that snowmobiling was not important to her experience still found value in it. She said,

I don't especially like snowmobiling actually. So it's okay from that point of view. I guess the fun part about it is I got to feel a little closer to the wildlife and the environment.

Unlike many other visitors interviewed, Brian's experience with wildlife was somewhat unnatural.

I had seen photos of the buffalo on the road before. I didn't really think we'd get that close, but it was kind of interesting. But at the same time I feel a little 'cheesy'. These supposedly wild animals that see probably more people than I do every day...but I feel like I was cheating a little bit

to be driving down a road on a gasoline-powered machine, seeing the buffalo. But so far, they're off the road. It's interesting.

All in all the snowmobiling in YNP was characterized as an opportunity to experience the Park in unique ways. Participants expressed that they felt freedom in setting their own pace and schedule while on snowmobile. They perceived snowmobiling as giving them access to the whole Park and all of the major attractions. Finally, according to many snowmobilers, this experience offered them close interaction with the wildlife and the outdoors in general. Snowmobiling was often contrasted with other modes of experience, most commonly snowcoach touring. From these interviewees' perspective, snowcoach touring was constraining and confining.

The Snowcoach Touring Experience in Yellowstone

Some visitors, commonly families, those staying overnight at Old Faithful, or those who plan on skiing in the interior of the Park, take snowcoach tours. Snowcoaches are oversnow vehicles that transport groups of visitors in the Park. Some use the snowcoach as a guided tour of the Park's natural resources, and others use the coach primarily as transportation.

Snowcoach riders enjoy the comfort and ease of a guided tour through the Park. Snowcoaches take visitors from the Park's entrances on tours to the many geological and wildlife "hot spots" along YNP's groomed roads. Some snowcoach tours transport visitors to the Snow Lodge at Old Faithful where visitors may take advantage of hotel and restaurant accommodations, as well many cross-country skiing and hiking trails around the area. For some the snowcoach provides access to the wildlife and natural scenery, to others it serves as transportation to the many frontcountry and backcountry

skiing trails, many appreciate both aspects of the ride. Two predominant themes were present in the stories of those who traveled by snowcoach, again having to do with access freedom, and interactions with the environment. They are: 1) access to information and 2) comfort and ease.

Access to Information

A big part of a snowcoach tour for participants was the guide and the information he or she provided. These participants appreciated learning about the cultural history, geography, and biophysical environment of YNP. When asked why the opportunity to snowcoach is important, Sarah answered,

Well, because it's a chance to see and to take photographs, which we're interested in doing. And a chance to have a driver-guide that knows how to explain to us the history of the Park and the things that we're seeing.

Interviewees Alice, Fanny, and Dawn all remarked about the advantages of having a guide on their snowcoach trip. Alice called her snowcoach guide "marvelous". Fanny got a bit of a history lesson on her tour:

... we came up on Thursday from Flagg Ranch. We took the snowcoach and that was kind of interesting because Luke, who was our driver and guide, pointed out to us a little bit like what people did way back, like coming in on stagecoach. And it was bumpy, so it was easy to visualize that. And he was great and gave us a tour there from West Stone Bay and it was quite cold and it was wonderful.

I asked Dawn if the opportunity to snowcoach into Old Faithful was important to her experience. She replied,

Oh, yeah. If it wasn't for that we probably wouldn't have come in, but it was great. Besides that, the people that brought us in were knowledgeable. Gave us different little outlooks on what was going on and that sort of thing. It was good.

Comfort and Ease

Lynette gave this perspective on snowcoach travel:

It think it's fun. It's very comfortable, for sure, because we sit there. We take our coat off and everything. ...[The guide] mentions things, the rivers. He knows the names, and where the animals hang out.

She went on to explain why she chose the snowcoach, saying,

...the first time I pushed things towards the snowcoach, just thinking that he [her travelling companion] wouldn't have to figure out where we were going, he could just let somebody else do it.

Kay, a snowcoach traveler said she preferred it to snowmobiling for the warmth and the scheduled stops along the tour. The snowcoach tour gave Krista an alternative way of seeing the Park. She is limited in her ability to get around and appreciated the chance to be inside and seated. She explained,

The snowmobiling puts you outside, and since I'm a little bit limited in walking, so today I would have had a hard time. Back before I had spinal cord damage, I could definitely snowshoe a long ways or cross-country ski a long ways. But today I'm limited in that ability to do that, so for people with limited ability, it certainly is another way for you to see the Park. It's not something I'd want to do every day, though. I mean it's rough...and very noisy. The fumes are obnoxious.

For visitors who want to enjoy the comfort and ease of a guided tour throughout the Park, it appears that the snowcoach experience might suit them best. These participants perceived the experience to be about sitting back, taking your coat off, and listening to what the guide has to say about the Park. It appears that the knowledge and character of the guide has a big influence on the experience. Some visitors experienced Yellowstone both on snowmobile and snowcoach. Fanny and Amanda saw the value of both. Amanda described here how she compares the two. I asked her what she thought about snowmobiling, she replied,

I enjoyed it. I'm very, very sore. We had two days of it. It was a real unique way...of seeing the scenery and everything. And I would do it again. ...Riding the snowcoach is much more comfortable, but they're each attractive in their own way. I would not choose one or the other. I think they're both important.

The Cross-country Skiing Experience in Yellowstone

Both frontcountry and backcountry trails are available to skiers in YNP. Most interviewees agree that the skiing experience on these trails is unique. Some skiers mentioned the thrill of breaking new snow on the trails or blazing their own in the backcountry. Accessing the backcountry trails and scenery was a major theme among skiers. Several skiers mentioned escaping the crowds and finding solitude was important to their experience. The opportunity for isolation was especially important to Isabell and Jack, who spent a week skiing and camping throughout the park. When asked what skiing in Yellowstone was like they replied,

Isabell: We've had so much snow, a ton of snow. First couple of days we didn't do much because there was so much snow. But it's beautiful, especially the burn areas. We're from back East and you don't see many areas like that and it makes it really nice backcountry skiing. It was all thinned out and beautiful.

Jack: Some of the snow pack has been tricky. Originally we were going to go down back and go to Shoshone Lake, but one day we went up and broke trail...it was pretty weary. ...It was really beautiful skiing yesterday up to Mallard Lake and hike on the ridge for a while and did some downhill runs. And there was no one there. ...It's nice if you can get into the backcountry and get away from the snowmobiles.

When asked why she came to YNP to ski Jody replied,

It's quiet and you can get away and get out. I was going to say it was quiet, but it's a lot more crowded than I expected. We went for a ski last night. We went to Howard Eaton trail. There was no one else out there and it was just so beautiful, peaceful, really relaxing. It's just nice to take advantage of your surroundings.

One interviewee, Carl, perceived skiing as the means by which he could both access the backcountry and preserve the wilderness. Randy and Thad described the skiing experience as one of the attractions of Yellowstone. For Randy, skiing got him outside and challenged his skills. He explained,

Yeah, that was one of the attractions. I found out what I couldn't do and what I could do and all that, but I'd do it again. It's good fun. It added diversity as opposed to coming out to a snow-filled wonderland and staying in the lodge reading books. I mean you could actually go out.

Thad also wanted to relax in a secluded setting. He added, "[Skiing] was a lot of why we came. And just to relax in a somewhat secluded setting during the winter, place to stay in kind of a winter wonderland."

While skiing is described as challenging, relaxing, and peaceful, most of the talk concentrates on how skiing provides visitors with access to the quiet beauty of the Park. Many skiers took advantage of the trails in order to escape the noise of the snowmobiles. The skiing experience in Yellowstone was perceived as being different than in other recreation areas. Frank said his winter experience in Yellowstone on skis was "special" and "unusual".

I'm from kind of a mountain community so it's not completely unique to me, but yet this is certainly different from where I live. ... The isolation here is pretty spectacular. My wife and I are from Idaho and we can backcountry ski basically out our back door. And so in that respect this is not like we're coming from New York City where this would be a dramatic change. But I don't know, I just think Yellowstone is a special place and it's kind of unusual to be able to come here in the winter. We're more used to being here in the summer, so to be able to see it in a different season where the animals are sort of fighting for their lives. It's unique. That's about all I can say on that.

PERCEPTIONS OF SOCIAL CONDITIONS

The preceding sections have established through rich stories of visitor experiences, that interviewees perceive wildlife and natural scenery to be the cornerstone of Yellowstone National Park's winter setting. It has also been demonstrated that the mode of experience chosen, such as snowmobiling, skiing, or snowcoach touring, shapes the ways in which the setting is experienced. I have examined in great detail the characteristics of each mode of experience remaining faithful to the themes present in the participants' stories.

The following section deals with the social conditions identified by the participants that influenced their recreation experience in the Park. Perceptions about these factors and the extent to which they influenced the experience were common topics of conversation among interviewees. To understand what constraints visitors perceived negatively impacted their experiences and how management changes might ultimately affect social conditions, I examined the factors that influence the social conditions in Yellowstone.

To elicit a discussion of the social conditions in YNP, some participants were asked indirect questions such as, "what was it like out there in the Park", "what added to or detracted from your experience", and "is there anything that you would change about your experience in Yellowstone". Other participants were asked direct questions about the presence of other visitors in the Park. Three distinct themes manifested from the narratives. These include concerns about:

- crowding and visitor behavior
- motorized use

- road conditions

Crowding

I know some people probably don't like as many people...there aren't that many people here today. ...To me it's pretty open and we haven't had any traffic problems. Other snowmobilers have been real good, nobody speeding or causing any problem. There haven't been any detractions in my mind.
-Donna

Interviewees made numerous comments about their observations of, encounters with, and conversations with other visitors in the Park. Some offered their perceptions about the numbers of visitors and compared this to summer conditions. Others focussed on their impressions of the behavior of fellow visitors. Most described other visitors as courteous and safe. A few interviewees, however, recollected some behavior that detracted from their experience. The data is divided into participants' perceptions about the numbers of visitors in the Park and the behavior of those visitors.

Numbers of Visitors

As the 1998 winter survey (Borrie et al. 1999) suggests, escaping crowds is important to the Yellowstone winter experience. Several visitors I interviewed addressed this issue and explained why crowding would negatively impact their experience. Some, like Hal and a group of four visitors wanted to have the Park to themselves. Even though crowding is an important issue to many interviewees, few perceived crowded conditions in the Park. The numbers of visitors in the Park did not seem to negatively affect their experience. The data suggest that participants were more concerned about the behavior of visitors, than the numbers of them. First, I will present what participants had to say about the importance of the numbers of visitors to their experience in Yellowstone. Then I will examine the narratives pertaining to whether or not participants felt crowded. Frequent

comparisons were made between the number of visitors to YNP in the winter and summer, between different types of recreation, and between YNP and other recreation areas. Participants also revealed different personal indicators of crowding, for example when the trail conditions are poor, when wait service is slow or when fast travel throughout the Park is disrupted.

How important is the number of people in Park to the Yellowstone experience?

Answers vary. Betty's snowmobile experience in Yellowstone was not hindered by crowding. Because avoiding crowds is so significant to her, she said that she usually goes out of her way to avoid crowds. I asked her if few encounters with other visitors was important to her. She replied,

Oh, yeah. ... We travel the U.S., we travel in Europe, we go to the Caribbean a lot, so we know when not to go. We try to pick times when we're not packed in there like sardines and this was free. I mean this was great.

According to Hal, who was also on snowmobile, not being too crowded is important to his experience in the Park. Here he tries to explain why.

Yeah, I don't want to see anybody. The fewer the better. That means the trails are better, there's less wear and tear on them and it just seem like you are more out in the wild, enjoying nature. You know, I come from a state where there's a lot of people. So it's kind of neat to come out here and...just enjoy nature.

Guy and two of his traveling companions cited privacy and road conditions, as well, as reasons they prefer fewer snowmobilers on the roads during their snowmobiling experience in Yellowstone.

Guy: Went down to Flagg Ranch too. That was a nice trip. It snowed the day before or that night. There was hardly any snowmobilers out there and there was fresh snow and it was really nice. ...It's nice not to have...
Mike: the road doesn't have the ruts from the previous snowmobilers it makes it so much nicer.

Guy: It's nice to be out on your own.

Dave: It's just nice to be private, yeah.

Guy: Not have the snowmobiles coming and going. It's like being on a freeway, otherwise.

In contrast, crowds don't really bother Roger too much. He expects crowds in other types of recreation and doesn't believe his snowmobiling experience in Yellowstone should be any different.

