

A STUDY OF PARK VISITORS' USE OF INTERPRETIVE PROGRAMS
AT LAKE WISSOTA STATE PARK, WI

by

Niorn Srisomyong

A Research Paper

Submitted in Partial Fulfillment of the
Requirements for the
Master of Science Degree
With a Major in

Hospitality and Tourism

Approved: 6 Semester Credits

Christine J. Clements, Ph.D.
Thesis Advisor

Thesis Committee Members:

Robert Davies, Ed.S.

Kenneth S. Parejko, Ph.D.

The Graduate College
University of Wisconsin-Stout
Nov, 2000

**The Graduate College
University of Wisconsin-Stout
Menomonie, WI 54751**

ABSTRACT

(Writer)	Srisomyong (Last Name)	Niorn (First)	(Initial)
<u>A Study of Park Visitors' Use of Interpretive Programs at Lake Wissota State Park, WI</u> (Title)			
Hospitality and Tourism (Graduate Major)	Christine J. Clements, Ph.D. (Research Advisor)	Nov, 2000 (Month/Year)	98 (No.of Pages)
<u>American Psychological Association (APA) Publication Manual</u> (Name of Style Manual Used in this Study)			

The main purpose for the establishment of state parks has been to preserve important features and unique habitats. Additionally, to serve, educate, and fulfill the recreational needs for the public are also aims of the parks. Most of the state parks in Wisconsin, including Lake Wissota State Park (the study area), provide the interpretive programs because these are seen as a tool to protect the natural surroundings and to fulfill visitors' expectations. Interpretive programs provide park visitors opportunities to experience the geological, biological, and historical heritage through a variety of educational and recreational programs in the parks.

This study determined the park visitors with the use of interpretive programs at Lake Wissota State Park, which is situated on the shores of 6,300-acre Lake Wissota in Chippewa Falls, Wisconsin, USA. The specific objectives of the study were: 1.) To study the demographic characteristics of park visitors both those who attended and those who did not attend the interpretive programs; 2.) To identify the reasons people attend the

interpretive programs; 3.) To determine the use pattern of visitors who attended and those who did not attend the interpretive programs; 4.) To assess the park visitors' satisfaction level with the interpretive programs; 5.) To identify the preferred interpretive themes, preferred time of day, and preferred days of week for participating in the interpretive programs; 6.) To identify the obstacles that prevent people from attending the interpretive programs.

Questionnaires were used as the primary data collection instrument for this study. The questionnaires were developed based on previous surveys of Clements and Ness (1995) and the Division of Parks and Recreation, Minnesota Department of Natural Resources (1995). Two kinds of questionnaires, one for park visitors who attended and the other for park visitors who did not attend the interpretive programs (park programs with the guidance of a naturalist or interpreter), were used to address the objectives of the study. The subjects were park visitors who visited Lake Wissota State Park in Chippewa Falls, Wisconsin on Saturday and Sunday during June 10 and July 15, 2000. Adult groups or group leaders were sampled rather than individual park visitors. The locations for distributing the surveys were the family campground, beach area, and nature center. The total number of respondents was 215, which included 75 respondents who attended the interpretive programs and 140 respondents who did not attend the interpretive programs.

The findings of this study were intended to 1.) Improve better interpretive programs to meet park visitors' needs; 2.) Encourage more follow-up procedure for the interpretive programs at Lake Wissota State Park; 3.) Motivate more research in this field since there is a limit of the resources.

ACKNOWLEDGEMENTS

To my thesis advisor and the thesis committees, for their guidance and patience
To Allen J. Middendorp, park superintendent, Lake Wissota State Park, for his support of my study
To Christine Ness, for her guidance of SPSS
To all Hospitality and Tourism faculty members, for their valuable knowledge and recommendations to me during my 2 years at the department of Hospitality and Tourism
To my family, for their encouragement
And to my all dear friends for their loving relationships

TABLE OF CONTENTS

	Page
ABSTRACT.....	i
ACKNOWLEDGEMENTS.....	iii
TABLE OF CONTENTS.....	iv
LIST OF TABLES.....	vi
LIST OF FIGURES.....	vii
CHAPTER ONE: INTRODUCTION	
Introduction.....	1
Study Area.....	6
Statement of Problem.....	8
Definition of Terms.....	10
CHAPTER TWO: LITERATURE REVIEW	
Introduction.....	11
The Definition of Interpretation.....	12
Interpretive Programs.....	13
Benefits of Interpretation.....	18
Obstacles for Non-Participants.....	23
What to Interpret.....	26
The Idea for Improving the Effective and Ideal Interpretation.....	29
Conclusion.....	31
CHAPTER THREE: METHODOLOGY	
Sample Selection.....	33
Instrument.....	34
Survey Administration.....	35
Pilot Test.....	38
Data Analysis.....	38
Limitations of Study.....	39
CHAPTER FOUR: RESULTS AND DATA ANALYSIS	
Respondent Profile.....	42
Reasons that Respondents Attend the Interpretive Program.....	49
Use Patterns.....	50
Level of Satisfaction with the Interpretive Program.....	55
Preferences in Interpretive Themes/Topics, Time of Day,.....	57
and Day of Week for Participating in the Interpretive Program	
Obstacles that Prevent People from Attending the Interpretive Program.....	61
Written Comments.....	62

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

Restatement of Problem and Research Objectives.....	65
Summary of Methodology.....	66
Discussion on Significant Findings	
Research Objective 1.....	66
Research Objective 2.....	68
Research Objective 3.....	69
Research Objective 4.....	70
Research Objective 5.....	71
Research Objective 6.....	73
Conclusions.....	74
Recommendations for Lake Wissota State Park.....	76
Recommendations for Future Research.....	77

REFERENCES.....	79
-----------------	----

APPENDICES

A. Questionnaire for Visitors Who Attended the Interpretive Programs.....	84
B. Questionnaire for Visitors Who Did Not Attend the Interpretive Programs..	87
C. Table of Sampling Schedule.....	90
D. Written Comments.....	92

LIST OF TABLES

Table	Page
1 Park Visitor Who Attended and Did Not Attend the Interpretive Program.....	42
2 Gender of Respondents.....	43
3 Age Category of Respondents.....	44
4 Geographical Residence of Respondents.....	45
5 Geographical Residence of Visitors to the Area.....	46
6 Level of Education of Respondents.....	47
7 Ethnicity of Respondents.....	48
8 Reasons that Respondents Attend the Interpretive Program.....	49
9 Engaged Activities at Lake Wissota State Park.....	51
10 Staying Overnight or Visiting by Day.....	52
11 Size of Party.....	53
12 Attended Park Activities.....	54
13 First Time User or Repeat User.....	55
14 Level of Satisfaction with the Interpretive Programs.....	56
15 Preferred Program Topics.....	57
16 Preferred Time of Day to Attend.....	59
17 Preferred Day of Week to Attend.....	60
18 Obstacles that Prevent People from Attending the Interpretive Programs.....	61

LIST OF FIGURES

Table		Page
1	Number of Visitors to Wisconsin State Park System.....	3
2	Location of Lake Wissota State Park.....	7
3	Map of Lake Wissota State Park (location of distribution the survey).....	36
4	Campground Map of Lake Wissota State Park.....	37
5	Map of Area of Wisconsin.....	46

CHAPTER 1

INTRODUCTION

Pigram and Ding (1999) acknowledged that tourism today is a mass phenomenon, the largest movement of people in human history. Tourism is the world's largest industry. Buckley (1999) also stated that the growth of tourism has been rapid and is significant in economic terms. Currently, tourism shows a shift in tourist preferences. Increasing numbers of tourists are moving away from mass tourism toward more specialized forms of tourism, especially ecotourism or nature tourism. Lucas (1988) noted that increased public awareness toward environmental issues has contributed. This form of tourism based on the enjoyment of natural areas and the observation of nature is flourishing.

Due to Whelan's definition (1991), in nature tourism people travel to undisturbed and uncontaminated areas to study, admire, and enjoy the scenery, wild plants, animals and cultural advantages. Whelan also stated that nature tourism is probably the fastest growing sector in the tourism industry, accounting for 10% of the market in 1989 and increasing at a rate of 30% a year. Parks and forests have always been preferred destinations for those tourists who seek closeness with nature.

Since nature tourism has prospered, parks and forests are the most popular and heavily visited tourist destinations around the world. Each year millions of domestic and international tourists visit parks and forests for various reasons. According to the National Park Service's report, the number of park visitors in the 378 units of national parks in the United States was 275 million visitors in 1998. The growth in popularity of the national parks is overwhelming (The National Park Service [NPS], 2000, [http](http://)).

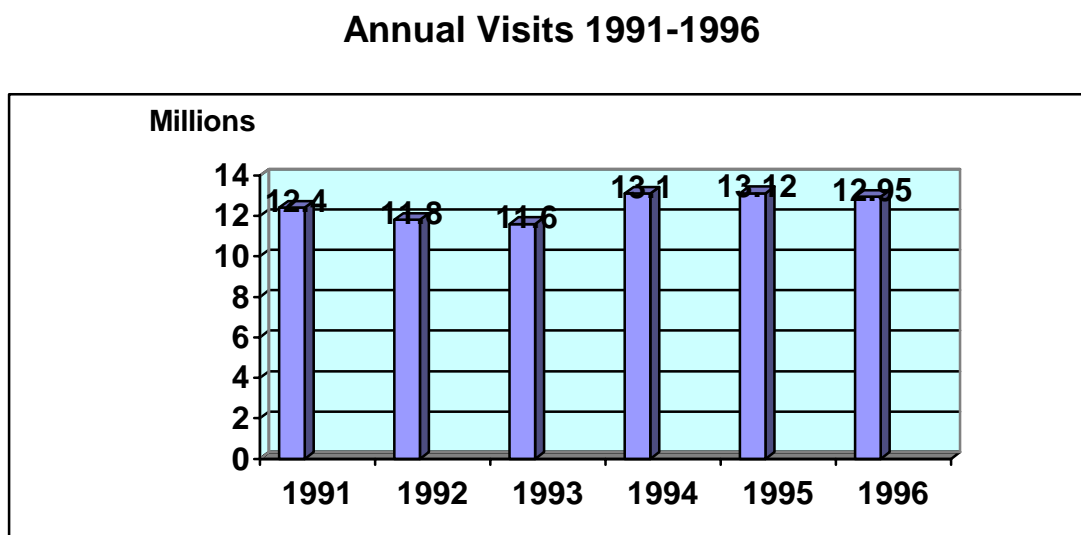
The continued growth in park visits gives various benefits to parks. The economic benefits of tourism, for example, revenues earned from tourist visits or jobs created through the multiplier effect of tourism; have been well recognized by the general public. Due to the revenue from tourism, the facilities and infrastructure within the parks and forests and the adjacent areas have been developed. The continued growth and the development of communities adjacent to parks have impacts on parks as well. Thus maintaining a balance between growth and preservation of the natural environment within parks should be considered. Interpretive programs provided by the parks are one way to increase the awareness of natural environment and may help protect and mitigate negative impacts.

Parks can play an important role in contributing environmental education for the local and regional community. Pitt (1988) believed that *“no learning experience is more stimulating and lasting than first hand experience obtained by studying natural processes where they occur”* (p.46). Parks offer the natural settings in which phenomena such as habitats, ranges and life cycles of plants and animals can be observed. Thus, interpretation is a service and a communication that links, inspires, explains, and entertains people. It helps people develop greater sensitivity to their surroundings (Sharpe, as cited in Douglas, Ted, and Larry, 1995).

The main purpose for the establishment of state parks has been to preserve important natural features and unique habitats. In addition, to serve, educate, and fulfill recreational needs for people are also the crucial aims of the parks. Wisconsin, a state with an area of 35,000,000 acres, has beautiful and refreshing scenery. Wisconsin, recognizing its diversity and natural resources, began efforts to establish a state park in

1878 when the state was only thirty years old (Davenport, 1989). Wisconsin state parks and forests today has 55 state parks, 10 state forests, 25 state trails, and four state recreation areas with 500,000 acres serving a variety of purposes. According to the Bureau of Parks and Recreation's annual report 1996-1997 (Bureau of Parks and Recreation, 2000, http), recorded visits are 12,949,679 and the number of visitors is increasing every year (Figure 1). This analysis indicates that people are changing their travel behavior and the demands on state parks seem to be increasing. As a result, to protect the natural surroundings and to fulfill visitors' expectations, interpretive programs were introduced by the Wisconsin Department of Natural Resources to educate visitors.

Figure 1. Number of visitors to Wisconsin State Park System



Source: Bureau of Parks and Recreation's annual report (1996-1997)

Interpretive programs were initiated in Wisconsin state parks and forests in 1963. The Bureau of Parks and Recreation defines interpretation as a significant tool for the

parks to use to support visitors' awareness and knowledge of Wisconsin's natural surroundings, and to encourage visitors to participate in conserving and managing the wise use of these natural resources (Bureau of Parks and Recreation, 2000, <http>). Various means are used to achieve these goals including annual interpretive themes, guided hikes, special programs and events, publications, exhibits, and school programs. Park visitors can enjoy themselves while learning valuable lessons about natural resources. Clearly, the interpretive programs provide park visitors opportunities to experience the geological, biological, and historical heritage through a variety of educational and recreational programs in the parks.

The elements of the interpretive programs in Wisconsin state parks and forests include personal services and non-personal services. The following services are the activities provided by Wisconsin State Parks and Forests:

Personal Services: are those services that directly employ Department employees or utilize volunteers to carry out the programs (Wisconsin Department of Natural Resources [WIDNR], 1995)

- Guided nature hikes: Naturalists present specific themes while providing an opportunity for participants to interact with the natural settings.
- Evening programs: Naturalists present activities during dusk. The activities may be slides, films, use of props, or campfire programs. Participants have an opportunity to share with and elaborate their ideas to the others.
- Night hikes: Participants hike with a naturalist during nighttime to explore the wilderness area. The specific themes provided for participants are usually night wildlife.

- Junior Ranger/Wisconsin Explorer programs: Since 1985, Wisconsin state parks and forests have offered the junior ranger and Wisconsin explorer programs with booklets. These programs, designed for children in grades K-6, encourage family interaction while learning about natural resources.
- Teacher study guides: Naturalists or interpreters are available to assist teachers on field trips to some parks and forests. Other parks and forests provide teacher study guides to help teachers plan their own educational activities in the parks and forests. A teacher study guide is designed to provide all information teachers need for a field trip.

