

Recreation and Conservation in Wisconsin State Parks

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Brian Bultman, Lainey Chavez, Chris Matzke, Scott McPeake

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Abstract

There exists a debate on whether Wisconsin state parks should focus on conservation or recreational activities. The question posed was, how do recreational activities at Devil's Lake State Park and Wyalusing State Park affect each park's conservation plan? The presented research question interrogates the dilemma between maintaining the natural setting of the park, and the pervasive nature of park visitors. Through engaging interviews with park rangers and recreational enthusiasts and direct personal observations, insight was gleaned into the complicated dynamic between recreation and conservation at the state parks. In the course of this primary data collection, it was concluded that tourism and revenue outweigh the efforts towards conservation at Devil's Lake State Park and Wyalusing State Park.

Recreation and Conservation in Wisconsin State Parks

Introduction

Wisconsin State parks are strikingly beautiful, and play a critical role in protecting our state's natural resources. Providing a relaxing natural setting close to home; state parks are visited by environmentalists protecting against invasive species to nature enthusiasts who enjoy bird watching. From day hikers seeking scenic vistas; to campers looking for a momentary escape from the city. With unique geographical landscapes and diverse plant and wildlife species, each state park is a valuable natural research laboratory for understanding how recreation influences the park's conservation management. Our goal was to find two state parks that were distinctly different in total area, number of annual visitors, recreational activities, and habitats for plants and wildlife. Wyalusing and Devil's Lake State Parks fit all these criteria and were considered ideal to test our research question: How do recreational activities at Devil's Lake State Park and Wyalusing State Park affect each park's conservation plan?

Wyalusing State Park (Appendix Figure 1) is located in the Driftless Area of Southwest Wisconsin, at the confluence of the Wisconsin and Mississippi Rivers. The park is an important wildlife habitat for numerous species of waterfowl, fish, and bald eagles. Since the park is such an important bird sanctuary, the conservation of their habitat is the primary concern of the park. Wyalusing is a relatively small, but wide spread park that receives 190,000 visitors annually (Wyalusing Master Plan, 1985, p.1), and is not located near any major population centers. The main recreational activities at Wyalusing include bird-watching, canoeing, camping, and hunting.

In contrast, Devil's Lake State Park (Appendix Figure 2) is a large, extensive park located near Baraboo, WI. Devil's Lake is also located close to popular tourist destinations, most notable Wisconsin Dells, and large population centers that include Madison, WI. The park, which is visited by 1.2 to 1.4 million people annually, is the most visited state park in Wisconsin (WDNR, 2010). The high volume of visitors to the park undoubtedly has an effect on the park's ecosystem and conservation efforts by the Wisconsin Department of Natural Resources. With numerous campsites, hiking trails, beaches and boating on Devil's Lake, the park attracts visitors year round.