This time it hasn't been that congested. There's other times we've been down here it's been really busy.

Interviewer: Did that bother you when you were here when there was a lot of congestion...?

Not really compared to other recreation. I mean skiing, you're talking about congestion. This here warming hut, when you go to a ski lodge, you couldn't even find a place to sit down.

Valerie, who chose to snowmobile in Yellowstone, thought the fact that there were less people in the winter carries over into the quality of the services in the Park. She said that she liked having fewer people. I asked her if that was important to her experience. She replied,

Yes, yes, I think so. When we ate lunch at Old Faithful, we sat down immediately and were served immediately and this is different than being here in the summer. It's just nice. It seems like...my husband was saying that everybody is really, really friendly. The people who work here. And I noticed they were in the summer, but in the winter they have a little more time to talk to you and tell you about themselves too, so that was nice.

Here's what other participants had to say about the crowding conditions in Yellowstone. Clyde didn't perceive any problems with crowding during this winter's snowmobiling experience in Yellowstone. When asked how he felt about the number of people in the Park he replied, "No problem at all. I've been here with a lot more people, so it's nice. Not a lot of crowds this weekend."

Many observations about the number of people in the Park were influenced by their perceptions of crowding during the summer season. Brian imagined that winter crowding would be more like the summer, but his snowmobile trip in Yellowstone exceeded his expectations.

...I figured winter was, well, for one thing, it's just the only time we were here. But, if I had a choice I'd probably try to come in the winter anyway, because it seems like everybody is a little bit less crowded. But still we expected there'd be people, but I would imagine this place in the summer as being bumper-to-bumper traffic.

Interviewer: Is there anything that you can tell me that's detracted from your trip so far?

No, I think my expectations were about right as far as the number of people. ...Obviously, I guess I'd rather have the whole place to myself but the traffic, really, I don't think was that bad. I expected bumper-to-bumper snowmobiles, twenty miles an hour. So it's been better than I expected.

Hal, who toured the park on snowmobile, had no problems with the number of people in the Park. He also thought that summer probably has more crowds.

No problems at all. ...Plus the numbers are tremendously less. I imagine in the summer time it's just mobs of people out here. So I mean, in our drive up here we hardly saw anybody. Where I imagine if you were here in the summertime there would be tons of people that you'd be seeing. So, I think it's important just to observe the wildlife, but at the same time I don't feel like as snowmobilers we're affecting their quality of life.

I asked Roger how his summer experience in YNP compared to this winter's snowmobiling experience. He replied,

It's a lot more crowded in the summertime. I had a friend that came here last summer and he said they couldn't get a place. They hadn't made a reservation.

Jake, Kelsey and Roberta, who were all in the Park on snowmobile, described their experiences as more natural in the winter than in the summer, because of the summer

crowds. I asked Jake if he perceived any problems at all with the protection of the Park's resources.

I don't, no. The Park is well-protected. I know in the summertime there are too many people here. I've been here once in the summertime. ... In a way, it's much better in the winter, because there are so few people around, and much more natural. But it was fun in the summertime too.

Kelsey and Roberta also contrasted the summer feel from the winter feel of the Park.

Roberta: We thought there might be less people and course, we had friends who had done it and they told us about it and it's wonderful.

Kelsey: It's really different in the winter. This is the only place I've recognized so far.

Interviewer: Do you feel like there's less people in the winter?

R: Oh, yes.

K: It's really crowded in the summer. It made it kind of commercially feeling in the summer, I didn't like it.

R: Right, especially when an animal would be there and they'd all stop and not even listen to the Rangers and run down into the woods to see the grizzlies.

K: Well, we went to Rocky Mountain National Park, Tetons, and YNP that one year and this was crowded. It just didn't feel like wilderness.

Mary, who toured the Park on snowmobile, liked not having to fight the crowds in the winter. I asked her if she perceived any problems with other visitors in the Park. She answered,

Today there's very few. Tomorrow may be different because it's Saturday. We'll find out. I've never been here before. Some of these people have been down in the summer and they say it's really crowded, so this is really nice. You're not fighting the crowds. An the main thing with snowmobiles, you can get from point A to point B so quickly. I guess that's not possible in the summer with all the traffic congestion and tourists.

Isaac and Anne who skied in Yellowstone's frontcountry did not feel crowded. They said,

Anne: Not too many people.

Isaac: No, it's not crowded at all, very few people.

Interviewer: Is that important?

Anne: Yes.

Isaac: Well, it's just nicer when it's not so crowded, yeah. We met one...a couple of snowshoers from Houston, and that was it for the whole trip.

Even though the two skiers didn't perceive any issues with crowding, they still supported a ban on snowmobiles because of their noise and pollution.

Three interviewees on snowmobile perceived Yellowstone to be crowded, but being first timers, they admitted to not knowing what to expect. I asked Patrick and his travelling companions if they had any experiences with other visitors that they could share with me.

Patrick: No, no distractions.

Blake: I'm shocked at how many snowmobilers, but I've never been snowmobiling so I didn't know what to expect. It seems like they come by in hoards.

Todd: They're all guided tours.

Patrick: I like being by myself. I like not having the crowds, like I've been through and seen wildlife and stuff.

Olivia felt "really packed," but she relates the crowds to it being a "big weekend".

It seems really packed, but it's a big weekend. It doesn't seem like a tremendous amount or anything like that. But I would guess it's a lot of people for any time up here at one time, I would think. I don't know, first time.

Belinda, toured the Park on snowcoach. She wished that the *snowmobiles* would "all go away". She enjoyed the parts of the Park where snowmobiles were not allowed. Though she mentions that the "crowds are detrimental" it seems as if the type of use has more of an impact on her experience than crowding.

Why are fewer visitors important to the experience? Participants mentioned feeling more out in the wild, having privacy, better road conditions, and not being slowed down by congestion as reasons for avoiding crowds. Although crowding is an important factor in the Yellowstone winter experience, most participants did not feel that the sheer numbers of visitors was a problem in the Park. Visitors were generally more concerned with the behavior of visitors and the impacts of motorized use, than the numbers of visitors.

Behavior of Other Visitors

Valerie's statement presented in the last section suggests that the behavior of the workers influenced her winter experience in the Park. Likewise, the following excerpts imply that the number of other visitors in the Park is less important to the experience than the behavior of those people. Andrea toured the Park on snowmobile. She perceived the Park to be fairly busy, but mentions behavior as being important.

It's kind of busy today. Yeah, there is a lot of people out there today. ...I'm sure it's because it's the weekend. It's a holiday weekend. There's quite a few snowmobiles out there today. ... There's more out there today than last year when we were here, but I think again if you don't have any crazy folks you're going to be alright. But they are, they're getting a little more heavily traveled, that's obvious.

What kinds of behavior did the interviewees notice? Many remarked that visitors seemed friendly, courteous, respectful, and safe. In Olivia's mind, the people she met added to her Yellowstone experience.

Just the people are great. Just the people in the visitor centers, other snowmobilers, the groups that are out. Just always, you know they're really polite and they don't block your way or anything. Help you with anything you need if you get lost. They will tell you which way you need to go. It's just a fantastic experience.

Hal, who toured Yellowstone on a snowmobile, recalled that the general atmosphere was friendly in the Park. He ascribed this to visitors being on vacation from the “rat race” at home. He thinks the visitors also respect and appreciate the outdoors. I asked him about how visitors protect the Park’s resources. He said,

Well, I didn’t see any litter on the trails. I think everybody is pretty tuned into throwing their garbage in the garbage things or keeping it until they get someplace. So at least from what I’ve seen last year and this year, I think the snowmobilers ...I think as a general group they’re pretty tuned into enjoying the outside, because by virtue of what they are doing, they appreciate the outdoors. Or they wouldn’t be out here snowmobiling. So I think that’s indicative of that person. ...Everybody seems pretty friendly and you know, as we were talking here, somebody walked in, one of the first things, ‘where you guys heading?’ and ‘where are you from?’ I think everybody has a general friendly atmosphere, you know, basically they’re on vacation. So we’re on vacation, they’re on vacation. And you don’t have the pressures right there staring you in the face that you do everyday. You know and the rat race that we all participate in and try to get away from.

For Lynette, who rode a snowcoach, the other visitors she was in contact with were polite and safe, but she adds that the future of the Park’s resources might be threatened by a small handful of people. I asked her what she thought of the snowmobilers out there.

L: The one’s I’ve seen are staying on the road. They’re very polite. They wave to you as they go by. They’re not hotdogish.

Interviewer: Did you perceive any problems with the protection of the Park’s resources?

L: No, not really. Just people and their lack of common sense. The handful of people that sneak and manage to ruin just about anything. There’s always that handful of people. Maybe if we can protect the Park from that handful of people, then it’ll be here for our kids and grandkids.

Safety was a factor for some of the visitors with respect to snowmobiling in the Park.

Henry mentioned a small minority of visitors that detracted from his snowmobiling experience by being reckless.

There were some people that were a little reckless on their machines and going over the speed limit and stuff. The speed limit is 45, try to obey that, but there's only a few and far between. For the most part, everybody has been respectful of the wildlife and of everybody else.

Andrea's group has had snowmobile accidents before and she's concerned that no one gets hurt. She said,

We just hope to see as much wildlife as possible. And hope that we have good weather which, you know, the more snow the better. And that no one gets hurt. ...because we've had snowmobile accidents before. There's eight of us on snowmobiles today so its kind of hard to keep us all up in a group.

Amanda, who used both snowmobiles and the snowcoach in the Park, was intimidated by the dangers of snowmobile travel. She explained,

I think it's a little dangerous with the snowmobiles. It seemed a little dangerous to me. It was a little intimidating to me. All these people running snowmobiles that may never have been on them before in their lives, running up and down these roads. It seems a little scary.

Alex toured the Park on snowcoach. He wanted to rid the Park of them because of the visitors who drive dangerously. He explained,

It's unbelievable and they're crazy. Most of the people are insane driving them. They'd just as soon run you down as let you pass through. I guess that would be something, but like I said, this is the first time I've been here in the winter; but they are a bit whacko.

Isabell and Jack, who toured the Park on skis, experienced firsthand a group of visitors who in their mind weren't "cooperating" during an encounter with bison.

It was Saturday, last Saturday. There were two snowcoaches, one from our direction and a bunch of snowmobiles and they were going behind the snowcoach and there were a bunch of bison in the road. And the people just weren't cooperating at all in letting them go by there. They were just pushing the animals aside and they were getting pretty crazy and they were playing for half an hour or something and the bison were getting pretty worked. They were unable to get further down the road.

Fanny toured the Park on both snowcoach and snowmobile. She recalled a bison being “harassed” by people on snowmobile. She felt like the visitors weren’t respecting the bison’s space.

I came with my girlfriend, and we're staying in the Lodge and the things we've done are, we took two or three hikes out here the first day, and saw Castle Geyser and Grand Geyser and Old Faithful, and saw a bison being harassed by people. It wasn't direct harassment. They just ignored their space and their privacy and then the bison did kind of put his head down and kind of went toward him. So an issue that we don't really understand. ... We don't feel like they're respecting the distance the bison are given. And at one point, snowmobilers are coming this way and we're coming this way, so we stopped and they didn't really want to stop, and the bison were going that way, so now they start milling around because they don't know which way to go. And then they start butting each other, because they're agitated.

She later explained how her experience was affected not so much by the numbers of other visitors, but by those who don’t appreciate the nature around them.

And I feel like--this is just my reaction--is that some of the people who ride the snowmobiles are more into snowmobiles than they are into where we are. Appreciating the nature of where we are and just how fabulous it is. They're more into the snow. Because we would see them stop and they weren't even looking where they were. ... To me, it diminishes the nature experience, and then you see them not respecting the bison’s space. It makes me feel a little bit apprehensive even to be around them, because I don't feel like they're coming at the Park the same as I am. So that is a little troublesome.

She continued,

I think there are a little bit too many for me, because it seems like such a reverence here, and it's not maybe that there are too many, it's just that you've got all kinds. You know, I don't need to hear your conversation, 'cause I didn't come here to hear your conversation or be subjected to your point of view, or the way you conduct yourself around the animals. So, I don't know what you do about that though, other than education. Educate people about it. I don't know what else you can do.

While the behavior of other visitors was a concern of interviewees, many also characterized that behavior as friendly, respectful, and safe. Yet, the potential for

negative behavior was not overlooked by others. Isabell, Jack, and Fanny had experiences with other visitors who from their perspective, did not respect the space of wildlife on the groomed roads. Fanny had a sense that some visitors' values conflict with hers and this impacted her experience.