(Source: WI DNR, 1995)

Non-personal services: are other types of interpretive information made available to visitors where direct staff contact is not available (WI DNR, 1995)

- Self-guided nature trails: Interpretive labels and descriptive illustrations are used to communicate messages along the trails. This type of trail is most useful when parks and forests receive many visitors but do not have enough naturalists available.
- Nature centers/Interpretive centers: These interpretive centers interpret the natural history of the park and surroundings using displays and exhibits. The display and exhibit areas describe natural features and historical features of the parks. They also describe the important and unique characteristics of the parks. (However, if the park staff is available at a nature center, it is considered as personal services.)
- Wayside exhibits: Large interpretive panels are located at significant sites. The wayside exhibits provide unique features and themes.

- Audio/Visual media: Slides, movies, and VCR programs are available for park staff to use in both personal and non-personal services.

(Source: WI DNR, 1995)

Study Area

Lake Wissota State Park is situated on the shores of 6,300-acre Lake Wissota in Chippewa Falls, Wisconsin, USA (Figure 2). Lake Wissota, created in 1918 after serving as farmland until 1917, is a man-made lake rebuilding from the Wisconsin-Minnesota Power and Light Company building a dam on the Chippewa River (Davenport, 1989). With the purpose to create interest, understanding, respect and a sense of responsibility toward natural surroundings, interpretive programs at Lake Wissota State Park include personal services and non-personal services. Personal services at this park include interpretive hikes/programs, evening programs, the Junior Ranger program, and other programs (group tours, vehicle tours, and all other nontraditional interpretive programs). Non-personal services include labeled interpretive trails, wayside exhibits, and an interpretive center.

Figure 2. Location of Lake Wissota State Park





Statement of Problem

Interpretive programs are the tools used by park managers and naturalists to help park visitors gain experience in natural resources while enjoying the varied activities in the parks. According to one of the objectives of the interpretive programs of the Wisconsin state parks and forests, “to provide visitors high quality interpretation of the natural and cultural history including environmental education” (WI DNR, 1995), the improvement of activities to fit park visitors’ needs is required. To know visitors’ needs and satisfaction, a study of park visitors who do or do not participate in interpretive

programs is a means to achieve that goal. The park manager and naturalists work together to create the activities for park visitors. However park manager and naturalist have never studied the park visitors' use of interpretive programs. Thus, the goal of this research was to develop better interpretive programs that fit park visitors' needs. The following were the objectives of this study:

1. To study the demographic characteristics of park visitors both those who attended and those who did not attend the interpretive programs.
2. To identify the reasons that people attend the interpretive programs
3. To determine the use patterns of park visitors both those who attended and those who did not attend the interpretive programs.
4. To assess the park visitors' satisfaction level with the interpretive programs
5. To identify the preferred interpretive themes, preferred time of day, and preferred days of week for participating in the interpretive programs.
6. To identify the obstacles that prevent people from attending the interpretive programs.

It is noted that the interpretive programs or naturalist programs for this study were only the personal services. That means the researcher studied only the interpretive programs with the guidance of naturalists or interpreters. The non-personal services were not included in this study.

Definition of terms

For Clarity of understanding, the following terms need to be defined.

- Naturalist program/Park program are interpretive programs.
- Personal services are those services that directly employ Department employees or utilize volunteers to carry out the programs (WI DNR, 1995).
- Non-personal services are other types of interpretive information made available to visitors where direct staff contact is not available (WI DNR, 1995).

- Interpretive themes are statements which describe the park resources or events for which the park was established. They are generally derived from enabling legislation or master plans (WI DNR, 1995).
- Interpreters/Naturalists do their jobs of enrichment and education by cultivating people's minds. They help transport imaginations and lead clients to see many species of life (Douglas, Ted, and Larry, 1995).
- Wonder walk bags is one kind of interpretive program at Lake Wissota State Park. This program is designed to help adults and children share their wonder for the natural world through reading and activities. There are five different bags to choose from and all of them are packed with adventure for the whole family (Lake Wissota State Park, 1999).

CHAPTER 2

LITERATURE REVIEW

Introduction

To pursue a study of park visitors' use of interpretive programs in Lake Wissota State Park, a review of literature covered the following topics:

First was to define the interpretation and environmental or natural interpretation.

Second was to describe the interpretive programs in general, the interpretive programs at Wisconsin state parks, and the interpretive programs at Lake Wissota State Park (study area) specifically.

Third, this part of the literature review focused on the benefits of interpretation. Moreover, the benefits of outdoor recreation discussed by the Wisconsin Department of Natural Resources were noted in this literature as well.

Fourth purported to identify the obstacles for non-participants. However this literature review is not directly involved in interpretive programs. This part came from the previous study of obstacles in a previous study of leisure and recreation.

Fifth, the content was what to interpret to the park visitors, i.e. what kind and type of interpretive themes and topics are appropriate for them.

Lastly, the review presented the ideas for improving the effective interpretation.

Prior to the 1980's little was written about the study of interpretation and interpretive programs at the parks and forests, so the research resulted in a limited number of resources on this subject. For this reason, the partial literature review was not directly relevant to the field of interpretive activities. This suggests the need to study more and in depth in the future.

The definition of interpretation

“Interpretation, as a communications process, has been used in many different venues throughout this century.... Nevertheless, the general perception seems to have focused on interpretation in the public sector, particularly in outdoor recreation/natural resource settings” (Vander & Christensen, 1995, p.473)

It seems that the most widely adopted definition of interpretation came from Tilden (1967). He defined that interpretation is an educational activity that purposes to uncover meanings and relationships by the use of primary objects, firsthand experience, and by picture media, rather than convey facts of information. Tilden also suggested six bases that would support the goal of interpretation:

- 1.) Any interpretation that does not somehow relate to what is being described to something within the personality or experience of the visitor will be useless.
- 2.) Interpretation is not entirely informative. Information is only a part of interpretation. Interpretation is revelation based on information.
- 3.) Interpretation is a combination of many arts.
- 4.) The main aim of interpretation is neither instruction nor direction, but provocation and motivation.
- 5.) Interpretation should present an entire thing rather than a partial thing.
- 6.) Interpretation for children should be a separate program that can specifically be shown to children.

Edward also emphasized that the purpose of interpretation is to open the minds of people so they can accept what the world is all about (as cited in Douglas et al., 1995).

Another meaning of interpretation by Sharpe defined interpretation as a communication

that attempts to inspire, interpret, and entertain. It helps people improve responsiveness to their environment (as cited in Douglas et al., 1995). Lastly, from the definition of Anderson and Low, interpretation is a program and an activity that attempts to make people understand the history and significance of events and objects around that place (as cited in Douglas et al., 1995). However, this study will focus on environmental or natural education that is the tool used by the National Park Service and State Park Service to educate their visitors.

With the same purpose, environmental, cultural and historical interpretation aim to open and communicate the settings related to people. Nevertheless, environmental interpretation or natural interpretation is somewhat different. The main goal of environmental interpretation is to focus on changing people's behavior toward their surroundings and to change people's opinions in the use of natural resources by responsiveness (Knapp and Volk, 1997). Kreag (1995) suggested that environmental interpretation has a significant role in the nature-based tourism experience as well.

Overall, interpretation is the tool that attempts to link the significance of cultural, historical and natural settings and human beings. People perceive and understand their surroundings through the interpretation.

Interpretive programs

The National Park Service (NPS) was created in 1916. Then due to people's need to learn more about the natural feature of the parks, the NPS has included interpretation in its programming since 1920. Previously, the U.S. army managed the parks; soldiers and civilian guides provided education and tours to natural features. Then when the NPS took over responsibility for managing the park areas, it became the park rangers' duty to

provide educational and interpretive opportunities to people (NPS, 2000, [http](#)). At present, almost all of the 378 units of the National Park System offer a variety of interpretive programs. These activities include guided walks and talks along the nature trails, publications, and video presentations based on educational programs. The National Park Service's recent policy (as quoted in Douglas et al., 1995, p.46) stated:

“The National Park Service will conduct interpretive programs in all parks to instill an understanding and appreciation of the value of parks and their resources, to develop public support for preserving park resources, to provide the information necessary to ensure the successful adaptation of visitors to park environments, and to encourage and facilitate appropriate, safe, minimum impact use of park resources.”

Based on the NPS's interpretive program policy, a six-part balanced interpretive program was created:

- 1.) Information and orientation easy access to information needed for a safe and enjoyable park experience.*
- 2.) Understanding and appreciation-foster deeper understanding of resources and values of the park, its regional context, and the National Park System.*
- 3.) Protection-offer a variety of opportunities for people to interact safely with and enjoy park resources while protecting the resources from overuse, damage, vandalism, and theft.*
- 4.) Participation and skill development-aid and motivate recreational skill development where appropriate.*
- 5.) Dialogue-provide means for communication of thoughts and desires among the public, neighbors, and park managers.*

6.) *Education-provide interested users and educational groups with information needed to develop a thorough understanding of a park's resources, its regional context and the entire National Park System's significance and values.*

(NPS, as quoted in Douglas et al., 1995, p.46)

Each national park creates its own interpretive activity based on each park's policy, its natural resources, history, and the purpose. The basis of interpretation comes from research about the history, science, and condition of resources. Furthermore, the research about needs, expectations and behavior of visitors is the crucial basis for interpretation as well (Douglas et al., 1995). The following examples are the interpretive programs that the National Park Service provides for the park visitors: Yellowstone National Park, Wyoming offers park programs during the summer with national park rangers helping people to explore the colorful geology of Mammoth Hot Springs, and evening programs with rangers to learn more about Yellowstone's wildlife. Mount Rainier National Park, Washington, provides evening programs with a variety of topics to illuminate Mount Rainier's natural and cultural history. Yosemite National Park, California rangers offer various park programs every summer. For instance, ranger walks to explore the Yosemite's living landscape, ranger talks (the bear facts), and old fashioned campfires and sing-alongs, and so on (NPS, 2000, [http](http://)).

Apart from the responsibility of the NPS to provide interpretive activities to visitors, State Park Services through every state in the U.S. also offer these programs to their park visitors. Many U.S. states seemingly do a good job demonstrating the cultural and natural features of their park properties. For instance, Indiana's Department of Natural Resources provides year-round interpretive programs through its Division of

State Parks. They support wise use of leisure time and acknowledge the importance of nature to their visitors. Various daily interpretive programs, visitor centers or nature centers, self-guided nature trails, school programs, and special weekend events attract thousands of visitors every year to Indiana state parks. The West Virginia State Park Service provides natural and recreational programs during the summer and all year-round for park visitors (Douglas et al., 1995).

The elements of the interpretive programs in the National Park Service and U.S. State Park Services include personal interpretive services and non-personal interpretive services. Personal interpretive services are the cornerstone of each park's interpretive program because they are the most competent methods of motivating visitor perception and appreciation of park values. They provide information and orientation and support to ensure natural resource conservation and visitor safety. Furthermore, they are flexible activities and person-to-person interactions. Clearly, personal interpretive services are the most powerful forms of park interpretation for visitors. Personal interpretive services have existed in the NPS and U.S. State Park Service for a long time. They are visitor centers with staffed orientation, staffed exhibits, staffed audiovisual programs, guided walks, talks and tours, and campfire programs. However, the personal interpretive services sometimes are not the best means for educating park visitors, and non-personal interpretive services are the ways to be considered. These include park brochures and publications, exhibits, audiovisual presentations and radio information systems. One advantage of non-personal interpretive services is they can reach a large group of visitors. In addition, outreach services-environmental education, heritage education, other

community, and national programming are used to propagate natural resource interpretation beyond park properties (NPS, 2000, [http](#)).

The Wisconsin Department of Natural Resources also plays a significant role in supporting and inspiring nature education through various interpretive activities. According to the Wisconsin Bureau of Parks and Recreation's annual report 1996-1997 (Bureau of Parks and Recreation, 2000, [http](#)), the number of interpretive program attendance, both personal interpretive services and non-personal interpretive services, around all Wisconsin state parks was 1,568,426. Interpretive programs included interpretive hikes, evening programs, on-site school programs, off-site school programs, teacher training programs, labeled nature trails, wayside exhibits, interpretive centers, Junior Ranger, and Wisconsin Explorer programs. The following examples are interpretive programs provided by Wisconsin state parks: Peninsula State Park, Fish Creek offers a cemetery walk to learn about park history. A nature walk to discover the wildlife through tracking at Pattison State Park; in Superior the park visitors can learn the basics of tracking and how to piece the clues left by animals. Kettle Moraine State Forest Northern Unit, Campbellsport offers the journey into darkness night hike to explore the world of the insects (WI DNR, 2000, [http](#)).

Like many Wisconsin state parks, Lake Wissota State Park conducts interpretive programs or naturalist programs at the park from Memorial Day through Labor Day every year. Evening programs, children's programs, nature hikes, campfire sing-alongs, and guest speakers are the activities during summer. The interpretive program attendance, in both personal interpretive services and non-personal-services, was 10,821 in 1999 (Lake Wissota State Park, 1999).

In conclusion, the park and recreation department provides interpretive programs for visitors, which not only provides information and entertains visitors but also attempts to convince them to behave sensibly and to perceive the importance of natural resources (Stokowski, 1990). The NPS noted that interpretive programs helped the National Park Service to accomplish the profession's mission which is as follows:

- 1.) Perpetuates and represents the heritage of the nation reflected in the national park units;
- 2.) Ensures that the natural, cultural, and recreational heritage reflected in national park units is available and accessible to everyone;
- 3.) Provides experiences that strengthen the recognition, understanding, enjoyment, and preservation of the nation's heritage;
- 4.) Creates the opportunity for audiences to ascribe meaning to resources, leading to concern for the protection of the resource. This revelation is the seed of resource stewardship.

(NPS, 2000, [http](#))

Benefits of interpretation

It is significant to an interpreter to know why people choose to participate in activities and what benefits they receive from those programs. By knowing the reasons participating in activities, an interpreter can improve the programs to fit visitors' need. Klenosky, Frauman, Norman, and Gengler (1998) studied the park visitors' usage of specific interpretive service offerings at South Carolina state parks. They found that the respondents perceived learning more about natural settings as the chief benefit for them.

However, they also perceived physical exercise and relaxation as benefits in participating in interpretive programs. McCool and Reilly (1993) also conducted a study of the expected benefits from a visit to a park. Respondents were asked to rate the importance of 18 reasons for visiting three Montana State Parks. The result of study showed that the importance of appreciating and learning about nature was the major benefit for visiting a park. Apart from this benefit, others were also determined. Benefit two involved respondents' desires to use a park as a place to improve their skills and health. Benefit three was to get away from the crowds. Benefit four was to escape from the mundane, and the last one was the importance of affiliation or establishing and maintaining social linkages with others.

The chief purpose of interpretation is to help a person gain a sense of place, to have a feedback to their surroundings, their meaningful history and culture (Douglas, et al., 1995). According to Douglas et al., the benefits of interpretation involve benefits to the individual and to the society. The benefits gained by individuals can be divided into educational, recreational, and inspirational.