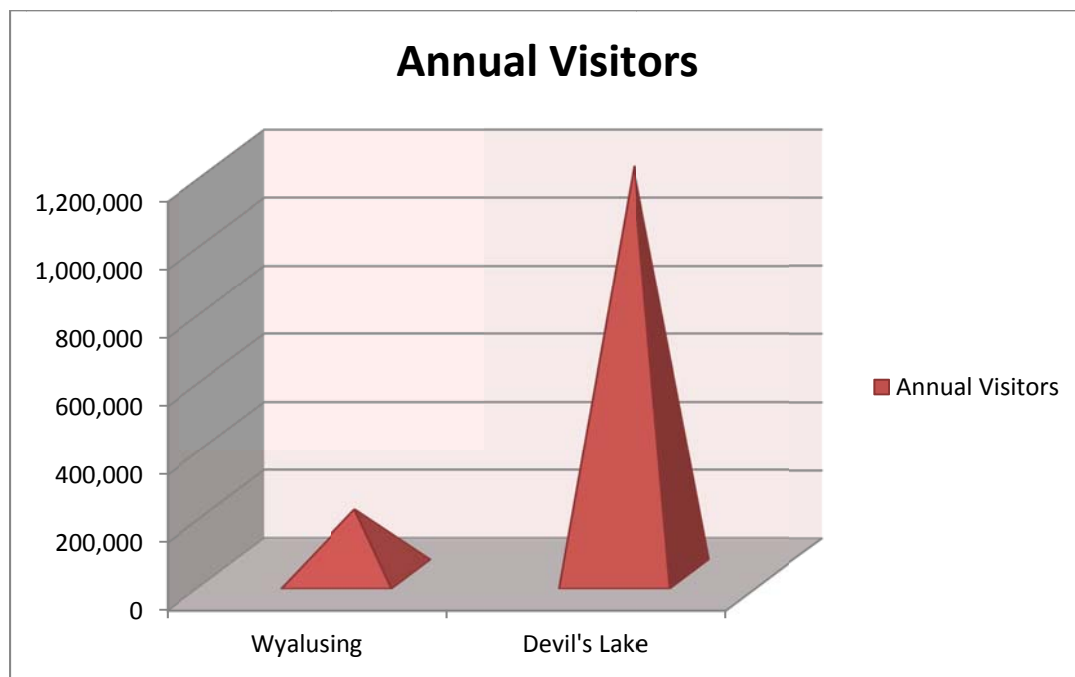


Figure 3. The total number of annual visitors was a key factor in determining which parks were chosen. Shown above is the significant difference between Devil's Lake and Wyalusing in annual visitors, which directly leads to problems with park conservation.

The interview process has been our most important way to gain primary data from visitors at Wyalusing and Devil's Lake, and how these visitors are interacting with

the natural setting in the parks. Also, the interviews with the park rangers gave insight on what the conservation objectives of park are, if these objectives are being met, and what economic deficiencies the parks are experiencing. Coupled with the interview process, direct personal observations have allowed a visual analysis of what condition the park is in, what recreational resources are being used, and if the conservation regulations are being followed by visitors. The visits to the two parks have proven to be invaluable in understanding the complicated dynamic between recreation and conservation at Wyalusing and Devil's Lake State Parks. The data collected from these visits, interviews, and direct observations indicate that state parks have been forced to concentrate on tourism and recreational needs to generate revenue because of budget constraints.

Literature Review

Recreation Impacts

The Parks

Devil's Lake State Park, located in Sauk County near Baraboo, Wisconsin was established in 1911. The park, which is visited by 1.2 to 1.4 million people annually, is the most visited state park in Wisconsin (WDNR, 2010). The high volume of visitors to the park undoubtedly has an effect on the park's ecosystem and conservation efforts by the Wisconsin Department of Natural Resources.

Wyalusing State Park is located in the Driftless Area of Southwestern Wisconsin and was established in 1917. The park's name is a Munsee-Delaware Indian word meaning "place where the holy man dwells" (WDNR, 2010). Since the original land purchase more land was added with the primary goal to preserve this unique area for the approximately 190,000 visitors annually (Wyalusing Master Plan, 1985, p.1). The low volume of visitors and the park's focus on conservation and maintenance has a significant effect on the ecosystems in Wyalusing State Park.

The research question for this project is, "How do recreational activities at Devil's Lake State Park and Wyalusing State Park affect each park's conservation plan?" The effects can be broken down into these four primary components: soil, water, flora, and fauna. Negative impacts on the four categories are an inevitable consequence of recreation. David N. Cole defines recreational ecology as the study of human impacts from recreation on natural and semi-natural environments (Cole, 1989, p.144). Thus, the objective for recreational ecologists is to have a balance between low-density

recreation opportunities and the maintenance of substantially natural operating ecosystems (Stankey & Lucas, 1974, p.6). In studying human impacts from recreation, it is important to consider the variety of recreational activities by different visitors which will leave different effects (Leung & Marion, 2000, p.36).

Hiking Effects on Park Environment

Both soil and vegetation are impacted by trail construction and use. Evidence of this includes soil compaction, erosion, muddiness, loss of vegetative ground cover, and changes in species composition around trails (Leung & Marion, 2000, p.30). Steep sloping trail positions are most erodible while intermediate positions can experience both erosion and deposition, and flat trails are most stable; all experience the problem of widening (Leung & Marion, 2000, p.32). Trails also create an increase in species diversity the closer to trails. At Wyalusing, there are about 1,797 acres of extensive recreation area and there are trails with in these acres available to hiking, cross-country skiing, and nature study (Wyalusing Master Plan, 1985, p.14). Camping is another activity that is associated with these effects.

Camping Effects on Park Ecosystem

Camping is a primary activity for many wilderness visitors and the campsites regularly experience high levels of use. There is substantial and localized ground cover loss and soil exposure that has been found even at sites with minimal use (Leung & Marion, 2000, p.32). At Wyalusing State Park there are 62 acres devoted to camping activities but there is an uneven distribution of use between two of the camping

areas. As a result of heavy use to the Wisconsin Ridge Campground, the area has diminishing ground cover, loss of shrubs for screening, hastened deterioration of the trees, serious erosion problems, and an overall decline of the site (Wyalusing Master Plan, 1985, p.15).