Motorized Use

In the following paragraphs what the Yellowstone visitors interviewed had to say about motorized (primarily snowmobile) use in the Park and how it influenced their experience will be presented. Several visitors commented that certain aspects of motorized use in YNP had negative effects, directly or indirectly on their experience. Interviewees mentioned noisy machines, emissions, and safety. Some perceived these factors as having minor impacts on their experience. Others noted much more pronounced impacts on their experience.

The noise and emissions from motorized use, in particular snowmobile use, was a concern for a number of visitors I interviewed. To these interviewees the emissions and noise from snowmobiles was a disturbance and for many it took something away from the experience. Many of the complaints about the noise and emissions were from participants who skied in Yellowstone or took a snowcoach tour, but some participants on snowmobile also felt that these aspects of motorized use detracted from their experience.

First let's look at what participants who experienced Yellowstone on skis or by snowcoach had to say about emissions and noise. One interviewee, Randy, thought that the snowmobiles around one particular geyser sounded and smelled like a stockcar race. This visitor supported a ban on snowmobiles.

Outlaw snowmobiles, because we were cross-country skiing, I forgot the name of the geyser, and we were a good two or three miles in the forest and it sounded like... I don't know if you were ever in stockcar races, but there's like twenty to thirty racecars and they just mill around in a circle. And it's just what it sounded like. And even from a mile off, we could smell the burning oil from these two-stroke engines.

Some just felt like the numbers of snowmobiles should be limited or their emissions and noise should be controlled. If Thad could change anything about the Park, he would limit the number of snowmobilers because,

It kind of takes the fun out of skiing through an area when you can smell exhaust for half a mile after crossing the road. Four stroke engines and some mufflers might be nice. Or even limit the number that can come in so that it's not so crowded.

Kay, who took a snowcoach tour, thought that the Park Service should limit the numbers of snowmobiles or that technology should improve upon the pollution of the machines. She was in favor of a mass transit system. I asked her if she would change anything about her experience and she answered,

Get rid of some of the snowmobiles. There's just too many of them, I think. When you stop sometimes the fumes are horrendous and they are overpowering. And I think there are ways to make them so they don't stink the way they do or they're not as loud as they are. And I think the technology is there. And it angers me that they don't do something about that. And so some ways I prefer that the people come and see it on a snowcoach or in a mass vehicle rather than pollute the air...

Irene toured the Park on snowcoach. She changed her mind about renting a snowmobile because of their noise. She thought the machines needed to be "fixed".

They're very noisy. I mean the people themselves were nice, ...but gosh, they've got to fix those machines. I didn't know that because I really thought maybe this morning I'd take a snowmobile, but after yesterday, I thought, I'm not going to support that at all. No, that would be the only thing I would change.

Another interviewee, Carl, who experienced the Park on skis, believed that the pollution detracts from “what the Park has to offer” and therefore more emission restrictions need to be implemented.

I think although the snowmobiles bother me a bit, I think it's more not the fact that people are snowmobiling, but the lack of restrictions on the way they perform. The noise and the pollution are rather amazing, so I think that detracts quite a bit from what the Park has to offer, especially given that there are alternatives to quality of the snowmobile.

Some interviewees on snowmobile mentioned noise or emissions as an influencing factor on their experience. Valerie felt like she needed to overcome the noise of the snowmobiles when she stopped to enjoy the scenery. She liked the Park “because it's so big”. She added, “if you can counteract the noise of the snowmobile, it's pretty quiet when you stop.”

Nicole, who experienced the Park on snowmobile felt like there are better ways to see Yellowstone. She said, “Actually, these things seem like they put out a lot of pollution and they're really noisy and I don't know, there's probably better ways to do it.”

Isaiah thought snowmobiling was “wonderful” he added though, “If I were ‘king for the day I'd make the snowmobiles quieter.” Jon was also on snowmobile. He commented on the smoke from snowmobiles and felt “coated”. He said, “I notice the smoke on the trail and, you know, things like that. I feel like I'm coated.”

Concerns over the noise and emissions of snowmobiles in Yellowstone was not specific to those participants on skis or travelling by snowcoach. Interviewees on snowmobile also took issue with the pollution of motorized use. Again, it seems that the

factor here is not necessarily the numbers of snowmobilers, but the emissions and noise from the snowmobiles.

Road Conditions

Quite a few visitors on snowmobile commented on the conditions of the roads as having an effect on the experience. Although most of the snow vehicle roads are groomed nightly, when the weather is warm, especially at the end of the day, the road conditions can be poor. When asked if anything detracted from his trip, Greg, who had been to YNP the last two years answered,

No. Not even last year. The trails are a little bit bumpy, that's the only think I can say. It's kind of difficult. Last year was towards the end of the season and there wasn't much new snow, so that's the only problem we had. ... The only complaint I had was about the trails last year. So far, this year everything has been great.

Andrea loves being out in the snow, but she also commented on the bumpiness of the roads.

Kind of bumpy today. Yeah, a little on the rough side today. A lot of snow this year, than we saw a couple of years ago. But yeah, it's always nice to see the snow. We live in Atlanta so we don't see it that often so it's always nice to see as much of it as possible, but a little rough today on the roads.

One interviewee liked "being out in the open" on snowmobiles, but added that the roads were rough. He thought maybe the NPS should groom during the day.

It's a little rougher riding at some times. We're not real experienced snowmobilers, so we kind of got beat up a little bit yesterday. ... Maybe, the road coming in from the north was really rough. I don't know if there's anything they can do about that. It just gets traveled a lot and it gets bumpy. So I don't know if there's any mid-day grooming or anything like that they can do.

Kelsey thought the Park Service should do a better job of grooming, as well.

Yesterday we rode down to Old Faithful, it was good except for the stretch between Norris Basin and... Anyway, it was extremely bumpy. We all had to take Advil this morning, because we were so sore. ...I think they should groom the snowmobile trails more often. Oh my gosh, it was twelve miles of bumps, it was awful. It was fine I think if you were the driver of the snowmobile, but if you're the passenger it is miserable. ...Or maybe they could forewarn us a little, that that's the way it's going to be, because it wasn't like that in the morning.

More grooming is in order, according to another interviewee. Here Calvin explains why it was the only thing he'd change about his experience.

The only thing I saw was maybe more grooming on trails for everybody. There was a lot of traffic, you know, so they get a little rough, but the rest of it was really a good experience.

While the bumpiness of the roads was a common topic of conversations for many snowmobilers, very few indicated that this was a major detraction from their trip. Some suggested more grooming, but others seemed willing to put up with it as part of the snowmobiling experience.

Discussion

This examination of participants' perceptions about social conditions illustrates the that many factors influenced the visitor experience in Yellowstone. However, in general the social conditions were acceptable to participants. The number of visitors in Yellowstone was not as significant of a factor as the behavior of those visitors and the very presence of motorized use in the Park. Several participants expressed concern over the emissions and noise of the snowmobiles in Yellowstone. For some, this greatly detracted from their experience. A few visitors specifically expressed having little or no concern about the emissions and noise of the snowmobiles.

INTERVIEWEE SUPPORT FOR MANAGEMENT ACTIONS

Up to this point I have presented what respondents think the winter setting in YNP offers visitors. I have demonstrated how the mode of experience shapes the ways in which visitors interact with that setting. I have also examined social conditions that respondents identified influence the visitor experience. Now it is time to turn to management issues. The purpose of this study in part was to explore visitor attitudes toward management actions and more importantly to understand how these attitudes are formed. The question remains, “what are the factors that visitors contemplate while judging management actions?”

The 1998 winter use survey revealed that while wildlife and in particular bison were important to most respondents, they were on average unwilling to support management actions that are designed to protect the bison herd in the Park. This incongruity begs the question “*why?*”

Direct questions regarding management actions and environmental impacts elicited talk about attitudes and perceptions. Participants were asked to explain *why* they felt as they did. This analysis does not focus on which management actions garnered support and which didn't, but on a comprehensive exploration of *why*.

For this study I used the same type of question under the same format as in the 1998 winter use survey to explore the incongruity. For example, I asked participants “considering your experience might be affected, would you be willing to support some management actions to help protect the bison herd?” Interviewees were asked to explain their support, which in most revealed great insights into the factors that interviewees contemplate in judging management actions.

What did participants consider when faced with management change? This varied to a great extent, but four distinct dimensions of contemplation are evident in the narratives. They include:

- worthiness of cause/role of YNP
- awareness of environmental degradation
- impact on visitor experience
- trust in decision-makers

Although not every participant considered each of these factors, the four factors do encompass most of their considerations. The data will be presented based on this organizing model of interviewee contemplation. First I will explore what participants had to say about the importance of preserving wildlife and the role of the Park, then I will investigate participants' perceptions of any environmental degradation, next I will look at the narratives that highlight any considerations regarding how management change will affect the visitor experience, and finally I will present excerpts from participants who contemplated their trust in management. Within each dimension of contemplation a range of attitudes and perceptions exist.

Worthiness of Cause and Role of YNP

...it being a National Park, it's like a double-edged sword, because you want visitors there to view the beauty of it all, but yet, the more people you have the more danger it puts the animals in. -Andrea

Throughout the analysis of the data, it became increasingly evident that many participants held values which were reflected in their talk about their support for management actions. Certain attitudes towards the role of YNP were revealed in what they had to say about access, preservation, or management actions, for example. On one

hand some respondents expressed values aligned with the idea that the Park is for the people. This stance is consistent with the notion that the Park's most important role is that of a recreation area. On the other hand, some participants held the opinion that the Park is primarily for the animals. Under this idea, the Park's role as a wildlife sanctuary is most significant. While some visitors' narratives aligned them with either of these stances, others revealed values that were consistent with the idea that the Park is for both people and wildlife. These folks suggested that a balance is needed between the two.

The values addressed here are less directly associated with the conditions or visitor experience in Yellowstone and more with general stances about the role of Yellowstone or National Parks in general. Many times the talk about management actions revealed that personal values about access and preservation were at play. The following sections will delve into the participants' narratives that suggest values are major factors in their attitudes toward management actions.

Because specific questions about the role of YNP were not included in the interview, more participants might have held strong opinions about this issue. However, the narratives presented here are from those participants who cited personal values as explanations for their attitudes. Many of these participants demonstrated their strong values in blanket statements, such as "whatever is best for the animals" or "it's everybody's right to be able to see the Park".

Park for the People

This section includes text from those narratives in which participants expressed the importance of YNP as a "people's Park". These visitors stressed the need to have access to Yellowstone and many felt that they had the right to be there. Wendy was in

Yellowstone on snowmobile. She recognized the biological advantage of protecting the bison by restricting visitor access to them, but contended that seeing them is too important. She explained, “No, I think that just from the environmental standpoint it’s nice to have all these animals have this nice seclusion, but nobody gets to see them. I wouldn’t want to do that to myself or anyone else.”

Another visitor on snowmobile, Roberta, saw the value of nature lying in human enjoyment of it. She asks succinctly, “Why have nature, if people can’t be around to enjoy it?” Jake also toured Yellowstone on snowmobile. He was not in favor of any of the management actions offered to him to protect the bison herd in particular. He added, “It’s a people’s Park and all people ought to be allowed” and then continued, “the more that’s open, the better the access.” I asked him if he would support restricting the times visitors could be in the Park, he replied

I wouldn’t be in favor of them. If you need a shorter season because the weather doesn’t permit travel, then that’s one thing. If it’s just to protect the buffalo, I wouldn’t be in favor of that.

Clyde didn’t support a permit system, because in his mind it would infringe on people’s right to be in National Parks. Here’s his answer when I inquired about his support for a permit system.

No, not at all. No. They limit the deer hunt and everything like that for a certain reason, cooperation control, but I think it’s a National Park and I think you have the right to be here. It was set aside for us as a National Park and I think we have a right to come in and out as we please. As many people as want to come, I mean, people from back east, out west, and other parts of the country that doesn’t have National Parks, I think they have the right to come in when they please so they can see the beauty that we have set aside for the Park. I don’t support any permit system like that at all.

When I asked Ulee whether he would support management actions that would close some sections of the groomed roads, he replied, “I think you’ve got to keep as much open as possible. ...It’s everybody’s right to be able to see and do; to see the Park.”