1) Educational benefits:

According to the definition of interpretation, it seems that educational aspects of the interpretation are always mentioned and focused. Most people participate in interpretive programs because they perceive that acquiring new knowledge is an enjoyable and enriching experience. By learning more and more about the natural resources of a place, their visit to the park or attending the interpretive program becomes more enjoyable and meaningful (Douglas et al., 1995).

2) Recreational benefits:

People spend their leisure time visiting a park or attending the interpretive program because they want to relieve their stress. The program that comprises only information will not motivate people to learn or absorb something (Douglas et al., 1995). Interpretive programs should bring happiness and satisfaction to visitors. Satisfaction with their experiences seems significant to sustain a good quality of life. That means they relieve stress and improve mental and physical health (Paffenbarger, Hyde, and Dow, as cited in Douglas et al.). However, most researchers found that it is difficult to generate more recreational benefits than educational benefits. Usually, visitors attending the interpretive program such as bird watches, prairie days, or family nature classes found the program enjoyable (Douglas et al.).

3.) Inspirational benefits:

Mills emphasized the inspirational component of interpretation: “a nature guide...is not a teacher. At all times, however, he has been rightfully associated with information and some of education. But nature guiding, as we see it, is more inspirational than information.” (as cited in Douglas et al., 1995)

Douglas et al. (1995) noted that the inspirational benefits should assist people to stretch their minds to something more. That means interpretation generates not only the variety of knowledge and the pleasure of activity, but also the motivation to perceive the importance of nature. A good interpretive program is knowledgeable and fun, but the best interpretative program conveys one beyond the educational and recreational to inspirational experiences. It drives people along toward richer living, born of more sensitivity and behavior reminding them of their natural resources and heritages.

Benefits to Society:

Apart from the benefits to the individual, the advantages also accrue to society. Interpretation supports public welfare. The outcomes from interpretation improve public health, family and community harmony, and even a decline of crime rate (Douglas et al., 1995). Douglas et al. also noted the benefits to society in more details as follows:

a.) For the purpose of interpretation, to identify the land and culture, helps sustain a society. People need to recognize their natural and cultural heritages. This helps them feel part of the nation, thereby contributing harmony and a sense of belonging. Consequently, public pride grows and it may prevent vandalism.

b.) Interpretation helps support ecological awareness. Interpretation provides experience in the natural world to give people the practical framework to better perceive the problems and alternative solutions.

Benefits to management:

Interpretation plays an important role in the management of parks and forests. The work of the interpreter is far beyond education and entertainment. It yields an advantage to the resource management. Interpretation inspires people to perceive and appreciate, and finally to love their resources. As a result, they will yearn to protect their environment. Without interpretation to bring the park managers and the people together, there is little chance of blending and full achieving of functions of many parks and forests. Interpretation is the place where the exchange between the park management and public happens (Douglas et al., 1995).

Sharpe and Gensler (1978) indicated the benefits of interpretation for management in that it helps decrease vandalism, poaching of fish and wildlife, and other inappropriate behavior. Interpretation supports increasing safety and compliance with

park regulations. It can solve specific management problems related to both resource both resource protection and to providing visitors with a safe and enjoyable recreational experience.

Furthermore, the Wisconsin Department of Natural Resources (WI DNR, 2000, [http](http://www.dnr.wisconsin.gov)) also discussed the benefits of recreation for Wisconsin people, and it remarked that the interpretive activity is one of the recreational activities. WI DNR classified the benefits into the personal, social, community, educational, and environmental benefits.

- a.) Personal benefits: this literature is much the same as the previous study of Douglas et al. (1995). Recreation improves people's well-being and good health because recreation provides opportunities for physical fitness and stress reduction.
- b.) Social benefits: Recreation contributes to new relationships among people through learning teamwork and the relationship between organizations and people. Furthermore, recreation also supports unity in the family and community.
- c.) Educational benefits: While people are enjoying the recreation, they also learn about their natural resources. It is the direct interaction between people and natural settings through learning. This knowledge provides a fundament for individuals to perceive how their personal actions may affect the natural environment.
- d.) Environmental benefits: Community parks or public land set aside for outdoor recreation provide the benefits to protect biodiversity and the ecosystem. Their significant role is to conserve the natural resources for people to study and enjoy.

Without interpretation to bring the park managers and the people together, there is little chance of fully achieving the functions of many parks and forests. Interpretation is

the place where the exchange between the park management and public happens (Douglas et al., 1995).

In conclusion, people have different reasons for doing something and seeing the benefits, which drive them to reach their goals. Therefore, the study of achieved benefits for visitors to attend a program is significant when the professionals need to develop an appropriate program for various visitors

Obstacles for non-participants

The term non-participant is seen in review on the issue of barriers. It seems that there has been a number of researchers addressing this issue although the literature in this topic is not substantial (C.R. Edginton, Hanson and S.R. Edginton, 1992). Two studies of Godbey (1985) identified the major reason for non-participants. The first study, undertaken in a large city in the eastern United States, examined the reasons for nonparticipation in recreation and park services. The second study, funded through the Urban Park and Recreation Recovery Act also determined the reasons for non-participation in recreation and park department services. Godbey found that lack of convenience of the site location was a major factor. He also found that lack of sufficient interest, lack of time, and personal health reasons were the highest ranked reasons respectively for non-participation. Due to the reasons for nonparticipation, lack of sufficient interest, Godbey stated that those who did not want to attend the leisure activity but knew the services existed were most likely to say they were simply not interested. In addition, in this study a few respondents stated that site hours of operation were inconvenient, and did not have anyone to do activity with were other reasons for

nonparticipation. These barriers should not be disregarded. They may be the major reason for people who select not to attend the activity. Another study conducted by Schroeder and Wiens (1986) among the nonusers of public park and recreation facilities in Tulsa, Oklahoma found that the restraints to participation were user characteristics rather than the problems of the parks and recreation department. The chief deterrents in their study were lack of interest in provided activities and limitations of time and health.

On the other hand, due to the study of Searle and Jackson (1985), the highest ranked barrier was work commitments. The obstacles of overcrowded sites or site in convenience is the second rank, followed by obstacles in locating others to join with, lack of opportunity to participate near one's home, and family commitment. Bialeschki and Henderson (1988) studied the constraints to trail use among users and nonusers in the state of Wisconsin. They also indicated that time, lack of information, money, health, and distance from the home were the major barriers.

Smith classified the obstacles that prohibit the visitors to join in the interpretive programs into three major categories (as cited in Douglas et al., 1995):

a.) Intrinsic barriers:

These barriers derive from personal limitations involving physical, psychological, or cognitive disabilities, including various situations that probably restrain desires to join in interpretive activities:

- Skills/challenge gap, where the person's skills may seem inappropriate for an activity.
- Physical dependence on another person or machine.
- Health problems and chronic limitations, such as range of movement, allergies to plants, sun, or insects.
- Lack of knowledge of programs and recreation activities to make informed choices may restrain a person's desire to try interpretive activities.

b.) Environmental barriers:

These barriers involve external forces that impose limitations on an individual with a disability, including the following:

- Architectural structures that are an obstacle for access.
- Natural obstacles such as hills, rocks, and even trees that limit use of the environment.
- Transportation barriers that keep people from access to a site.
- Economic barriers from low income and high expenses.
- Barriers of neglect, for example lack of interpretive services offering access, lack of publicizing appropriate services, lack of education or training in interpretation skills.

c.) Communication barriers:

These barriers derive from the failure to communicate between visitors and interpreters. Although most people may see and hear clearly while an interpreter is speaking and showing slides, some people may have difficulty and become frustrated

with the program offerings. The most obvious cases are people with sight and/or hearing impairments.

In summary, the reasons for nonparticipation derived either from the problems of site offering the services or the reasons of individuals. The problem of site that was the most perceived was the lack of convenience. Lack of interest, lack of time, lack of information, and personal health problems were perceived as the essential reasons for nonparticipation of the individual. Thus, when professionals understand the cause of barriers either from the site itself or the individuals, they can find the best solution to eliminate the obstacles and stimulate people to attend the activity.

What to interpret

Each park and forest has its own feature and value. A site may be unique in its ecological, geographical, or historical phenomenon (Douglas et al., 1995). Therefore, the interpretative theme or topic should be based on the character and distinctiveness of each park and forest.

Furthermore, interpretive information topics should be based on the types of questions that visitors ask repeatedly. The ideas of interpretive topics may come from the interaction between park officers and visitors at the site (Masberg and Savige, 1996).

Moscardo (1998) and team conducted visitor surveys to evaluate the contribution of Skyrail's communication program to their visitors' experiences. The Skyrail Rainforest Cableway takes visitors on a gondola trip above the World Heritage Rainforests of North Eastern Australia. The results of the survey indicated that the interpretation was a significant element of satisfaction. Moreover, they also found that

the chief interpretive content visitors wanted involved conservation, including threats to the natural resources and the way to protect those resources, followed by ecology, specific plants/animals and human interaction.

Douglas et al. (1995) suggested the ideas for interpretation themes as the following concepts:

- 1.) Interpret the name of the park and its significance. Often, visitors are curious as to the name of the place, where the site got this name and the relevance between the name and the features of the place, because the name often describes a particular attraction of the place.
- 2.) Inventory the natural features. The character of the animals and the plants around that place can attract numbers of visitors to attend the interpretation. The theme may be the wonders of nature. For example, “Wolf Adventure”- the story of the reality of the wolf from the legend at Lake Wissota State Park, Chippewa Falls, Wisconsin; “Edibles Hike” the narration and hike around the woods in search of edible and useful plants at Bong State Recreation Area, Kansasville, Wisconsin. Moreover, the features of the site such as lake, cliff, river and forest can be the interesting topics for visitors, such as the geysers and mud pools at Yellowstone National Park, Wyoming, USA and Rotorua, New Zealand; or rock formations at Arches National Park, Utah, USA.
- 3.) Identifying the character of the place comes from history. The history of humans can interest the visitors if the theme is developed properly. Furthermore the history of a well known person can be connected to the places of great scenic beauty, such as John Muir and Yosemite in California,

Alexander Mackenzie's trail across Canada and Clark's expedition across the USA to Oregon (Bell, 1997).

Astronomy is also of interest to park visitors. For this reason, the Wisconsin Department of Natural Resources, and the Department of Astronomy, University of Wisconsin-Madison have featured a program, namely "Universe in the Park" through Wisconsin State Parks. Park visitors have the opportunity to view the night sky through telescopes and learn about an overview of astronomy and astronomy news (WI DNR, 2000, [http](#)).

Apart from the topics of features of parks, geology, and features of nature, park resource management issues are also provided to bring the park management and people together. Mount Rainer National Park, Washington with the objective to promote more about park resource management provides a slide program for visitors to learn more about ongoing programs and what the visitors can do to participate in and support them (NPS, 2000, [http](#)).

In conclusion, what to interpret, in terms of the various themes or topics, depends on the individuality of visitors, such as their age range, socio-economic grouping, expected educational background and range of interests. As a result, a variety of themes may be chosen and presented in different ways (Bell, 1997).

The idea for improving the effective and ideal interpretation

To improve the interpretation, the park professional needs to study the features of the potential and actual audience. The evaluation of interpretation aims at the quality of visitor satisfaction. To identify what they look for and serve the right thing to them is the key for successful interpretation (Douglas et al., 1995). Tilden (1977) also implied that if

the park professionals intend to develop better interpretive offerings, they must know and understand the visitors' needs.

To know the preference of the visitors (the preference of topics, time of day and day of week to attend the activity), Douglas et al. (1995) suggested the method "Putting on their shoes" (p.107). That means before developing the interpretive programs, the professionals should figure out what topics or themes can motivate the visitors' interest, why some visitors attend the interpretive program while some do not attend. Following are some of the methods that they suggested to develop the ideal interpretive program.

1.) "Ask the visitors" (p.108)

The professionals should regularly inquire about visitors' needs, interests, preferences, and questions so they know what visitors are seeking from the interpretive programs. Moreover, this can reveal some significant ideas that the professionals might have known and seen before. The methods for asking visitors may be the interview or the questionnaire. The idea that visitors evaluate the interpretive program is the key for successful interpretation.

2.) "Watch the visitors" (p.108)

Time and movement studies expose how visitors use the interpretation and how much they view and read the exhibits at a nature center or the exhibits along a trail. Counters, clickers, and videos can record how often and how long visitors view the exhibits, which ways they move, even whether or not they stay long enough to get the message.

The aspects used as criteria for the effective interpretation would be the evaluation of interpretive programs or interpreters by visitors. The demeanor and

appearance of interpreters must be qualified and skilled and the knowledge of interpreters must be in depth because the knowledge is more than just the facts about the resource. The interpreters have to be careful with the accuracy of information. They should not exaggerate or present only a personal viewpoint. Moreover, the interpreter should be able to communicate with entire audiences to draw their attention. The interpretive principles of a program are supposed to be applied to routine life by visitors (Douglas et al., 1995).

In addition, Moscardo (1998) also advocated that the key to quality interpretation is to sustain the visitors' interest. There are several principles for designing the interpretive activity. One of them is the idea from the study of Moscardo. He suggested that the professionals should provide alternatives for a range of visitors. Visitors are dissimilar in their age, gender, where they live, and what they expect and they seek. Audience differences can affect the time spent in a place, the level of interpretation sought, or the expectation. Therefore, this important point is one of the various points that professionals should not disregard for planning the interpretive programs.

Overall, to plan the ideal interpretive program, the study of visitors is the key. Various studies of interpretation stated this notion, because the customer is the visitor and interpretation is a product (Masberg et al., 1996)

Conclusion

In accord with the purpose of this study, to study the park visitors' use of the interpretive programs at Lake Wissota State Park for increasing the quality of activities, the literature review has placed the importance of this study in several contexts. Among them are to illustrate the feature of interpretive program, the benefits of visitors to attend,

obstacles for visitors who did not attend the program, and the study of visitors because they are the central interest.

Douglas et al. (1995) noted that visitor evaluation of interpretive programs in their experience has long been part of the operation of the professionals. The studies of visitors using the interpretation and many analyses in parks and forests provide the theoretical basis of how they use the facilities and their apparent preferences. Professionals always use marketing techniques and communications principles to determine visitor characteristics and preferences for choosing interpretive programs (Douglas et al.).

Therefore, this study would be useful in Lake Wissota State Park's ongoing efforts to increase the quality of interpretive programs and the number of participants.

CHAPTER 3

STUDY METHODOLOGY

The idea of this research project developed because of a conversation between the park manager of Lake Wissota State Park and the author. An apparent lack of a study of park visitors' use of interpretive programs was noted by the park manager. For this reason, the author thought that this is a valuable opportunity to study the park visitors who attend and do not attend the interpretive activities at Lake Wissota State Park. Furthermore, this study can help develop activities that fit park visitors' needs.

