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Integrating social equity into the measurement of human values in outdoor recreation

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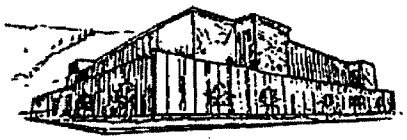

INTEGRATING SOCIAL EQUITY INTO THE MEASUREMENT OF HUMAN VALUES IN OUTDOOR RECREATION

by

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Integrating Social Equity into the Measurement of Human Values in Outdoor Recreation

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Parks and protected areas have an extensive set of functions within modern American society. One of these functions is to provide for the diverse array of values that society assigns to these areas. The measurement of values in outdoor recreation has been commonly explored in leisure studies. Values, as defined in this thesis, include what an individual perceives as the particular importance of a place. The measurement of values in previous studies, however, has not adequately addressed specific values related to social equity in parks and recreation. This could lead to the marginalization of certain groups of users whose values go undetected. It could also lead to a failure in understanding the full range of values a wildland area provides.

Social equity in parks and recreation involves an intricate integration of the theories behind both social justice and environmental justice. From this integration, seven dimensions of values of social equity in parks and recreation emerge. These seven dimensions of values include: race, class, gender, health, social and physical well-being, unity/equality, and freedom. From the emergence of the seven dimensions, a social equity values scale was constructed and employed for study during the summer of 2003. The study location for this research was the Snake River Birds of Prey National Conservation Area in southwestern Idaho.

The results of the experimentation of the scale reveal that social equity is best operationalized in three dimensions as opposed to the proposed seven dimensions. These dimensions are inclusiveness, interaction, and quality of environment. Furthermore, a social equity in parks and recreation dimension was found to be missing in at least one previous recreational values study. This suggests that any future outdoor recreational values study should consider social equity in parks and recreation.

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Chapter One
Introduction

Parks and protected areas have an extensive set of functions within modern American society. These functions have been defined by previous historical environmental and social interactions. One of these functions, some argue now, is to provide for the diverse array of societal values that recreationists may assign to these areas. Values, in recreation and leisure, have been both studied and empirically considered, but issues and values related to social equity in recreation have received less than adequate attention (Floyd and Johnson, 2002). Because of this, a complete and full understanding of the values that people assign to recreational places is vacant. The value of social equity is one component in which increased understanding could be beneficial. Thus, value measurement is challenged to develop a social equity dimension. Historical review of park and protected area development provides the basis and foundation for understanding the place of social equity in recreational values.

Historical Role of Justice in Park Support

It is necessary to re-examine the history of recreation and how it has been understood, especially in ways that might differ depending on someone's class, gender, or ethnic identity. The recreational movement may have had a jumpstart by the Industrial Revolution. Work hours were significantly reduced allowing more time for recreation and play. "Eight hours for what we will" became the mantra of the working class (Rosenzweig, 1983). Barrooms and saloons were an early expression of that initial

freedom from working hours. Such activities were dominated by working class men and mostly excluded women from participation and consumption.

In the late 19th century, men such as Frederick Law Olmsted began to recognize the need for alternative forms of leisure as well as exposure to the healing power of nature. Natural scenery was a remedy for health and welfare ailments (Spirn, 1995). Olmsted and others argued that children, especially of the working class, were in need of adequate play space separate from the neighborhood streets. Early designers of parks saw them as a place "to promote social cohesion and order" (Rosenzweig, 1983). Olmsted saw parks as a place to defuse social tensions. Although the intermingling of different classes, races, and genders came later, these early park developments were a start to what would become the grand park and recreation systems that exist today. Such systems were established with a philosophy, common during that time period and referred to as 'popularism,' that included all people regardless of race, class, or gender.

The values of recreationists in recent times, as well as managerial recreational objectives, have been partly cultivated from these beginning park ideas and philosophies. The early park developers have laid groundwork for a fair and equal experience for all people in order to be inclusive. Previous research on values, however, is lacking a social equity dimension that accounts for the values shaped from the early development of urban recreation. Taylor (1997) discusses the need to understand environmentalism and recreation foundations from a perspective other than that discussed by the dominant views of middle class white males. Harmon and Putney (2003) state that, 'If protected areas are to be meaningful to and valued by society, they must relate to the full spectrum of human values by embracing a holistic approach to management.' An adequate

understanding, then, of societal values and what they mean to all people will help in the management of a recreational area.

Background

The research contained in this study comes at a time when researchers are recognizing the need to incorporate multi-cultural perspectives into recreation management frameworks. Race and class have been looked at in relation to leisure and recreation, but only superficially. Most studies have only focused on these issues in urban park settings in relation to differences between different racial and cultural groups (Payne, Mowen, and Orsega-Smith, 2002; Tinsley, Tinsley, and Croskeys, 2002). Gobster (2002) recognizes that variations exist between users of different races and ethnicities, but also mentions that more research is needed to look at the meanings and values that leisure experiences have for different cultural groups.

A recent book by Harmon and Putney (2003) discusses "The Full Value of Parks," but fails to mention values related to social equity in regards to park management. Values included in this book contain recreational, spiritual, cultural, identity, existence, artistic, aesthetic, educational, research and monitoring, peace, and therapeutic values. Although this list is quite extensive, the authors leave out a very important component in relation to social equity values as well as the design of democracy in values. In the background of all values related to parks and protected areas are the principles of democracy. Democracy in recreation management looks at who controls park management in relation to the values of individuals. But whose values end up being included and whose values are excluded from this management? A fair democratic balance of values will reflect the issues contained in both social and environmental

justice. Zerner (2000) argues that 'what is necessary is a broad-gauged vision of justice and its links with the environment that explicitly engages inequitable concentrations of power, processes of democratization, and the formation of democratic institutions.' Therefore, values related to social equity in recreation are an imperative element to a more comprehensive list of values.

A previous study, in particular, at Yellowstone National Park (Borrie, Freimund and, Davenport, 2002) evaluated the values of winter visitors and found that visitors value Yellowstone for a myriad of reasons and not for one specific and distinct value. This study employed a survey instrument that measured 24 potential values of parks. Interpretation of the analyses resulted in groupings of natural values, symbolic/historic values, recreation and tourism values, and personal growth and development values. Such a study may not fairly represent all the dimensions of societal values as determined by the resultant interpretation of the groupings of the values. Consideration of social equity is lacking in the Borrie et al. (2002) study, but is indeed an important part of recreation management.

Social equity in parks and recreation relates to the representation of all people of society no matter their race, class, or gender. Some argue that environmental decisions are predominantly made by a group of white, middle to upper class males (Taylor, 2000). This group of people ultimately makes decisions that reflect their backgrounds and values. These decisions do not necessarily parallel the backgrounds and values of minority and working class citizens, nor the different values of women. This study builds on the knowledge gained by Borrie et al. (2002) by adding a dimension of social equity to the values scale they tested.

Purpose of Study

The overall purpose of this study relates to the exploration of social equity as a values dimension and its connection to values measurement. This study is also important for exploring the relationships between values related to social equity and the other dimensions of values studied in previous research.

As previous studies have shown, such as the winter visitors to Yellowstone study, managers may not be adequately reflecting and managing for the diversity of visitor values, nor considering values related to social equity in parks and recreation. Values, however, are an important way to understand visitor decisions. 'The values of natural resource agency personnel charged with planning and management often differ from the various constituencies they are charged to serve' (Vaske, Donnelly, Williams, and Jonker, 2001). Conflicting values may represent the mismanagement of the natural areas, which would lead to further complications.

Bengston (2000) adds that 'one of the most significant changes in the social environment in which natural resource managers operate is the evolving values of the public and other stakeholders.' He further comments that there is an existing tension between values that are traditional, such as individual values and values that are emerging, such as societal values. This tension relates to the need for better planning and decision making to manage for the diversity of values. Societal values, more recently, are thought of as not static, but subject to change. Such changes should be recognized and prepared for by management agencies.

This study, then, evaluated the values specifically related to both social and environmental justice that certain individuals assign to a recreational setting within the

public land system in the United States, through asking the visitors to assess their perceived importance of the place. A goal of the study was to look at values as they related to both social and environmental justice to determine if these values, an important part of historical recreational objectives, are an overlooked, but necessary component to current values study and research. Inclusion of a social equity dimension in values study may be a more inclusive approach to understanding values. Upon obtaining this information, the final goal of the study was to incorporate the social equity dimension into the overall values scale designed by Borrie et al. (2002).

Guiding Questions

Three initial questions guided the conception of this study. The conception, based on the three guiding questions, focused on the measurement of visitor values in relation to place purpose. The three guiding questions are:

1. How can social equity in parks and recreation be operationalized?
2. Could social equity in parks and recreation enhance the measurement of previous recreational values studies?
3. How do certain demographic characteristics relate to a person's value orientation?

Evaluation of historical park and leisure literature as well as information on social justice and the Environmental Justice Paradigm (Taylor, 2000) will aid in further defining these guiding questions. A scale containing values related to social equity in parks and recreation was constructed, employed and analyzed to determine the sub-dimensions and values questions most directly related to both social and environmental justice. A sub-set

of proxy items that sufficiently represented social equity in parks and recreation was added to the original values scale and then analyzed to determine whether or not both social and environmental justice values are being considered by most visitors or only by a certain group of visitors in connection with the values assigned to the study area. The following chapter will explore the literature pertaining to the conceptual framework of this study.

Chapter Two
Conceptual Foundation

There are two broad topics to this study – values, specifically their measurement, and social equity. The purpose of the following review is to provide the necessary background for the study by reviewing relevant literature on these topics while demonstrating the need for further study and then finally discussing the conceptual framework for the research. There are four parts to this review. The first is literature that contains information relating to park and recreational values. That section begins with the definitions and importance of values as well as the nature of values as something that may change or remain constant according to each individual. The differences and similarities between the values of individuals are also pondered. The second part of this section looks at previous attempts at measuring values and how it may be accomplished. The second section looks at the social justice foundations in the historical context of public recreational settings and the early history and purposes of such establishments. The third part of the literature review looks at environmental justice and its relation to outdoor recreation. Finally, this literature is brought together in a framework, in the last section, for the study of social equity in park and recreational settings. Social equity in recreation is seen as a conglomeration of both social and environmental justice, class issues, and gender evaluation.

Values

Research and literature relating to and discussing values is abundant and many different aspects of values have been debated. Values are considered to be important indicators of behavior. Some of these indicators deal with their status and nature as

something enduring or ephemeral and values as something that can be measured empirically.

Definition of Value

The definition of a value, as applied to leisure and recreation, differs depending on the source. Such a definition may originate in a philosophical context. Philosophers such as David Hume believe that facts alone never tell us what we ought to do. Hume (1958) reasons that fact statements and values statements belong in different categories. Values are the answer to the ought to question. Meglino and Ravlin (1998) believe that this idea comes from the influence of culture. Culture affects our social expectations so that we behave in a way that is expected and accepted by society. In this manner, a value may be defined as "a person's internalized belief about how he or she should or ought to behave" (Ravlin, 1995; Meglino and Ravlin, 1998).

Rokeach (1973) defines a value as 'an enduring belief that a specific mode of conduct is personally or socially preferable to an opposite or converse mode of conduct or end state of existence.' Values are also defined as 'an enduring conception of the preferable, which influences choice and action' (Brown, 1984; Manning , Valliere, and Minteer, 1999).

Bengston, Fan, and Celarier (1999) see values as 'relatively enduring conceptions of 'the good.' Larue (1998) add that 'the term values points to what we value, to what we consider to be of worth or merit.' Larue also postulates that values can be thought of in an expectancy-value approach whereby 'values are one class of motives that lead individuals to perform acts they think should be done.' Values also may have to do with incentives or reasons for choosing between things or an activity (Eccles and Wigfield,

2002). Feather (1992) in another definition of value asserts that values are a 'set of stable, general beliefs about what is desirable.' The norms of society as well the inner psychological needs of an individual give rise to values.

Importance of Values and Values Studies

The importance of values has been stressed in many ways and the subject of values has been debated across a wide array of disciplines (Rokeach, 1973). Social science, political science, and philosophy are among the myriad of disciplines that have contemplated values and their meanings. Braithwaite and Blamey (1998) add that 'values are a handful of constructs that bridge the social sciences.' Values have a preeminent position 'in the scientific and public discourse at a number of levels' (Meglino and Ravlin, 1998).

Values are also believed to play a role in a cognitive hierarchy theory with tiers consisting of values, value orientations, attitudes, normative beliefs, and behaviors (Vaske et al. 2001; Rokeach, 1973). In this theory, values form the basis for later actions and decisions. While higher tiers on the hierarchy are often viewed as shifting, many believe that values remain more static. Values are seen as more foundational, less context-specific, and less open to manipulation by factors such as interpretation or marketing strategies.

Value study and interest dominate most of the early social science research and literature. In the 1950s and 1960s values were studied in an attempt to 'reveal the essence of being human' (Hechter, Nadel, and Michod, 1993). Such inquisitiveness has declined in recent years. Values have come to be seen as abstract and difficult to measure. Hechter et al. (1993) put forth that information regarding values may be a very

important tool to understanding and explaining behavior. Furthermore, the authors assert that 'there are good reasons to continue searching for measures of values that can predict behavior, the sources of the values, and the conditions under which they sometimes change.'

Many others have also argued that values hold an important place in social behavior. Evaluation of human values reveals that it is a prerequisite to a rational decision. 'The study of value is therefore of importance...since it can assist our understanding human deliberation, decision-making and behavior in relation to natural areas' (Lockwood, 1997). Understanding values and the origins of values may be key to sound and sane choice making and behavior. Madrigal (1995) adds that 'values are a type of social cognition that reflects internal states that intervene between stimuli and responses, and affect those responses.' Values have been understood as affective predictors of behavior in a bundle of situations.

Some researchers have looked at values as being composed of two types (Rokeach 1973, Meglino and Ravlin, 1998). The first value type is identified as that which is "inherent in an object." The second value type is that which is "possessed by a person." Meglino and Ravlin stress that 'the locus of both types of values is within the individual.' Rokeach asserts that when analyzing values in a social context it is more appropriate to focus on values applied to individuals as opposed to objects or outcomes. By understanding values of individuals one can then apply that knowledge to objects or outcomes.

Bengston (2000) also looks at two types of values when they are applied to the environment. He devised a system for looking at environmental values and proposes that

both instrumental and non-instrumental values contribute to the overall values structure of an individual. Instrumental values refer to an individuals concern for the environment as a means to some human end that can be seen as desirable. Instrumental values are one that will benefit the individual. Non-instrumental values relate to 'ways that go beyond their contribution to self-interested goals.' Bengston (2000) also adds that 'the deeper, non-instrumental values help to explain why many people care so passionately about environmental issues and therefore why the intensity of the conflict over resource management is often high.'

Nature of Values in Humans

Many differences and similarities may exist in regards to values between individuals. Some have suggested that all individuals have the same basic value structure, but differences and similarities may still be present. Many have tried to explain this phenomenon. Some suggest that values are at the core of the biological foundation in all humans. Similar values are shared between individuals due to the genetic make-up of our species. The difference in our values may be attributed to the idea that 'variance in values could be the direct result of differences in individuals' behavior' (Meglino and Ravlin, 1998) This would mean that individuals may rely on values as a means to justify behavior.

Other accounts for differing values between people may be that values are a component of ones own unique experience. The social situation that an individual is placed in may help to explain varying values. Meglino and Ravlin assert that early experiences are important for shaping the value system of each person. Rokeach (1973) believes that values 'are initially taught and learned in isolation from other values in an

absolute, all-or-none manner.' This relates back to values as something that one believes should or ought to be done. Values may be different or similar to the values of another individual depending on the social environment in which they interact.

The idea of values as a static construct has also been discussed. Meglino and Ravlin suggest that unlike attitudes and opinions values are more stable and enduring. Certain changes in values may occur due to the shifting nature of society, if society is what harbors values. 'Stability in values is likely to follow from consensus about values' (Braithwaite and Blamey, 1998). Rokeach (1973) believes that because values are learned distinctly, in an all-or-nothing fashion, 'absolute learning of values that more or less guarantees their endurance and stability.' Meglino and Ravlin also add that individuals may be attached to certain values, which make any changes hard to happen. Values as a means for predicting behavior may be grounded in the idea that values are static.