Likewise, Henry thought that experiencing Yellowstone was integral. I asked Henry if he would be supportive of the Park Service potentially closing some sections of the groomed roads to protect the bison herd. He was hesitant, because in his mind “everyone should experience” the Park. He said,

For the amount of time that I come here, I really don’t know. I wouldn’t like to see them close the whole Park down. I think everybody should experience it. Be it on snowcoach or snowmobile. If they wanted to close certain roads off, that’s one thing, but I wouldn’t want to see them close the whole Park because of snowmobiles.

Park for the Animals

Anne and Isaac, who skied in Yellowstone, said that they did not have many encounters with people and they felt like everyone was doing their part to protect the resource, however, they were in favor of limiting access. I asked them if they would support limiting group sizes. He said they are “for the animals”. Isaac answered:

Oh, yeah, you know in Denali National Park access is very...in Alaska it’s very restricted and I don’t know, it was only one day a month that cars could come into the Park. You had to go on buses and of course they stayed where they should and such. Yeah, I’d be for that.... Yeah, we’re for the animals.

Olivia, who chose to snowmobile in Yellowstone, was in favor of any management actions designed to protect the bison. According to her, access is secondary to preservation. When I asked her if she would support some management restrictions, she said,

To protect the bison? Absolutely, anything like that. ... I think you have to do what you have to do to protect what we've got, you know. There's just too many people and not enough bison, if you will. So what we have to do to protect it, is what we have to do. And then [the visitors] just have to live with the rest, because otherwise they don't get to see any of this.

Fanny toured Yellowstone on snowcoach and snowmobile. She believes National Parks are there to preserve wildlife. Here's what she had to say:

... They're starting to cut back on how people get into the Park, which I think is all good stuff, though it means it'll limit my experience; opportunity to go and convenience, but I think it's better overall for the Park and the wildlife. I mean, that's part of the whole why we have these parks is to preserve that. So with out that-the way I try to think about animals and then try to explain it to other people is that, it's like I'm in their yard and I don't want people coming up in my backyard and standing two feet from me, looking at me. I would find that very rude and offensive. So you have to turn that around and think about the animals.

Isabell, who skied in Yellowstone, was willing to support some restrictions to protect the bison herd in Yellowstone. She added,

My take on the National Park is yes. It's a Park about the land and the animals that are there and I think that should come first, by not allowing access to an unlimited number of people and snowmobilers.

Nadine, who snowmobiled in the Park, explained her support for management actions in that she thinks "...the environment is more important to maintain than the entertainment that it provides people".

Park for Both

Andrea compared protecting the Park's resources and the visitor experience to a "double-edged sword". She showed concern for the number of visitors in the Yellowstone. In her mind, controlled access is key to preservation

... Well, I think as long as it's controlled, there's controlled access, and you don't have any idiots doing crazy things or trying to harm the animals, just pretty much abiding by the rules. You know just doing the basics. And I think we'll all be alright. ... One path for humans and leave the rest for all the wildlife. And if everybody can abide by those rules, then I hope it will be alright because what a beautiful way to see this place.

When I asked Andrea, a visitor on snowmobile, if she would support the closing of some sections of roads to let bison migrate more freely, she responded, "absolutely", but wondered if she would still have access to Old Faithful. She said that seeing Old Faithful was very important to her. She agreed with the idea of requiring all visitors watch a thirty minute video and shortening the winter season to protect the bison herd. She said,

That's a great idea. One thing I did notice, there's a couple more signs this year that were more visible. ... Just mentioning "don't feed the animals" "keep your distance" that type of stuff. ... I think a good time to do that is when you purchase your tickets before you come into Yellowstone. I mean you have to pay the fifteen dollar entrance fee on those for snowmobiles. Maybe, a short video just talking about the wildlife that's in this Park. The "dos" and the "don'ts". That would be nice, and I think helpful.

Another visitor on snowmobile, Brian, showed concern for the future of the bison herd, but he recognized the importance of the visitor experience. He suggested a quota system to regulate visitation and added that free access to Yellowstone could ruin the Park. I asked Brian if he would support management actions directed at protecting the bison herd. He answered,

I would because, in some senses the bison herd here or anywhere else is already such a compromised thing from genetics and lack of open range and things like that. But just since this is a reality that that's how they are, now they're smaller and they're less genetically diverse. That would be fine. It wouldn't do a whole lot of good if they all died the next ten years so I could plow through them on my snowmobile and nobody else could ever see them. So if I wanted to just see one, I could always go see one in the zoo. And I'd rather keep it out here so you could, if you wanted to

make the effort to come out here in the winter or the summer...that they be here in some capacity and not wiped out, because the tourists' lobby wanted free access for snowmobiles. ...Maybe they could consider a quota or limit on the number of people that come through. And I don't know, hopefully, whenever I would come I would be included. I would make it before the cutoff. ...It's great for everybody to have access to it, but if ultimately it cuts the life span down significantly, it's sort of pointless to make things free and open to the whole world.

I asked Max and Nora, two visitors on snowmobile, if they perceived any problems protecting the Park's resources. They perceived a balance. They explained,

Max: No, I think everything is pretty well protected...isn't it?

Nora: Amazing how it all worked together, really. You know with the animals and the snowmobile. But it just works, you know. It's very neat.

In Oscar's eyes, "The Park belongs to the people and they ought to go in there to the extent they don't bother the wildlife that's [in the Park]." Oscar, who chose to snowmobile in the Park saw access as conditional, depending upon wildlife preservation. The question this statement poses is to what extent is wildlife bothered by people? The next section addresses how participants perceived the issue of environmental degradation in Yellowstone.

Awareness of Environmental Degradation

I think the impact on the wildlife is not as great as a lot of people seem to think it is. Because the Park is so large, and the contact between people and the animals in the wintertime is less than it is in the summertime, even though it's noisy. Hopefully the animals have adjusted to that, and the ones it does affect and bother they just stay away from the areas. -Eve

The results that will be presented in the next section of this chapter concern visitors' perceptions of real or potential problems in protecting the wildlife and natural scenery that they deem so important to the YNP experience. While visitors are fairly clear on how motorized use and the presence of other visitors impacts their own experiences (see section on Social Conditions), how these elements impact the wildlife

and natural scenery in the Park for many is not nearly as straightforward. Most interviewees perceived very little or no environmental impacts in YNP. According to several participants, the Park seems well protected. Three interviewees used the phrase, “if it ain’t broke, why fix it?” to explain their lack of support for management restrictions. Some interviewees perceived a *potential* for impacts due to the presence of visitors in Yellowstone and others *imagined* that impacts might exist. However, in general, participants mentioned no visual proof of impacts to the environment.

After interviewees were asked about their perceptions of problems in the preservation of the Park’s resources, I asked them if they would be willing to support management change either to specifically protect the bison herd in the Park or the elements they deem important to YNP. I will begin this section by examining the narratives reflecting the extent of interviewee’s personal awareness of problems in protecting the wildlife and natural scenery in the Park. Those who imagined a problem or perceived potential for a problem are presented first.

Those Who Perceived Potential Problems

Very few interviewees could pinpoint any direct visual damage to the resources caused by motorized use or the presence of visitors in general. Yet some showed concern for future impacts that these elements might impart on YNP and speculated that unless management implemented some restrictions, environmental degradation would occur. The impacts that interviewees mentioned include those from emission and noise pollution, visitor behavior, and the effects of groomed roads on wildlife migration.

In the longer interviews I specifically asked visitors if they perceived any problem with the protection of the Park. Emissions, noise, and to a lesser extent visitor behavior seemed to be the most frequent concerns.

Wendy, who snowmobiled in Yellowstone, worried about how the snowmobiles disturbed the wildlife in the Park. At the same time she likes the opportunity motorized use provides her to see Yellowstone.

The only thing I don't like about it is that I love being here, I love getting to see it, but the snowmobiles are so loud that I think that's kind of too bad for the environment, you know, to come in that way and disturb everything. ...I think the animals probably don't like that noise. I wouldn't if I were living here. They're noisy. So in a sense, if I was a big environmentalist, I'd say you have to bring people in on something quieter. But I like to be able to come in and see this.

Some were adamantly opposed to snowmobiling altogether because of the noise and emission pollution. Caren, who toured YNP on snowshoes, doesn't believe that snowmobiles belong in National Parks.

I'm opposed to snowmobiling in the National Parks, because I just don't think it belongs there. It's polluting, it's noisy, I guess they think it causes a pathway for the wildlife to get out... So I think they should get rid of them. I'm a taxpayer.

Fanny and her partner, who both snowmobiled and snowcoach toured in Yellowstone, were disappointed in the behavior of other visitors who in their opinion, violated a bison's space. She admits, however, that she and her partner were unsure of how to properly handle the situation.

[We] saw a bison being harassed by people. It wasn't direct harassment. They just ignored their space and their privacy and then the bison did kind of put his head down and kind of went toward him. So it's an issue that we don't really understand. We have a hard time understanding what we're supposed to do around a bison, because yesterday we were out on

the snowmobiles... several times bison were in the road and we were just like, how long are we supposed to wait? Other people are coming. We don't feel like they're respecting the distance the bison are given. And at one point, snowmobilers are coming this way and we're coming this way so we stopped and they didn't really want to stop... so now they start milling around because they don't know which way to go. And then they start butting each other, because they're agitated.

Fanny adds that even though she was told what to do in that kind of situation, facing it in the flesh, was intimidating.

It's kind of a problem trying to figure out what the right thing is to do. So we felt like if we had a better way; people told us, but now it's like *we're in*. What are we supposed to do exactly? And then at one point one of them just laid down right in the middle of the road. So it's like okay, we have no choice now, so we had to go around him.

Brian, who chose to snowmobile in YNP, was aware of the exhaust from the snowmobiles and was concerned about river pollution.

Well, I think that 2-cycle gasoline engines pollute a whole lot. So when there's a million snowmobiles coming through, it seems to me that it would be really difficult to not have an accumulation of exhaust from the machines. Also, just all the junk that they drip on the road. And then when the snow melts, it goes right into the river. So that would seem to be a concern. I'm a little hypocritical there since I'm on one of those machines. If they could come up with a propane powered snowmobile, something that was a little cleaner.

Brian added that he is worried about long term effects of so many visitors.

I think otherwise, what I think in terms of my kids coming here or my grandkids coming here, I think they'll see... well, I don't know if they'll change the Park much, but there will probably be more and more people. But I wondered what over the course of 50 or 100 years that all that snowmobile traffic will do. ...But I don't know much about how...that would turn out.

Fanny expressed concern over snowmobile fumes, she suggested limiting the number of people in the Park.

I wonder about the fumes of the snowmobiles, but again, I benefited from riding it. But I do wonder about it, because you can smell it when you're riding on them. So I don't know if it would be a lottery or limited number, but then you've got people coming in and out of the Park, so I don't know. Those are all sticky questions.

Fanny's experiences with other visitors' careless behavior around some bison on a snowmobile road may have sparked this comment on educating visitors.

I think somehow it's like you almost need to go through an orientation program when you come here. Most of it is about education because people don't appreciate fully the consequences of their behavior. ... So I think a video or a lecture or something like that before maybe you get on the snowmobiles.

While a few interviewees imagined potential problems, none of them could describe any real visual impacts. The following excerpt from Nadine, a visitor on snowmobile, illustrates this issue well. Nadine expressed that she was concerned about the sign of pollution in the snow and called for reducing the number of snowmobiles, but when she considers her experience she admits that they didn't *seem* affected. She said,

I'm concerned about the pollution, frankly. I was struck by the snow everywhere, the diesel fuel or whatever they use in them; the disruption to the wildlife. Although actually, they didn't seem to pay much attention to us. Maybe they are used to us by now.

The biggest concerns of the participants who speculated that the YNP environment might be at risk were about emissions, noise, and the behavior of visitors. As Nadine's words suggest, however, visual proof of environmental degradation was not present, which made it difficult for participants to be definitive about their concerns. Furthermore, because many of these participants benefited from motorized use, as Fanny put it, issues like whether or not restrictions are necessary become "sticky questions."

Those Who Did Not Perceive Any Problems

Most of the visitors I interviewed did not perceive any problems with preservation in the Park. Commonly visitors who described their close encounters with wildlife remarked at how indifferent the bison appeared to be with respect to the presence of visitors. Although, some interviewees noted that the bison seemed to be agitated, many felt like their encounter had little or no effect on the bison at all. *Not affecting the wildlife* was a predominant theme in the data and the following excerpts illustrating these three visitors' perceptions of the wildlife they encountered underscores this theme.

One visitor on snowmobile, Eve, saw the opportunity to be so close to wildlife without disturbing them or threatening her own personal safety as unique.