In an attempt to discover the park visitors' use of interpretive programs, a questionnaire was designed to determine:

- The demographic characteristics of park visitors who attended and who did not attend the interpretive programs
- The reasons park visitors attend the interpretive programs
- The use patterns of park visitors who attended and who did not attend the interpretive programs
- The park visitors' satisfaction level with the interpretive programs
- The preference of the theme, preferred time of day, and preferred days of week for participating in the interpretive programs
- The obstacles not to attend the program for non-participants

Sample selection

The target population of this study included both participants of the personal service interpretive programs and non-participants at Lake Wissota State Park, Chippewa Falls, Wisconsin. The systematic sampling methodology was structured to obtain a representative sample of participants and non-participants. Summer visitors who visited the park during Memorial Day and Labor Day 2000 (that is the duration for interpretive program each year at Lake Wissota State Park) including day users and overnight users were sampled. Visitors in this study were separated into participants and non-participants. Adult groups or group leaders were surveyed rather than individual park visitors. Only weekend (Saturday and Sunday) participants and non-participants were sampled. Weekday users were excluded because they have less potential impact on interpretive programs. Participants for this study were adult visitors (16 or older) who visited Lake Wissota State Park, Chippewa Falls, Wisconsin and attended the personal services (park activities with the guidance of the naturalist or interpreter). Non-participants for this study were adult visitors (16 or older) who visited Lake Wissota State Park but did not attend the personal services of the park. The family campground, the beach area, and the nature center were considered as the cross section of the whole group of people who visited Lake Wissota State Park. Sampling on Saturday was from Noon to 6 PM at the beach area, from 6.30 PM to 8 PM at the family campground, and from 8 PM to 9 PM at the nature center. Normal sampling on Sunday was from 10 AM to 11 AM at the family campground, from 11 AM to noon at the nature center, and from noon to 4 PM at the beach area. Nevertheless, the sampling time was flexible because the schedule of the park program was different in each week.

Instrument

Questionnaires were used as the primary data collection instrument for this study.

The sources for the questionnaires were based on previous studies conducted by Clements and Ness (1995) and the Division of Parks and Recreation, Minnesota Department of Natural Resources (1995).

Two kinds of questionnaires, one for participants and the other for non-participants, were used to address the objectives of this study. The questionnaire for participants (Appendix A) consisted of 15 questions that included:

- a.) The demographic characteristics of park visitors including age, gender, education, geographical origin, and ethnicity (multiple choice).
- b.) The use pattern activities engaged in at Lake Wissota State Park, staying overnight or visiting a day, and size of party and use pattern of the personal service interpretive program including the program attended, size of group, and the frequency of program use (checklist and multiple choice).
- c.) Reasons for joining the interpretive program (Likert Scale).
- d.) The satisfaction with the content of program, staff and time (Likert Scale).
- e.) The preference of interpretive theme, time to attend, and day to attend for the personal service interpretive program (checklist).
- f.) Additional comments (open-ended question).

The questionnaire for non-participants (Appendix B) contained 12 questions that included:

- a.) The demographic characteristics of park visitors including age, gender, education, geographical origin, and ethnicity (multiple choice).

- b.) The use pattern of activities engaged in at Lake Wissota State Park, staying overnight or visiting a day, and size of party (checklist and multiple choice).
- c.) Obstacles for not attending the interpretive programs (Likert Scale).
- d.) The preference of interpretive theme, time to attend, and day to attend for personal service interpretive programs (checklist).
- e.) Additional comments (open-ended question).

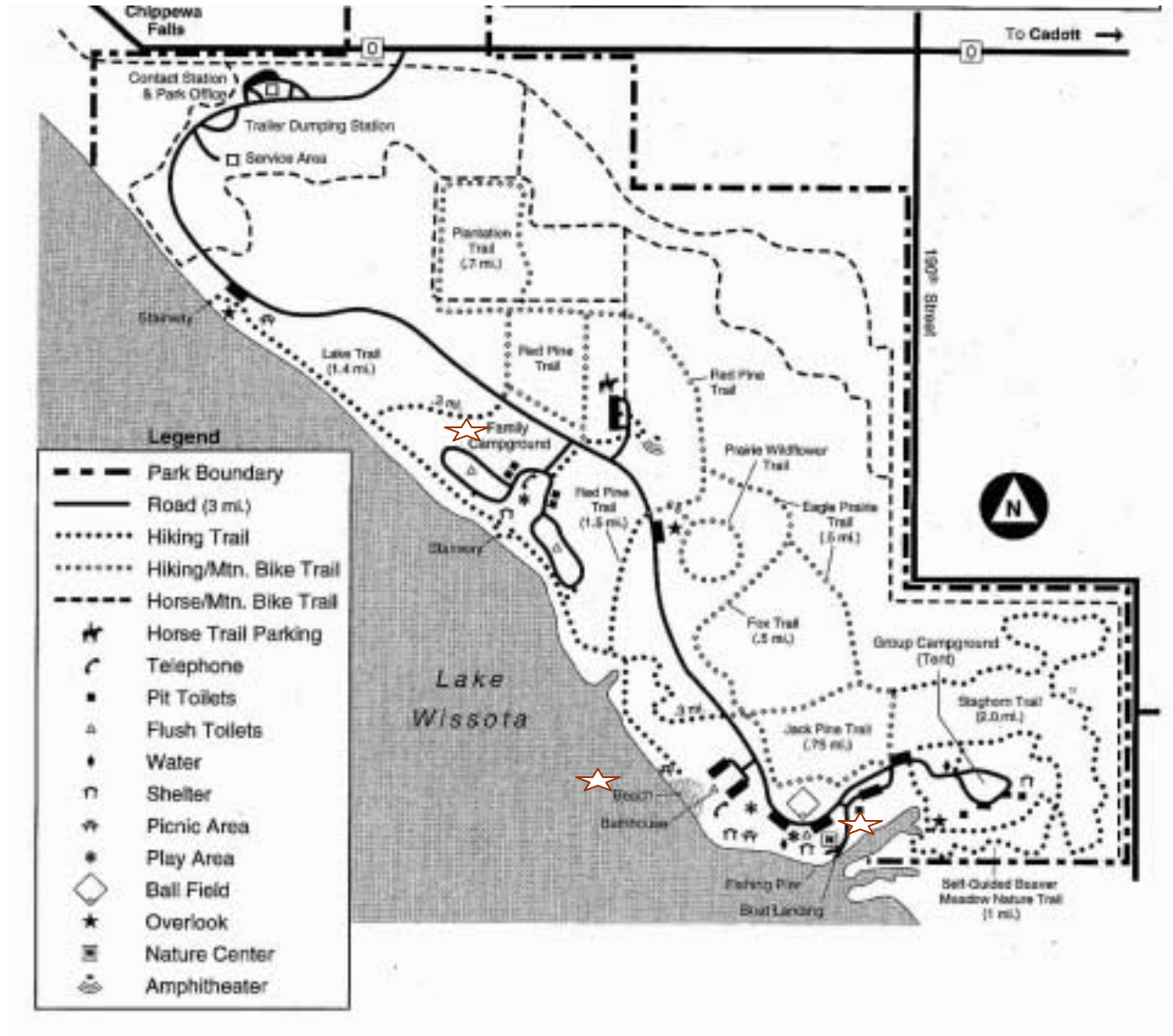
Survey administration

The survey was conducted during the summer of 2000 from June 10 until July 15, which was considered the time of major attendance at Lake Wissota State Park. The researcher distributed the surveys in each location on Saturday and Sunday. The researcher introduced herself, explained the purposes of this survey, and emphasized the voluntary nature of participation. After the researcher obtained informed consent, the researcher asked the visitors whether they have attended the park activity or not. Then, the researcher gave visitors the survey forms, either the survey of participant for visitors who attended a park activity or the survey of non-participant for visitors who did not attend. Respondents were compensated for filling out the survey by receiving a 100th anniversary of Wisconsin State Park sticker.

The sampling days were Saturday and Sunday and the sampling locations were the family campground, the beach area, and the nature center (Figure 3). The total number of campsites is 81 (Figure 4). The even numbered campsites were surveyed on Saturday and the odd numbered campsites were surveyed on Sunday. As mentioned in the sampling selection, the schedule of park activity was different in each week.

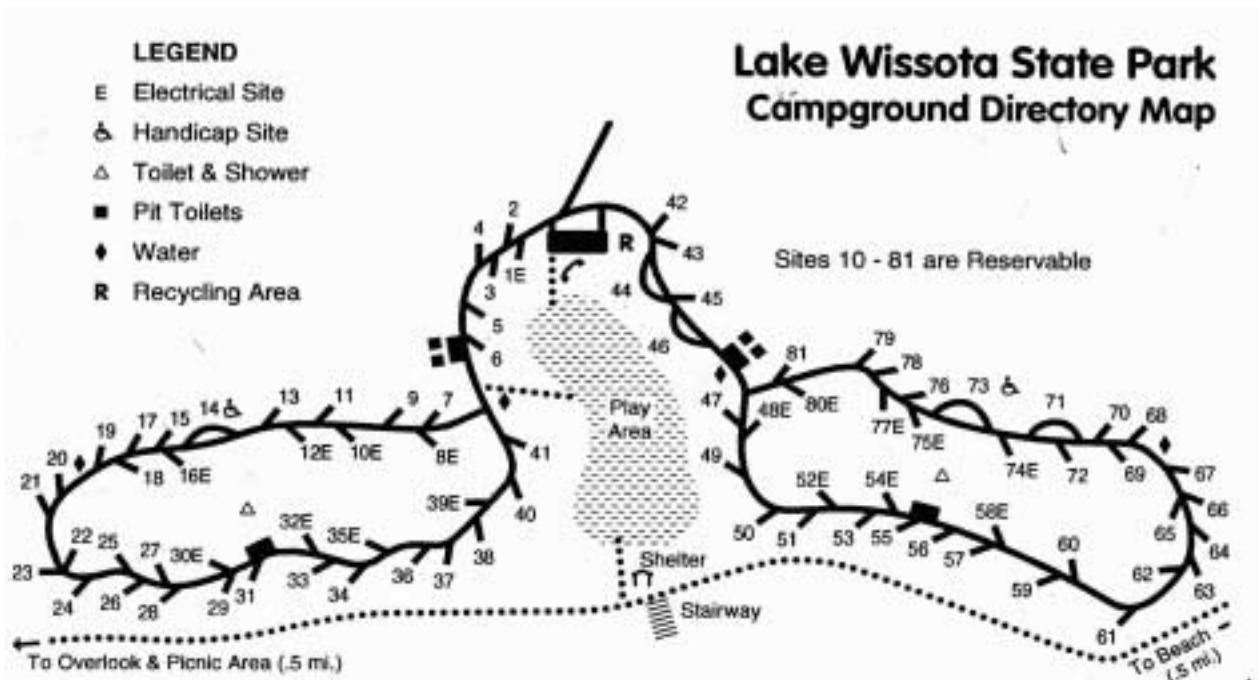
Therefore, the sampling time was flexible, depended on the schedule of the park program. The sampling schedule was shown in Appendix C.

Figure 3. Map of Lake Wissota State Park (location of distribution the survey)



Source: Lake Wissota State Park

Figure 4. Lake Wissota State Park, campground map



Source: Lake Wissota State Park

Pilot test

To maximize the reliability and validity of the questionnaire, the researcher distributed the initial surveys (participant survey and non-participant survey) to visitors who visited Lake Wissota State Park on June 3, 2000. The locations of distribution were the beach area, the family campground, and the nature center. Twenty visitors were asked to fill out the initial surveys. Among them, fifteen visitors attended the park program and five visitors did not attend the park program. The initial survey took respondents about 10 minutes to complete and was considered too long. Some of respondents skipped the questions and some did not complete the survey. Then, the final version of the survey was made after a review by the University of Wisconsin-Stout thesis advisor, thesis committee members, and the park manager of Lake Wissota State Park.

Data analysis

The total sample comprised 215 questionnaires. Surveys were entered into a data file and analyzed through the Statistical Program for the Social Science (SPSS) at University of Wisconsin-Stout. Frequency counts, percentage distributions, and mean were calculated and analyzed. The results of these analyses were used to assess a park visitors' use of interpretive programs at Lake Wissota State Park, Chippewa Falls, Wisconsin, USA.

Limitations of Study

Limitations of this study might affect directly or indirectly the obtained results.

These limitations included:

1. When comparing the total number of respondents ($N = 215$) with the total number of visitors all year round, this was the small number. For this reason, the results of the study might not apply to the total population.
2. Although the researcher tried to reduce gender bias in sampling, sometimes people whom the researcher asked to do a survey passed a questionnaire to their partner instead.
3. The number of visitors totally depended on the weather. When the weather was not good, few people visited the park. This limited the number of respondents.
4. Background experiences and various domestic factors of respondents might affect their responses to the questionnaire.

CHAPTER 4

RESULTS AND DATA ANALYSIS

This study determined the park visitors' use of interpretive programs at Lake Wissota State Park, Wisconsin, USA. As mentioned in the chapter on methodology, questionnaires were used as the data collection instrument. The questionnaires were developed based on previous surveys of Clements and Ness (1995) and the Division of Parks and Recreation, Minnesota Department of Natural Resources (1995). Various questions were asked of those park visitors who visited the park from June 10 to July 15, 2000, to identify their use of interpretive programs at Lake Wissota State Park. Two kinds of questionnaires, one for participants and the other for non-participants, were used to address the objectives of this study.

In this chapter the objectives will be addressed and compared with the results of the survey. The objectives included identifying the following:

- 1.) The demographic characteristics of park visitors who attended and did not attend the interpretive programs;
- 2.) The reasons people attend the interpretive programs;
- 3.) The use patterns of visitors who attended and did not attend the interpretive programs;
- 4.) The park visitors' satisfaction level with the interpretive programs;
- 5.) The preferred interpretive themes, preferred time of day, and preferred days of week to attend the interpretive programs;
- 6.) The obstacles that prevent people from attending the interpretive programs.

As noted in methodology, the total survey comprised 215 questionnaires. Adult groups or group leaders were sampled rather than individual park visitors. The average number of people in a group was 3.74, so the total number of people who were representative of this study was 804.

Surveys received were entered into a data file and analyzed through the Statistical Program for the Social Science (SPSS) at University of Wisconsin-Stout. The frequencies of response and percent (%) were tabulated, which were based upon the multiple choice. The rank order, frequencies of response, and percent (%) were tabulated based on the checklist question. Furthermore, the determination of mean and the rank order were calculated and analyzed in questions with a five-point scale or Likert Scale.