Values, however, have been argued by others as constructs that are not stable and that are constantly subjected to change. Values 'can be expected to change as the environment changes' (Braithwaite and Blamey, 1998). The abstract nature of values allows for changes or shifts. 'Change in values derives from fault lines in social patterns shown up by turmoil' (Hechter et al., 1993). Larue (1998) argues that values, especially those dealing with moral and ethical situations, evolve. Values as those discussed by Larue change because society changes and evolves toward a more ethical and moral position. Without this change, values will remain stable and may continue to unjustly affect disadvantaged individuals.

Measurement of Values

The physical measurement of values has also been discussed throughout literature. There is, however, no agreed upon means to measure values and remains a debatable topic. 'Value researchers are divided on the appropraite way to measure values' (Meglino and Ravlin, 1998). Values are abstract and 'they have no consensual definitions' (Hechter et al., 1993). Values are not tangible objects that one can observe in a traditional manner such as by touching, seeing, or hearing. Values have many forms, but they are generally unobservable.

Hechter et al (1983) suggest that although measuring the values of another person are difficult, the individual person should know their own values. It is this hypothesis that produces measurement instruments such as surveys as a way to observe values. The authors also add that everyone may not know their own values and that the survey should not be regarded as the panacea to values measurement. Instead, they suggest that a better way to determine values is to give a person a choice between alternatives. If values are stable and enduring than an individual will recognize their values again and again when given a choice between other values. This is known as revealed preference.

Meglino and Ravlin (1998) discuss studies that measure preferences between different values. Such a method is labeled ipsative and uses a ranking system to order a set of values or to choose one value statement over another value statement. Another method, the normative technique, measures values independently of each other. Respondents in this format are asked to rate the extent to which they support a group of statements describing values. Researchers engaged in each technique see the one they use to be the most advantaguous.

The normative technique, because values are measured independently, allows the researcher to observe distinct values of individuals as either high or low. The observation of absolute differences are also able to be determined using the normative approach to values measurement. Supporters of this technique also argue that data can still be ranked and that the normative style can do the job of the ipsative style and more.

Researchers that measure values using the ipsative technique conceptualize the nature of values in a different manner. (Meglino and Ravlin, 1998) 'Values are believed to be less than totally conscious, somewhat below an individual's level of complete awareness.' In this way, values are thought to be best measured by engaging the individual in a forced choice and rank between other values. 'Ipsative scores are believed to more closely represent an individual's true values, rather than his or her public endorsements of socially desirable statements' (Meglino and Ravlin, 1998). Ranking values may also represent what is thought to be a hierarchy of values that resides within an individual. Ipsative scores of values are also thought to be more stable than normative scores of values because they are free from social influence and desirability.

McCarty and Shrum (2000) also looked at the measurement of values in survey research. The authors believe that values tend to be more inherently positive constructs, which leads to an end-piling of positive results when the surveys are analyzed. This often occurs when respondents are asked to rate a list a values as opposed to ranking a list of values. The authors suggest that an alternative may be to combine the two techniques of ranking and rating in a process known as the most-least method. Such a method would mean greater differentiation and a decrease in the end-piling of the values.

Social Justice Foundations in the Establishment of Public Parks and Recreation

Reviewing literature on the early establishment of park and recreation systems within the United States is important for looking at issues pertaining to social justice and eventually social equity. Looking at some of the earliest expressions of leisure as well as looking at the contribution of industrialization to forms of recreation is important as well. Individuals like Frederick Law Olmsted aided the establishment of public parks and recreational outlets.

Early Expressions of Leisure

Early expressions of leisure were often joined to alcohol consumption in bars and saloons. Drinking and its connection to work and the working class are tied to many conflicts within and between classes. Women have an early role in public drinking in so far as a saloon exists in a "grog" or "barroom" setting within the household. When saloons outside of the house were established, the role of women as consumer/seller of alcohol greatly diminished. Saloons came to be seen as a social and recreational center of activity, mostly for men (Rosenzweig, 1983; Kraus, 2001). Saloons allowed their patrons to feel a sense of safety combined with equality and respect when they entered. It was also seen as a group activity. Recreation also occurred on public streets, viewed as a dangerous activity because of its connection to late night alcohol consumption, before the establishment of parks.

Establishment of Parks

Early expressions of leisure began to change with the introduction of public parks. Early designers of parks saw them as a place 'to promote social cohesion and order' (Spirn, 1995). Frederick Law Olmsted viewed the park as a place to defuse social

tensions. The early parks were viewed as calm areas distinct from the loud celebrations of the working class. The early neighborhood parks of Worcester, MA, as discussed by Rosenzweig (1983), were divided along class lines between the playgrounds of the working class and the scenic parks of the elite. The idea of the park as a melting pot was not fully integrated. Ethnic intermingling, though encouraged, was often lacking. Parks were located within ethnic neighborhoods with little regard for class or cultural intermingling. Other commercialized forms of recreation provided for interclass entertainment such as theaters and movies. Such forms of recreation eventually encouraged roles for women and opened doors for the reduction in conflicts along class lines.

Kraus (2001), in an historical review of the emergence of leisure, looks at the influences and forces that promoted recreation and leisure within American society. Religion played an early role as an inhibitor of recreation. Recreation was thought to promote evil by early churchgoers. Such individual views eventually became more relaxed and more open to the idea of leisure. Common areas became important for gatherings and events. People also began to contemplate ideas of conservation.

Kraus also discusses that the recreation movement began with the beginnings of the education movement and the development of state, national, and municipal parks. Municipal parks provided relief from work and 'refreshment of the mind and nerves' (Kraus, 2001) for those living in the city. Playgrounds were established to provide for the safety and health of children. People of differing races and ethnicities, however, often had to deal with discrimination in these public establishments. Leisure and recreation from their onset, however, came to be seen as places of excitement and

freedom by most of society. Education, largely promoted by schools, encouraged alternative forms of recreation that would lead people to enjoy healthy and societal acceptable lives.

Industrialization and Recreation

Kelly and Freysinger (2000), in their discussion, focus on industrialization and the work ethic of the 19th and early 20th centuries. A small discussion about the role of recreation in that time period is also mentioned. The role of women is minimal during this time period and their work at home is viewed as minimal and insignificant. Recreation plays a role for both sexes and their free time is separated from their work time. Leisure and recreation is viewed as freedom of expression. The Recreation Movement gathered momentum in this time of industrialization. Constructive play and recreation was seen as part of the responsibility of the public and its leaders. Leisure was often viewed as the solution and answer to the demands of a challenging job.

Rosenzweig (1983), in his evaluation of Worcester, MA attempts to address three main questions in his book dealing with recreation of this town in the period 1870-1920. This time period is about the time of the major parts of the Industrial Revolution. The first question addresses the values, beliefs, and traditions of the American working class and how they shaped the views of themselves as well as society. The second question looks at the bonds and conflicts that exist between the different economic classes of people within an industrial community. The third question focuses on the culture of the working class and the class relations that existed in the transition to the 20th century. Many different themes emerge in his exploration of the questions. Differences among cultural lines become evident and recreational habits exist in separate cultural spheres.

Kraus also discussed how the industrial revolution played an important part in shaping recreational behaviors. Work hours were reduced, encouraging more time for recreational activities. Racial and ethnic differences made an impact in the separation of leisure activities, but different cultures and classes usually found their own activities to pursue. Recreational activities also encouraged and inspired freedom, especially among black slaves and indentured servants. Society as a whole came to see recreation as an alternative form to 'undesirable play.' Women were also allowed and often encouraged to participate in organized activities and games.

Frederick Law Olmsted

The contribution of Frederick Law Olmsted is also monumental particularly to the construction and establishment of urban parks. Olmsted is also recognized for his contribution to social justice in recreational settings. Spirn (1995) looks at the role of Olmsted as a pioneer in early park planning and design. Spirn notes that viewing landscapes through their original construction plans may alleviate environmental values/conflicts. Olmsted viewed natural scenery as a remedy for health and welfare ailments. The morals of working class people would be improved by exposure to such landscapes. Olmsted worked with planners of Yosemite to encourage the use of the park for all citizens and to see that such places be accessible without great costs.

Olmsted's contributions to urban park planning are discussed by looking at Yosemite, Niagara Falls, Biltmore, and The Fens and the Riverway in Boston. His designing of the Fens and Riverway are one example of his attempt at constructing wilderness within proximity to large cities and working class people who may be unable to travel great distances to natural park settings. Spirn concludes her discussion of

Olmsted by noting that 'the role of human ideas and purposes in constructing these landscapes forces us to clearly confront the human values we inevitably project upon such places.'

Gender Equity in Recreation

Literature relating to gender is often lacking in regards to recreation, but a small look is taken at women and recreation in an article by Wearing (1998). Wearing explores the notion of urban sociology and public spaces as places created by white men for their use and enjoyment. She asserts that a 'feminine' city might look very different. Such a city would be accessible and pleasurable for women, children, and other traditionally marginalized users of public spaces. The values of men and women differ and women may seek leisure activities as opportunities of interaction with others, thereby enhancing the self and the identity of the individual woman.

Wearing states that leisure places are individual human creations that have social values that groups of people attach to their meaning. Women – friendly parks would involve the incorporation of elements such as safe challenges, diversity and clarity, graduated challenges, and flexibility. Safety and public place access remain at the top of concerns for women. Public places should celebrate the diversity of cultures and encourage self-reflectivity and self-enhancement. Park managers and planners should incorporate social values in planning for city spaces.

Environmental Justice

Some of the best attempts at researching social equity issues may be found in environmental justice literature. Environmental Justice is a new framework, developed in

the past twenty years. Environmental justice is a critique of the waste disposal that contaminates black and lower class communities. The dumping in city neighborhoods went unnoticed at first, but this "framing" eventually got public attention and action which later expanded environmental justice to be the broader concept that exists today. Before environmental justice, environmental attitudes were reflected in the New Environmental Paradigm (NEP) that was characterized by the environmental thoughts of white, middle-class males. Environmental decisions were made by this group of people in a reflection of their backgrounds and values. Ultimately, these backgrounds and decisions did not parallel the backgrounds and values of minority and working class citizens. A 'connection between race, class, and environment' (Taylor, 1997) spawned the term environmental justice. Taylor (2000) suggests that the Environmental Justice Paradigm (EJP) addresses environmental activism from an intersection of a black and white, and male and female perspectives.

The *Principles of Environmental Justice* (1991), or simply the *Principles*, is the culmination of a year-long process of the First National People of Color Environmental Leadership Summit held in 1991. This document outlines the conditions of justice and equity as it relates to the environment and to people. The *Principles* also states that the EJP is concerned with both distributive justice and corrective justice. Taylor (2000) defines distributive justice as who should get what and corrective justice as the way individuals are treated during a social transaction. The EJP also advocates the elimination of race, sex, and class discriminations as they relate to the environment and society.

Environmental Justice and Values

Stern and Dietz (1994) discuss environmental justice and environmental ethics as being made up of values. They also define values as individuals decisions of what is, or what ought to be. The distribution of hazardous waste facilities in low-income and minority neighborhoods triggered the environmental justice movement that started in the early 1990s. Stern and Dietz (1994) argue that such events of environmental classicm and racism 'can be interpreted as revealing limited value assigned to the health and well-being of people living in those communities.' They add that their research on environmentalism in the United States hints at three different value types:

(1) The first type, egoistic values, relates to the idea of individuals selfishly protecting only the aspects of the environment that may personally affect them. The cost and benefits of protecting the environment are considered and if the cost is too high, opposition to protection will occur. Egoistic values leave no room for an individual to contemplate environmental justice if they are not experiencing an injustice.

(2) Altruistic values are the second type of values proposed by Stern and Dietz. These values are attributed to what an individual may choose to support in regards to the protection of something as it relates to affecting a group. People will act on personal norms when they feel that undesirable consequences may occur to others. The individual will attempt to stop or prevent the destructive situation from occurring.

(3) The last type of values discussed by Stern and Dietz is that of biospheric values. Biospheric values are values that are commonly held by environmentalists or ecologists. In this value system, protection of the environment and the ecosystems within are the main goal.

Environmental Justice and Outdoor Recreation

Attention to environmental justice concerns is lacking in literature on outdoor recreation (Taylor, 2000; Floyd and Johnson, 2002). Floyd and Johnson (2002) add that much of the literature on environmental justice deals with environmental hazards and not outdoor recreation. Executive Order 12898 (1994) now mandates that recreation management should address issues of environmental justice. Floyd and Johnson (2002) suggest that without further research on environmental justice in outdoor recreation, management decisions may continue to discriminate against minority and low-income citizens.

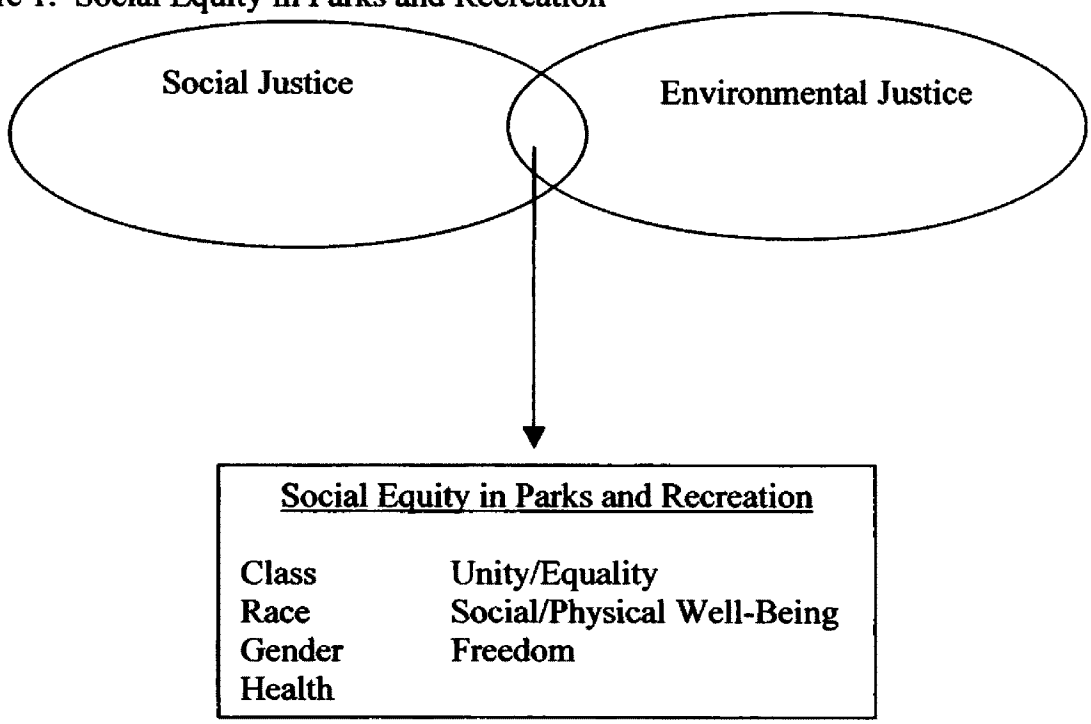
Bengston (2000) further adds that research is needed to look at the differences in values held by different ethnic and minority communities. The author states that responding to the needs of all the communities served by natural resource managers is a challenge and should be looked at a more intense level. 'A number of studies have shown that members of racial and ethnic groups may hold environmental attitudes and values, have greater concern for certain environmental problems, and have participation rates in wildland recreation and environmental activism that differ in various ways from those of European-Americans' (Bengston, 2000).

Social Equity and Outdoor Recreation

Finally, from the review of the previous three sections, this research is brought together in a framework that addresses social equity in outdoor recreation. The term equity is defined as an equal opportunity or voice in recreation. Social equity in parks and recreation is seen in this research as a component of both social and environmental

justice. These two concepts are seen as converging somewhere in the middle when pertaining to recreation. As figure 1 demonstrates, social and environmental justices converge to result in social equity in parks and recreation. Several relevant dimensions pertaining to social equity in recreation emerged for this research. These dimensions include: class, race, gender, social and physical well-being, health and environmental justice, unity/equality, and freedom. These dimensions encompass the framework for the rest of the study and the scale that was developed to measure values related to social equity. These dimensions cannot entirely be viewed as separate. These dimensions, although separately listed, are considered interrelated and overlapping.