There isn't any place that I know of in the United States that you can go and snowmobile the way you can in Yellowstone, and be safe. Safety is a big feature. Close to the animals. It's so great to see the animals in their natural setting without disturbing them.

Hal and Nancy were conscious of the potential their "noisy" snowmobiles had for disturbing wildlife, but they both contended that the bison they encountered appeared to go about their business without being affected. Hal said,

We had several times yesterday on our travels where they were on the road and we just pull off to the side and wait till they do something and move away and then take off, you know. You just try to accommodate their migration patterns across the road.... For the most part, they're on the sides, eating, sleeping or whatever and don't seem to be affected by us with our loud, noisy snowmobiles.

Nancy added,

I've never seen them in person before, and it was pretty exciting. We pulled over on some of them and they were out in this field grazing, digging holes, and looking for food. They don't even know that you're there. They're not fazed by the noise or anything. It's just impressive how massive they are. They're powerful animals. They look docile, but they can be pretty aggressive.

Greg also didn't perceive any problem with protecting the bison on his snowmobile trip.

He said,

I don't really know what the problems with the bison are. They don't seem to mind the snowmobilers. They'll stand right there by the side of the trail and go right by them real slowly. They don't even mind that you're there it seems like. I don't even think that they care if we're out here.

When I asked Clyde, who chose to snowmobile in YNP, if he would support management actions to protect the bison herd, he admitted not knowing much about the issue. He was not aware of any impacts that people had on the environment. He explained,

With the trails groomed as they are, I don't think there's a whole lot of destruction of the natural beauty. Personally, I don't think so. Of course, you're going to have that couple of people that wander off every year, but the majority of the people are environmentally conscious and not going to do that, not going to chase the buffalo or anything else out in the middle of the rivers or anything. I don't perceive any problems.

Clyde also didn't think that the NPS could keep bison from migrating out of the Park on groomed roads. In his opinion the Park is already fairly limited in access. His travelling partner Cathy agreed.

I've seen more bison this year than I have in five years. So if they're migrating, they must be migrating to the tourists. I don't think the herd has grown that great in five years, but we've seen quite a bit more. And I haven't seen any problems with the snowmobilers and the bison. They seem to respect each other. So I don't know what the big problem is.

Since Lynette, a visitor on snowcoach, didn't perceive that the bison were in any danger, she was not especially supportive of closing some sections of the groomed roads from oversnow vehicle use. I asked her if she would support management restrictions, she replied,

Not really, because I don't think the bison are affected by people. I mean yes they are, but they don't seem to be the least bit interested when you drive by in the snowcoach. No matter what you do, they've adapted to people, so I don't think they're that affected by it. They're still having young, they're still multiplying. Therefore, I don't think they're really that much in danger.

Wendy, who toured the Park on snowmobile, also believes that people aren't affecting the bison.

I think people are going to stay on the roads. I haven't seen anybody off of them. I don't even know if you're allowed to go off of them. And I don't have any intent to go off. I guess it would be nice if snowmobiles weren't so loud, but other than that I don't think it's hurting anything.

Likewise, Eve thought that the wildlife had adjusted to visitors and have less contact with visitors in the winter than in the summer.

I think the impact on the wildlife is not as great as a lot of people seem to think it is. Because the Park is so large, and the contact between people and the animals in the wintertime is less than it is in the summertime, even though it's noisy. Hopefully the animals have adjusted to that, and the ones it does affect and bother they just stay away from the areas.

I then asked Eve if she would support management actions to protect the bison herd, such as limiting visitor group size. She was hesitant to support this management change, because she does not perceive any problem. She did imply though that if impacts were proven or protection was "necessary" that she would support management change.

I would if it really proved to be true, but I don't believe that that's true, because if the animals are getting out through groomed trailways or by the paths the snowmobiles are taking, it doesn't matter if you've got a big group or a small group, That trail, in fact, is still there. ...I don't think limiting the number of people, unless you were going to limit the patterns by having certain areas that people could access the Park, which would prevent those access points for the bison to leave the Park, but as I understand it, the bison problems are usually hard winters where they're forced out of the Park in order to hunt for grazing ground. I'm

sympathetic to the ranchers, but I think they take it too far sometimes. I think just good relations between the ranchers and the Park wildlife management people just have to keep those avenues as open as possible.

Other interviewees mentioned that they would want *proof* of impacts before supporting any management restrictions. Randy, who cross-country skied in Yellowstone said he would support closing some sections of groomed roads from oversnow vehicles, "...if there is a clear present danger to the buffalo". He continued,

Because I understand that if the buffalo run off because they're scared by the snowmobiles and go outside the Park, they're executed. Because they carry some disease that they're afraid cattle will get. From what I understand from the coach driver, they never have gotten it. So, to prevent the slaughter of buffalo that leave the Park area, sure.

Participants, in general, perceived no real damage to the environment in YNP. A few voiced concerns regarding the emissions and noise of snowmobiles, but no one could really pinpoint any damage. While some imagined potential degradation, the overall attitude was that visitors aren't negatively impacting the wildlife in Yellowstone. Where did these perception come from? Many interviewees remarked at how much wildlife there seemed to be in the Park. They perceived this to be an indication of health. Others mentioned how bison didn't even notice them drive by, because they are so well adapted to life in the Park. Some perceived this to mean that the bison are unaffected by the presence of visitors. The presence of calves suggested to Lynette that the environment in Yellowstone is not too stressful for the bison, as well. The explanations interviewees gave for their attitudes about management action support and environmental degradation were concentrated around their observations and the lack of visual indications of impacts. Eve and Randy admitted that they would support restrictions if they had real proof of

visitor impacts. This issue is linked to the final section on interviewee support, trust in the decision-makers.

Impacts on Visitor Experience

How management change would affect the visitor experience was a consideration for many participants. Respondents contemplated how their experience would be restricted in terms of access, time, and freedom. While these visitors weren't necessarily against wildlife preservation, they were hesitant when preservation means restricting their own experience. Many visitors said they "like the way the Park is now" and were wary of change.

Caren, who snowshoed in Yellowstone, was not aware of any problems with the protection of the Park's resources. She was skeptical about restricting group size, but would support a mass-transit system. She later voiced support for an educational video and potentially limiting the times people could travel in the Park. Here's what she had to say about limiting visitor group size.

I don't know, because my whole family, there's five in my family, so if we couldn't come as a family, I would not be happy about that. But, I would be for doing something like, course I don't know if cars, see I don't know much about that issue and...what they would do to protect bison and how that would affect me to comment on it. I think they should cut down on the cars in the summer too. So I would be for some kind of mass transportation in, as opposed to everybody bring their personal vehicles into the Park. I don't know how that affects bison though.

Ulee and his wife, both on snowmobile, came to YNP in fear that future legislation would close the Park. Ulee didn't perceive any differences between the impacts of snowmobiles and automobiles. He was against closing sections of the groomed roads. He said,

Well, if they close down the roads, then it's pretty much going to close it down for the snowmobiles. ... I think you've got to try to keep as much open as possible, otherwise... it's everybody's right to be able to see and do, to see the Park.

He continued, to say that he didn't feel that bison leaving the Park on groomed roads was a problem. He was also unsure about shortening the winter season.

I don't know. You've got a long winter here, and a lot of businesses need the income. I think that shortening the season, I don't know, it all depends on what you mean. If they're going to bring it down to a month or something like that, that would be pretty tough.

Although Roger's snowmobile visit was not negatively affected by the congestion in the Park, he felt like the numbers of visitors might be responsible for some "environmental pressures".

Oh, I don't think it's going to stay open for snowmobilers forever. Seems like more environmental pressures and things. I don't know, this time it hasn't been that congested. There's other times we've been down here it's been really busy. And I don't know, perhaps they should have limits on it or something. Limit the number.

He did show reservations about too many restrictions. I asked him if he would support restricting the times that people can be in the park. "Well, I hate to see them restrict it too much. It's something we've really enjoyed for the last five years. And I hate to see them close it down."

Even though Quin, who toured YNP on snowmobile, perceived that preserving wildlife in Yellowstone means restricting use in some way, he showed disapproval of management actions that would restrict the flow of traffic. I asked him if he would support management actions that would close some sections of groomed roads to oversnow vehicles to help large animals in Yellowstone. He replied,

Judging by what I've seen on a map, in order to do that you more or less restrict the flow of traffic around there. And by cutting of a small section you restrict a great deal of the Park by doing that. So I would not be in favor of that, no.

Thad and his traveling partner, Theresa, who skied in the Park, said they wouldn't support the requirement of a thirty minute video, because they would not want to be "forced" to do it, primarily because they feel that many visitors already know how to be respectful of the environment. They explained,

Thad: I think to require someone to sit down and watch a thirty minute tape before taking their family through ...I'm not sure that's the best way to get the information across. Handing them a pamphlet at the gate and hope that they are reading it; I would prefer that to being forced to watch a thirty minute video.

Theresa: Especially for people like us that feel we know a lot about not ruining environments and supporting wildlife and everything. So for us, [we'd] probably hate sitting down for thirty minutes.

Thad: Might take away from the experience of being outdoors if you were forced to take initiation before doing it. This is supposed to be a place to enjoy yourself as you want to.

It appears as though these participants struggle with idea of restricting the very things that the earlier section on recreation in Yellowstone revealed are so important about *experiencing* the Park. Thad put it succinctly, restrictions "might take away from the experience of being outdoors..."

Trust in Management

The narratives presented here are based on interviewees' contemplation of the ability and objectives of the decision-makers in YNP. Some imply that management should explore all other options available, before restricting visitor access. Some question the tactics of wildlife management and suggest other options such as cattleguards to keep the bison from leaving the Park. Many, as the section on awareness

of environmental degradation suggests, need proof from scientific research, before they'll support restrictions^{*}. Other excerpts represent participants who have complete faith in YNP management. These participants express a willingness to support any restrictions that wildlife managers deem important to preserving the environment. These narratives are grouped together because they all address trust in Park management in some way.

Max and Nora, who both snowmobiled in YNP, didn't perceive any problems with the protection of the wildlife in the Park. I then discussed the issue regarding bison leaving the Park. They were not aware of that as a problem and suggested ways of keeping them in the Park rather than restricting visitor use.

M: Why can't they put up cattleguards? To keep them in? ... That's probably too simple, though. They want to go way overboard.

I asked them if they would support a thirty minute video about the Park's resources.

Nora agreed, but Max was unsure.

M: Well, you know what, everything is pretty much regulated. I don't see much wildlife getting hurt. The bison that we've seen on the trail, the people have stopped, let them kind of move where they want to move. So I don't see any problem with it. But...I haven't been all the way around the Park.

I asked them at the end of the interview if there was anything else that they felt like the Park Service should know about their experience. They revealed concern that the Park would be closed to snowmobiles and added that snowmobiling was the reason they came to YNP.

M: Keep Yellowstone open for snowmobilers. Totally awesome. ... What an experience

^{*} This interpretation may not seem as obvious to the reader as the other interpretations. The sense of mistrust in government I gained from participants was often from comments prior to the tape recorded interview, tone of voice, or sarcasm which is difficult to capture in a tape recorded interview, but was recorded in journal notes.

N: Yeah, don't close this.

M: We've heard rumors that they're trying to ban snowmobiling. That's what brought us to Montana was snowmobiling. We wouldn't come if we weren't snowmobiling.

This narrative implies that Max and Nora perceive YNP management as not wanting simple solutions to a simple problem. They suggest that the Park is too regulated with out good reason and the motives of the Park Service are questioned. Several interviewees brought up the idea of cattleguards to keep bison in the Park. Valerie, a visitor on snowmobile, also mentioned cattleguards, when I asked her about her support for closing some sections of groomed roads to oversnow vehicles to protect the bison herd. When I asked her and her husband about the possibility of shortening the winter season he replied,

Before they do that, I think they ought to determine that this is, the common problem. What is the problem with bison wandering out of the Park? Are they carrying that disease and is it safe? To what extent do the bison wandering out of the Park; is their migration affected by the groomed trails? You can count that. You can count the bison and find out where they are, and another question would be are there some simple things you could do, like certain trail points, where you could keep the bison from getting that trail. I think get some wildlife biologists involved and they can do it.

I asked her if she had better proof of impacts, would she support management change.

True. It's easy to take a management action with no clear objective and some generalization, but the results may not be what you expect. Measure the environment before you take the action. Measure after you take the action to see if it's good. If you see the effects you desired, or you could have the exact opposite.