In this chapter, the results of the data were determined in the following order:

- The respondent profile of park visitors who attended and did not attend the interpretive programs
- The reasons for attending the program of park visitors who attended the interpretive programs
- The use patterns of park visitors who attended and who did not attend the interpretive programs
- The park visitors' level of satisfaction with the interpretive programs (for park visitors who attended the interpretive programs)
- The preference of the interpretive topics, preferred time of day, and preferred days of week to attend the interpretive programs
- The obstacles that prevent people from attending the interpretive programs

Respondent profile

The total respondents were 215. Among them, there were 75 park visitors (35%) who attended the interpretive program and 140 park visitors (65%) who did not attend the interpretive program (Table 1).

Table 1

Park visitors who attended and who did not attend the interpretive program

Visitor	Number	Percent %
Attended the park program	75	34.9
Did not attend the park program	140	65.1
Total	215	100.00

N = 215

In order to accomplish objective 1, questions listing the gender, age, residence, level of education, and ethnicity were asked. The following tables show these data.

The data regarding the gender of respondents were presented in Table 2. The male respondents were 86 (40%) and the female respondents were 129 (60%).

Table 2

Gender of respondents

Gender	Number	Percent %
Male	86	40.0
Female	129	60.0
Total	215	100.00

N = 215

Table 3 presents the data of respondents' age. The majority of respondents were 30-39 (36.3 %) and 40-49 (36.3%). The next range was 20-29 (12.1%). Only 6 of respondents (2.8%) were visitors with the age of 16-19 and 70 and above.

Table 3

Age category of respondents

Age Category	Number	Percent %
16-19	3	1.4
20-29	26	12.1
30-39	78	36.3
40-49	78	36.3
50-59	23	10.7
60-69	4	1.9
70 and above	3	1.4
Total	215	100.00

N = 215

The majority of respondents who visited Lake Wissota State Park were visitors to the area (79.5%). Other data revealed that forty-four of the respondents (20.5%) were local area residents, determined as living within a 10 mile radius of Lake Wissota State Park (Table 4).

Table 4

Geographical residence of respondents

Resident	Number	Percent %
Local area resident	44	20.5
Visitor to the area	171	79.5
Total	215	100.00

N = 215

The respondents who were visitors to the area also were asked to clarify their zip code (Table 5 and Figure 5). The majority of them were from northeastern Wisconsin (23.4%). The rest of them were from Northwestern Wisconsin (21.1%), Southeastern Wisconsin (8.2%), Southwestern Wisconsin (14%), and other states (22.2%). 11.1 % of visitors to the area did not specify the zip code.

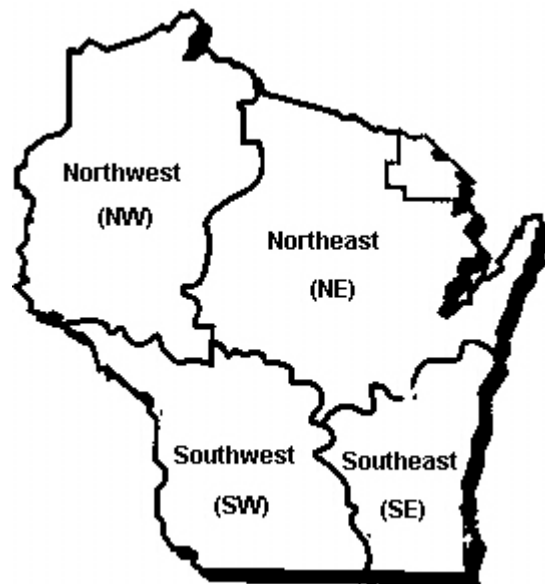
Table 5

Geographical residence of visitors to the area

Location	Number	Percent %
Northeast	40	23.4
Northwest	36	21.1
Southeast	14	8.2
Southwest	24	14
Other State	38	22.2
Did not specify	19	11.1
Total	171	100.00

n = 171 (visitors to the area)

Figure 5. Map of area of Wisconsin



Most of respondents, 77 (36%), had a bachelor's degree (Table 6). The respondents who had some college degree, high school degree, graduate degree, and less than high school were 69 (32.2%), 44 (20.6%), 22 (10.3), and 2 (0.9%) respectively.

Table 6

Level of education of respondents

Level of education	Number	Percent %
Less than high school	2	0.9
High school	44	20.6
Some college	69	32.2
College	77	36.0
Graduate degree	22	10.3
Total	214*	100.00

N = 215

* Number varies due to non-respondents.

Lastly, the following table indicates the data of ethnicity of respondents (Table 7). The number of respondents who identified themselves as Caucasian was very high (211, 98.1%). Only 1.9% of the respondents were American Indian and Hispanic. Furthermore, none of the respondents were Afro-American or Asian/Pacific Islander.

Table 7

Ethnicity of respondents

Ethnicity	Number	Percent %
Caucasian	211	98.1
Afro-American	0	0
American Indian	3	1.4
Asian/Pacific Islander	0	0
Hispanic	1	0.5
Total	215	100.00

N = 215

According to the data of Wisconsin population reported by the U.S. Census Bureau in 1999 (U.S. Census Bureau, 2000, [http](http://www.census.gov)) the total population was 5,250,446. Among them, they were White (92%), Afro-American (5.6%), Asian (1.5%), American Indian (0.9%), and Hispanic (2.6%). When comparing the results of ethnicity of respondents of this study with the data of Wisconsin population, among the minorities of Wisconsin population, Afro-American were the highest number, however, the result of this study revealed there were no Afro-Americans who were respondents of this study. On the other hand, although American Indians were the smallest number of minorities in Wisconsin, they were the majority of minorities who used the park service for this study.

Reasons that respondents attend the interpretive program

The second objective concerned identifying the reasons people attend the interpretive programs. In order to assess this objective, a Likert Scale or five-point scale, ranging from not important to very important, was used. The respondents were asked to select their agreement with 9 items regarding the reasons they attended the interpretive program. The results of the next table came from question 6 in the questionnaire of respondents who attended the interpretive program (Appendix A). The data were ranged by mean score and tabulated as shown in Table 8.

Table 8

Reasons that respondents attend the interpretive program

Items	1 % NI	2 % SI	3 % N	4 % I	5 % VI	Mean	SD
To do something with family	0	0	5.3	34.7	60.0	4.55	.60
To have fun	0	2.7	5.4	39.2	52.7	4.42	.72
To develop an appreciation of nature	0	2.7	12.2	47.3	37.8	4.20	.76
To learn more about nature	0	4.0	16.0	52.0	28.0	4.04	.78
To have a change from daily routine	1.4	2.7	31.1	44.6	20.3	3.80	.84
To develop skills and abilities	4.0	6.7	38.7	37.3	13.3	3.49	.95
To develop mental and physical health	6.8	13.5	32.4	27.0	20.3	3.41	1.16
To get away from crowds of people	9.3	12.0	34.7	22.7	21.3	3.35	1.21
To talk to new and varied people	14.7	16.0	36.0	24.0	9.3	2.97	1.17

n = 75, respondents attending the interpretive program

1 = Not Important 2 = Somewhat Important 3 = Neutral 4 = Important

5 = Very Important

Most of the respondents agreed with the item “To do something with family” (Mean score = 4.55). The table also showed there was an agreement in this item, with

Standard Deviation of 0.6. The second rank of mean score (4.42) was the item “To have fun”. When comparing the mean score of these two items, it is slightly different.

Surprisingly, the item “to learn more about nature”, reported as most of the reason why people use the interpretive programs by Klenosky et al. (1998) in the literature review of this study (Chapter 2), was ranked as the fourth place for the reason to attend the program, with the mean score 4.04. The fewest respondents agreed with the item “To talk to new and varied people”, as ranked as the bottom of the item with the mean score 2.97.

Use patterns

The research assessed the use patterns of park visitors who attended and did not attend the interpretive programs. In order to accomplish this objective, questions listing the activities engaged in at Lake Wissota State Park (these activities were pursued at different times during the year), staying overnight or day visiting, and size of the group were asked. In addition, respondents who attended the interpretive programs were asked two more questions concerning the attended park activities and whether they were first time users or repeat users. The following tables showed these data.

Table 9

Activities engaged in at Lake Wissota State Park

Activities	Number of respondents	Percent % of respondents
Camping	156	72.6
Swimming & sunbathing	134	62.3
Hiking	77	35.8
Biking	69	32.1
Boating/Canoeing	55	25.6
Picnicking	55	25.6
Fishing	52	24.2
Family gathering	52	24.2
Visiting local area of interest	14	6.5
Cross country skiing	10	4.7
Other	6	2.8
Snowshoeing	1	0.5

N = 215

Note The respondents were asked to check all items that applied in this question.

Multiple responses were possible from each respondent.

The responses in table 9 are ranked from the largest number to the smallest number. The respondents were asked to check all items that applied in this question so multiple responses were possible from each respondent. Of the 215 respondents, 156 respondents (72.6%) answered that the activity they normally engage in when visiting Lake Wissota State Park was camping. When collecting the survey, the subjects were people who visited the park on weekends. For this reason, it implied that most of weekend users came to the park to stay overnight and obviously camping was the chief activity for them. The second rank was swimming and sunbathing selected by 134

respondents (62.3%) from 215 respondents. The third rank was hiking with the response of 77 (35.8%).

In addition, there were 6 respondents who selected the item “Other”. Among them, only 3 respondents indicated the activities. They were “Horseback riding”, “Rollerblading” and “Running”.

Table 10 revealed the data regarding the question of whether the respondents were staying overnight or visiting for the day. Most of the respondents (74.3%) were staying overnight at the park; only 55 (25.7%) were visiting for the day. As mentioned above, the survey was collected from weekend users and they were more likely to stay overnight rather than weekday users.

Table 10

Staying overnight or visiting by day:

	Number	Percent %
Staying overnight	159	74.3
Visiting the day	55	25.7
Total	214*	100.00

N = 215

* Number varies due to non-respondents

The respondents were asked the size of their group. As noted above, group leaders were sampled rather than individuals. For this reason, only 3 respondents (1.4%) were the individual users (Table 11). The majority of the size of the group was 5 or more (36.2%). It is noted that some of the respondents represented a big group with more than one family gathering. The second rank was the size of 4 (29.1). This is the usual size of party with one family.

Table 11

Size of the party

Size of the party	Number	Percent %
1	3	1.4
2	53	24.9
3	18	8.5
4	62	29.1
5 or more	77	36.2
Total	213*	100.00

N = 215

* Number varies due to non-respondents

The following tables reveal the use pattern data of respondents who attended the interpretive programs (n= 75). One question, question 4 in the survey of respondents who attended the park activities (Appendix A), inquired about the park activities (interpretive programs) in which the respondents participated. Then the respondents were asked if they were first time users or repeat users of park activities (question 5, Appendix A).

In table 12 the data were ranked from the largest number to the smallest number. The respondents were asked to check all items that applied in this question. Of the 75 respondents, 54 respondents (72%) attended the evening program that was the chief park activity during the summer. The next park activity chosen by 31 respondents (41.3%) from 75 respondents was the nature center. This kind of activity is the activity in which the respondents looked around the exhibition at the nature center and asked questions from the naturalist or interpreter.

Of the 75 respondents, 4 respondents (5.3%) selected other park activities. Nevertheless, they did not specify what kind of activity they attended.

Table 12

Attended park activities

Attended park activities	Number of respondents	Percent % of respondents
Evening program	54	72
Nature center	31	41.3
Junior ranger	17	22.7
Guided nature hike	16	21.3
Wonder walk bags	4	5.3
Other	4	5.3

n = 75, respondents attending the park activities

Note The respondents were asked to check all items that apply in this question.

Multiple responses were possible from each respondent.

In response to the question whether the respondents were first time user or repeat user, 42 respondents (59.2%) were repeat users; 29 respondents (40.8%) were first time users (Table 13). It implied that the park professionals should put more effort to promote the park activities among park visitors who have never attended the activities.

Table 13

First time user or repeat user

	Number	Percent %
First time user	29	40.8
Repeat user	42	59.2
Total	71*	100.00

n = 75, respondents attending the park activities.

* Number varies due to non-respondents.

Level of satisfaction with the interpretive programs

To accomplish objective 4, a Likert Scale, ranged from very unsatisfied to very satisfied, was employed to determine the level of satisfactions toward the interpretive programs. The respondents were asked to describe their agreement with 8 items concerning their level of satisfaction. The results of Table 14 came from the question 7 in the questionnaire of respondents who attended the interpretive program (Appendix A). The data were ranged by mean score and tabulated as follow.

Table 14

Level of satisfaction with the interpretive programs

Items	1 % VU	2 % U	3 % N	4 % S	5 % VS	Mean	SD
Accuracy of information	0	0	13.7	57.5	28.8	4.15	.64
Knowledge of subjects by interpreter	1.4	1.4	16.4	47.9	32.9	4.10	.82
Demeanor and appearance of interpreter	0	2.7	17.8	47.9	31.5	4.08	.78
Communication with audience by interpreter	0	5.5	19.2	43.8	31.5	4.01	.86
Overall interpretive program	0	5.5	12.3	63.0	19.2	3.96	.73
Application of interpretive principle	0	0	20.5	64.4	15.1	3.95	.60
Duration of activity	1.4	4.1	24.7	49.3	20.5	3.84	.85
Effective conclusion to program	0	8.2	23.3	47.9	20.5	3.81	.86

n = 75, respondents attending the interpretive program.

1 = Very Unsatisfied 2 = Unsatisfied 3 = Neutral 4 = Satisfied 5 = Very Satisfied

The data positively indicated that respondents who attended the interpretive programs were satisfied with the interpretive programs. Item “Accuracy of information” was ranked as the first place with the mean score 4.15. The table also showed there was an agreement in this item because the Standard Deviation was 0.64. The level of satisfaction with the knowledge of the subjects by the interpreter, demeanor and appearance of the interpreter, and communication with the audience by the interpreter were also considered as high mean score with the score of 4.10, 4.08, and 4.01 respectively. The lowest mean score (3.81) of these data was the item “Effective conclusion to program”. However, 63% of respondents who attended the park programs were satisfied with the overall interpretive programs.

Preferences in interpretive themes/topics, time of day, and day of week for participating in the interpretive programs

In an effort to find out what are the preferred interpretive topics, a listing of interpretive themes was provided for the respondents to choose all items that applied (Table 15).

Table 15

Preferred program topics

Program topics	Number of respondents	Percent % of respondents
Wildlife	150	73.5
Astronomy	97	47.5
Recreation activities	90	44.1
Birdwatching	83	40.7
Pond and water life	61	29.9
Plant life	57	27.9
Cultural and regional history	50	24.5
Geology	49	24
Ecology	35	17.2
Park resource management	16	7.8
Other	2	1

N = 215

Note The respondents were asked to check all items that applied in this question.

Multiple responses were possible for each respondent.