Figure 1. Social Equity in Parks and Recreation



Class

The class component comes from the culmination of environmental and social justice literature. Literature by authors such as Floyd and Johnson (2002) and Taylor (1997; 2000) discuss the disproportion of environmental hazards in low-income

communities. Prior to the environmental justice movement, environmental reform and policy was, and is still, primarily dominated by white middle to upper class males. Taylor (1997) suggests that a 'connection between race, class, and environment' is important for the environmental justice movement.

The working class, historically, was a motivation in the establishment of recreational venues such as neighborhood parks and baseball fields. Parks represented an alternative to the saloons and barrooms that were thought to characterize the recreation of this class of people. Rosenzweig (1983) discusses, however, that although parks were set up historically in working class neighborhoods, there was still little concern for class or cultural intermingling as parks were established in each separate ethnic and cultural neighborhood.

Race

Race, as mentioned by Taylor (1997), is also an important dimension to understanding environmental and social justice. Taylor (2000) also states that 'environmental justice activism has been a submerged frame in the politics of the communities of people of color for more than a century.' The environmental justice movement gained momentum especially in communities of color where things like hazard waste facilities were targeted in their community. Before the term environmental justice, environmental racism was used (Taylor 2000). Race is one of the major components of the social and environmental justice and something that should be looked at in recreational research.

The culture and heritage of individuals is important to both social and environmental justice movement for many of the same reasons as race. Understanding,

appreciating, and celebrating the diversity of all people is important for maintaining and encouraging equality.

Gender

Gender is also an important factor of social justice and environmental justice. The women in the targeted communities organized many of the grassroots organizations for environmental justice. The destruction of sexism, along with racism and classicm, are important goals of the environmental justice movement because they are part of basic human rights. Women were some of the most important people involved in the mobilization of the movement. Gender discrimination, from a basic human rights perspective, should be eradicated and it is important part of understanding environmental justice.

Rosenzweig (1983) also discusses how women became marginalized in their pursuit of recreation and leisure. Early saloons were catering and welcoming to men, but women were seldom included or participated in this early form of leisure. The park movement included a role for women as participants of recreation as well as educators of nature and leisure to children.

Health

The inclusion of a health dimension is one of the most important characteristics of environmental justice. The movement mobilized around the issues of low-income and minority neighborhoods targeted for the placement of hazardous waste facilities. Taylor (2000) suggests that some of the most important concerns of people of color environmental groups are: water pollution, toxics, waste disposal, community organizing, air pollution, etc. Events like Love Canal are evidence to the idea of

environmental discrimination. Health issues may also be an important component of recreation when it relates to air quality or safety concerns found within park boundaries.

Social and Physical Well-being

Spirn (1995) discusses early park planner and landscape designer Frederick Law Olmsted and his contribution to social justice. Olmsted viewed natural scenery as a remedy for health and welfare ailments. He also believed that the morals of working class people would be improved by exposure to such natural settings and scenery. Parks are still believed to help renew one's mind and body and are still visited and sought after for the same reasons. Parks, in some places, may be disproportionately visited by the people needing the least inspiration and renewal and not enough by marginalized individuals where the benefit of such a visit may be greater.

Unity/Equality

This dimension of social justice sums up the goals of social and environmental justice. When recreating in parks and other recreational areas, all people should feel welcome and part of the same, equal community regardless of their differences. Feminist recreational literature aids in this as well by describing that modern parks are often exclusive to some types of users and that women, children, and other marginalized users are the people who suffer and miss out on recreational opportunities (Wearing, 1998). Recreational areas should be a place for intermingling with people who are different and at the same time should offer a level of comfort and respect for those people who are different. Parks and other recreational areas on public land belong to all the people and such places may be important gathering places for communities.

Freedom

Freedom may mean several things and may be different for each individual. Leisure, in its early form, is viewed as freedom of expression (Kelly and Freysinger, 2000). Also important in this dimension is a place that is free from any demands or stresses of work or the home, especially important for working class citizens. Recreating in places with little structure and little constraints allows a sense of freedom and opportunity to experience different surroundings. Kraus (2001) also mentions the idea of freedom and open spaces as important for early recreationists. Black slaves, indentured servants, working class individuals, and other marginalized peoples saw parks and recreation as a place to encourage and inspire freedom. Freedom is still an important part of recreation and parks as people increasingly come to such places seeking solitude and alternatives to everyday life.

After the review of the previous literature, a study was designed from the guiding questions discussed in Chapter One. Using the conceptual foundation defined in this chapter, the next chapter will discuss the methods used for the experimentation of the study.

Chapter Three
Methods

The following chapter includes the methods used for the study and the analysis of the research contained in this study. The chapter begins by taking a look at several propositions that were constructed from the material presented in the previous chapters. The next two sections look at the study design behind the study and the social equity scale construction, which leads into the next section on scale management. The place of study, Snake River Birds of Prey National Conservation Area, is discussed in the next section. The study population, the procedure, and the survey instrument are all explained in the following sections. The chapter concludes by looking at several limitations and delimitations of the study.

Propositions

Given the background material contained in the previous two chapters, several propositions were made in this research to determine the extent to which visitors considered the values associated with social equity in parks and recreation. The propositions included:

Proposition One:

Social equity in parks and recreation can be operationalized through the seven dimensions of race, class, gender, social and physical well-being, health, unity/equality, and freedom.

Proposition Two:

(a) Values associated with social equity in parks and recreation exist separately from the values studied in previous recreational research.

(b) Values related to social equity in parks and recreation will enhance the knowledge contained in previous recreational values studies, assuming social equity in parks and recreation will emerge as a distinct values dimension of a broader park values assessment.

Proposition Three:

A respondent's value orientation will be related to several variables evaluated in the study including: socioeconomic status (income or education), frequency of visits, length of stay, and activities in which they participate.

Study Design

This study centered on the idea of social equity in parks and recreation as was discussed in the previous chapters. Social equity in parks and recreation is seen as a component of the assumptions found within both social justice and environmental justice. Working from these assumptions, a values scale related to social equity in parks and recreation was constructed from literature related to the theories behind social justice and environmental justice and then integrated into a survey that also measured the overall values of recreating in a specific place.

Scale Construction

The social equity in parks and recreation scale was created using the proposed seven dimensions of race, class, gender, health, social and physical well-being, unity/equality, and freedom. Multiple items were created for each of the dimensions depending on the literature sources discussed in the last section of chapter two. The

items and corresponding dimensions are given below. The actual wording of the scale is also included.

I believe Birds of Prey National Conservation Area is particularly important as:

Class

1. A place for people of all classes.
2. A place for people of all income levels.
3. A place to access without paying money.

Race

1. A place for people of all races.
2. A place for people of all cultures.
3. A place to experience society's ethnic diversity.

Gender

1. A place welcoming to women.
2. A place enjoyable for women.
3. A place for both men and women to enjoy.

Social and Physical Well-being

1. A place for interaction with others.
2. A place that encourages self-reflection.
3. A place that encourages self-enhancement.
4. A place to renew the mind.
5. A place to refresh the body.

Health

1. An environmentally health place.
2. A place with little trash and pollution.
3. A place with unpolluted water.

Unity/Equality

1. A place to respect the differences of others.
2. A place of social equality.
3. A place that belongs to everyone.
4. A place for all of society to interact.

Freedom

1. A place to move freely.
2. A place separate from both work and home.
3. A place free from everyday demands.

Scale Management

In deciding to integrate the social equity in parks and recreation scale into the overall values scale, it is important to consider several factors. Review of the theory of scale construction and the merging of scales produces several questions regarding the integrity of such a method. For instance, what is involved in this process and what aspects should you consider?

By definition, scaling implies 'the development of systematic rules and meaningful units of measurement for quantifying empirical observations' (Crocker and Algina, 1986). The overall goal of the method of scaling is to provide ordinal measures of given variables (Babbie, 2001). Scales, as opposed to indexes, are considered unidimensional, meaning the items in the scale belong on a continuum that is thought to reflect one concept (Nachmias and Nachmias, 1981). The concept of the scale for this study is social equity in parks and recreation. The scaling technique used in this study is Likert-type Scaling. This technique affords the researcher the ability to judge the relative strength of an agreement or disagreement to a scale item, or in this study, a value item on the scale (Babbie, 2001). Likert scaling also allows for the researcher to judge the intensity between different scale items.

This study used a multi-scale item approach as opposed to a single-scale item approach. By using a multi-scale approach, each of the seven dimensions of social equity

in parks and recreation in this study had at least three value items resulting in a 24-item scale. A single-scale item approach would have only allowed one item for each dimension that would result in a limited scale of seven items. Therefore, the multi-scale item approach helps to add validity and reliability to the seven dimensions because they are composites of several empirical properties and are, therefore, difficult to measure without using a multiple-item approach (Nachmias and Nachmias, 1981).

Once a scale has been constructed, it is necessary to consider whether or not it is valid and reliable. A reliability analysis can be performed to determine whether the results could be replicated if the same respondents were tested again under similar conditions (Babbie, 2001). The validity of a scale's content can be evaluated to determine if the items sufficiently represent the construct that is of interest in the scale.

If a scale is to be integrated into another scale, as such is the goal for this study, then several other issues must be looked at as well. Both scales should be analyzed to determine their reliability and validity. For this study, the overall values scale developed by Borrie et al. (2002) had been employed for use in a recreational study and then tested for reliability. The social equity in parks and recreation values scale is subject to the same reliability analysis before integration of the two scales can take place. Once reliability is considered for this scale, it is subject to factor analysis that involves determining if there are groups of scale items that respondents answer similarly. These scales should also be evaluated for validity. Evaluating for validity of these scales involves more testing. The groups, or factors, that are determined from this statistical analysis should be examined to determine which items have high loadings in the factors. Those with the highest loadings for each factor are the items that are then considered

adequate for integration into the other overall values scale. After this integration, the scale should be tested for reliability and then be factor analyzed to determine whether or not integration of the two scales was an appropriate method. Validity should be tested by using the scale at more recreational settings.

Snake River Birds of Prey National Conservation Area

The study was undertaken within the Snake River Birds of Prey National Conservation Area. The NCA is approximately 485,000 acres located along 81 miles of the Snake River in southwest Idaho. The river lies at the bottom of a deep canyon that is surrounded by a vast plateau. The main types of recreation found within the NCA include fishing, camping, boating, walking, swimming, and viewing wildlife.

There were four main study areas sampled within the Birds of Prey NCA. The first site, Celebration Park, located on the Snake River, contains a large petroglyph field where visitors can take a walking tour through the field. A hiking trail is also available that leads to Halverson Lake, a small pond within the Snake River Canyon. The second sampling site was located at Dedication Point and Swan Falls Dam. Dedication Point is an overlook that looks down into the Snake River Canyon. Visitors are able to walk along a one-quarter mile trail with interpretive signs that highlight the wildlife, geology, and plants along the way. Swan Falls Dam is located next to the old Idaho Power Dam and provides places for visitors to fish, camp, and swim along the Snake River within the NCA. The third and fourth sample sites were located at C.J. Strike Reservoir where visitors are allowed overnight as well as day-use opportunities at several dispersed use settings.

Study Population

The population of interest for this study was defined as all visitors over the age of 18 recreating within the boundaries of the Snake River Birds of Prey National Conservation Area. The age of the recreationists in this area varied between 18 and 86. Every individual recreating within the NCA at the given sample times was given the chance to participate. Although there are a slightly higher percentage of male recreationists within the sample area, the sample of recreationists in this study included a fairly even mix of both male and females.

Procedure

At the four sites within Birds of Prey National Conservation Area sampling occurred during the 2003 summer season between June 29 and August 24. Each site was assigned a number and the starting location was randomly selected by a formula entered into a statistical program, SPSS. Sampling of the locations was rotated on a four day basis. This sampling design afforded a sample that included both weekdays and weekends. The times for sampling were also rotated so that each site was sampled from 8:00am to 2:00pm one time and then 2:00pm to 8:00pm the next time. At each site and within each time shift, all visitors at the specific sampling site were approached with an on-site survey and a small introduction of the purpose of the study. Upon agreeing to participate, the visitors were given the survey to complete. The survey was then collected within approximately 10 to 15 minutes. The same on-site survey was used at all sample locations.

Survey Instrument

The survey constructed and employed in this study consisted of four pages. The first part of the survey consisted of items relating to demographic information. The demographics component of the survey consisted of questions pertaining to gender, place of residence, age, education level, income, and occupation. The next part of the survey asked questions relating to group size, type of traveling group, length of visit, how many visits, first awareness of the NCA, and the types of recreational activities in which the visitors will participate. Questions relating to crowding and conditions within the NCA were also included. The final part of the survey consisted of two scales that related to the values of recreating within the NCA.

The first scale consisted of values associated with social equity in parks and recreation in choosing to recreate within a specific place. This scale contained 24 items, as discussed earlier that were randomly placed in a list on a Likert scale ranging from 1 to 8. The 1 represented the response "strongly disagree" and the 8 represented the response "strongly agree." The scale also contained the response "don't know."

Borrie et al. (2002) developed the second, overall values scale that was used in this study. This scale measures the responses of visitors in regards to the overall value of a specific recreational venue. This scale also contained 24 items that were scored in the same manner as the social equity scale. These items, as discussed by Borrie et al. (2002), were created using the work of Henneberger (1996) who reviewed the National Park ideal.

Survey Pre-test

Before the final version of the survey was accepted, a pre-test of a survey draft was given to visitors at the Birds of Prey National Conservation Area. This initial survey was used on 100 individuals recreating in the area to determine any discrepancies in the survey design. This initial pre-test consisted of 50 surveys with the social equity scale printed before the overall scale used by Borrie et al. (2002) and 50 surveys with the Borrie et al. (2002) scale printed first. The motive behind this was to determine if the placement of the scales made a difference in how a respondent answered it. The desired result would be to have variability between each of the items in the scale.

Although very little differences were found after initial pre-test analysis, the decision was made to put the social equity in parks and recreation scale before the overall scale by Borrie et al. (2002) in the final version of the survey. This decision was based on the idea that the social equity scale was more experimental and exploratory in nature than the Borrie et al. (2002) scale, which had previously been tested. Respondents might not be as careful in reading and answering each item if the scale was placed second. Greater variability would be desired in the social equity scale in order to more properly determine the actual dimensions of social equity in parks and recreation as discussed in proposition one. The trade-off from this decision is the possibility of inaccurate measurement of the overall values scale. Several other smaller changes were made in the survey design regarding the wording placement of certain questions not related to either values scale after the initial pre-test.

Limitations

The research contained in this study was limited by the following factors:

1) Time constraints prohibited the review of more literature related to social justice and environmental justice. Better review of a broader range of literature might have yielded more dimensions relating to social equity in parks and recreation, therefore creating a more thorough scale. Other dimensions related to social equity in parks and recreation might include age and physical condition.
2) The use of qualitative methods might have provided a clearer picture for the understanding of social equity in parks and recreation in Birds of Prey National Conservation Area.
3) The respondents in the study were mostly from the same racial background.
4) The study was restricted to only one protected area with very little ethnic diversity.

Delimitations

The following methods were employed in an attempt to preserve the integrity of the study:

1) The recreationists were told as little as possible about the study to avoid any bias.
2) The survey was the same for each of the respondents in each study site within the National Conservation Area.
3) An initial survey was pre-tested at the study site to determine any inadequacies or inconsistencies in the survey design.
4) The population of respondents to the survey was from a random sample.

5) The location of the study site, Birds of Prey National Conservation Area, is close to an urban city, Boise, ID, which allows for a relatively diverse sampling of respondents.