Eve stressed the importance of good relations between Park management and the public.

When I mentioned that it has been suggested that the Park Service should close some road sections to oversnow vehicles, she said.

I'd be sad about it, but if it was necessary than I'd support that. I just don't want it to become political to the point where it's closed for political reasons and not true wildlife management reasons.

Eve demanded true scientific proof of degradation. It seems as though she was also skeptical of the Park Service's agenda. I asked her if there were particular sections that she would want to remain open. She answered,

I don't think it would be up to me whatsoever. It would be up to what is truly needed to manage wildlife. It doesn't have anything to do with which ones I would be interested in.

So on one hand while Eve didn't perceive a problem with the protection of wildlife, she would support necessary actions with proof. And furthermore, she thinks that these decisions should be based on science and not on politics or visitor opinion.

I asked Randy, who toured YNP on skis, if he would be supportive of restrictions on the times that visitors could be in the Park to protect wildlife in the Park. He answered, "I guess I'd have to defer. The answer is yes, deferring that decision to those professionals that are trained in the habitat and how different species react to man."

Sarah, a visitor on snowcoach, said she would support restricting the times visitors could be in Yellowstone in the winter. Here's how she explained this:

Well, because I would trust that they wouldn't do such a drastic thing unless they had good reason to. I certainly would not want them to just do it because somebody got the idea that it might be nice to give the animals a break. I mean how do they know. But if they can convince the people that they know what the animals need better than the rest of us, then I think they ought to do that. But I'm not sure... I don't know what the animals need, but maybe somebody else does. If the animals are showing signs of stress, well, they should have a break.

Ursula, who visited YNP on snowmobile, also said she would trust in the expertise of management. I asked her why she supported restrictions and she said, "Just the

conservation, and there are certainly experts that know more about the ecosystem and wildlife management and things than I do, so if it were put into effect because of that reason, I would be.”

In summary, this chapter presents the narratives supporting four broad themes: visitor perception of YNP’s winter setting, the nature of recreation experiences within that setting, visitor perceptions of social conditions and their impacts on the experience, and common factors in visitor contemplation of management change. The data tell us that an abundant diversity of unique wildlife in a natural setting and aesthetically pleasing and unique landscapes make YNP’s winter setting special. Regardless of their mode of experience (activity/mode of transportation), interviewees highly valued these elements of YNP’s physical setting.

We have also learned that the nature of recreation experiences within that setting are shaped by a visitor’s mode of experience. Access, freedom, interaction with the environment, relaxation, and escape were all common themes unique to experiences on snowmobile, snowcoach, or on cross-country skis.

The interviewees’ stories about social conditions uncovered three topics of concern, crowding and visitor behavior, motorized use, and bumpy roads. While the number of visitors in YNP was important to participants, very few actually felt crowded. Other participants pointed out that the behavior of visitors was more of a concern in the Park. The presence of motorized use affected some visitors I interviewed, most commonly in terms of noise and emissions. Although bumpy roads was a common topic of conversation, it did not appear to have a major affect on the visitor experience. Finally, I established four common factors present in participants’ contemplation of

management change. When faced with management actions that might affect their experience in YNP, participants talked about: the worthiness of the cause or the role of YNP, their awareness of environmental degradation, the potential impacts on their own experience, and their trust in decision-makers. The next chapter delves into the conclusions made about the nature of the YNP experience with respect to the results presented above. I will also highlight some management implications and outline recommendations for future research.

CHAPTER FIVE--CONCLUSIONS AND MANAGEMENT IMPLICATIONS

This chapter includes a discussion of the conclusions I draw from the participants stories about the physical setting in YNP, the nature of the recreation experience in that setting, perceptions of social conditions, and factors of support of or opposition to management actions. I will also offer what I believe this study's results mean to management and how my findings will be useful in understanding the full effect of management change on the visitor experience in YNP.

YNP'S PHYSICAL SETTING

The fact that thousands of visitors are drawn to Yellowstone National Park each winter to experience wildlife and view natural scenery is well known. The 1998 winter use survey told us that the opportunities to view wildlife and natural scenery are among the most important reasons visitors come to YNP (Borrie et al. 1999). Managers themselves know that YNP's wildlife and scenery are at the heart of the visitor experience in the winter. This study takes this information one step further and asks "why". Why are wildlife and natural scenery so important to the winter experience in Yellowstone. What about these attributes of the Park's winter setting are special to visitors? What separates these opportunities in Yellowstone from the same kinds of opportunities in other winter recreation areas? What sorts of conditions and opportunities should be maintained? For the answers to these questions, I examined the visitor perspective. From visitors' richly detailed stories and fervent descriptions of their experiences in the Park, many clues were uncovered about how the recreation setting is linked to the recreation experience.

Much insight was gained about the visitor experience and wildlife. In summary, it was the opportunity to observe an abundance and diversity of unique species of wildlife in their natural setting that made the interviewees' wildlife experiences significant in Yellowstone. These attributes combined for a more holistic experience much different than most other wildlife viewing and recreation areas. From my examination of recreation experiences it was revealed that for many participants, especially those on snowmobile, "being right there" with wildlife highlighted their visit. These participants appreciated their wildlife experiences not merely as a chance to observe but to interact (eg. "being breathed on by a bison").

The natural scenery in the Park also made the recreation experience unique. Aesthetic beauty, geological features, and fire affected landscape were common topics of conversation among participants. Participants described the deep snow, steamy mudpots, icy rivers, charred snags, young pines, geyser spouts, and mountain views. My inquiries about the things that make YNP unique elicited talk about the vastness of the Park, diversity of the landscape, and the evidence of environmental change. Like the wildlife opportunities, the scenery in Yellowstone is unique and as one participant remarked, "breathtaking".

Observing wildlife and viewing natural scenery in YNP are unique in that these opportunities are highly accessible, plentiful, yet still very natural. Moreover, the types of wildlife and natural scenery are unique in and of themselves. Many participants expressed joy in experiencing wildlife and natural scenery that they don't have at home. This mix of elements in YNP make the recreation opportunities there difficult to duplicate.

These descriptions of the importance of wildlife and scenery in YNP, came from participants who experienced the Park on snowmobile, skis, and snowcoach. What these participants saw as outstanding about Yellowstone's winter setting was largely consistent across user groups. Overall, visitors had very little to say about the wildlife and scenery in YNP's winter setting that wasn't positive. From this standpoint, managers have much to be happy about. Yellowstone National Park's winter setting, in particular the opportunities to view wildlife and natural scenery, still takes a visitor's breath away. And it does so in ways unique from other recreation and wildlife viewing areas. As far as the physical setting in Yellowstone in the winter with respect to the visitor experience, managers should not make many changes. Visitors appreciate the fine balance the Park maintains between accessibility of wildlife and natural scenery and the natural feel of the experience.

What makes managing YNP difficult however, is that the importance of wildlife and natural scenery to YNP's winter setting is where visitor consensus regarding recreation experiences ends. A great diversity of perceptions and attitudes are discussed in the following conclusions from an analysis of mode of experiences, social conditions, and support for management actions. What is learned from this research is that with respect to the recreation experience in YNP, the ways in which visitors experience YNP is just as important as the setting itself.

THE NATURE OF THE RECREATION EXPERIENCE IN YELLOWSTONE

Now that I have established that YNP's winter setting is revered across all user groups for unique opportunities to view wildlife and natural scenery, I will argue that the recreation experiences within that setting are also revered, but for a diversity of reasons.

The term *mode of experience* has been adopted in this study to represent the dual role of snowmobiling, skiing, and snowcoach touring in Yellowstone as recreational activities and modes of transportation. This term underscores the idea that modes of experience shape or frame how YNP's winter setting is experienced. Although for many participants the actual activity, such as skiing, was important to the experience; the ways in which the "activity" enabled them to experience the Park were central to their recreation experience in Yellowstone. For example, while participants who chose to ski in Yellowstone mentioned challenging their abilities and fitness, most of the talk focused on the backcountry scenery and opportunities for solitude in the Park. One visitor commented that her experience in the Park was "not just to ski, but to ski among the beautiful things in Yellowstone" (Gina). The same concept holds true for many participants involved in snowmobiling and snowcoach touring. While, participants who experienced each called their mode of experience "fun" or "thrilling", most of the narratives concentrated on the advantages of each in "getting around" the Park. Thus for management, this means that the recreation activities in Yellowstone, such as snowmobiling, cross-country skiing, and snowcoach touring cannot be separated from the natural environment. The NPS needs to reconceptualize their traditional notion of management from that of managing snowmobilers, skiers, and snowcoach riders to managing snowmobiling, cross-country skiing, and snowcoach touring experiences. To underscore this new conceptualization the term *mode of experience* should replace the terms activity or mode of transportation in management language.

The mode of experience shapes the way in which the recreation experience in Yellowstone unfolds. Each offers visitors different and unique opportunities.

Participants' perceptions about how snowmobiling, skiing, and snowcoach touring frame the experience are important in understanding how management change will affect their visit. Five common themes embedded in the narratives illustrate what participants perceived was important and unique about their modes of experience.

- access
- freedom
- interaction with the environment
- relaxation
- escape

Participants who snowmobiled in Yellowstone valued this experience for the opportunities it provided them. In particular snowmobiling afforded them the *freedom* to set their own schedule and pace. According to their experience, snowmobiling also gave them *access* to the whole Park. These participants felt a close connection with the *environment* in that they were "right there" with the animals and the elements. They also appreciated not being confined to a guided tour in an enclosed vehicle. And so any limitations on the use of snowmobiles will be a limitation on the ability of visitors to feel free, have access to, and close encounters with the wildlife—all fundamental values and objectives of the Park. Managers suggesting such restrictions will likely face opposition from visitors seeking these values and not just those that like snowmobiling.

Participants who skied in the Park liked the opportunity to *escape* other visitors and noise. Seeing the Yellowstone's backcountry *environment* was important to many of them. For many, *relaxation* in a peaceful setting seemed to be what skiing in

Yellowstone's front and backcountry was all about. Preserving the opportunities for relaxation and access to the backcountry are thus important management objectives.

The snowcoach touring experience in YNP, gave visitors a variety of unique opportunities. Some used the snowcoach as transportation to ski trails and Park facilities. Others praised the snowcoach rides for the opportunity to have a guided tour and *accessing* information about the Park. Several participants remarked that their guide gave them insights into the cultural history, geology, and biology of the Park. According to some interviewees, taking your coat off, being warm, and *relaxing* were all important features of a snowcoach ride. One participant felt *freedom* in sitting back and letting someone else do the driving, while she enjoyed the scenery. The photographic opportunities that riding a snowcoach gives visitors was also important to some interviewees. Having access to information about the Park, being able to relax, and the freedom to enjoy the Park on a guided tour is important to these visitors and should be maintained by management objectives.

What does all this mean to management? Although it is clear that observing wildlife and viewing the natural scenery in YNP's winter setting are what attracts visitors to the Park, the ways in which visitors access these attributes and the freedom that they have in doing so are integral to the nature of the recreation experience. The ways in which each mode of experience shapes visitor experiences are strikingly unique. For example several participants on snowmobile said their close encounters with bison was the highlight of their visit. One participant, for example, explained how exciting it was to have a bison breathe on him. These interactions appear to be unique to the snowmobiling

experience. Many participants said that if it weren't for the opportunities that the mode of experience they chose gave them, they might not have come to YNP.

Each mode of experience shapes the types of recreational opportunities available to visitors. Taken as a whole, this diversity of recreation opportunities in Yellowstone has great value. In the Park visitors can frame their visit according to the kinds of unique experiences they seek, or more specifically the ways in which they want to experience Yellowstone. Preserving this range of profound experiences should be the focus of management aimed at maintaining quality experiences. As analyses of visitor motivation in YNP tell us, observing wildlife in a natural setting, viewing natural scenery, and the opportunity to snowmobile, snowcoach, cross-country ski in Yellowstone are all highly important experiences to visitors (Borrie et al. 1999). This current study elucidates what it is about these dynamic and complex experiences that are so special and how management change will affect them.