Trampling

In both Devil's Lake and Wyalusing State Parks there have been efforts to reduce the trampling of vegetation by visitors. The master plan for Devil's Lake states that one of the park's goals is to return the flora and fauna to pre-settlement conditions (Devil's Lake Master Plan, 1982, p.11). The park also prohibits all off-road vehicles except for one pass through snowmobile trail. The effects of off road vehicles from trampling are extremely destructive to vegetation and cause compaction of soil. Devil's Lake also does not allow horseback riding because the soils are too shallow over the bedrock for horses without wearing it down (Devil's Lake Master Plan, 1982, p.8).

Rock Climbing

The impacts of rock climbing on the cliffs in parks can be significant. Impacts include everything from the rubbing off of lichens and vegetation from cliff faces to the bolts and other hardware used for safety can damage the cliff face. Also, creation of trails to access climbing points leads to vegetation destruction and increased trampling (Leung & Marion, 2000 p.35). Devil's Lake specifically has been affected by rock climbing, especially in the past when climbing equipment was secured by pounding bolts into the rock.

Park Management

The Need for Protection

One of the focal points of our research is on how park management and the Department of Natural Resources (DNR) protect the natural resources of Devil's Lake and Wyalusing State Parks. With budget and manpower constraints, park management must decide what forms of recreation are acceptable with the understanding that any type of visitation causes some degree of harm to the park. Park management, with support from the DNR needs to monitor recreational activities within the park to ensure no environment changes are taking place that could be detrimental to the health of the park.

The Wilderness Act (P.L. 88-577) defines wilderness as “undeveloped” lands “without permanent improvements” which “has outstanding opportunities for solitude or a primitive and unconfined type of recreation,” and where “the imprint of man’s work is substantially unnoticeable.” Additionally, it states that “except as necessary to meet minimum requirements for the administration of the area...there shall be no...motorized equipment...and no structure or installation within any such area.” As a result of the Wilderness Act, managing agencies have generally adopted what has become known as the “minimum tool rule” to guide their wilderness management actions (Hendee et al.,1990, p.36). In general, the “minimum tool rule” instructs park officials to apply only the minimum necessary regulations and enforcement that is require to protect the wilderness of the park. However, if these passive methods fail to resolve wilderness concerns, park management must be prepared to apply more restrictive measures, as Dustin & McAvoy (1982, p.51) emphasize, it has been argued that managers must not

hesitate to employ direct controls, even as initial actions, when long-term or irreversible resource degradation is occurring.

Management Strategies

The goals of wilderness management are to keep wilderness wild and “untrammled” while preserving natural ecosystems and opportunities for high quality experiences, characterized by solitude, primitiveness, and lack of confinement (Hammit & Cole, 1998). Park officials and DNR managers must balance the protection of the natural state of the wilderness while providing access for recreation. This balancing act is particularly challenging at popular destinations like Devil’s Lake State Park which sees over 1.2 million visitors per year (WDNR, 2010). Such destinations provide substantial societal benefits by allowing respite from city life and immersion in natural environments for thousands; however, the thousands that throng to these places detract from the wildness and sense of solitude that wilderness should provide.

Managers must make decisions on the type of recreational experience that is appropriate or, more specifically, what experiences are so inappropriate that restrictive actions should be taken to avoid those illegal or damaging activities (Cole & Hall, 2007, p.126.) Particularly argumentative decisions are whether or not to deny access to visitor to certain environmentally sensitive sections of the park, and limiting use in order to protect the general recreational experience of all. Management of the state park directly affects the quality of the recreation resources, and the overall experience for park visitors. For example, restricting camping to designated campsites may reduce campsite numbers and aggregate impact, but it also imposes a direct management

“presence” and control on visitor freedom to travel and select campsites (Leung & Marion, 2000, p.40).

The expanding popularity of wilderness recreation, greater public scrutiny of management decision making and widening demands for participatory public land management are placing greater demands on land managers to further develop and communicate the processes by which decisions are made (Krumpe & McCool, 1997, p.18). A poignant hypothesis concerning the effects of management on recreational use is the “adaptable human hypothesis”— is that people do care about how many other people they encounter. However, they learn; they plan; they adjust their expectations; they cope; they rationalize; they view things in relative terms— rather than in absolutes—they say “this place provides more solitude than Seattle” rather than “this place provides no solitude”; they make trade-offs. They adapt (Cole & Hall, 2007, p. 129.)

Methodology

Overview

Conducting interviews was the most informative primary data that we collected. There are two primary groups of people that we would like to interview. The first group is park rangers and the people who work at the state parks. We will ask questions in person to gain information and more insight into the park itself. Information on the types of recreation, and conservation management will be asked. Appendix A provides the list of questions we will be asking park officials. We will only require that answers be given orally, but group members will record the answers of the park official. This

information on recreation and conservation will be used for qualitative as well as quantitative analysis in regards to the success the park is having in maintaining its conservation principals.