Chapter Four
Analysis and Discussion

The propositions discussed in the previous chapter were statistically evaluated using SPSS version 11.0 software to determine the results of the analyses for this chapter. These analyses were conducted from survey results for the demographic variables and for the social equity values scale developed for this study and for the overall values scale developed by Borrie et al. (2002). The chapter begins by looking at the descriptive statistics for the sample population at the Snake River Birds of Prey National Conservation Area. The next section of the chapter focuses on the results of the statistical analyses performed on each of the three propositions developed in the previous chapter.

Population Description

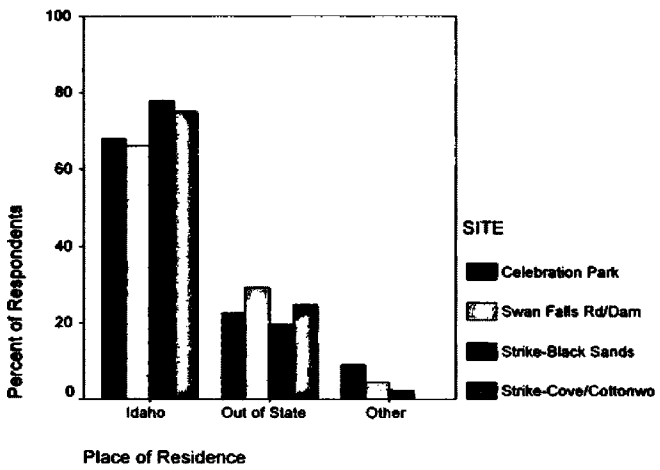
Understanding the study population is an essential tool in the foundation behind the framework of this thesis. Gathering and understanding demographic information on the sample residence, gender, age, education level, income level, group size, and length of stay will aid in the results and interpretation of all of the propositions, especially the third. The total number of surveys collected during the sample period of June through August 2003 was 213.

Respondent Residence

The majority of respondents were from the area surrounding the Snake River Birds of Prey National Conservation Area. For each of the four areas sampled within the NCA, 65% to 85% of respondents were from the state of Idaho. The remainders of the population of respondents were from other states including California, Oregon, Utah, Montana, or Nevada. The differences in place of residence by sample location varied

minimally. Idaho residents were more likely to be found at the C.J. Strike Black Sands sample location. Visitors from other states were more likely to be found at the Swan Falls Road location, more specifically at the Dedication Point overlook.

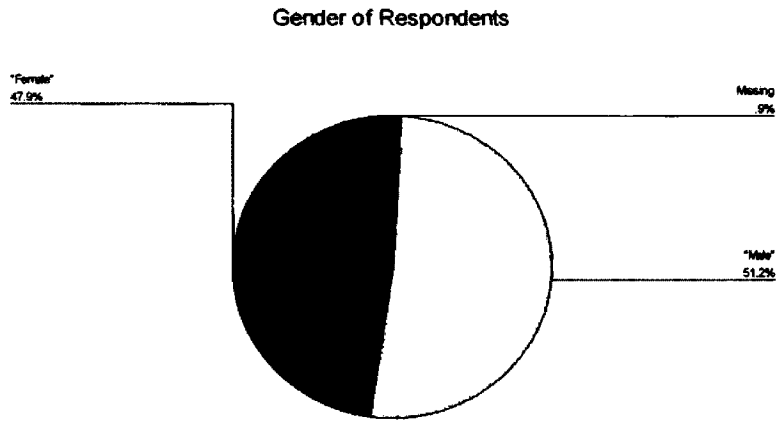
Figure 2. Respondent Residence.



Respondent Gender

The gender of the survey respondents was relatively equal with a slightly higher male percentage. Females composed 47.9% of the 213 surveys; males made up 51.2% of the collected surveys. A total of 0.9% of the surveys were missing a gender response.

Figure 3. Respondent Gender.



Respondent age

The range in age for all of the respondents to the survey was between 18 and 90. Differences in age varied somewhat by survey location. Celebration Park had an average age of 49; Swan Falls Dam average age was 43; Strike-Black Sands average age was 41; Strike-Cotton/Crane had an average age of 48. The average age for all respondents at all survey locations was 43.

Table 1. Average Respondent Age.

SITE	AGE	Valid N	207
Celebration Park	49	Missing	6
Swan Falls Dam	43	Mean	43
Strike-Black Sands/Cove	41	Std. Deviation	14.82
Strike-Cotton/Crane	48	Minimum	85
		Maximum	18

Respondent Education Levels

The average education levels for the respondents varied by survey location from 12.6 to 14.9 years of school. The highest level was at Swan Falls Road; the lowest level was found at Strike-Cotton/Crane sample area. The average education level for all respondents at all four of the sample areas were high school educated with some amount of college.

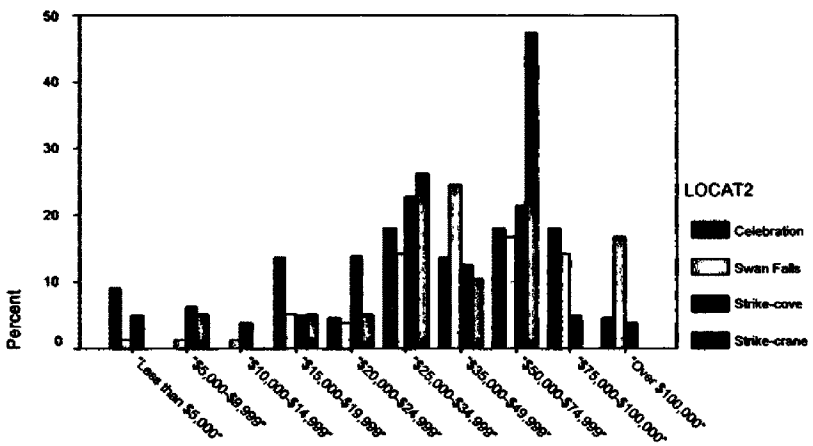
Table 2. Average Respondent Education Level.

LOCATION	AVERAGE EDUCATION LEVEL	Valid N	207
Celebration Park	14	Missing	6
Swan Falls Dam	14.9	Mean	13.97
Strike-Black Sands	13.2	Std. Deviation	2.69
Strike-Cotton/Crane	12.6	Minimum	6
		Maximum	19

Respondent Income Levels

The average income level for each of the sample locations was relatively similar. For Celebration Park and both of the C.J. Strike sample locations the average income level was $25,000 to $34,999. The average income level for respondents at the Swan Falls Road area was slightly higher at $35,000 to $49,999. This figure is relatively low for park studies.

Figure 4. Average Respondent Income Level.



Respondent Group Size

Average group size for the sample location was between 3 and 4 people for Celebration Park, Swan Falls Road, and Strike-Cotton/Crane. The average group size at Strike-Black Sands was significantly higher at 9.14 people because of its ability to accommodate a larger group.

Table 3. Average Respondent Group Size.

LOCATION	AVERAGE SIZE OF GROUP	Valid (N)	211
Celebration Park	3.5	Missing	2
Swan Falls Dam	3.37	Mean	5.69
Strike-Black Sands	9.14	Std. Deviation	9.05
Strike-Cotton/Crane	3.95	Minimum	1
		Maximum	71

Respondent Length of Stay

The average length of stay varied between 1 and 3 days. Respondents at both Celebration Park and Swan Falls Road stayed an average of 1.2 days. The average length of stay was higher for respondents at both C.J. Strike locations. Respondents at Black Sands stayed an average of 2.6 days. Respondents at Cottonwood/Crane stayed an average of 2.4 days.

Table 4. Average Respondent Length of Stay.

LOCATION	AVERAGE LENGTH OF STAY AT THE NCA	STANDARD DEVIATION	Valid (N)	210
Celebration Park	1.23	0.53	Missing	3
Swan Falls Dam	1.21	0.71	Mean	1.88
Strike-Black Sands	2.64	1.54	Minimum	1
Strike-Cotton/Crane	2.4	1.93	Maximum	7

Respondent Activity Participation

The survey included a list of 25 activities that respondents were asked to check all of the activities that they were planning on participating for that visit to the NCA. The following table lists the percentages of activities for all survey locations.

Table 5. Average Respondent Activity Participation.

ACTIVITY	PERCENT	ACTIVITY	PERCENT
Horseback Riding	2.30%	Nature Study	8.90%
Shooting	2.30%	Viewing wildflowers	10.80%
Backpacking	2.30%	Viewing cultural/historic sites	15%
Jogging	2.30%	Photography	17.40%
Snowmobiling	2.80%	Boating	28.60%
Other	3.30%	Sightseeing	35.20%
Off road motorcycling	3.80%	Picnicking	37.10%
Hunting	4.70%	Camping	39.90%
Viewing other wildlife	4.80%	Swimming	41.30%
River floating	5.20%	Walking/Hiking	45.10%
Bicycling	6.10%	Bird watching	46%
Jet Skiing	6.10%	Fishing	48.80%
Off road 4x4 driving	7%		

Proposition Analyses

The propositions were evaluated using the statistical tools discussed in the previous chapter. The following is the results and discussion of each of the analyses for each of the three propositions. The tables correspond to the analyses of the propositions.

Proposition 1 – Dimensions of Social Equity

Factor Analysis of Social Equity Scale

The first proposition questioned whether or not the seven dimensions of race, class, gender, health, unity/equality, freedom, and social/physical well-being could represent social equity in parks and recreation. A factor analysis on the entire 24-value item scale of social equity in parks and recreation was the appropriate starting point for exploring this proposition. A factor analysis was helpful to look at the total variance that can be explained by the responses to the scale. This determined whether or not the seven dimensions separated out or if some other grouping of the dimensions existed.

This proposition was analyzed using the factor analysis command found within the SPSS software. A principal components analysis was performed with a Varimax rotation method with Kaiser Normalization. Missing values were excluded using the pairwise deletion command. Table 6 presents the results.

Table 6. Factor analysis of 24-item social equity scale.

VARIABLE	COMPONENT		
	1	2	3
"a place for people of all classes"	.843	.341	.232
"a place for people of all income levels"	.794	.216	.436
"a place enjoyable for women"	.792	.372	.280
"a place welcoming to women"	.786	.353	.297
"a place that belongs to everyone"	.785	.282	.286
"a place for people of all races"	.781	.428	.206
"a place separate from both work and home"	.779	.375	.343
"a place for both men and women to enjoy"	.774	.247	.466
"a place for people of all cultures"	.764	.445	.127
"a place free from everyday demands"	.653	.253	.482
"a place that encourages self-reflection"	.643	.509	.357
"a place to renew the mind"	.626	.452	.360
"a place to move freely"	.625	.342	.378
"a place to access without paying money"	.584	.158	.406
"a place to refresh the body"	.553	.464	.418
"a place for interaction with others"	.291	.860	.183
"a place for all of society to interact"	.389	.816	.268
"a place to experience society's ethnic diversity"	.255	.766	.287
"a place to respect the differences of others"	.511	.653	.325
"a place of social equality"	.516	.519	.476
"a place with little trash and pollution"	.242	.192	.821
"a place with unpolluted water"	.258	.329	.763
"an environmentally healthy place (no toxins, etc.)"	.458	.283	.739
"a place that encourages self-enhancement"	.473	.458	.522

The rotated component matrix revealed three factors, instead of the proposed seven, as determined by the factor loadings. The decision to cut each of the loadings from the factors off at .70 and above was made from consulting literature on multivariate statistics. Tabachnick and Fidell (1989) state that "the greater the loading, the more the variable is a pure measure of the factor." Loadings in excess of .71 are considered to be excellent because they have at least 50% overlapping variance. The authors also agree that natural gaps between loadings are another way to determine the factors from the loadings. A significant gap existed between the cut-off mark of those variables above .70 and below .70 for this analysis. Interpretation was also aided by the decision to only accept factor loadings above .70. The factor loadings above .70 represented 15 out of the

24 original social equity variables. The first factor contained nine variables; the second factor contained three variables; the third factor also contained three variables.

The variance explained by the three factors for the reduced 15-item social equity in parks and recreation scale was also high. The first factor explained 44% of the total variance. Factor two was responsible for explaining 20.8% of the variance. The third factor contained a variance of 19.8%. Together, the three variables accounted for a total variance of 84.6%. Table 7 shows this variance.

Table 7. Variance for 15-item social equity scale.

	ROTATION SUMS OF SQUARED LOADINGS		
Component	Total	% of Variance	Cumulative %
1	6.606	44.037	44.037
2	3.114	20.757	64.794
3	2.965	19.764	84.558

Reliability Analyses

Once a factor analysis had been performed, a reliability analysis was the next step in exploration of this proposition. A reliability analysis on the social equity scale was necessary to determine the validity and soundness of this measurement. A reliability analysis was performed on each group as determined by the factor analysis, but was also then followed up by a reliability analysis on the entire 24-value item scale. A reliability analysis was performed using SPSS to determine Cronbach's alpha, a measure of reliability, for this scale of values related to social equity in parks and recreation. Tables 8, 9, and 10 show the reliability for each of the variables above .70 in each factor. The reliability of the first factor of nine items revealed a very strong Cronbach's alpha level of .98. The second factor, containing only three items, had an alpha level of .91. The

third factor, also containing three items had an alpha level of .88. When the three factors were evaluated together for their reliability a very high Cronbach's alpha was revealed of .97. Table 11 shows the analysis for all 15 of the variables with loadings above .70.

Table 8. Reliability coefficient for factor one.

		MEAN	STD DEV	CASES
1.	BELONGEV	7.2896	1.6897	183.0
2.	MENWOMEN	7.2186	1.7085	183.0
3.	INCOMEAL	7.2240	1.7222	183.0
4.	ALLRACES	7.1148	1.8044	183.0
5.	WELCOMEW	7.0000	1.9358	183.0
6.	CLASSALL	7.1530	1.8122	183.0
7.	ENJOYWOM	6.9727	1.8823	183.0
8.	CULTUREA	7.1475	1.7867	183.0
9.	WORKOME	7.0219	1.8156	183.0
RELIABILITY COEFFICIENTS N OF CASES = 183.0			N OF ITEMS = 9	
ALPHA = .9807				

Table 9. Reliability coefficient for factor two.

		Mean	Std Dev	Cases
1.	DIVERSIT	5.8939	2.3619	179.0
2.	INTERACT	6.1955	2.1854	179.0
3.	SOCIETYI	6.3631	2.1742	179.0
Reliability Coefficients N of Cases = 179.0			N of Items = 3	
Alpha = .9127				

Table 10. Reliability analysis for factor three.

		Mean	Std Dev	Cases
1.	TRASHPOL	6.4362	2.0815	188.0
2.	HEALTHYP	6.8723	1.8281	188.0
3.	UNPOLLUT	6.5053	2.0619	188.0
Reliability Coefficients N of Cases = 188.0			N of Items = 3	
Alpha = .8796				

Table 11. Reliability analysis for factors 1, 2, and 3.

		MEAN	STD DEV	CASES
1.	BELONGEV	7.2667	1.7360	165.0
2.	TRASHPOL	6.3333	2.1451	165.0
3.	MENWOMEN	7.1636	1.7714	165.0
4.	INCOMEAL	7.1636	1.7885	165.0
5.	DIVERSIT	5.9333	2.3141	165.0
6.	ALLRACES	7.0606	1.8666	165.0
7.	WELCOMEW	6.9576	1.9796	165.0
8.	CLASSALL	7.1030	1.8729	165.0
9.	ENJOYWOM	6.9091	1.9469	165.0
10.	CULTUREA	7.0848	1.8624	165.0
11.	HEALTHYP	6.8364	1.8455	165.0
12.	INTERACT	6.2303	2.1317	165.0
13.	UNPOLLUT	6.4788	2.0912	165.0
14.	SOCIETYI	6.4121	2.1413	165.0
15.	WORKOME	6.9515	1.8832	165.0

RELIABILITY COEFFICIENTS
N OF CASES = 165.0 N OF ITEMS = 15

ALPHA = .9725

Reduction of factor one

In order to increase interpretability within factor one, the nine items above a .70 factor loading, were again reduced down into only three items. This decision was made after performance of another factor analysis on this new nine-item social equity scale. No matter what three variables were chosen for inclusion into this scale from factor one, the factor analysis revealed that all of the nine-items together represented only one factor. This one factor, with only nine variables, is operationalized as a unidimensional concept of social equity in parks and recreation according to the conceptualization of this study discussed in the second chapter.