PERCEPTIONS OF SOCIAL CONDITIONS IN YNP

Another objective of this study was to explore what factors impact the visitor experience in YNP. How do visitors describe the social conditions in Yellowstone? Two primary concerns of management have been crowding and the presence of motorized use. From the visitor perspective in general, however, the numbers of visitors in the Park was not really a major issue. While the number of visitors in Yellowstone was important to many interviewees, very few actually felt crowded. Several visitors commented on why they avoid crowds or why they don't want crowds in YNP. At the same time the overall evaluation of the numbers of people in YNP was positive. In terms of the evaluations of social conditions other factors surfaced. Curbing reckless and environmentally

insensitive behavior, however, was a concern. According to most interviewees, the other visitors were courteous and respectful, but several saw behavior as a potential problem. Motorized use was also a source of some perturbation. More specifically the noise and emissions from snowmobiles detracted from the experience of some participants on snowmobile, snowcoach, and skis.

Previous studies in recreation research and in YNP in particular have concentrated on identifying an area's social carrying capacity from normative standards of encounters with other visitors. The 1998 winter use survey in the Park revealed that the crowding conditions in Yellowstone could triple before normative standards were exceeded (Borrie et al. 1999). The data here suggests that while crowding issues are important to visitors, for many participants in this study the conditions in Yellowstone are far from crowded. Because of this, setting use limits in the winter in YNP may not easily be justified in terms of the visitor experience. For visitors who do feel crowded, this may be less of a product of the sheer numbers of visitors and more of a product of the behavior of other visitors and the impacts of emissions and noise from motorized use.

The analysis of participants' perceptions of social conditions supports the findings of the research presented in the literature review. There does not appear to be any real crystallization in the crowding norms of YNP visitors. This may be explained by participants' very different standards of comparison and very different personal indicators in terms of their perceptions of crowding. Hal, for example, used road conditions as an indicator for crowding, while others like Roger used summer conditions as a standard for comparison. In other words, there is not social standard for the number of encounters in the Park. Other factors are at play in visitors' perceptions of crowding.

The notion of conflict also is somewhat ambiguous in Yellowstone. Visitors don't appear to be competing for land, but competing for experiences. Insofar as the factors of conflict, visitors are less concerned with the presence of motorized use than they are with the effects of motorized use on their experience. In Yellowstone, the conflict is not one of snowmobilers versus skiers, but of the characteristics of motorized use versus the visitor experience in general. Visitors of each mode of experiences complained about emissions and noise.

Therefore, any indicators chosen to monitor the quality of social conditions in YNP in the winter should concentrate on the behavior of visitors, as well as the emissions and noise of motorized use. Participants themselves suggested visitor education and more interpretive sites as potential actions to address behavior. Several participants charged the NPS and snowmobile manufacturers with the responsibility of designing and requiring cleaner and quieter snowmachines to address emissions and noise.

MANAGEMENT ACTIONS

Managers in YNP are faced with the challenge of preserving the delicate balance between the environment and the visitor experience. Understanding how visitors are affected by management change and exploring factors that influence their attitudes towards management actions is important.

After exploring the nature of the experience in Yellowstone and how this experience is linked to the Park's winter setting, I examined what interviewees had to say about potential management actions to protect the things they deemed important, such as bison and other wildlife. In looking at the reasons participants gave for their support of and opposition to management actions, four factors of contemplation were revealed.

These factors of visitor contemplation surfaced in their perceptions of management actions and explanations of attitudes. The factors include:

- worthiness of cause/role of YNP
- awareness of environmental degradation
- impact on visitor experience
- trust in decision-makers

When faced with management change, participants considered these factors in their judgement about the action. The data tells us that many participants seem to be asking themselves the same kinds of questions. They ask, 1) How important is the cause and how appropriate is this cause in YNP? 2) Is there really a problem that demands management change? 3) How will this change affect me and my experience? 4) Do the decision-makers know what they're doing and do I trust them to do the right thing?

The following sections present a discussion of the conclusions we can draw from the data about why participants are supportive or in opposition to management change and how participants contemplate management actions. I will also examine what implications this understanding of visitor contemplation might have on management.

It's a People's Park

Several interviewees questioned the role of YNP or the worthiness of preserving wildlife. The comments about the role of YNP can be divided into three different stances. There were those stances that identified the role of YNP as a place for people and recreation, as a place for wildlife protection, and as a place for a balance between both. These stances are discernable from the other factors of contemplation, in that they appear to come from internal values, not related to the conditions in YNP or their recreation

experience. Their attitudes with regard to management actions are at least partially based on their beliefs about the role of National Parks.

Because I did not specifically ask questions about the role of YNP, more participants may have strong values on this issue, but the ones presented in the results chapter used these values to explain their support or lack of support for management actions. For some participants, the role National Parks play was a major factor in their attitudes towards management actions, for others different factors such as awareness of impacts or trust in government may have had more to do with their attitudes.

Participants that expressed the importance of YNP as a people's Park, were generally less likely to support management actions for the purpose of protecting wildlife. Some interviewees with these values suggested that it is their *right* to be in National Parks. One interviewee believed that Yellowstone was set aside for people and that it is his *right* to come and go as he pleases. Another interviewee asked "why have nature, if people can't be around to enjoy it" (Roberta). These kinds of attitudes and values about the role of National Parks might be the most deeply rooted and difficult to change. Thus, management should expect this kind of opposition, and will find it difficult to completely satisfy these visitors.

Where might these attitudes come from? In 1872 the Yellowstone National Park Act did dedicate and set aside YNP as a "public park or pleasure ground for the benefit and enjoyment of the people" (YNP Act of 1872, 17 Sta.32). This mission statement is carved into the stone arch that stands over the original entrance to Yellowstone. The notion that YNP's role is that of a recreation area versus a biodiversity reserve is not solely constructed by today's recreation visitors, but has been a part of Yellowstone's

history since it's conception. The dual mandate upheld by the National Park Service has long posed a challenge to managers of Yellowstone. This challenge is illustrated here in the attitudes of interviewees toward management restrictions of visitor use. Visitors are very sensitive to any changes in the balance between the dual mandate. The NPS needs to be seen as striving to meet both and not trading off one for the other.

The participants with these attitudes and values are likely to be the biggest opponents of management change, because of their fundamental difference in opinion about the role of YNP. They are likely to say argue that the NPS “just doesn't get it” and will fundamentally question the agency's ability to correctly manage the Park. This brings up the important and delicate component of trust in government which is discussed in depth later in this chapter.

Why Fix It If It Ain't Broke?

The heading of this section captures the attitude of many interviewees with respect to their awareness of impacts and support for management actions. Many visitors I talked to were adamant about how unaffected the wildlife seemed to be by the presence of people in the Park. Their observations of and encounters with bison convinced them that the animals are not disturbed by visitors. Several participants questioned rumors and reports they've heard about the impacts to wildlife in YNP. The key here seems to be lack of visual proof. Because bison do not *look* stressed; because they do not *appear* bothered, visitors do not perceive any problem with their protection. Therefore, visitor attitudes toward management actions based on their perceptions of impacts were less likely to favor management change to protect the wildlife in Yellowstone. These visitors ask, “why fix it if it ain't broke?”

This theory suggests that if managers are to gain support in management change to protect wildlife, it is essential that they clearly demonstrate that wildlife are in need of protection. Wildlife biologists should communicate with the public their concerns about impacts to wildlife, they need to provide an appropriate scientific foundation for their arguments, and these biologists need to demonstrate how restricting visitor use will address the impacts to wildlife. There is great danger in wildlife ecologists turning into advocates and being perceived as anti-snowmobiles, for example. The science serving as a backbone for management change needs to be objective and well articulated to the public. Without this kind of good science and a process of mutual learning between managers, scientists, and the public, public acceptance of management change may be difficult, if not impossible to achieve.

What is encouraging about these results is that visitors are aware of the issue itself. They are concerned with how their presence affects wildlife and they do contemplate this issue in explaining their attitudes towards management change. Some participants conceived potential impacts from snowmobile emissions or noise and the behavior of other visitors. The rest of the participants, however, that contemplated their impacts to wildlife, felt that wildlife and bison in particular had adapted to conditions in the Park. But they should not be seen as “anti-Park”. These visitors understand and appreciate the values unique to the Park and do not want to abuse those values.

Because the attitudes of these participants seemed to evolve from their perceptions of conditions, and not inherent values about the role of the Park or the importance of wildlife versus access, managers may have more of the ability to influence these attitudes. Conclusive evidence from wildlife studies, for example, may altogether

change these participants' attitudes. The last narratives presented in the Awareness of Impacts section of the Results chapter, illustrates this theory. Randy and Eve both intimated that their attitudes towards management actions protecting wildlife in Yellowstone would change if the Park Service demonstrated that visitors threatened wildlife.

To most effectively bridge the gap between science and the public, the NPS needs to facilitate opportunities for information exchange and mutual learning. Public involvement should be encouraged in open house forums. Scientific publications geared at the public as an audience would also aid in increasing public awareness of environmental issues.

Restrictions Might Take Away from the Experience

Some attitudes towards management change were based on participants' contemplation of how their own experience would be affected. These participants were more likely to take issue with the details of specific management actions. For example, one woman was hesitant to support restrictions on group size, because she valued the opportunity to be with her whole family in the Park. Another participant felt like because he was environmentally minded and a mandatory thirty-minute video about the Park's resources would be a waste of time and even take away from the outdoor experience.

An analysis of the nature of the recreation experience in YNP tells us what participants value about each mode of experience and how these modes of experience shape the YNP experience. Management actions that would put constraints on valued characteristics of the modes of experience, are less likely supported by these participants. Characteristics such as access, freedom, ability to interact with the environment,

occasions for relaxation and the opportunity to escape are very important to these participants, and in some cases these factors outweigh the importance of preserving wildlife.

Managers can best address these types of contemplation by examining how management change will affect the nature of the recreation experience in YNP. As this study illustrates there are specific elements of the Park's physical setting, modes of experiences, and social conditions that have major impacts on the quality of the experience. Managers need to see the big picture in not only how management actions will affect traffic flow, crowding, and visitation numbers, but in how these actions will affect the nature of the experience. The NPS should clearly consider and document the costs and benefits of any management actions to the visitor experience.

Trusting the Experts

While explaining their attitudes towards management change, a few participants implied that they lacked faith in the decision-makers or experts in the Park. Some felt that the Park's management objectives were not clear or intimated that they believed management had a hidden agenda. Others thought that management had not considered every option available to them in protecting bison. There seemed to be a gap in the knowledge participants had about the issue and their understanding of management strategies.

This attitude may be the fruition of other factors. Visitors that express distrust in management might base this attitude on factors such as their lack of awareness of a problem or their fear of how management change will affect their experience. Again to address these perceptions, management needs to bridge the gap between science and the

public. Decisions based on science must be clearly presented to the public. The objectives of management actions must be established and clearly articulated before they are implemented. Visitors are concerned about protecting the resource and preserving the recreation experience in YNP.

Final Conclusion

This qualitative study has brought our conceptualization of the recreation experience in YNP closer to the actual lived experience by examining the visitor perspective. It has furthered our knowledge of how the winter setting in Yellowstone is unique from other areas and has expanded our understanding of how modes of experience shape the ways in which that setting is experienced. We now have a clearer picture of what visitors perceive to be important elements of the social conditions in Yellowstone. This study also provided us with an in-depth understanding of how visitors contemplate management change and it illustrated how this change may impact the visitor experience.

One of the guiding questions of this research posed by the 1998 winter use survey, was why do YNP visitors value wildlife, but are not necessarily very willing to support management actions to protect wildlife in the Park. The four factors of visitor contemplation highlighted in the Results chapter address this question directly. The biggest factor to visitors in general is that the wildlife in Yellowstone seem unaffected by the presence of visitors. In other words, the wildlife in the Park are not perceived as being in need of protection. For some visitors the role of YNP is a key factor in their contemplation of management change. The idea that the role of the Park is that of a “people’s Park” and that preservation of wildlife is secondary to this exists in the mind of some visitors. Other visitors are more attuned to how management change will affect the

quality of their experience with respect to factors, such as access, freedom, and escape. The final reason why visitors may not be willing to support management change to protect wildlife is a lack of trust in the decision-makers. Some question the motives of management, as well as their capability of finding the best alternative.

This study has expanded upon and challenged the traditional management and research perspective of recreation. The complex, subjective, and dynamic nature of recreation experiences is confirmed here and furthermore, this examination illustrates why management considerations must address this nature of recreation. Because of the research approach used here, the deeper meanings, common themes, and direct relationships between the YNP environment and visitor experiences were captured.

While managers have no doubt heard many of these kinds of stories from YNP winter visitors, this study freezes the experience in time and critically analyzes the meanings behind these stories. Common topics of conversation or themes are elevated and linkages or relationships between these themes are made explicit. Moreover, this study has provided managers with a framework in expanding their understanding of future visitor comments. For example, in the content analysis phase during an Environmental Impact Statement process, managers now have a headstart in conceptualization and categorization of criticism or disapproval of potential management change.