Of the 215 respondents, 150 respondents (73.5) answered “Wildlife” as their preferred program topic. 97 respondents (47.5%) from the total of 215 respondents selected “Astronomy” as their preferred park topic. Most of these park topics are usually the topics offered by the park naturalists at Lake Wissota State Park, especially the topic of wildlife. However the park naturalists have never offered the topics of “Recreation

activities” that was selected as one of the top rank (44.1%) for preferred topics among respondents. Due to this, the park naturalist should consider creating this topic to fulfill the park visitors’ need, which might attract more participants. Furthermore, the park naturalists have never offered the topic of “Cultural and regional history” and “Park resource management”. Although these topics were chosen by fewer respondents, 24.5% for “Cultural and regional history” and only 7.8% for “Park resource management”, these topics are considered as a potential park topics to bring the park professionals and people together. When people know and learn more about the importance of the park from the cultural and regional history, they will acknowledge and help to protect natural resources. The topic of park resource management also helps to improve understanding between the park management and park visitors.

In addition, two of respondents who chose “Other” specified the topic of “Outdoor skills” as their preferred park topic.

The data concerning the preferred time of day to attend the park activities are reported in Table 16.

Table 16

Preferred time of day to attend

Time	Number	Percent %
6-8 AM	5	2.4
8-10 AM	8	3.9
10-Noon	35	17.1
12-2 PM	10	4.9
2-4 PM	19	9.3
4-6 PM	14	6.8
6-8 PM	38	18.5
8-10 PM	21	10.2
No preference	29	14.1
Multiple responses	26	12.7
Total	205*	100.00

N = 215

* Number varies due to non-respondents.

Thirty eight respondents (18.5%) chose 6-8 PM as their preferred time of day to attend the park activity, followed by 10-Noon with thirty five of respondents (17.1%) who selected this time. Twenty-nine of respondents (14.1%) chose item “No preference”.

Table 17 shows data regarding the preferred day of the week to attend the activity. The majority of respondents, 129 (63.2%) selected “Saturday” as their preferred day of week to attend the activity. When comparing the number of respondents who selected “Saturday” with the number of respondents who selected the other days of the week, there was a considerable difference. For instance, the number of respondents picking “Sunday” and “Friday” was only 25 (12.3%) and 13 (6.4%) respectively. Obviously, the days “Monday-Thursday” were selected by a smaller number of respondents. Undoubtedly, the reason the majority of subjects of this study chose Saturday and Sunday was because they were at Lake Wissota State Park those days.

Table 17

Preferred day of week to attend

Day of week	Number	Percent %
Sunday	25	12.3
Monday	2	1
Tuesday	7	3.4
Wednesday	5	2.5
Thursday	1	0.5
Friday	13	6.4
Saturday	129	63.2
Multiple responses	22	10.8
Total	204*	100.00

N = 215

* Number varies due to non-respondents.

Obstacles that prevent people from attending the interpretive programs

To clarify objective 6, a Likert Scale, ranging from strongly disagree to strongly agree, was employed to indicate the barriers that prevent respondents to attend the interpretive programs. The respondents were asked to indicate their agreement with 9 items regarding the reasons why they did not attend the interpretive program. The results of the next table came from the question 4 in the questionnaire of respondents who did not attend the interpretive program (Appendix B). The data were ranged by mean score and tabulated as shown in Table 18.

Table 18

Obstacles that prevent people from attending the interpretive programs

Items	1 % SD	2 % D	3 % N	4 % A	5 % SA	Mean	SD
Did not know about the activity	11.6	7.8	26.4	27.1	27.1	3.50	1.29
Do not have time	9.2	10.8	37.7	23.1	19.2	3.32	1.18
Time of day is not convenient	7.9	12.6	64.6	9.4	5.5	2.92	.87
Length of program	11.4	16.3	67.5	4.1	0.8	2.67	.76
Not interested in park program	22.7	22.0	36.4	12.1	6.8	2.58	1.17
Location of activity	22.7	13.3	55.5	4.7	3.9	2.54	1.02
Do not have anyone to join with	28.6	18.3	43.7	6.3	3.2	2.37	1.06
Personal health problem	55.9	11.0	26.8	5.5	0.8	1.84	1.05
Cannot communicate well in English	77.3	7.0	13.3	1.6	0.8	1.41	.84

n = 140, respondents did not attend the interpretive programs

1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

The data was neutral. Most of respondents agreed with the item “Did not know about the activity” with the mean score 3.50 as the chief deterrent for them not to attend the activity. It appears that park professionals could improve attendance through more

thorough promotion of the programs. The second rank of mean score (3.32) was item “Do not have time” that was also considered as one of the major constraints for non-participants of the study of Godbey (1985) and the study of Schroeder et al. (1986). The next item “Time of day is not convenient” ranked as the third place with a quite neutral finding. Park professionals should consider offering programs at various times of day. Surprisingly, the item “Personal health problem”, identified as one of the chief deterrents for non-participant from the study of Godbey (1985) and the study of Schroeder et al (1986) was ranked as the eighth place of the barriers for non-participants with the mean score 1.84. The fewest of respondents agreed with the item “Cannot communicate well in English” (mean score = 1.41). This is likely due to the majority of respondents of this study being Caucasian (98.1).

Written Comments

Lastly, the respondents were asked to add any comments that they might have. This question was the open-ended questions. There were many written comments on the survey. The majority of these comments were positive, with only a few complaints. Some comments expressed recommendations in the area of interpretive programs and park resource management. Even though written comments cannot be statistically analyzed, it is important to include them in this study because they can provide the park professionals with specific information. Every written comment received was included here and none have been edited (Appendix D).

In summary, according to the comments, the respondents were satisfied with the interpretive programs. They stated that it was good to have the interpretive programs while camping in Lake Wissota State Park. Children could have activities to do and

parents could join with them too. The respondents also indicated that the interpretive programs could help them to understand more about natural resources. In addition, these comments also revealed that additional promotion might be needed. Some respondents did not attend the interpretive program because they did not know the program was available in the park. The respondents suggested that the park professionals and naturalists might need to do more promotion to the camper around the campsites and to the other park visitors when entering to the park. The park professionals could do the publicity in local newspapers as well. On the other hand, some respondents did not have available time to attend the interpretive programs because their own activities kept them busy. These comments support the findings of this study: the majority of respondents who did not attend the interpretive programs did so because they did not know about the activity or they did not have time to attend.

The respondents suggested that the interpretive programs should have more adult programs. This is likely due to most people usually understanding the interpretive programs are the activities for children. Due to the comments, the respondents also needed the park professionals and naturalists to offer more programs. Each summer, there is only one naturalist to work for the interpretive programs; therefore, it might not be enough to offer more programs. The park professionals may consider it possible to have more naturalists to serve the park visitors' need.

The next chapter, the final chapter, covers a summary of the findings of this research. It also contains the recommendations for Lake Wissota State Park to improve the interpretive programs that better suit the users' needs. Lastly, the recommendations for further research are presented. As noted in the chapter of literature review, the

research resulted in a limited number of resources on this subject because little of this field of research has been studied. Thus, the researcher strongly recommends further research in this field.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

This final chapter includes the significant findings and the conclusions of this study. Recommendations for increasing the number of attendances for the interpretive programs and the effectiveness of interpretive programs are made. Additionally, the researcher also suggests recommendations for future study.

Restatement of problem and research objectives:

Interpretive programs are the tools used by park professionals and interpreters to help park visitors gain individual and group experiences in natural environments while enjoying the varied activities. Generally, park professionals and interpreters at Lake Wissota State Park work together to create a unique set of activities for park visitors. However, this is the first study of park visitors' use of interpretive programs. Due to the purpose of the study, the following objectives were discussed:

7. To study the demographic characteristics of park visitors who did and who did not attend the interpretive programs.
8. To identify the reasons people attend the interpretive programs
9. To determine the use patterns of visitors who did and who did not attend the interpretive programs.
10. To assess the park visitors' satisfaction level with the interpretive programs
11. To identify the preferred interpretive themes, preferred time of day, and preferred days of the week for participating in the interpretive programs.

12. To identify the obstacles that prevent people from attending the interpretive programs

Summary of methodology

Questionnaires were used as the primary data collection instrument for this study. Two kinds of questionnaires, one for park visitors who attended the interpretive programs (park programs with the guidance of a naturalist or interpreter) and the other for park visitors who did not attend, were used to address the objectives of this study. The subjects were park visitors who visited Lake Wissota State Park in Chippewa Falls, Wisconsin on Saturday and Sunday between June 10 and July 15, 2000. Adult groups or group leaders were sampled rather than individual park visitors. The locations for distributing the surveys were the family campground, the beach area, and the nature center. The total number of respondents was 215, which consisted of 75 respondents who attended the interpretive programs and 140 respondents who did not attend the interpretive programs.

Discussion on significant findings:

This section covered a summary of the important findings of this study. The findings were discussed based on the objectives of study.

Objective 1 To study the demographic characteristics of park visitors who did and who did not attend the interpretive programs.

Of the 215 surveys, 75 respondents attended the interpretive program and 140 respondents did not attend the interpretive program. The majority of respondents were

female and primarily represented 30-39 and 40-49 year of age (Table 2 and 3). Mostly, the respondents were visitors to Lake Wissota State Park from outside the immediate area (Table 4). Among these visitors, the greater number of them was from northeastern Wisconsin. A college degree was the most common level of their education (Table 6). Most respondents were Caucasian while only about 2% of respondents were American Indian or Hispanic. None of them were Afro-American or Asian (Table 7).

As previously mentioned in the limitations of study (Chapter 3), sometimes people whom the researcher selected as the subject passed a survey to their partner instead. This might be the reason for non-equal representation of male and female in this study. In addition, another study about the level of education could be one of the aspects for park professionals to plan the activity. The difference in age category and level of education of people who attend the interpretive programs challenge the park professionals to design suitable programs.

This study revealed that the majority of respondents were visitor to the area, from outside a 10 mile radius of Lake Wissota State Park. The great number of visitors to the area was from northeastern Wisconsin and the other neighboring states, for example, Minnesota, Iowa, and Illinois.

Few minorities seem to use the park. The possibilities were they might use the park service during weekdays, or they might camp at the area of group campground, which was not the survey area for this study, or they might not use the park service and interpretive service at all. Furthermore, among the respondents who attended the interpretive program (n = 75), none were minorities. This result should motivate the park

professionals to study the appropriate marketing strategy to attract more minorities to use the park and its service.

Objective 2 To identify the reasons that people attend the interpretive programs.

The respondents who attended the interpretive programs (n = 75) were asked to select their agreement with 9 items regarding the reasons they participate in the interpretive program. The top 4 reasons were “To do something with family”, “To have fun”, “To develop an appreciation of nature”, and “To learn more about nature” respectively (Table 8). The item “To talk to new and varied people” was considered as the least important reason to attend the activity.

These reasons identified in this study were not among the top 2 reasons identified in the previous studies (Chapter 2). McCool et al. (1993) found appreciating the importance of nature and learning about nature was the major reason when visiting the park. Klenosky et al. (1998) also found that the respondents perceived learning more about natural surroundings was the major reason. This study found the reasons “To develop an appreciation of nature” and “To learn more about nature” were ranked as the third place and fourth place respectively.

The reason “To do something with family”, ranked as the first place of this study. This should be one of the factors to support designs of interpretive activities that parents and children can do together. “To have fun” was also indicated as one of the top reasons to attend the activity. That supported the study of Douglas et al. (1995). They found most people participated in interpretive programs because they perceived that acquiring new knowledge is enjoyable. Due to these findings, when the park professionals create a

program, they should not put too much information in the activity. On the other hand, they should create the activity that can give new knowledge with an enjoyable experience because the attendees can learn and absorb something while having fun (Douglas et al., 1995).

Objective 3 To determine the use patterns of visitors who did and who did not attend the interpretive programs.

Mostly, the respondents normally engage in camping, swimming and sunbathing when visiting Lake Wissota State Park (Table 9). The greater number of them was staying overnight (Table 10) and the majority of the size of their group was 5 or more (Table 11). Then, only respondents who attended the interpretive program were asked what activities they attended and which type of user they were. Evening programs were the predominant activity in which they participated (Table 12). They primarily represented repeated users of the interpretive program (Table 13).

This study determined that the majority of respondents were overnight users. That implied most respondents engaged in camping when visiting the park. Moreover, this state park is located by Lake Wissota, therefore swimming and sunbathing were also favorite activities of the respondents.

During the duration of the survey (June 10 - July 15, 2000), most interpretive programs were evening programs, which were scheduled every weekend through the summer (Memorial Day until Labor Day). Therefore, most respondents who attended the interpretive programs (n = 75) joined this activity. Other interpretive activities, guided nature hikes, nature center, Junior Ranger and Wisconsin Explorer, and Wonder walk

bags, were not put in the schedule, depending on the requests of park visitors. Another finding revealed the greater number of repeat users. This implied most attendees knew the park activities existed in the park. This might motivate park professionals to promote the activities among visitors who had not known about the programs in the park.

Objective 4 To assess the park visitors' satisfaction level with the interpretive programs

The respondents who attended the interpretive program were asked to describe their level of agreement with 8 items concerning their satisfaction. The top 4 items, which the respondents noted were "Accuracy of information", "Knowledge of subjects by interpreter", "Demeanor and appearance of interpreter", and "Communication with audience by interpreter" (Table 14). Item "Effective conclusion to program" was considered as the least acceptable part of the interpretive program.

The results positively showed that respondents were content with the interpretive program. Especially, they were satisfied with the knowledge, appearance, and communication skill of the interpreter who led the activity. This suggests that the attendees, whether pleased or not, based their opinions heavily on the interpreter.

However, the interpreters or naturalists at Lake Wissota State Park are part-timers or hold temporary positions and most of them are college students. They are hired only for one summer when the interpretive programs are active in the park. Consequently, it might be a problem for park professionals to sustain the quality of seasonal interpreters. In addition, some respondents considered the duration of the activity was too long. It might be assumed that respondents who were not satisfied with the duration might have joined

the program that lasted 2 hours, while most programs lasted 1 hour. Thus, the interpreter might need to condense the 2-hour program that was considered too long.

In summary, it is appropriate to note that overall, the park visitors who attended the interpretive programs seemed to be satisfied with the programs (63%, Table 13).

Objective 5 To identify the preferred interpretive themes/topics, preferred time of day, and preferred days of the week for participating in the interpretive programs.

The interpretive topics “Wildlife”, “Astronomy”, and “Recreation activities” were selected by respondents in that order (Table 15). Most respondents preferred to attend the activity between 6-8 PM and on Saturday (Table 16 and Table 17).