The variables selected to represent factor one were: "a place for people of all classes", "a place for people of all races", and "a place for both men and women to enjoy." The variable pertaining to class was the highest loading variable for factor one in

the original factor analysis. The other two variables, although they did not load highest, were chosen because they were more representative of and applied specifically to the study area at the Snake River Birds of Prey National Conservation Area and still represented the unidimensional concept of social equity. This relates to construct and face validity regarding the chosen variables. They were also still above the .70 factor loading, which is considered excellent (Tabachnick and Fidell, 1989). Table 12 gives the results of this factor analysis for the three chosen variables plus the six variables from the other two factors.

Table 12. Factor analysis of nine variables.

	Factor Loading
"a place for people of all races"	.874
"a place for both men and women to enjoy"	.863
"a place for all of society to interact"	.859
"an environmentally healthy place (no toxins, etc.)"	.855
"a place for people of all classes"	.852
"a place with unpolluted water"	.791
"a place for interaction with others"	.782
"a place to experience society's ethnic diversity"	.776
"a place with little trash and pollution"	.697

Certain trade-offs existed from the decision to reduce factor one into three variables. For instance, was factor one still reliable after the reduction of the variables? In order to further test the three variables, another reliability analysis was performed. The reliability analysis for the reduced three items of factor one is given in Table 13. Table 14 evaluates the reliability coefficient for the new nine-item scale. Factor one, reduced to three variables, still contains a very high reliability coefficient of .95. The three factors together, with nine variables, results in a reliability coefficient of .95.

Table 13. Reliability for factor one with three variables.

	MEAN	STD DEV	CASES
1. MENWOMEN	7.2268	1.7095	194.0
2. ALLRACES	7.0928	1.8272	194.0
3. CLASSALL	7.1856	1.7710	194.0
RELIABILITY COEFFICIENTS N OF CASES = 194.0		N OF ITEMS = 3	
ALPHA = .9453			

Table 14. Reliability for factors one, two, and three with nine variables.

	MEAN	STD DEV	CASES
1. TRASHPOL	6.3647	2.1253	170.0
2. MENWOMEN	7.1824	1.7496	170.0
3. DIVERSIT	5.9294	2.3168	170.0
4. ALLRACES	7.0647	1.8498	170.0
5. CLASSALL	7.1118	1.8508	170.0
6. HEALTHYP	6.8588	1.8246	170.0
7. INTERACT	6.2412	2.1166	170.0
8. UNPOLLUT	6.5118	2.0705	170.0
9. SOCIETYI	6.4176	2.1225	170.0
RELIABILITY COEFFICIENTS N OF CASES = 170.0		N OF ITEMS = 9	
ALPHA = .9451			

Factor Names

After completion of the factor analysis and reliability analyses, the factors were given a name that best represented the underlying concept and consensus behind each of the variables within the factors. The first factor contained items that most represented the concept of Inclusiveness. These variables related to who should be allowed access within the conservation area boundaries. Most emergent within this concept were the variables and earlier dimensions pertaining to race, class, and gender. The first concept of social

equity in parks and recreation, now with only three variables, was given the name Inclusiveness. The concept included the variables of "a place for people of all classes", "a place for people of all races", and "a place for both men and women to enjoy."

The second factor contained variables that related to the concept of the experience of the diversity and interaction of people within society. This factor was given the name Interaction and contained the variables "a place for all of society to interact", "a place for interaction with others", and "a place to experience society's ethnic diversity."

The third factor was the only factor that represented an original dimension, health. In this factor, health relates to the concept of the Quality of the Environment within the park or protected area, or in this case, the conservation area. Because of this, the third concept of social equity in parks and recreation was renamed Quality of Environment and contained the variables "a place with little trash and pollution', "a place with unpolluted water", and "an environmentally healthy place (no toxins, etc.)."

Discussion

The seven proposed dimensions of social equity in parks and recreation did not factor as predicted. Instead, social equity in parks and recreation can be said to exist in three dimensions in this data. These three dimensions are Inclusiveness, Interaction, and Quality of the Environment. These three dimensions, or concepts, of social equity in parks and recreation were found to be exceptionally reliable. From the three concepts, nine items exist in which to adequately test social equity in parks and recreation values in a scale.

The thoughts behind the conceptualization of social equity are considered exploratory in this study. In light of this, the conceptualization, as discussed in Chapter

Two, allows for the nine-item social equity scale to still be unidimensional because of the broadness of social justice and environmental justice. Although the three dimensions are separate concepts, they are all viewed as components of the singular concept of social equity. The scale containing the nine variables was also found to be very reliable. Proposition one was useful to predict several dimensions in which to operationalize the values of social equity in parks and recreation.

Proposition 2 – Social Equity Values are Distinct and Different

Proposition two evaluated whether or not social equity values existed separately from the values studied in previous research. Proposition two also looked at whether or not social equity values were left out of these previous studies. To test this proposition, a reliability and factor analysis was conducted in the Borrie et al. (2002) scale. Then, those values items selected to represent the concept of social equity were then integrated into the Borrie et al. (2002) scale. After the integration of the social equity scale into the overall values scale, another factor analysis occurred to investigate the last part of the proposition. This was necessary to determine if a separate factor results from the social equity integration and if the total amount of variance explained increased.

Reliability Analysis of Overall Scale

A reliability analysis was performed on the overall values scale by Borrie et al. (2002). A reliability analysis was necessary to determine whether or not this scale was reliable in the recreational setting chosen for this study. A reliability analysis had previously been performed on this scale in the winter visitor to Yellowstone study. The results of the reliability analysis for the overall scale, at Birds of Prey National

Conservation Area, reveal that the scale is reliable. The results of this analysis are presented in Table 15.

Table 15. Reliability Analysis of Overall Values Scale (Borrie et al., 2002).

		MEAN	STD DEV	CASES
1.	NATRESOU	6.7419	1.9132	155.0
2.	TOURDEST	6.1484	1.9993	155.0
3.	RESEARCH	6.5484	2.0645	155.0
4.	RECACTIV	6.9419	1.6045	155.0
5.	WILDNESS	7.0387	1.7577	155.0
6.	LIVEXIST	7.1613	1.7264	155.0
7.	FISHHABI	6.9419	1.9009	155.0
8.	AMERIDEN	6.5161	2.0076	155.0
9.	USEENJOY	7.1290	1.7310	155.0
10.	SOCIALPL	6.0516	2.2528	155.0
11.	RENEWSEN	6.4839	2.0713	155.0
12.	SCENBEAU	7.1161	1.6315	155.0
13.	FREESOCI	6.5032	2.0270	155.0
14.	ECORESOU	5.4129	2.4088	155.0
15.	FAMTRAD	6.0645	2.1792	155.0
16.	SEEONCE	6.8258	1.8834	155.0
17.	COMMDEV	6.9935	1.8144	155.0
18.	NATCURIO	6.8258	1.6560	155.0
19.	HISTRESO	6.6452	1.7682	155.0
20.	WILDSANC	7.0065	1.8743	155.0
21.	EDUNATUR	6.8516	1.6972	155.0
22.	SKILLABI	6.1032	2.0103	155.0
23.	ENDANGER	6.9419	1.8207	155.0
24.	SACRED	5.6968	2.4131	155.0
Reliability Coefficients				
N of Cases = 155.0			N of Items = 24	
Alpha = .9641				

Factor Analysis of Overall Scale

The factor analysis command found within the SPSS software was again used for the evaluation of the Borrie et al. (2002) scale. A principal components analysis was performed with a Varimax rotation method with Kaiser Normalization. Table 16 shows the results of this analysis.

Table 16. Factor analysis of overall scale.

VARIABLE	COMPONENT		
	1	2	3
"a protector of threatened and endangered species"	.826	.195	.234
"a wildlife sanctuary"	.801	.105	.356
"a place for scientific research and monitoring"	.777	.284	.121
"a place for education about nature"	.777	.266	.263
"a historical resource"	.776	.301	.149
"a place for wildness"	.723	.145	.488
"a display of natural curiosities"	.707	.425	.264
"protection for fish and wildlife habitat"	.698	.161	.456
"a place for all living things to exist"	.677	.113	.555
"a place of scenic beauty"	.662	.204	.565
"a sacred place"	.614	.581	-1.958E-02
"a place without most types of commercial development"	.613	.196	.323
"a place to develop my skills and abilities"	.175	.783	.308
"a family or individual tradition"	.112	.763	.263
"an economic resource"	.191	.760	.100
"a social place"	4.344E-02	.684	.494
"a tourist destination"	.426	.615	9.307E-02
"a site to renew your sense of personal well being"	.365	.591	.534
"a symbol of America's identity"	.491	.570	.220
"a place everyone should see at least once in their lives"	.451	.475	.354
"a place for the use and enjoyment of the people"	.389	.261	.736
"a place for recreational activities"	.243	.303	.723
"a place to be free from society and its regulations"	.291	.427	.605
"a reserve of natural resources for future use"	.493	.290	.584

The results from this factor analysis also produce three concepts relating to the overall value of a park or protected area. The first factor in this analysis relates to the concept of naturalness and wildness of the place. Variables relating to the conservation area as a place for endangered species, a wildlife sanctuary, and a place for wildness emerged in this dimension. The second factor in the overall values scale factor analysis relates to the concept of tourism and personal growth of visitors to the area. Variables relating to tourism and the area as a social place emerged in this concept, as did variables relating to developing skills and abilities. The third factor resulted in variables relating to the concept of recreation. This concept loaded highly with variables dealing solely with the area as a place for recreation. Factor loadings were accepted at .60 for this analysis

because it was a natural gap for all of the factors. A factor loading of .60 is still considered very good (Tabachnick and Fidell, 1989).

The total variance explained for this scale is 69.8%. The first factor contributes 32% of the total variance. The second factor explains approximately 20.4% of the variance. The last factor on the overall values scale contributes 17.5% of the total variance. Table 17 explains the variance.

Table 17. Variance for 24-item overall values scale.

	ROTATION SUMS OF SQUARED LOADINGS		
Component	Total	% of Variance	Cumulative %
1	7.672	31.965	31.965
2	4.895	20.397	52.361
3	4.191	17.464	69.826

Factor Analysis on Overall Values Scale and Social Equity Addition

The next step in the analysis of proposition two involved integrating the social equity variables into the overall values scale developed by Borrie et al. (2002). The nine-item social equity in parks and recreation scale was reduced into just three items after an initial analysis. Because this research is exploratory and the conceptualization of the study is broad, the three items that were chosen were decided upon after first using the nine-item scale in the factor analysis with the Borrie et al. (2002) scale. This analysis is shown in Table 18. The results of this analysis show that the integration of all nine-items did indeed factor into its own, fourth, dimension.

Table 18. Factor Analysis of Overall scale and Nine-item Social Equity Scale.

	COMPONENT			
	1	2	3	4
"a protector of threatened and endangered species"	.826	.201	.170	.156
"a wildlife sanctuary"	.800	9.979E-02	.248	.260
"a place for scientific research and monitoring"	.770	.245	.167	8.946E-02
"a place for education about nature"	.757	.228	.299	.179
"a historical resource"	.748	.257	.267	8.515E-02
"protection for fish and wildlife habitat"	.706	.173	.177	.412
"a place for wildness"	.691	.176	.231	.451
"a place for all living things to exist"	.690	.125	.192	.515
"a display of natural curiosities"	.684	.390	.291	.186
"a place of scenic beauty"	.650	.197	.313	.493
"a sacred place"	.615	.557	.141	-8.515E-02
"a place without most types of commercial development"	.593	.171	.290	.240
"a reserve of natural resources for future use"	.499	.326	.277	.459
"a place to develop my skills and abilities"	.220	.753	.190	.210
"an economic resource"	.232	.742	8.077E-02	2.854E-02
"a social place"	6.134E-02	.739	.217	.352
"a family or individual tradition"	.184	.739	8.525E-02	.185
"a site to renew your sense of personal well being"	.419	.595	.125	.477
"a tourist destination"	.380	.584	.300	1.487E-02
"a symbol of America's identity"	.472	.523	.266	.173
"a place everyone should see at least once in their lives"	.484	.494	.114	.281
"a place with unpolluted water"	.346	.144	.775	2.651E-02
"an environmentally healthy place (no toxins, etc.)"	.427	.125	.774	.138
"a place for all of society to interact"	7.508E-02	.501	.701	.264
"a place for people of all races"	.227	.228	.684	.450
"a place with little trash and pollution"	.365	7.752E-02	.670	5.015E-02
"a place for both men and women to enjoy"	.350	.150	.665	.445
"a place for people of all classes"	.276	.150	.636	.548
"a place for interaction with others"	4.116E-02	.577	.597	.241
"a place to experience society's ethnic diversity"	.128	.504	.593	.210
"a place for the use and enjoyment of the people"	.408	.264	.272	.671
"a place for recreational activities"	.274	.339	.234	.614
"a place to be free from society and its regulations"	.284	.460	.251	.540

The reduction of the nine-items into three items was decided upon after reviewing the previous analysis. The thought process behind the conceptualization was if the nine-items were to represent the unidimensional concept of social equity, then reducing the

scale into three items should still measure the one concept of social equity. The reduction was also made to see if the nine-item integration was overpowering the rest of the original Borrie scale because it contained more variables than some of the dimensions in the overall scale.

The three items that were chosen for integration were still thought to represent the one concept of social equity according the conceptual framework given for this study. The choice of the three items to integrate into the scale was made upon careful contemplation and selection. The three items used for inclusion into the overall values scale were the variables "a place for all of society to interact", "an environmentally healthy place," and "a place for people of all classes." These three variables were chosen because of their specificity and relevancy to the actual study location and also because of their measured construct validity as the best three-sub-sets with all of the other variables being equal. Depending on the study location in any future research, inclusion of three different variables may be the most appropriate method for this analysis.

The reliability of the reduced three items of social equity is shown in Table 19. Reliability was slightly reduced, but overall, the coefficient is still very high at .8506.

Table 19. Reliability analysis for three items of social equity scale.

	MEAN	STD DEV	CASES
1. CLASSALL	7.1033	1.8273	184.0
2. HEALTHYP	6.8913	1.7861	184.0
3. SOCIETYI	6.3424	2.1671	184.0
RELIABILITY COEFFICIENTS N OF CASES = 184.0		N OF ITEMS = 3	
ALPHA = .8506			

The items were then integrated into the overall values scale for another factor analysis to evaluate how all of the 27 variables would factor out. The results of this analysis suggest that there are still four factors when the new social equity dimension is included into the overall scale and that the three social equity items still hold together. Results of this analysis are shown in Table 20.

Table 20. Factor analysis for overall values scale plus social equity dimension.

	COMPONENT			
	1	2	3	4
"a protector of threatened and endangered species"	.814	.209	.310	4.672E-02
"a place for scientific research and monitoring"	.771	.252	.130	.170
"a wildlife sanctuary"	.769	.109	.420	.135
"a historical resource"	.747	.242	7.956E-02	.358
"a place for education about nature"	.738	.227	.240	.310
"protection for fish and wildlife habitat"	.671	.187	.523	8.726E-02
"a place for wildness"	.669	.148	.493	.252
"a display of natural curiosities"	.659	.366	.151	.459
"a place for all living things to exist"	.646	.140	.608	.115
"a sacred place"	.633	.575	3.362E-02	1.399E-02
"a place of scenic beauty"	.601	.184	.507	.385
"a place without most types of commercial development"	.562	.152	.229	.408
"a family or individual tradition"	.131	.777	.234	6.279E-02
"a place to develop my skills and abilities"	.174	.773	.228	.217
"an economic resource"	.219	.765	6.862E-02	4.734E-02
"a social place"	-1.223	.704	.395	.285
"a site to renew your sense of personal well being"	.344	.597	.442	.277
"a tourist destination"	.387	.571	5.240E-02	.300
"a symbol of America's identity"	.450	.505	8.472E-02	.464
"a place everyone should see at least once in their lives"	.442	.493	.310	.160
"a place for the use and enjoyment of the people"	.327	.269	.685	.327
"a place for recreational activities"	.191	.329	.651	.281
"a reserve of natural resources for future use"	.449	.329	.626	.131
"a place to be free from society and its regulations"	.242	.436	.519	.324
"a place for all of society to interact"	-9.719	.420	.267	.718
"a place for people of all classes"	.269	.132	.493	.667
"an environmentally healthy place (no toxins, etc.)"	.427	.125	.233	.660

The total amount of variance explained for the factor analysis of the scale with the social equity dimension was 71.8%. The first factor accounted for 26.7% of the variance. The second factor explained 18.4% of the total variance. The variance of the third factor

accounted for 15.1%. The last factor contributed 11.6% of the variance. Variance is shown in Table 21.