Another caution in qualitative research is that because of the nature of the sampling procedure and data collection in qualitative studies, the results are not *statistically* generalizable to other populations. The goal of the qualitative approach is not to determine the extent and intensity of attitudes and perceptions across a population,

but to explore the nature of these attitudes and perceptions. In this sense, the results from this study are generalizable across different recreation settings. While the perceptions and attitudes are directly associated with recreation experiences in YNP, this study does have management implications beyond this setting.

For example, we have gained a clearer picture of how activities such as snowmobiling and skiing shape recreation experiences. In other areas like YNP, where the activity is so closely linked to the setting, it may be more accurate to consider these activities as modes of experiences. Furthermore, management change affecting an activity in these types of settings, may also have a great impact on the visitor experience in general. In terms of social conditions, we have also shown that from the visitor perspective, factors other than the sheer numbers of people may have a greater influence on experience quality. Perhaps the biggest contribution this research has made beyond the scope of YNP is that of identifying and examining how management change challenges visitors. The four factors of visitor contemplation: worthiness of cause/role of recreation area, awareness of problem, impact on experience, and trust in decision-makers have implications across recreation management today. Managers should consider these factors when deliberating over management change.

Propositions

Four propositions summarizing the results of this examination of the nature of recreation experiences and visitor perceptions of YNP winter visitors are presented below. These propositions have been developed through the interpretation and theory building based on visitor stories.

- A. In unique natural settings which offer a diversity of winter recreation opportunities, including snowmobiling, cross-country skiing, and snowcoach touring, the quality of visitor experiences is directly linked to issues of access, freedom, interaction with the environment, relaxation, and escape.**
- B. In protected areas offering motorized and non-motorized winter recreation, visitor perceptions of social conditions are highly influenced by other visitors' behavior, emissions and noise from motorized use, and road conditions. The sheer number of visitors in the area may be of less significant than these factors.**
- C. When faced with potential management change, visitors contemplate the validity of this change in terms of four factors: 1) the worthiness of the cause or role of the protected area, 2) their awareness of a problem, 3) the potential impacts of the change on their own experience, and 4) their trust in the management.**
- D. Managers can gain public acceptance of management change by clearly defining their role and mission in managing the protected area, demonstrating a need for change based on science, exploring the impacts of management change on the visitor experience, and clearly articulating to the public the objectives, impacts, and expected outcomes of management change.**

APPENDICES

Appendix A.

Nature of the experience

1. Describe for me your visit today.
 - P. What did you do?
 - P. What did you see?
2. What events or experiences were particularly important to your visit?
3. Why do you choose to (activity) in the park over other ways of seeing the park?

Conditions

4. What was it like out there today?
5. If a friend was choosing between YNP or another place next weekend, what would you point out about Yellowstone that would help them to decide where to (activity)?
6. What sorts of things added to your experience in Yellowstone? How important are these?
 - P. What makes these important?
7. What things detracted from your experience? (If no, what would you change?) How important are these?
 - P. What makes these important?
8. Some people have mentioned the ...(use only those not yet discussed) ...what did you think about the _____?
 - a. trails
 - b. facilities, such as warming huts, bathrooms, and visitor centers
 - c. other visitors
 - d. what the NPS provides
 - e. wildlife

Management Issues

9. Did you perceive any problems with the protection of the park? (Yes - go to 9.; No-go to 10.)
10. What sacrifices, if any, would you be willing to make to help protect YNP?

11. It has been suggested that the NPS should take action in order to better protect the bison herd. Considering that you may be affected by these actions, what sacrifices would you be willing to make? (Bison aren't affected: It has been suggested that groomed roads allow bison to leave the park, if this were proven...) Would you be willing to.... Why not?
 - a. limit the size of your group?
 - b. watch a compulsory 30 minute video?
 - c. travel in the park during restricted times?
 - d. travel in the park only in specific areas (what sections of roads)?
12. What do you think about the park's regulations?
 - P. Do you feel they are appropriate?
 - P. Do you feel they are effective?
13. The purpose of this study is to help the NPS understand the visitor experience, is there anything else you think they should know about your visit?

Appendix B.

YNP Short Interview

- 1) What does the Yellowstone experience offer that you can't get anywhere else?
- 2) Is the opportunity to _____ in Yellowstone important to your experience here?
 - a. Why?
- 3) Is there anything that you would change about the Park or your experience here?
- 4) In order to protect those things that you mentioned were important to your visit, would you be willing to support some management actions:
 - a. requiring visitors to watch a 30 minute video before entering the park?
 - b. restricting the times visitors can be in the park in the winter?
 - c. closing some sections of groomed roads to snow vehicle use?

Why?
How would these affect your visit here?
- 5) Visitors we surveyed last winter said that viewing wildlife was the most important aspect of their trip to YNP. Yet, when we asked them whether or not they would support a list of management actions in order to better protect the bison herd, most were unwilling to support any of the actions listed. Why do you think they felt this way?

Appendix C.

Hello!

Thank you for considering to participate in this study. Your involvement and insights are greatly appreciated. I would like to explain a little about this study, how the data will be used, and what your rights are as an interviewee. This consent form is a requirement of the University of Montana. Feel free to ask any questions you may have at any time.

I am particularly interested in documenting the story of your winter experience here in Yellowstone National Park. Through this study I hope to gain insights into the relationship visitors have with Yellowstone's winter setting. The project is aimed at exploring issues identified by visitors which may include social, environmental, and managerial conditions and expectations. I do not foresee any risks in participating in this study. Our conversations will last approximately twenty to forty minutes and will take place here in Yellowstone National Park. I would like to have your permission to tape record our conversations to promote an accurate account of your comments.

All efforts will be made to maintain confidentiality. I will be responsible for the study and will be the only person able to identify you throughout the process. The recordings of the interview will be transcribed into text in full, and you will be given a "false name" in these transcriptions and in the written report. The transcriptions will be modified so they do not contain any revealing information about your identity. You are free to withdraw your consent or to discontinue participation in the project at any time.

Although there are no foreseeable risks involved in participating in the research, the University of Montana requires the following paragraph:

In the event that you are injured as a result of this research you should individually seek appropriate medical treatment. If the case is caused by the negligence of the University or any of its employees, you may be entitled to reimbursement or compensation pursuant to the Comprehensive State Insurance Plan established by the Department of Administration under the authority of M.C.A., Title 2 Chapter 9. In the event of a claim for such injury, further information may be obtained from the University's Claims Representative or University Legal Counsel.

If you agree to participate, please sign the attached form. You may keep the cover letter.

Thank you,

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Visitor Experience in Yellowstone's Winter Setting

I have read the preceding cover letter and understand the project. I understand that our conversation will be tape recorded, and I agree to participate in the research.

(Signature)

(Date)

Appendix D.

Name	MOE	Location	Date	Time	L/S
Aaron	snowmobile	Canyon Village	23-Jan	1:20	L
Alice/	snowcoach/skis	Mammoth	14-Jan		L
Amanda	snowcoach/snowmobile	*MJ	7-Mar	10:16	S
Andrea	snowmobile	OF	13-Feb	11:20	L
Ardith/Alex	snowcoach	OF	27-Feb	1:00	S
Bart	snowmobile	MJ	7-Mar	10:36	S
Belinda	snowcoach	OF	27-Feb	1:10	S
Betty	snowmobile	Mammoth	14-Jan	11:40	L
Bobby/Beth	snowmobile	Canyon Village	23-Jan	12:10	L
Brian	snowmobile	OF	13-Feb	11:40	L
Brian/Bernadette	snowmobile	Canyon Village	23-Jan	12:40	L
Calvin	snowmobile	OF	27-Feb	1:24	S
Caren	snowshoe	Mammoth	14-Jan		L
Carl	skis	Riverside	6-Mar	3:50	S
Clyde	snowmobile	OF	13-Feb	12:20	L
Dawn	snowcoach	OF	27-Feb	1:35	S
Donna	snowmobile	OF	13-Feb	1:15	L
Doris	skis	Mammoth	14-Jan		L
Doug	snowmobile	MJ	7-Mar	11:55	S
Ed	snowmobile	OF	14-Feb	10:20	L
Elaine	snowmobile	MJ	6-Mar	9:23	S
Emily/Ezra	snowcoach/ski	OF	27-Feb	1:45	S
Eve	snowmobile	Canyon Village	22-Jan	12:40	L
Fanny	snowcoach/snowmobile	OF	14-Feb	10:30	L
Ferdinand	snowmobile	MJ	6-Mar	9:36	S
Frank	skis	OF	28-Feb	8:16	S
Gavin	snowmobile	MJ	6-Mar	9:47	S
Gina	skis	OF	28-Feb	8:30	S
Greg/Gina	snowmobile	Mammoth	15-Jan	11:10	L
Guy/Mike/Dave/Brad	snowmobile	Mammoth	14-Jan	10:45	L
Gwyneth	snowmobile	OF	14-Feb	11:00	L
Hal	snowmobile	Mammoth	15-Jan	11:40	L
Helen	snowcoach	MJ	6-Mar	9:55	S
Henry	snowmobile	OF	14-Feb	11:15	L
Howard/Hanna	snowmobile	OF	28-Feb	8:40	S
Irene & 3 women	snowcoach	OF	28-Feb	8:48	S
Isaac/Anne	skis	Mammoth	15-Jan	12:00	L
Isabell/Jack	skis	OF	14-Feb	11:30	L
Isaiah	snowmobile	MJ	6-Mar	10:09	S
Jake	snowmobile	Canyon Village	22-Jan	10:19	L
Janice	hiking	Mammoth	15-Jan	2:30	L
Jody/James	skis	OF	28-Feb	9:00	S
Jon	snowmobile	MJ	6-Mar	10:20	S
Kay	snowcoach	MJ	6-Mar	10:35	S
Kelsey/Roberta	snowmobile	Canyon Village	22-Jan	10:20	L
Kevin	snowmobile	Mammoth	15-Jan	3:00	L
Krista	snowcoach/skis	OF	14-Feb	12:00	L
Kurt (guide)	snowmobile	Canyon Village	22-Jan	2:30	L
Kyle	snowmobile	OF	28-Feb	10:30	S
Laurie	snowmobile	MJ	6-Mar	10:47	S
Luke	snowmobile	OF	28-Feb	10:40	S
Lyle	snowmobile	OF	14-Feb	12:15	L

Lynette	snowcoach	Canyon Village	22-Jan	11:00	L
Mark	snowmobile	MJ	6-Mar	11:02	S
Mary	snowmobile	Canyon Village	22-Jan	11:40	L
Max/Nora	snowmobile	OF	14-Feb	12:25	L
Melanie	snowmobile	OF	28-Feb	11:10	S
Nadine	snowmobile	OF	28-Feb	11:15	S
Nancy/Arne	snowmobile	Canyon Village	22-Jan	12:00	L
Nicole	snowmobile	MJ	6-Mar	11:21	S
Olivia	snowmobile	OF	14-Feb	1:15	L
Omar	snowmobile	MJ	6-Mar	11:46	S
Oscar	snowmobile	OF	28-Feb	11:30	S
Patrick/Blake/Ted	snowmobile	Canyon Village	22-Jan	1:30	L
Penelope	snowmobile	OF	28-Feb	11:45	S
Quin	snowmobile	OF	28-Feb	12:13	S
Randy	ski/snowshoe	OF	28-Feb	12:35	S
Roger	snowmobile	Canyon Village	22-Jan	3:05	L
Sarah	snowcoach	OF	28-Feb	12:50	S
Stan	snowmobile	Canyon Village	22-Jan	3:50	L
Ted	snowmobile	Canyon Village	23-Jan	10:10	L
Thad/Theresa	skis	OF	28-Feb	1:03	S
Ulee/Lena	snowmobile	Canyon Village	22-Jan	10:35	L
Ursula	snowmobile	OF	28-Feb	1:30	S
Valerie/Tom	snowmobile	Canyon Village	22-Jan	11:20	L
Vicky	skis	Riverside	6-Mar	4:00	S
Wanda	skis	Riverside	6-Mar	4:24	S
Wendy	snowmobile	Canyon Village	23-Jan	11:40	L
Wilma	snowmobile	MJ	7-Mar	9:40	S
Yvette	snowmobile	Canyon Village	23-Jan	1:00	L

*MJ = Madison Junction, OF = Old Faithful

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