The favorite interpretive topic among the respondents was wildlife, which is always provided by the interpreter. Consequently, this finding supports Lake Wissota State Park continuing this topic as per the requests of the visitors. Astronomy, ranked as the second favorite topic, is the program provided by University of Wisconsin-Madison. The University has brought this program to Wisconsin State Parks. This year (2000) is the fifth year of this program. Park visitors have the opportunity to view the night sky through telescopes and ask questions about the universe. Last summer (2000), Lake Wissota State Park offered this program only once. That single offer was not enough to serve the total demand. As a result, park professionals should consider adding more of this type of program in the future. Also it is important to note that recreation activities, ranked as the third place, should be included in the future as well.

Immediately below the topic of wildlife, plant life is another popular interpretive topic that the naturalists often provide at Lake Wissota State Park. In this study, only 57

of respondents (N = 215, Table 15) selected this topic. This finding might not be used for the park professionals to reduce this program. The topic of plant life is still as significant as wildlife for visitors to learn more about the wonders of nature. In summary, the park professionals and interpreters might need to develop a variety of topics to serve visitors' needs. This may help to attract more attendees, while keeping the topics of wildlife and plant life as the major interpretive programs.

6-8 PM seems to be the most convenient time for visitors. On the other hand, this might not be an appropriate time for some activities. For instance, bird watching should start in the early morning while astronomy should start after sunset. By a small margin, 10-noon is secondary to 6-8 PM. In addition, the item "No preference" was also selected by a great number of visitors.

The majority of respondents preferred Saturday for interpretive programs. A fewer number of respondents selected weekdays (Monday to Friday). During last summer (2000), the park professionals provided the interpretive programs only from Friday to Sunday, which was the same as the previous summers. It was difficult for them to provide more interpretive programs during weekdays because they did not have the potential attendees. Moreover, they did not have enough interpreters or naturalists to take care of these programs either. As previously discussed, the interpreter at Lake Wissota State Park is a temporary position and there is only one interpreter for a summer.

Objective 6 To identify the obstacles that prevent people from attending the interpretive programs

The respondents who did not attend the interpretive program were asked to indicate their agreement with 9 items regarding the barriers that prevent them from participating. The top 4 deterrents for them not to attend the activity were “Did not know about the activity”, “Do not have time”, “Time of day is not convenient”, and “Length of program” (Table 18).

The previous study of Schroeder et al. (1986) revealed that the deterrents to participation of activity were from user characteristics and problems of parks. According to the findings of this study, most respondents agreed that the barriers were the problem of the parks. Some comments from the respondents also support this position. They indicated that they did not know the activity was available in the park, and the time of the interpretive program was not convenient. Consequently, the park professionals and interpreter must put more effort into publicity and apply the finding of a preferred time for participation of an activity as a criterion to adjust the interpretive programs. This might help to increase the attendance.

Another restraint, “Do not have time” ranked as the second place, is a problem of user characteristic. A few comments indicated that the respondents had their own activities while visiting the park and these activities did not allow them to have spare time for the interpretive programs. Some also indicated that they were new to the place so they wanted to do activities around the park rather than join the interpretive program. They might attend the program on their second visit.

In summary, the chief obstacle for participation in this study, “Did not know about the activity” was not in the top 3 deterrents identified in previous studies. This was a park problem while most of the major barriers found in the previous studies were personal problems (lack of interest, lack of time, and health problems). However, the other barriers were consistent with the previous study. Especially, the item “Do not have time” was indicated in every previous study.

Conclusion

Interpretive programs are the tools used by the park professionals and naturalists to help park visitors gain experiences in natural resources while enjoying the activities. The goal of this study is to develop better interpretive programs that meet park visitors’ needs because the interpretive program is a product and the park visitors are customers. Between Memorial Day and Labor Day every year, the park professionals and naturalists at Lake Wissota State Park offer the park activities for visitors. The temporary naturalist is hired to lead the interpretive programs in one summer. Besides the temporary naturalist, the park professionals also receive the recommendations about the interpretive programs from the state naturalist, which is a permanent position with the Wisconsin Department of Natural Resources. As previously mentioned, the park professionals and naturalists at Lake Wissota State Park have never studied the interpretive programs. Therefore, this study may encourage them to study more about the interpretive programs.

This study may be a framework for park professionals and naturalists to design the better interpretive programs. They could know more about their customers. Who were their customers and what were their demographics? How can the park professionals

design activities which permit all people with different demographics to join without the barriers? One image of interpretive programs for people in general might seem it is just for children. The image of the interpretive program and the different demographics of park visitors challenge the park professionals to design suitable programs. The study of reasons that motivate park visitors to attend the interpretive programs and the obstacles also help the park professionals and naturalists. According to this study, the park professionals may need to design the interpretive programs that offer various activities that permit the attendees do activities with their families while having fun and obtaining new knowledge about the natural resources. The additional promotion, various times of day for activities, and various interpretive topics may be needed. This may help to attract more attendees. Furthermore, the satisfaction of attendees with the interpretive programs depends heavily on the interpreters. The park professionals may need to consider if it is possible to have a permanent position for the naturalist.

On the other hand, it is impossible to design the interpretive programs that meet all park visitors' need. Nevertheless, this study may be a framework for park professionals and naturalists to develop better interpretive programs that meet the majority of park visitors' needs and support more researches in this field.

Recommendations for Lake Wissota State Park

The findings of this study resulted in recommendations for park professionals and interpreters at Lake Wissota State Park, as follows:

- 1.) The park professionals should study marketing strategies concerning how to attract more minorities to use the park service and interpretive programs.
- 2.) As mentioned in the finding of barriers for non-participants, the majority of them agreed that they did not know about the activity. Therefore, the park professionals should put more effort into publicity about the interpretive programs. They might advertise the programs in the local papers and provide more information to the visitors while visiting or camping at the park.
- 3.) As previously noted, the park professionals at Lake Wissota State Park have never studied the park visitors' use of interpretive programs. This study might encourage them to do more follow-ups when they offer the interpretive programs each year. Especially, each year's interpreter might make conclusions and recommendations for future interpreters because the interpreter at Lake Wissota State Park is a part-time and turnover position. With a summary and suggestions, the future interpreter would have a framework for developing better activities.
- 4.) The park professionals and naturalists should offer the interpretive programs with various interpretive topics and various time of day.
- 5.) The results of level of satisfaction toward the interpretive programs revealed that the satisfaction of attendees depended heavily on the interpreter. As a result, the park professionals may consider if it is possible to have a permanent position of interpreter to sustain the quality of interpretation.

Recommendations for future study

Due to the limited resources of this subject, the researcher strongly recommends future research to expand more study. The recommendations for future study are made as follow:

- 1.) Future research, the same as this study, was recommended. However, the duration of the survey should be expanded. Instead of one month for the survey, the future study might take a whole summer for the survey. This might help to get a larger sample size and support findings that can be adapted to the rest of population.
- 2.) Future research might include the study of weekend users and weekday users. In addition, the study of non-personal services might be included as well (the interpretive services without the guidance of the interpreter or naturalist, for example; self-guided nature trails, wayside exhibits).
- 3.) Besides providing interpretive programs in summer, some Wisconsin State Parks offer interpretive services all year. Therefore, it would be interesting to consider interpretive programs in spring, fall, or even in winter.
- 4.) The study of future research might focus on the interpretive needs and expectations of Wisconsin State Park visitors. The additional questions may be “What type of naturalist activities do you prefer?”, “What is your preference for the best way to learn about the park and its resources?”, “What do you feel are the most effective ways we could let you know about naturalist activities?” (Division of Parks and Recreation, Minnesota Department of Natural Resources, 1995). The study of level of satisfaction with the interpretive services might not be included because these results mostly came out positive. Only one kind of

survey might be addressed. This will not need to separate the visitors into participants and non-participants.

- 5.) Instead of studying the interpretive programs at the parks, it would be interesting to research the interpretive programs at the other location where provides the interpretive service to educate the visitors, such as museum, zoo, historic structure, factory, theme park and restored village.
- 6.) The park manager and Wisconsin State Naturalist recommended the researcher to study the diversity of culture to do a marketing plan for attracting more ethnic minorities. However, the researcher did not have any personal interest in this study. Currently, this topic seems to be a hot issue and some authors mentioned this issue. For instance, Goldsmith (1994) indicated that ethnic minorities are largely absent from most major national parks. Therefore, it might encourage the future researcher to study this issue.

REFERENCES

- Bell, S. (1997). Design for outdoor recreation. New York: E & FN Spon.
- Bialeschki, D. M., & Henderson, K. A. (1988). Constraints to trail use. Journal of Park and Recreation Administration, 6(3), 20-28.
- Buckley, R. (1999). Sustainable Tourism and Critical Environments. In T. V. Singh & S. Singh (Eds.), Tourism Development in Critical Environments (pp.21). New York: Cognizant Communication Corporation.
- Clements, C., & Ness, E. (1995). New Mexico Recreation User Study. New Mexico Recreation and Tourism Council, Santa Fe, NM.
- Davenport, D. (1989). A traveler's Guide to Wisconsin State Parks and Forests. Madison: Publication of the Wisconsin Department of Natural Resources.
- Division of Parks and Recreation (1995). Interpretive services survey. Minneapolis, MN: MN DNR Minnesota Department of Natural Resources.
- Douglas, M. K., Ted T. C., & Larry, B. (1995). Interpretation cultural and natural resources. Pennsylvania: Venture.
- Edginton, R. C., Hanson, J. C., & Edginton, R. S. (1992). Leisure Programming: Concepts, trends, and professional practice (2nd ed.). Dubuque, IA: Brown & Benchmark.
- Godbey, G. (1985). Nonuse of public leisure services: A model. Journal of Park and Recreation Administration, 3(2), 1-12.
- Goldsmith, J. (1994). Designing for diversity. National Parks. 68(5/6), 20-21.
- Interpretative documents. [Online]. The National Park Service.
<<http://www.nps.gov/planning/mngmtplc/ieis.html>> [2000, Apr. 10].

Klenosky, B.D., Frauman, E., Norman C. W., & Gengler, E. C. (1998). Nature-based tourists' use of interpretive services: A means-end investigation. Journal of Tourism Studies, 9(2), 26-36.

Knapp, D., & Volk, T. L. (1997). The identification of empirically derived goals for program development in environmental interpretation. Journal of Environmental Education, 28(3), 24-35.

Kreag, G. (1995). Linking interpretation /environmental education with tourism. In J.L. Thompson, D.W. Lime, B. Gartner & W.M. Sames (Eds.), Proceeding of the Fourth International Outdoor Recreation and Tourism Trends Symposium and the 1995 National Recreation Resource Planning Conference (pp. 476). St. Paul, MN: University of Minnesota, College of Natural Resources and Minnesota Extension Service.

Lake Wissota State Park. (1999). Annual Interpretive Programs Report. Chippewa Falls, WI: Author.

Lake Wissota State Park. (1999). Lake Wissota-A park for all seasons [Brochure]. Chippewa Falls, WI: Author.

Lucas, R.C. (1988). Trends in Wilderness Recreational Use: Causes and Implications. Western Wildlands, 14(3), 15-20.

Masberg, B. A., & Savige, M. (1996). Incorporating ecotourist needs data into the interpretive planning process. Journal of Environmental Education, 27(3), 34-40.

McCool F. S., & Reilly, M. (1993). Benefit segmentation analysis of state park visitor setting preferences and behavior. Journal of Park and Recreation Administration, 11(4), 1-14.

Moscardo, G. (1998). Interpretation and sustainable tourism: Functions, examples, and principles. Journal of Tourism Studies, 9(1), 2-13.

Mount Rainier National Park interpretive programs. [Online]. The National Park Service. <<http://www.nps.gov/mora/home.htm>> [2000, Sep. 9].

Pigram J. J., & Ding, P. (1999). Tourism Environment Interactions: The Greening of Australian Beach Resorts. In T. V. Singh & S. Singh (Eds.), Tourism Development in Critical Environments (pp.35) New York: Cognizant Communication Corporation.

Pitt, D.C. (1988). The future of the environment-the social dimension of conversion and ecological alternatives. New York :Routledge.

Planning a visit to Yellowstone. [Online]. The National Park Service. <<http://www.nps.gov/yell/planvisit/todo/ranger/mammoth.htm>> [2000, Sep. 9].

Population estimate. [Online]. U.S. Census Bureau. <<http://www.census.gov/population/estimates/state/srh/srh99.txt> > [2000, Nov. 6].

Schoeder, D. T., & Wiens, M. (1986). The non-use of public park and recreation facilities in Tulsa. Journal of Park and Recreation Administration, 4(3), 75-87.

Searle, S. M., & Jackson L. E. (1985). Recreation non-participation and barriers to participation: Considerations for the management of recreation delivery systems. Journal of Park and Recreation Administration, 3(2), 23-35.

Sharpe, G. W., & Gensler, G. L. (1978). Interpretation as a management tool. Journal of Interpretation, (3)2, 3-9.

Social Science and National Parks. [Online]. The National Park Service. <<http://www.nps.gov/socialscience/public/public.htm>> [2000, Feb. 24].

Stokowski, A. P. (1990). The rhetoric of interpretation: More than a set of techniques. Journal of Park and Recreation Administration, 8(4), 43-51

The benefits of outdoor recreation. [Online]. Wisconsin Department of Natural Resources. <<http://www.dnr.state.wi.us/org/land/parks/reports/scorp/2000/benefits.html>> [2000, Apr. 10].

The learning place. [Online]. The National Park Service. <<http://www.nps.gov/intern/learn.htm>> [2000, Apr. 10]

Tilden, F. (1977). Interpreting our heritage (3rd ed.). Chapel Hill, NC: University North Carolina Press.

Upcoming events and interpretive programs. [Online]. Wisconsin Department of Natural Resources. <<http://www.dnr.state.wi.us/org/caer/cc/news/events.htm>> [2000, Sep. 9].

Vander Stoep, G. A., & Christensen, T. (1995). Trends in interpretation and environmental education: Linkages with museums, tourism, and resource management. In J.L. Thompson, D.W. Lime, B. Gartner & W.M. Sames (Eds.), Proceeding the Fourth International Outdoor Recreation and Tourism Trends Symposium and the 1995 National Recreation Resource Planning Conference (pp. 473). St. Paul, MN: University of Minnesota, College of Natural Resources and Minnesota Extension Service.

Whelan, T. (1991). Nature Tourism. Washington D.C.: Island Press.

Wisconsin State Parks Annual Report 1996-1997. [Online]. Bureau of Parks and Recreation. <<http://www.dnr.state.wi.us/org/land/parks/reports/annual/index.htm>> [2000, Apr.10].

Wisconsin Department of Natural Resources. (1995). Interpretive Handbook.
Madison, WI: Author.

Appendix A

Questionnaire for park visitors who attended the interpretive programs

The purpose of this survey is to study the park visitors' use of interpretive activity/naturalist activity (naturalist leads activity). Your information is valuable input for further improving a better activity for you. Your participation in this study is voluntary and all information is confidential.