Table 21. Variance of overall scale with social equity dimension

Component	Total	% of Variance	Cumulative %
1	7.207	26.693	26.693
2	4.979	18.442	45.135
3	4.066	15.059	60.194
4	3.129	11.588	71.782

Reliability Analysis of Overall Scale with Social Equity Dimension

A reliability analysis was next performed on the overall scale with the integration of the three items relating to social equity in parks and recreation. The reliability analysis revealed a coefficient of .97 demonstrating that this new scale was very reliable. The analysis is shown in Table 22.

Table 22. Reliability analysis of overall scale with social equity dimension.

		MEAN	STD DEV	CASES
1.	WILDNESS	7.0204	1.7845	147.0
2.	LIVEXIST	7.1361	1.7542	147.0
3.	FISHHABI	6.9252	1.9342	147.0
4.	TOURDEST	6.1497	2.0012	147.0
5.	RESEARCH	6.5306	2.0980	147.0
6.	RECACTIV	6.9524	1.6190	147.0
7.	USEENJOY	7.1565	1.7190	147.0
8.	SOCIALPL	6.1293	2.1874	147.0
9.	RENEWSEN	6.4966	2.0520	147.0
10.	SCENBEAU	7.0884	1.6549	147.0
11.	FREESOCI	6.5374	2.0044	147.0
12.	NATRESOU	6.8027	1.8492	147.0
13.	FAMTRAD	6.0884	2.1737	147.0
14.	SEEONCE	6.8163	1.9125	147.0
15.	COMMDEV	7.0068	1.8413	147.0
16.	NATCURIO	6.8163	1.6799	147.0
17.	HISTRESO	6.6190	1.7878	147.0
18.	AMERIDEN	6.5238	2.0351	147.0
19.	WILDSANC	7.0204	1.8412	147.0
20.	EDUNATUR	6.8503	1.7056	147.0
21.	SKILLABI	6.1701	2.0047	147.0
22.	ENDANGER	6.9524	1.7840	147.0
23.	SACRED	5.7483	2.3867	147.0
24.	ECORESOU	5.4626	2.3908	147.0

25.	SOCIETYI	6.4014	2.1347	147.0
26.	HEALTHYP	6.9932	1.6614	147.0
27.	CLASSALL	7.2381	1.6934	147.0
Alpha =	.9687	N of Cases = 147.0	N of Items = 27	

Discussion

The results of the factor analysis of the overall values scale plus the three items pertaining to social equity reveal that both parts of proposition two are acceptable. This factor analysis resulted in four concepts. The factor analysis of just the overall scale only resulted in three concepts. The fourth additional factor on the second factor analysis contains only the three social equity value items of "an environmentally healthy place", "a place for all of society to interact", and "a place for people of all classes." Total variance also increased by the addition of the social equity items from 69.8% to 71.8%. Social equity in parks and recreation does indeed exist separately from the values studied in previous recreational research. Since the social equity component also contributed to a concept all by itself after the integration into the overall values scale, social equity will enhance and add to at least the Borrie et al. (2002) values study.

Proposition 3 – Relation of demographic variables to value orientations

Proposition three evaluated whether or not a respondent's value orientation would be related to several demographic variables assessed in the survey. The demographic variables used for analysis included: group size, activity type, rural or urban residence, place of residence, number of visits to the NCA, income status, gender, education level, and length of visit, and survey location within the NCA.

In order to evaluate this proposition, several statistical analyses were first performed on the variables before integrating the values into the analysis. This was undertaken by performing simple frequency and descriptive statistics to the experimental

variables. Many of the demographic variables also had to be re-coded in order to aid in the analysis and interpretation of this proposition.

A regression analysis was performed for each of the three concepts of social equity using the SPSS command. Before the analysis began, each individual was given a score for each concept. The score was referred to as a scale, and each scale was scored for each of the three variables within each concept, once again using the nine-item scale obtained from proposition one. The nine-item scale was used again because it contributed more variation in the regression analysis for Inclusiveness than using the nine variables above the factor loading of .70 for Inclusiveness. More variation was also found using the nine-item scale than just the three-items used in proposition two. The scale, for three variables in each concept, ranged from 3 to 24, depending on each respondents answer for the set of three variables. A three would indicate very low agreement (a score of all 1's for each of the three variables) with the concept, and a 24 would indicate very high agreement (a score of all 8's for each of the three variables) with the concept. Overall, a low scale score would indicate a less equity oriented person. A high scale score would indicate a more equity oriented person. Each respondent was given three scores for each of the three concepts. The distribution of these three scales for the three different concepts is given in Figures 5, 6, and 7.

Figure 5. Distribution of Inclusiveness Scale.

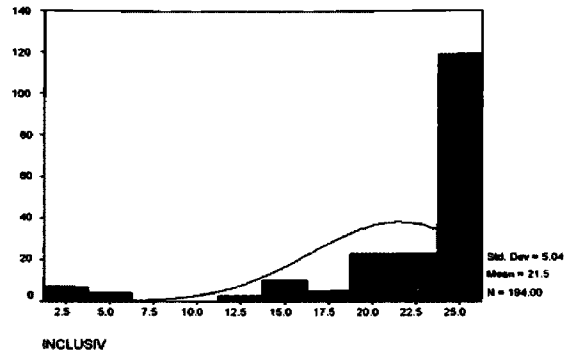


Figure 6. Distribution of Interaction Scale.

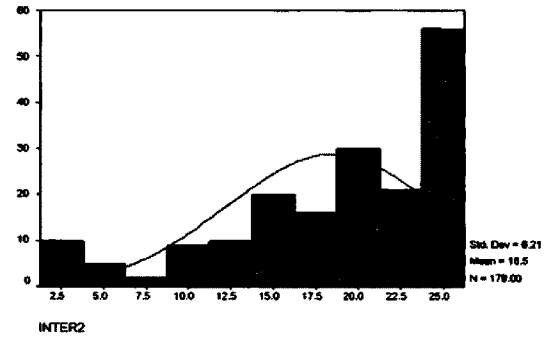
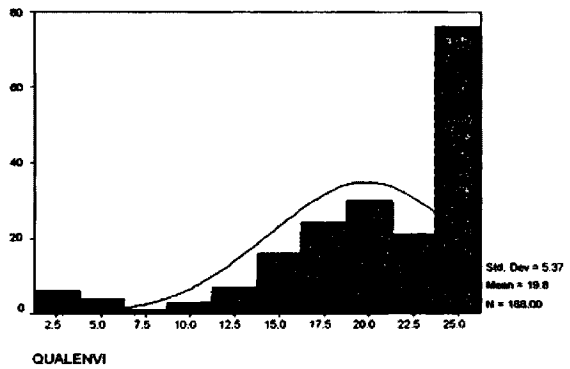


Figure 7. Distribution of Quality of Environment Scale.



The distribution for these three scales occurred in a normal distribution with a slight kurtosis to the right. The kurtosis is an indication of a high mean for the variables within the three concepts. The mean for the Inclusiveness distribution was highest at 21.5. The mean for the quality of environment was the next highest amount at 19.8. The

mean for interaction was lowest at 18.5. The interaction concept had more distribution and less crystallization among the scores for this concept.

Inclusiveness

Once the three scores had been obtained, a regression analysis was performed for each index of concepts using the demographic variables discussed earlier. The first regression analysis for the individual scores for Inclusiveness was entered in as the dependent variable. The demographic variables composed the independent variables. Results for this analysis are given in the following tables. Table 23 represents the model summary for the analysis. Table 24 is the ANOVA, indicating the error amount. Table 25 indicates the regression coefficients for the independent variables of the index scores for factor one.

Table 23. Model summary for scale score for Inclusiveness.

MODEL	R	R SQUARE	ADJUSTED R SQUARE	STD. ERROR OF THE ESTIMATE
1	.416	.173	.071	4.85973

Table 23 indicates that the adjusted r square value for the regression analysis is relatively low at only 17.3% of the variance for factor one being explained by all of the demographic variables.

Table 24. ANOVA for scale score for Inclusiveness.

MODEL		SUM OF SQUARES	DF	MEAN SQUARE	F	SIG.
1	Regression	799.022	20	39.951	1.692	.039
	Residual	3825.942	162	23.617		
	Total	4624.964	182			

Table 24 reviews the amount of error given for the dependent and independent variables in the regression analysis. A higher F-value and a lower significance value is desirable, indicating a lower amount of error. The significance value for the index score

for Inclusiveness in the regression analysis is relatively low at only .039. This value, because it is less than .05, allows one to reject the null hypothesis for this analysis that all of the Beta coefficients for the independent variables are equal to zero. This means that there is only a 3.9% chance at rejecting the null hypothesis that all of the coefficients are zero when they truly are zero, given the value of this test statistic.

Table 25. Coefficients for scale score for Inclusiveness.

	UNSTANDARDIZED COEFFICIENTS		STANDARDIZED COEFFICIENTS	T	SIG.
	B	Std. Error	Beta		
(Constant)	19.697	4.993		3.945	.000
Celebration Park	-1.472	1.761	-.090	-.836	.405
Swan Falls Road	-.939	1.529	-.092	-.614	.540
Black Sands	.503	1.403	.049	.359	.720
Watching/viewing activity	1.033	1.035	.097	.998	.320
Foot activity	-1.794	.903	-.178	-1.986	.049
Water activity	.490	1.125	.046	.435	.664
Riding/driving activity	-1.092	1.373	-.062	-.795	.428
Camping/picnicking	-1.366	.991	-.135	-1.379	.170
Gun activity	2.535	1.821	.107	1.392	.166
Is this your first visit?	1.691E-02	1.094	.002	.015	.988
Have you visited 2 to 4 times?	9.374E-02	.976	.008	.096	.924
Are you a day visitor?	-1.954	1.739	-.184	-1.124	.263
Are you staying 2-4 nights?	-1.647	1.731	-.147	-.952	.343
Are you of high wealth?	1.500	.896	.146	1.675	.096
Are you of low wealth?	1.095	1.027	.092	1.066	.288
Do you live in a rural or urban setting?	.621	.814	.061	.763	.447
Idaho or not	1.740	1.012	.152	1.720	.087
"What is your gender"	1.889	.794	.188	2.379	.019
Highest level of education	8.986E-02	.159	.048	.567	.572
"How many members of your group are there including yourself"	1.476E-02	.043	.027	.345	.731

Table 25 shows the coefficients for each of the independent variables as they relate to the dependent variable of the index score of each individual for Inclusiveness. A significance level of .10 was allowed for this analysis. This more liberal significance

value was allowed because of the experimental and exploratory nature of this study. For the most part, the demographic variables showed no statistically significant relationships with the scores for Inclusiveness. However, there were four variables that did fall within the significance level. These variables are foot activities, high income, place of residence, and gender.

For foot activities, those individuals who participated in activities related to hiking, walking, backpacking, biking, or jogging scored –1.794 points lower on the inclusiveness scale, all else constant. Another significant variable, individuals with a high income scored approximately 1.5 points higher on the scale for Inclusiveness relative to those with middle incomes. Place of residence was also significant. Idaho residents scored 1.740 points higher on the scale for Inclusiveness than non-residents. For gender, females are predicted to score almost two points higher on the scale for Inclusiveness than males.

Interaction

Interaction was evaluated in the same manner as Inclusiveness. The dependent variable for this regression analysis was changed to the index score for all respondents for Interaction. The same demographic variables were used for analysis as the independent variables. Table 26 represents the model summary for the analysis. Table 27 is the ANOVA for this analysis. Table 28 indicates the regression coefficients and significance for factor two variables.

Table 26. Model summary for scale score for Interaction.

MODEL	R	R SQUARE	ADJUSTED R SQUARE	STD. ERROR OF THE ESTIMATE
1	.340	.116	-.005	6.22291

Table 26 indicates that very little variance is being explained by the independent variables for Interaction. 11.6% of the variance is accounted for in the regression analysis for Interaction.

Table 27. ANOVA for scale score for Interaction.

MODEL		SUM OF SQUARES	DF	MEAN SQUARE	F	SIG.
1	Regression	740.331	20	37.017	.956	.519
	Residual	5653.790	146	38.725		
	Total	6394.121	166			

Table 27 indicates that the error level for Interaction is very high at .519. The null hypothesis that each one of the coefficients are equal to zero is failed to be rejected. A 51.9% chance exists at rejecting the null hypothesis that all of the coefficients are zero when they truly are zero, given the value of this test statistic.

Table 28. Coefficients for scale score for Interaction.

	UNSTANDARDIZED COEFFICIENTS (B)	STD. ERROR	STANDARDIZED COEFFICIENTS(BETA)	T	SIG.
(Constant)	20.682	6.694		3.090	.002
Celebration Park	-1.148	2.362	-.057	-.486	.628
Swan Falls Road	-.243	2.050	-.019	-.119	.906
Black Sands	.190	1.881	.015	.101	.920
Watching/viewing activity	.642	1.388	.049	.462	.644
Foot activity	-2.478E-02	1.211	-.002	-.020	.984
Water activity	.266	1.509	.020	.176	.860
Riding/driving activity	-1.622	1.841	-.075	-.881	.380
Camping/picnicking	-1.009	1.328	-.081	-.760	.449
Gun activity	-.357	2.442	-.012	-.146	.884
Is this your first visit?	-.106	1.467	-.008	-.072	.942
Visited 2 to 4 times?	-4.891E-02	1.309	-.003	-.037	.970
Are you a day visitor?	-1.930	2.332	-.148	-.828	.409
Are you staying 2-4 nights?	-1.940	2.321	-.141	-.836	.405
Are you of high wealth?	1.462	1.201	.116	1.217	.226
Are you of low wealth?	1.897	1.377	.129	1.378	.170
Rural or urban setting?	-.681	1.091	-.055	-.625	.533
Idaho or not	2.577	1.356	.183	1.900	.059
"What is your gender"	2.792	1.064	.225	2.623	.010
Highest level of education?	-7.454E-02	.213	-.032	-.351	.726

Table 28 indicates the coefficients for each of the independent variables. There are two variables in this analysis that are significant at the .10 significance level. However, because the error amount is so large, the relevance for the two variables is questionable. Idaho residents score 2.577 points higher than non-residents, all else constant, on the 3-24 scale for Interaction. Gender is also significant for this factor at .010. Females are also likely to score higher on the index for Interaction. Females score 2.792 points higher for Interaction, all else constant.

Quality of Environment

The evaluation of Quality of Environment occurred in the same manner as Inclusiveness and Interaction. The dependent variable was changed to the index score ranging from 3-24 for Quality of Environment for this analysis. The demographic variables were again evaluated as the independent variables. Table 29 represents the model summary for Quality of Environment. The ANOVA analysis is displayed in Table 30. Table 31 contains the coefficients for the independent variables for Quality of Environment.

Table 29. Model summary for scale score for Quality of Environment.

MODEL	R	R SQUARE	ADJUSTED R SQUARE	STD. ERROR OF THE ESTIMATE
1	.414	.172	.065	5.19172

Table 29 indicates that a relatively small amount of variance was explained in the regression analysis for Quality of Environment. Only 17.2% of the variance could be accounted for by the independent variables in the regression analysis for Quality of Environment.

Table 30. ANOVA for scale score for factor three.

MODEL		SUM OF SQUARES	DF	MEAN SQUARE	F	SIG.
1	Regression	870.468	20	43.523	1.615	.055
	Residual	4204.811	156	26.954		
	Total	5075.279	176			

The error level, indicated by a significance of .055 for the regression analysis of Quality of Environment, is relatively low as reported in Table 30. This is very close to rejecting the null hypothesis that the coefficients are equal to zero is using a significance level of .05.

Table 31. Coefficients for scale score for Quality of Environment.

	UNSTANDARDIZED COEFFICIENTS (B)	STD. ERROR	STANDARDIZED COEFFICIENTS (BETA)	T	SIG.
(Constant)	18.032	5.424		3.324	.001
Celebration Park	-1.949	1.914	-.111	-1.018	.310
Swan Falls Road	-1.360	1.661	-.125	-.819	.414
Black Sands	.263	1.524	.024	.172	.863
Watching/viewing activity	.142	1.124	.012	.126	.900
Foot activity	-.132	.982	-.012	-.135	.893
Water activity	.413	1.222	.037	.338	.736
Riding/driving activity	.218	1.492	.012	.146	.884
Camping/picnicking	-1.968	1.076	-.183	-1.829	.069
Gun activity	3.205	1.978	.127	1.620	.107
Is this your first visit?	-1.395	1.189	-.117	-1.173	.243
Have you visited 2 to 4 times?	-1.230	1.060	-.096	-1.160	.248
Are you a day visitor?	-1.520	1.889	-.135	-.804	.422
Are you staying 2-4 nights?	-.852	1.880	-.071	-.453	.651
Are you of high wealth?	1.471	.973	.134	1.511	.133
Are you of low wealth?	-.437	1.115	-.034	-.392	.696
Do you live in a rural or urban setting?	-.775	.884	-.072	-.877	.382
Idaho or not	2.024	1.099	.166	1.842	.067
"What is your gender"	1.336	.862	.125	1.549	.123
"Highest level of education you have completed so far"	.262	.172	.131	1.523	.130

The coefficients for each of the independent variables are reported in Table 31. There are two variables that fall within the .10 significance level for the regression analysis of Quality of Environment. The first variable significant variables is camping and picnicking activities. Respondents who reported participating in these activities scored on average 1.968 points lower, all else constant. Idaho residents were likely to score 2.024 points higher for the index score for Quality of Environment, all else constant.

Discussion

The overall relationships for the three concepts of social equity and the socio - demographic and activity variables were weak. Although only a few variables ended up being significant for each of the three concepts, the overall variance explained by the three regression analyses were minimal. Values, in this study, are not connected to a person's demographic background or activities in which they participate.

Overview of Analysis and Discussion

In review of the data and analyses for the three propositions, several results exist. Social equity in parks and recreation was predicted to exist in the seven dimensions of race, class, gender, social and physical well-being, health, unity/equality, and freedom. The first proposition was found to exist in three dimensions pertaining to Inclusiveness, Interaction, and Quality of Environment.

The second proposition was found to be accurate. Social equity in parks and recreation exists separately from the values in previous recreational studies. Social equity in parks and recreation is also a missing dimension of values in at least one previous values study.

The third proposition was difficult to evaluate. However, overall, a respondent's social equity value orientation is not likely to be predicted from several demographic variables. With a few exceptions, the demographic variables evaluated in this study were not a useful tool to evaluate the value orientations for the social equity in parks and recreation scale.

Chapter Five
Conclusions

The purpose of this study, as mentioned in Chapter One, was to explore the identification and integration of values associated with social equity in parks and recreation into the understanding and measurement of overall park and recreation values. The research conducted in this thesis was considered exploratory and the possible outcomes were not previously known.

The three questions that guided this study were: 1) How can social equity in parks and recreation be operationalized; 2) Has social equity in parks and recreation been left out of the measurement of previous values studies; and 3) How do certain demographic characteristics relate to a person's value orientation? These questions have directed and lead this study to the concluding thoughts presented in this chapter. These questions have also led to the development of the three propositions of this study. The propositions, from Chapter Three, can be best addressed by framing their content into three questions to address their interpretation. These questions are: What is Social Equity in Parks and Recreation?; Is social equity a missing part of outdoor recreation values study?; and Do certain demographic variables relate to a respondent's value orientation?

What is Social Equity in Parks and Recreation?

The concept of social equity is supported in this exploratory study. The question can be answered by stating that it is made up of the concepts of Inclusiveness, Interaction, and Quality of the Environment within Birds of Prey National Conservation Area. Identifying the original seven dimensions to represent the values associated with social equity in parks and recreation was challenging. The thought process concerning

these seven dimensions considered the potential for the overlap among dimensions from the beginning. In light of this, it is not surprising that the factor analysis of the social equity scale revealed only these three concepts as opposed to the original seven.

The Inclusiveness concept can be understood to mean that the visitors to the Snake River Birds of Prey National Conservation Area do not think of the original dimensions of race, class, and gender separately. Visitors to this area view all of the dimensions together as a concept of inclusivity and access as revealed in the factor analysis. This concept pertains to who should be allowed within the park boundaries.

The Interaction concept includes the variables originally in the unity/equality and social and physical well-being dimensions. Although the variables were originally introduced in separate dimensions, after review of the way the variables eventually factored, it is not surprising that they grouped together. The variables all have an underlying theme of diversity and interaction. In this way, the Inclusiveness concept might be viewed as who is allowed in; the second concept of Interaction might reveal what actually happens once all of these people are within the park boundary. For instance, even though the park is a place for all people, do you really want to see everybody? Perhaps this concept is also dependent on the park setting. In the Birds of Prey National Conservation Area, seeing other people might be considered undesirable. However, a neighborhood park in an urban setting might be considered a desirable place for interacting with diverse peoples.

The Quality of Environment concept can be considered unique, in that it is the only dimension that did exactly as predicted. The original dimension of health contained the exact variables of this concept. The quality of the environment is important for all

recreational places, especially somewhere like Birds of Prey National Conservation Area. This protected area is unique in that the Bureau of Land Management manages it. Management by the BLM is very relaxed compared to management of protected areas by an agency like the National Park Service (Muhn and Stuart, 1988; Foresta, 1984). A Wilderness area or National Park setting would have stricter guidelines in place regarding the quality of the environment. Birds of Prey should, however, have a conservation focus.

Visitors to Birds of Prey are mainly from the surrounding towns and, therefore, might have a great concern for the quality of the environment because they live so close to the area. Because of the few restrictions and the myriad activities that are conducted within the boundaries, the quality inside affects the quality in their communities. The environment within Birds of Prey might affect the environment outside of Birds of Prey. It is not surprising that this concept did exactly as predicted.

Is social equity a missing part of outdoor recreation values study?

Birds of Prey Compared with Yellowstone National Park

An important element to consider before proceeding with this question is what the differences are between Birds of Prey National Conservation Area and Yellowstone National Park. Yellowstone National Park is the study site for the research conducted in the Borrie et al. (2002) values study. In that study, the values variables factored into four dimensions. These four concepts were labeled in that study as: natural values, symbolic and historic values, recreation and tourism resource values, and personal growth and development values. The factor analysis of the overall values scale by Borrie et al. (2002) when used at Birds of Prey revealed other factors. In this analysis, only three

concepts emerged. These three concepts were best labeled: natural and wildness values, personal growth and tourism values, and recreation values.

The difference in factor amount and meanings is very relevant to the designation between each of these protected areas. Yellowstone National Park, our nation's oldest national park, had a high amount of variance explained on the factor pertaining to symbolic and historic values. Naturalness also contributed to a high amount of variance explained. This follows naturally from the significance of Yellowstone to our country's history and pride. Yellowstone is one of the "crown jewels" of America. Birds of Prey National Conservation Area, on the other hand, was just set aside for protection in 1993. The area was designated for protection because of the large numbers of raptors that come to nest there every spring. Birds of Prey National Conservation Area can be considered a Mecca for bird watching. Just as historic and symbolic values emerged for Yellowstone, Birds of Prey had a very high variance explained by variables pertaining to naturalness and wildness. Symbolism and historic values did not emerge as a distinct dimension for this place. The differences in value types between Birds of Prey and Yellowstone are logical and should not be expected to parallel each other. Each is unique and distinct.

The difference in the factor numbers and concepts between the two locations reveals the versatility and usefulness of the Borrie et al. (2002) values scale. This scale was very useful in determining these differences in the overall value concepts between the two locations.

Social Equity and Park Values Study

The success of the second proposition is somewhat dependent on the location for this study. As previously mentioned, Birds of Prey National Conservation Area is not

entirely comparable to a National Park. The people, as revealed by demographic information, have relatively low income and education levels. Birds of Prey is also very near the urban city of Boise, ID. The visitors to Birds of Prey are mostly from the area in and around Boise. The demographic variables of the visitors to this place make studying social equity in parks and recreation very relevant here. Some of the values variables contained in the social equity scale might pertain directly to these visitors.

Given the above, it is no surprise that the Borrie et al. (2002) scale was improved by a social equity in parks and recreation dimension. The overall values scale that they created was used in a National Park where the demographics of the visitors are very different. Social equity was probably an overlooked dimension in the construction of that particular scale. However, social equity in parks and recreation should relate to all protected areas, urban or otherwise. The original overall scale was very useful and valuable in evaluating several relevant dimensions of values, but would have been even stronger with the inclusion of a social equity dimension.

Perhaps another way to make the overall values scale (Borrie et al., 2002) stronger is to tighten up the scale by reducing the number of variables in each factor. Throughout at least two studies where a factor analysis of this overall values scale occurred, there were several variables that did not load highly on any of the factors. Consulting literature on multivariate statistics to determine the number of variables in each factor from the factor loadings might aid in this reduction. This was performed on the social equity scale in this study. However, it may be best to leave this scale broad until even more testing and experimentation is done at different locations.

The unidimensionality of the both the social equity scale and the Borrie et al. (2002) may still be in question. The reduction of both the 15-item scale and 9-item scale for social equity was done because the framework of this study supported that the three different concepts all represented social equity in parks and recreation. This study was exploratory and the reduction was made, comfortably, with that in mind. The Borrie et al. (2002) scale might have unidimensionality issues as well. More analysis and testing of both of these scales might help to reach an agreed upon consensus relating to unidimensionality and a more complete park values scale.

Do certain demographic variables relate to a respondents social equity value orientation?

The answer to this question is, no, not in this study. In the analysis of the third proposition, very little variance was explained by the independent variables for any of the factors. Perhaps this is because no relationship exists between any of the demographic variables and the factors in this study. This may also be because a large part of the variance may rely on some unknown variable, such as cultural or ethnic identity, that was either not evaluated in this study or not included in the regression analyses.

This question might also be better answered by using other demographic variables or a larger sample size in order to evaluate a respondent's value orientation. Another possible explanation for this outcome is that the values identified with social equity in parks and recreation transcends the demographics of the respondents in this study. This would be consistent with the values, environmental justice, and social justice literature that imply that a concept like social equity in parks and recreation is important and

considered by all people regardless of their race, class, gender, or other demographic characteristics.

Contribution of Social Equity in Parks and Recreation

The previous sections in this chapter discussed the contribution of this research to a specific recreational values study. This section will look at the broader contribution of social equity in parks and recreation to social justice and environmental justice as they relate to outdoor recreation. The contribution and importance of social equity in parks and recreation to previous social and environmental justice work and literature in this field is relevant. This research was very exploratory and no other research has been performed in the same manner on this topic, much less in an outdoor recreational study.

The second chapter in this thesis discussed the conceptual framework from the broad topics of social justice and environmental justice. The literature contained in these topics has important implications for the theoretical framework of this research. The authors of this literature did an excellent job of laying out the problems and inadequacies within the topics of both social and environmental justice. From these authors, this study sought to build on their foundations and apply their knowledge to a scientific study measuring values related to social equity in parks and recreation.

One of the intentions of this research was to explore and expand the literature discussed in the social justice section in Chapter Two. Issues in recreation like crowding or degradation have overshadowed some of the literature on social justice and recreation. Although these issues are important, a consideration of all the factors of outdoor recreation are needed, especially issues that address topics like social justice.

The contribution of this work to social justice in the establishment of public parks and recreation is important as well for its ties to public recreation at all levels of management. Whether a park is managed at a municipal, state, or national level, the concept of social equity in parks and recreation still applies. The versatility of the concept is important also for both urban settings and wildlands. This relates back to discussions by Kraus (2001) and Rosenzweig (1983) who both noted the importance of leisure and recreation at all levels for marginalized individuals. The contribution of a study like this one is important for exploring this issue at more than just an urban recreational setting.

This research is also very relevant to literature that relates to gender equity and equality. This study supports Wearing (1998) who discussed that women and recreation are very different from men in recreation. Women seek recreation that will be interactive and enhance their abilities. Women also prefer more safe challenges and places that are welcoming to all people. The results of this study are especially related to Wearing's (1998) discussion because of her postulations about gender and recreation.

The struggles of the people involved in gaining environmental justice are much more recent. Struggles such as air quality and water pollution may trump the influence of this study. On the other hand, this work relates to environmental justice by trying to broaden and integrate this topic into other areas of concern for inequality.

Floyd and Johnson (2002) recognize the need to research environmental justice in outdoor recreation. These authors layout several research suggestions for future studies of environmental justice in outdoor recreation. This article was one of the main

inspirations for the research contained in this study. In this way, this research can be seen as a logical extension of the work from these authors.

Management Implications

The first chapter in this thesis mentioned the need for social equity in parks and recreation as it applies to park and recreation management. It highlights the need to represent and account for all segments of society no matter their socioeconomic, cultural, or other demographic status. The values of both marginalized and more mainstream individuals should be at the core of any management decision. The purpose of this study, as mentioned in chapter one, is also to understand values as they relate to decisions that both management and visitors make about recreation. Conflicting values between both management and visitor, and visitor and visitor, should be prepared for by a management agency. Better planning and decision-making will be aided by the inclusion of social equity in parks and recreation.

Though this study sought to broaden the awareness of social equity in parks and recreation for consideration in future recreational studies, it was conducted in an area where this concept was very relevant to the visitors. Birds of Prey National Conservation Area is a place where, for the most part, people of all backgrounds come to recreate. I observed many different types of people recreating within the boundaries during the duration of this study. Lower income individuals were found recreating very near individuals with higher incomes.

Most visitors were pleased with the current access regulations within the area of Birds of Prey. Because it is very near Boise, ID, Birds of Prey should remain a place that

is free of charge because of its relationship to the area as more of a neighborhood park setting. However, there are plans to make at least one campground, Cove at C.J. Strike reservoir, a pay site. This area went through very recent upgrades and renovations and there were some visitors who were already unhappy with the new changes. Many visitors, in fact, responded on the survey that they preferred the less developed camping areas at this location. Making the campground a pay area would severely decrease the already limited use the campground receives. A pay area would also exclude those visitors with a low socio-economic status. More evaluation by the BLM should occur before implementing such changes. This evaluation would benefit from a socially equitable approach that included visitors in the evaluation.

Visitors to the Birds of Prey National Conservation Area are very fortunate that so many different types of recreational activities are allowed. The multiple-use philosophy adopted by the Bureau of Land Management allows for both of the Inclusiveness and Interaction concepts discussed in this study. However, the last concept of social equity relating to the Quality of Environment is something that should be addressed by the management at Birds of Prey. The quality of the environment could use improvements. The area is not altogether unhealthy, but needs a certain amount of "cleaning up." The area often contains abandoned trash items and other debris. There are few public trashcans and when there are, they are not regularly picked up. The surrounding community often uses the area as a dumpsite. Perhaps tighter regulations regarding the quality of the environment at Birds of Prey might aid in the prevention of future occurrences like littering and dumping.

By considering social equity in parks and recreation, a management agency will better represent the needs for all of its visitors. This will increase the spectrum of opportunities for each and every segment of the population. Different people have different values and management should, therefore, prepare for all the different types of people. By recognizing this, management agencies can better plan for development within a protected area boundary including any facilities needed and more useful interpretation and education programs. Above all, social equity in parks and recreation will help management agencies find a common ground for all of its actions.