1.) What activities do you normally engage in when visiting *Lake Wissota State Park*?
(Check **only 3** most common activities you engage in)

Swimming and sunbathing **Boating/Canoeing** **Fishing**

Family gathering **Picnicking** **Camping**

Biking **Snowshoeing** **Hiking**

Cross Country Skiing **Visiting Local Area of Interest**

Other (Please specify) _____

2.) You are:

Staying overnight at the park **Visiting the day**

3.) What is the size of your party?

1 **2** **3** **4** **5 or more**

4.) What naturalist activities did you participate at *Lake Wissota State Park*?

Evening program

Guided nature hike

Nature Center

Junior Ranger and Wisconsin Explorer

Wonder walk bags

Other (Please specify) _____

5.) Are you a:

First time user of naturalist activity

Repeated user of naturalist activity

6.) Listed below are some potential **reasons** why people **participate** in naturalist activity. How important is each reason for your participation?

Please **circle** a number corresponding to the level of importance **for each aspect**.

1 = Not Important (NI)

2 = Somewhat Important (SI)

3 = Neutral (N)

4 = Important (I)

5 = Very Important (VI)

	NI	SI	N	I	VI
A. To have fun		1	2	3	4 5
B. To do something with my family		1	2	3	4 5
C. To develop my skills and abilities		1	2	3	4 5
D. To talk to new and varied people		1	2	3	4 5
E. To learn more about nature		1	2	3	4 5
F. To have a change from my daily routine		1	2	3	4 5
G. To get away from crowds of people		1	2	3	4 5
H. To develop mental and physical health		1	2	3	4 5
I. To develop an appreciation of natural resources		1	2	3	4 5

7.) Information about your **level of satisfaction** with the naturalist activities can help the park better serve you. To what extent did each of the following meet your needs?

Please circle a number corresponding to the level of satisfaction for each aspect.

1 = Very Unsatisfied (VU)

2 = Unsatisfied (U),

3 = Neutral (N)

4 = Satisfied (S)

5 = Very Satisfied (VS)

	VU	U	N	S	VS
A. Accuracy of information	1	2	3	4	5
B. Application of interpretive principle	1	2	3	4	5
C. Knowledge of subjects by interpreter	1	2	3	4	5
D. Demeanor and appearance of interpreter	1	2	3	4	5
<u>E. Communication with entire audience</u>	1	2	3	4	5
by interpreter					
F. The duration of activity	1	2	3	4	5
G. Effective conclusion to program	1	2	3	4	5
H. Overall interpretive program	1	2	3	4	5

8.) What program topics are most likely of interest to you?

(Please **check all that apply**):

- Recreational activities Plant life Wildlife
 Birdwatching Astronomy Geology
 Pond and water life **Cultural and regional history**

 Park resource management issues **Ecology**
 Other (please specify) _____

9.) What time of day is most convenient for you to attend naturalist activity? (Please choose **only one**)

- 6-8 AM 8-10 AM 10 AM-Noon 12-2 PM
 2-4 PM 4-6 PM 6-8 PM 8-10 PM
 No preference

Also, what days of the week would you most likely attend naturalist activity? (Please choose **only one**)

- Sunday Monday Tuesday Wednesday
 Thursday Friday Saturday

10.) You are:

- Male Female

11.) Your age

- 16-19 20-29 30-39 40-49 50-59 60-69 70 and above

12.) You are a

- Local area resident (10 mile radius of the park)
 Visitor to the area, zip code _____

13.) What is your level of education?

- Less than High school High school graduate
 Some college/ associate degree/ vocational degree

College graduate Graduate degree

14.) What is your ethnicity?

Caucasian Afro-American American Indian
 Asian or Pacific Islander Hispanic

15.) Please add your comments regarding naturalist activity in *Lake Wissota State Park*:

End of questionnaire

Thank you for your cooperation. If you wish to receive the results of this survey, please leave your name and address at the park office. Survey and name will be separated to ensure confidentiality.

Appendix B
Questionnaire for park visitors who did not attend the interpretive programs

The purpose of this survey is to study the park visitors' use of interpretive activity/naturalist activity (naturalist leads activity). Your information is valuable input for further improving a better activity for you. Your participation in this study is voluntary and all information is confidential.

1.) What activities do you normally engage in when visiting *Lake Wissota State Park*?
 (Check **only 3** most common activities you engage in)

- Swimming and sunbathing** **Boating/Canoeing** **Fishing**
- Family gathering** **Picnicking** **Camping**
- Biking** **Snowshoeing** **Hiking**
- Cross Country Skiing** **Visiting Local Area of Interest**
- Other (Please specify)** _____

2.) You are:

- Staying overnight at the park** **Visiting the day**

3.) What is the size of your party?

- 1** **2** **3** **4** **5 or more**

4.) The following statements may be the **reasons** you did **not participate** in the naturalist activities. Please check the column, which best describes the reason you did not attend naturalist activities.

Please **circle** a number corresponding to the level of agreement **for each aspect**.

1 = **S**trongly **D**isagree (**SD**) 2 = **D**isagree (**D**)

3 = **N**eutral (**N**) 4 = **A**gree (**A**)

5 = **S**trongly **A**gree (**SA**)

	SD	D	N	A	SA
A. Location of activity	1	2	3	4	5
B. My personal health problem	1	2	3	4	5
C. Not interested in park program	1	2	3	4	5
D. Do not have time	1	2	3	4	5
E. Time of day is not convenient	1	2	3	4	5
F. Length of program	1	2	3	4	5
G. Do not have anyone to join with	1	2	3	4	5

H. Did not know about the activity 1 2 3 4 5

I. I cannot communicate well in English 1 2 3 4 5

5.) If you would like to participate in the naturalist activities what program topics are most likely of interest to you?

(Please **check all that apply**):

- Recreational activities Plant life Wildlife
 Birdwatching Astronomy Geology
 Pond and water life **Cultural and regional history**

 Park resource management issues **Ecology**

 Other (please specify) _____

6.) If you would like to participate in the naturalist activities what time of day is most convenient for you?

(Please choose **only one**)

6-8 AM 8-10 AM 10 AM-Noon 12-2 PM

2-4 PM 4-6 PM 6-8 PM 8-10 PM

No preference

Also, what day of the week would you most likely attend naturalist activity? (Please choose **only one**)

Sunday Monday Tuesday Wednesday

Thursday Friday Saturday

7.) You are:

Male Female

8.) Your age

16-19 20-29 30-39 40-49 50-59 60-69 70 and above

9.) You are a

Local area resident (10 mile radius of the park)

Visitor to the area, zip code _____

10.) What is your level of education?

Less than High school High school graduate

Some college/ associate degree/ vocational degree

College graduate Graduate degree

11.) What is your ethnicity?

Caucasian Afro-American American Indian

Asian or Pacific Islander Hispanic

12.) Please add your comments regarding naturalist activity in *Lake Wissota State Park*:

End of questionnaire

Thank you for your cooperation. If you wish to receive the results of this survey, please leave your name and address at the park office. Survey and name will be separated to ensure confidentiality.

Appendix C

Table of sampling schedule

Date	Location	Time of day	Remark
Sat, June 10	Beach area	Noon – 3 PM	
	Nature center	3 – 4 PM	
	Beach area	4 – 6 PM	
	Campground	6 – 8 PM	
	Nature center	8 – 9 PM	
Sun, June 11	Campground	10 – 11 AM	
	Nature center	11 AM – noon	
	Beach area	Noon – 4 PM	
Sat, June 17	Beach area	Noon – 3 PM	
	Nature center	3 – 4 PM	
	Beach area	4 – 6 PM	
	Campground	6 – 8 PM	
	Nature center	8 – 9 PM	
Sun, June 18	Campground	10 – 11 AM	
	Nature center	11 AM – noon	
	Beach area	Noon – 4 PM	
Sat, June 24	Beach area	Noon – 5 PM	No park activity
	Campground	5 – 7 PM	

Table of sampling schedule (continued)

Date	Location	Time of day	Remark
Sun, June 25	Campground	10 – 11 AM	No park activity
	Beach area	11 AM – 4 PM	
Sat, July 1	Nature Center	10 – 11 AM	
	Beach area	11 AM – 6 PM	
	Campground	6 – 8 PM	
Sun, July 2	Campground	10 – 11 AM	
	Nature center	11 AM – noon	
	Beach area	Noon – 4 PM	
Sat, July 8	Beach area	Noon – 3 PM	
	Nature center	3 – 4 PM	
	Beach area	4 – 6 PM	
	Campground	6 – 8 PM	
	Nature center	8 – 9 PM	
Sun, July 9	Campground	10 – 11 AM	
	Nature center	11 AM – noon	
	Beach area	Noon – 4 PM	
Sat, July 15	Beach area	Noon – 6 PM	
	Campground	6 – 7 PM	
	Nature center	7 – 8.30 PM	

Appendix D Written Comments

Written comments were grouped in the five categories listed below in order to ease reading. In “Pleasantness of park programs”, the researcher grouped all the positive comments on park programs which did not really give any other ideas. The “Specific suggestions on park programs” contained the ideas from park visitors who attended the park programs on how the naturalist could develop the activities. The “Criticisms on park program” were complaints about the park programs but they did not give any other ideas to improve the services. The “Park management issues” were compliments, complaints, and suggestions related more to overall park operations. The “Other comments” were the reasons why visitors did not attend the park programs and other comments.

Pleasantness of park programs:

- I think it’s neat that there are nature activities for those of us that live in city.
- Interesting stuff. Good for kids.
- Very interesting. Awesome program.
- Beautiful Park. The program helped us entertain grandkids. Great time.
- Very beautiful park and nice program.
- Have enjoyed the activities, especially happy with the activities for children. This is a very important time to learn.
- Kids enjoy sessions. Wish they were held this weekend.
- Very educational for everyone.

- It is nice to have different activities offered while camping at the lake.
- We've been to some very good and informative programs. I feel a lot of effort goes to these programs. Thank you.
- I think the naturalist program is great. You learn about the earth, plants, animals, and insects. The program is the learning experience.
- Only evening program over the 4th of July was at 8 Friday evening. We did not arrive until 8.15. Other all programs would be great.
- The program is great. It does not seem to get the participation, it deserves.
- I think it's great to have naturalist programs in a park to explain ecology, geology and etc.
- Very tactile center
- I would like to say I'm very pleased with everything.

Specific suggestions on park programs:

- Pictures of bats may have kept the children's attention a little better. Game was fun, may have more than one type of game.
- Would like to see more programs with naturalist. Would like activities at the amphitheatre.
- Would be nice to have programs at the amphitheatre.
- Would like to have a naturalist or interpreter at the nature center on Saturday. The kids love the nature center.
- I hope it continues and at times offer more. Is there any publicity in local newspaper?

- I am very pleased with the way things are planned. Could put up times and programs are being done. Inform campers more. I love coming to the park and beach area.
- Direct more towards children to hold their interest. Otherwise very good.
- I think the programs are good. I also think you should have horseback riding. I think it would be very successful
- Need to promote more as you come in the park. Talk and tell about it as you check in. Something like “Make sure you check our (program) tonight at 9 PM in the amphitheatre”.
- More adult programs.
- Visited the nature center. It was nice. The attendant was helpful, learned a few things. How about signing some of the plants and trees around the trails. I like what you are doing around the beach restoring areas to native habitat, also like the trails and the contract between prairie and woods for hiking.

Criticisms on park programs:

- We brought our grandchildren and families. The mosquitoes could not hear the speaker and too long for the children made use go dark to camp.
- (Name of program) Slides were very good. Speaker was not loud enough and had no public speaking skills. Line was to long to use (equipment), and not their fault but too much cloud cover. Could have focused on west sky without cloud cover rather than moon. Park ranger spoke very loud and clear and was funny.
- Too much details at (Name of activity)

- (Name of Program) Speaker seemed to be uneasy, perhaps first time. Hard to hear-crowd noise. Could have a P.A. system. Seemed to be uneasy with the use of (equipment). I believe it was a new item.

Park management issues:

- Need to have horses more than boat and store.
- Move the fishing pier.
- We would really appreciate a church service Sunday morning while we camp here.
- Lovely park, beautiful lake. Showers could stand some bleaching (milden removal)
- We feel the park should get newspaper.
- Seems like a nice park but what with the green beach water.
- I really like the campsite. I also like the reptile things.
- Very nice facility. If I lived here, I'd come here as often as I could. Very clean, excellent job.
- Very nice park, well kept and quiet
- Nice beach area, lawn kept nice.

Other comments:

- About 1-2 hours before an evening program, the Michigan adventure rangers walk through the campground, announcing the program at every campsite. This goes a long way towards good attendance.

- Have attended interesting programs in the past. We feel the age of the children is the driving force for attendance. Thank you
- This is our first visit to Lake Wissota so I feel what is available in the lake and hiking trails will keep us busy. Typically, when we've been to an area more than once, we may utilize the naturalist activities more often after we've explored the area and the kids want something new to do.
- New to the area, not familiar with the different naturalist activities you offer
- Not informed as of yet.
- We only stopped in for a picnic lunch enroute for Chippewa Falls.
- We usually don't stay at the park long enough to take part in these types of programs. We basically came to camp.
- Not here long enough to really say "We want to go to activity but got back too late.
- The program sounded interesting, and we probably would have attended with just our family. However, we were here with relatives and we don't see often so socializing was our primary activity.
- We had a lot on our own agenda to do and just didn't have time.
- Wonderful opportunities. Sorry our schedule did not work well to include the programs this time (They sounded interesting).
- We have a very young child so we chose not to participate but would love to when children are older. We really thought the programs offered while we were here were interesting.
- We were told that there were not be any naturalist programs this week.

- This is our first time to Lake Wissota but hope to come back to camp. (We're new to WI)
- Only here for the weekend so naturalist programs are not our top priority. Would be more likely to join in if we were here for a week or more.
- Most people are just arriving on Friday night. We were disappointed to miss the program.
- Do not use the programs offered; however they look very interesting
- We're traveling through the area with only a one night. We didn't have time to participate in your programs. Typically, I do participate in any park programs. I have always enjoyed the service I hope it will continue.
- The weekend has only just begun. I have not has a chance to be participant yet.
- Nice park, only reason did not camp here was we could only get one night spot. We needed 3 days. Don't understand one right thing.
- I did not know it was available.
- I honestly did not know you had any programs.
- Where is the nature center? How do we know when activities are taking place?
This is our third stay at this park. We like here very much. Clean facility, nice trails to hike on, and very nice campsites.
- Everyone should have knowledge of nature and the life around and know how to care for the land and its creature.
- We always enjoy our yearly trip to Lake Wissota State Park.
- Good resource for the entire family.
- Thanks for all your hard work