Management agencies, through recognition of social equity values, will also be more sensitive to Inclusiveness, Interaction, and Quality of the Environment. This will aid in any attempt to meet the needs of different visitors seeking different goals from their experience. Management should also understand, through social equity, that certain demographic aspects may limit a person's opportunity to experience other places. In this way, management can play a big role in helping the visitor make the most of their experience each and every visit.

Future Research Needs

Because this research is exploratory in nature, the need for future research is clear. If social equity in parks and recreation is to be ubiquitous in modern outdoor recreation, it should be considered at each and every recreational venue in the United States. The first future research suggestions deal with the further exploration of the research presented in this study. The remaining suggestions are of a broader nature.

As mentioned earlier in this chapter, a research need would be to further test the validity and reliability of the Borrie et al. (2002) scale. This scale should be used at more

locations. Along those lines, more testing should be done of the nine-item resultant scale in proposition one and the new overall scale with the three social equity variables in proposition two. Further testing of these will only help to add validity to this study. Also, what would the new scale look like if tested again at Yellowstone? Would the same factors hold?

Further investigation of any other dimensions pertaining to social equity in parks and recreation would be helpful as well. For instance, what about age or health issues? Those might already be encapsulated in the inclusiveness factor, but further evaluation would test validity and might help to explain more variance for this dimension.

Besides a values study, how else can we integrate social equity in parks and recreation or a sub-set of social equity into other outdoor recreational studies? This would increase overall inclusiveness and give those people who do not have the means to participate easily in recreational activities a better chance to experience naturalness and wildness. This could be integrated into something like a gender study or a study on regional exclusion, both of which have limited prior research.

Concluding Thoughts

This thesis has evolved from a simple study comparing the overall values of recreationists to a study of values at different recreational locations. This study, concerning social equity in parks and recreation, is about integrating the values of individuals into other areas of concern for outdoor recreation. The integration and addition of the social equity component into the Borrie et al. (2002) study should only be seen as a starting point for social equity in parks and recreation research. The results of

this study should also be integrated into values literature beyond the Borrie et al. (2002) study. Researchers should interpret and integrate the results of this study into their own work in order to be more comprehensive and inclusive.

Social equity in parks and recreation will continue to be an important research implication in the coming years. Traditional, one-sided ways of thinking will continue to be challenged by this research and by the emerging environmental justice voices coming out of urban centers. Now is the time to recognize and address inequality in our institutions. There must be a louder, better voice for those who have none. Social equity in parks and recreation is a start to making those changes and preparing for the future.

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Appendix I- Survey

Birds of Prey National Conservation Area

Visitor Survey

1. **Where do you live?**
   Zip code, if US resident _____ Country, if International _____
   Idaho – 71.8% Out of State – 23.9% Other - 1.4% Missing – 2.8%
2. **What is your gender?**
   [ ] Male – *51.2%* [ ] Female – *47.9%* *Missing – 0.9%*

3. **In what year were you born?** _____ *Mean = 1960.03 Standard dev = 14.82*

4. **What is the highest level of education you have completed so far?** *(Circle one Number)*

   1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19+
   Elementary High School After High School
   Mean = 13.97 Standard dev = 2.69

5. **What kind of work do you do?** _____

6. **Which of the following best describes the community in which you currently live?**
   [ ] Farm or ranch *5.7%*
   [ ] Rural or small town *21%* (under 1,000 population)
   [ ] Town *17.6%* (under 10,000 population)
   [ ] Small city *27.1%* (under 75,000 population)
   [ ] Medium city *21%* (under 1 million population)
   [ ] Large city, metropolitan area *7.6%* (over 1 million population)

7. **What is your approximate total annual household income?**
   [ ] Less than $ 5,000 *3.5%*
   [ ] $ 5,000 to $ 9,999 *3.5%*
   [ ] $10,000 to $ 14,999 *2%*
   [ ] $ 15,000 to $ 19,999 *6.1%*
   [ ] $ 20,000 to $ 24,999 *8.1%*
   [ ] $ 25,000 to $ 34,999 *19.2%*
   [ ] $ 35,000 to $ 49,999 *17.7%*
   [ ] $ 50,000 to $ 74,999 *21.7%*
   [ ] $ 75,000 to $ 100,000 *9.6%*
   [ ] Over $ 100,000 *8.6%*

8. **How many members of your group are there, including yourself?** *Mean= 5.69 Standard dev=9.05*

9. **Which of the following best describes the group you are with? (please check all that apply)**
   [ ] Family *60.5%*
   [ ] Friends *12.8%*
   [ ] Family and friends *24.1%*
   [ ] Organized group *2.1%*
   [ ] Commercial tour group *0%*
   [ ] School group *0%*
   [ ] Other *.5%* _____ please describe

10. **What will be the length of this visit to Birds of Prey?**
    [ ] Today only *65.2%*
    [ ] Overnight *7.1%*
    [ ] 2 nights *11.4%*
    [ ] 3 nights *9.5%*
    [ ] 4 – 6 nights *4.8%*
    [ ] 7 – 13 nights *1%*
    [ ] 14 nights or more *1%*

11. **Approximately how long has it been since your last visit to Birds of Prey?**
    [ ] First visit *30.9%*
    [ ] 6 months or less *36.7%*
    [ ] 7 – 12 months *13.5%*
    [ ] More than 12 months, less than 2 years *8.7%*
    [ ] More than 2 years, less than 5 years *5.8%*
    [ ] More than 5 years, less than 10 years *1.4%*
    [ ] 10 years or more *2.9%*

12. **Including this visit, how many times have you been to Birds of Prey?**

[ ] 1 [ ] 5 – 7
[ ] 2 [ ] 8 – 10
[ ] 3 [ ] More than 10 times
[ ] 4 *Mean=4.07 Stand. Dev=2.61*

13. **How did you first become aware of Birds of Prey?**

[ ] Signs *16.5%* [ ] Broadcast media (radio, television) *1.2%*
[ ] Road maps *1.8%* [ ] Information from Idaho Travel Guide or tourist information *1.2%*
[ ] Guide books *5.5%* [ ] Word of mouth (friends, family, association) *67.1%*
[ ] The Internet *1.8%* [ ] Information from hotels/motels/campgrounds, etc. 0%
[ ] Travel agency *0%* [ ] Other *2.4%* _____
[ ] Newspaper feature *2.4%*

14. **Check any activities you will participate in at Birds of Prey.** *See page 44*

[ ] Bird watching [ ] Viewing cultural/historical sites
[ ] Viewing other wildlife [ ] Fishing
[ ] Sightseeing [ ] Swimming
[ ] Walking/Hiking [ ] Photography
[ ] Nature Study [ ] Shooting
[ ] Camping [ ] Hunting
[ ] Picnicking [ ] Viewing Wildflowers
[ ] Bicycling [ ] Jet Skiing
[ ] Horseback Riding [ ] Jogging
[ ] Off road 4x4 driving [ ] Off road motorcycling
[ ] Boating [ ] River Floating
[ ] Snowmobiling [ ] Backpacking
[ ] Other_____

15. **Do you plan to visit Birds of Prey again?**

[ ] Yes *84.7%*
[ ] No *1.4%*
[ ] Maybe *13.9%*

16. **During this visit, did you feel crowded?** *(Circle one number.) Mean=1.84 Stand. Dev=1.65*

1	2	3	4	5	6	7	8	9
Not at all Crowded		Slightly Crowded			Moderately Crowded			Extremely Crowded

17a. **Are there any areas in the Birds of Prey that you no longer visit because of issues listed in 17b?**

❑No *98.9%*
❑Yes (Where?) 1.1%

17b. **If yes, what are the reasons you no longer visit?** *(Check all that apply.)*

❑Crowding *50%* ❑Conflicts with other users *25%*
❑Resource degradation *25%* ❑Overuse 0%
❑Other 0% _____

18. We are interested in your opinions about the ***social*** importance of Birds of Prey National Conservation Area. Please indicate for each of the following, how important they are to the overall social value of Birds of Prey. (1 being strongly disagree, and 8 being strongly agree):

I believe Birds of Prey National Conservation Area is particularly important as:	Strongly disagree • • • • • • • • Strongly agree	Don't know
a place that belongs to everyone	1 2 3 4 5 6 7 8	X
a place with little trash and pollution	1 2 3 4 5 6 7 8	X
a place that encourages self-enhancement	1 2 3 4 5 6 7 8	X
a place for both men and women to enjoy	1 2 3 4 5 6 7 8	X
a place for people of all income levels	1 2 3 4 5 6 7 8	X
a place to refresh the body	1 2 3 4 5 6 7 8	X
a place of social equality	1 2 3 4 5 6 7 8	X
a place to experience society's ethnic diversity	1 2 3 4 5 6 7 8	X
a place to move freely	1 2 3 4 5 6 7 8	X
a place for people of all races	1 2 3 4 5 6 7 8	X
a place welcoming to women	1 2 3 4 5 6 7 8	X
a place for people of all classes	1 2 3 4 5 6 7 8	X
a place to renew the mind	1 2 3 4 5 6 7 8	X
a place to access without paying money	1 2 3 4 5 6 7 8	X
a place free from everyday demands	1 2 3 4 5 6 7 8	X
a place enjoyable for women	1 2 3 4 5 6 7 8	X
a place for people of all cultures	1 2 3 4 5 6 7 8	X
an environmentally healthy place (no toxins, etc.)	1 2 3 4 5 6 7 8	X
a place for interaction with others	1 2 3 4 5 6 7 8	X
a place with unpolluted water	1 2 3 4 5 6 7 8	X
a place to respect the differences of others	1 2 3 4 5 6 7 8	X
a place for all of society to interact	1 2 3 4 5 6 7 8	X
a place separate from both work and home	1 2 3 4 5 6 7 8	X
a place that encourages self-reflection	1 2 3 4 5 6 7 8	X

***SEE APPENDIX II

19. Please rate your satisfaction with the following conditions on the Birds of Prey Conservation Area. *(Circle ONE number for each statement.)*

	Dissatisfied		Neutral		Satisfied	Don't Know
Campsite conditions *Mean=1.29 sd=1.12*	-2	-1	0	1	2	X
Maintenance of facilities *Mean=1.46 sd=.96*	-2	-1	0	1	2	X
Availability of interpretive and educational information *Mean=1.18 sd=1.04*	-2	-1	0	1	2	X
Low amount of development *Mean=1.49 sd=.98*	-2	-1	0	1	2	X
Condition of natural features *Mean=1.62 sd=.89*	-2	-1	0	1	2	X
Behavior of other people *Mean=1.35 sd=.98*	-2	-1	0	1	2	X
Few rules or restrictions *Mean=1.48 sd=.92*	-2	-1	0	1	2	X

20. We are interested in your opinions about the ***overall*** importance of Birds of Prey. Please indicate for each of the following, how important they are to the overall value of Birds of Prey National Conservation Area. (1 being strongly disagree, and 8 being strongly agree):

I believe Birds of Prey National Conservation Area is particularly important as:	Strongly disagree • • • • • • • • Strongly agree								Don't know
a wildlife sanctuary	1	2	3	4	5	6	7	8	X
a place for education about nature	1	2	3	4	5	6	7	8	X
a place to develop my skills and abilities	1	2	3	4	5	6	7	8	X
a protector of threatened and endangered species	1	2	3	4	5	6	7	8	X
a sacred place	1	2	3	4	5	6	7	8	X
an economic resource	1	2	3	4	5	6	7	8	X
a family or individual tradition	1	2	3	4	5	6	7	8	X
a place everyone should see at least once in their lives	1	2	3	4	5	6	7	8	X
a place without most types of commercial development	1	2	3	4	5	6	7	8	X
a display of natural curiosities	1	2	3	4	5	6	7	8	X
a historical resource	1	2	3	4	5	6	7	8	X
a symbol of America's identity	1	2	3	4	5	6	7	8	X
a place for the use and enjoyment of the people	1	2	3	4	5	6	7	8	X
a social place	1	2	3	4	5	6	7	8	X
a site to renew your sense of personal well being	1	2	3	4	5	6	7	8	X
a place of scenic beauty	1	2	3	4	5	6	7	8	X
a place to be free from society and its regulations	1	2	3	4	5	6	7	8	X
a reserve of natural resources for future use	1	2	3	4	5	6	7	8	X
a tourist destination	1	2	3	4	5	6	7	8	X
a place for scientific research and monitoring	1	2	3	4	5	6	7	8	X
a place for recreational activities	1	2	3	4	5	6	7	8	X
a place for wildness	1	2	3	4	5	6	7	8	X
a place for all living things to exist	1	2	3	4	5	6	7	8	X
protection for fish and wildlife habitat	1	2	3	4	5	6	7	8	X

***SEE APPENDIX II

21. **Are there any facilities or services would you prefer to see at this site or in the Birds of Prey?**

Do you have any additional comments or suggestions about any aspect of Birds of Prey?

Appendix II- Values Scales Descriptives

Social Equity Scale

	N	MINIMUM	MAXIMUM	MEAN	STD. DEVIATION
"a place to experience society's ethnic diversity"	186	1	8	5.80	2.43
"a place for interaction with others"	197	1	8	6.12	2.24
"a place for all of society to interact"	190	1	8	6.33	2.20
"a place with little trash and pollution"	204	1	8	6.42	2.07
"a place with unpolluted water"	193	1	8	6.49	2.06
"a place that encourages self-enhancement"	193	1	8	6.50	1.96
"a place of social equality"	195	1	8	6.54	1.96
"a place to respect the differences of others"	194	1	8	6.64	2.01
"a place to refresh the body"	200	1	8	6.67	1.91
"a place that encourages self-reflection"	194	1	8	6.77	1.88
"a place to renew the mind"	201	1	8	6.77	1.84
"a place to access without paying money"	204	1	8	6.79	2.10
"an environmentally healthy place (no toxins, etc.)"	195	1	8	6.90	1.80
"a place enjoyable for women"	194	1	8	6.97	1.89
"a place to move freely"	203	1	8	6.97	1.73
"a place free from everyday demands"	203	1	8	6.97	1.88
"a place welcoming to women"	194	1	8	6.99	1.91
"a place for people of all races"	197	1	8	7.05	1.88
"a place separate from both work and home"	200	1	8	7.07	1.77
"a place for people of all cultures"	200	1	8	7.07	1.88
"a place for people of all classes"	203	1	8	7.17	1.76
"a place for people of all income levels"	209	1	8	7.21	1.73
"a place for both men and women to enjoy"	204	1	8	7.23	1.68
"a place that belongs to everyone"	207	1	8	7.30	1.65
Valid N (listwise)	159				

Overall Scale (Borrie et al, 2002)

	N	MINIMUM	MAXIMUM	MEAN	STD. DEVIATION
"an economic resource"	186	1	8	5.46	2.37
"a sacred place"	186	1	8	5.59	2.44
"a social place"	192	1	8	6.03	2.24
"a place to develop my skills and abilities"	190	1	8	6.05	1.98
"a family or individual tradition"	190	1	8	6.09	2.20
"a tourist destination"	195	1	8	6.18	2.00
"a place to be free from society and its regulations"	197	1	8	6.42	2.11
"a symbol of America's identity"	193	1	8	6.45	2.01
"a site to renew your sense of personal well being"	195	1	8	6.46	2.03
"a place for scientific research and monitoring"	188	1	8	6.47	2.11
"a historical resource"	190	1	8	6.53	1.84
"a reserve of natural resources for future use"	193	1	8	6.72	1.91
"a display of natural curiosities"	192	1	8	6.82	1.68
"a place everyone should see at least once in their lives"	198	1	8	6.83	1.89
"a place for education about nature"	194	1	8	6.86	1.67
"protection for fish and wildlife habitat"	199	1	8	6.86	1.94
"a place for recreational activities"	200	1	8	6.87	1.75
"a protector of threatened and endangered species"	198	1	8	6.92	1.81
"a wildlife sanctuary"	200	1	8	6.96	1.92
"a place for wildness"	199	1	8	6.97	1.78
"a place of scenic beauty"	197	1	8	6.99	1.69
"a place without most types of commercial development"	200	1	8	7.02	1.77
"a place for all living things to exist"	199	1	8	7.03	1.84
"a place for the use and enjoyment of the people"	202	1	8	7.15	1.74
Valid N (listwise)	155				