The second group of people that we would like to interview is the park visitors. Appendix A provides the list of questions we will be asking park visitors. This primary data will be useful in learning the everyday uses of the park by park enthusiasts. This interview will once again be conducted in person with no surveys to fill out, and the information given will be recorded as they speak. Hopefully we will learn the reasons why these enthusiasts visit the park, how many times they have been there this year, as well as what activities they partake in at the park. We will also ask them which conservation policies they are aware of, as well as the efforts, if any, they take to preserve the park. The information we gain from these interviews will be useful for our research in terms of the effect that recreation is having on the park's conservation plan.

How the interviewer conducts their interview is a very important aspect of the interview process. As mentioned, our interview will be conducted in person, without surveys to fill out, and the answers will be documented as they speak. Making this a comfortable environment will be important. Our interview is going to be structured; it will be deemed a formal interview because we will have questions prepared in advance, and we will offer a friendly environment but very little on our personal thoughts and beliefs (Secor, 2010, p.195). Surveys are far too impersonal for the type of information we are collecting and we would expect fewer people to participate. We will provide privacy statements (Appendix B) to those being interviewed to make sure they are comfortable answering our questions.

Interview Process

When deciding how to conduct an interview, it is important to realize what is in your group's best interest, and what the best way to retrieve useful information is. There are many different ways to interview such as surveys and questionnaires, focus groups, and individual interviews. Some advantages of surveys are that they are easy to analyze and are minimally intrusive. However, they can have drawbacks, such as low response rates and the lack of depth in the responses. Also, you cannot give visual cues and you cannot probe responses. Personal interviews may give more qualitative responses and the responses can go into much more depth and detail. When interviewing, it is important to have questions prepared, show interest, be friendly, and provide appropriate contact information (Secor, 2010, p.196-197).

Interviews can be seen as an unstructured conversation with interpersonal exchange. They can also be very structured and formal with little information given about the interviewer and a solidified set of questions. Interviews can be conducted through surveys, questionnaires, focus groups, or conversations. Surveys are given as a set of questions to respond to and do not involve spontaneous responses. They are good for representing basic characteristics of research subjects and for giving findings that are very accurate and from actual responses from the population. Survey data often leads to statistical analysis. Also, questionnaires may be used but it is difficult to create one that will give valid and reliable results (Secor, 2010, p.196-199).

While surveys are given to many for statistical analysis, interviews and focus groups give more in depth conversations with individuals, with more room for flexibility.

Interview research is very variable; the number of participants interviewed varies greatly on the situation. While focus groups are used for group interviews and often used to spark a debate, interviews of single individuals are often common. Those who are chosen for interviews are relevant towards the research question, and their responses are useful towards answering the question. If diversity is relevant towards your research topic, and there are a wide array of types of people you wish to interview, it is important to conduct a high number of interviews. On site recruiting is the process in which you approach people in an area randomly and methodology is very important in this process. It is important to realize that sometimes in interviews you may not always follow your question guide and a semi-structured form is very useful. Where and when you interview the subject are important aspects of your interview process (Secor, 2010, p.200-201). Certainly when conducting on site interviews, such as interviews within state parks with those participating in recreational activities, a verbal interview rather than a survey is the correct choice. Verbal interviews offer much more opportunity to stray away from the list of questions that have been selected and to get a more in depth and insightful response if needed. This allows for more qualitative research and more subjectivity.

It is important to realize that interviews are a good way to discover a story behind the interviewee's experience. In depth conversation can take place, and you can learn more about an individual. It is important when preparing for an interview to follow some useful steps. Choosing a location with little distraction, explaining the purpose behind the interview, and giving the privacy statements are all important aspects. Making sure they know that they have freedom in the interview is important, as well as giving contact

information. Standardized open-ended interviews are those in which the same questions are asked to all, but the responses are entirely up to the interviewee (McNamara, 2006). It is also extremely important for the interviewer to be prepared; they should be knowledgeable, tolerant, critical, and clear. They should also structure the interview, and steer the subject topic so that it doesn't stray. Afterwards, it is important to transcribe, analyze, and report the information that has been retrieved (Valenzuela et al, 2010, slides 11, 14).

It is important for the interviewer to understand the objectives of the study they are conducting, as well as the answers that they are expecting to receive. Introductions are some of the most important aspects of an interview; they must overcome any apprehension that they have. Avoiding group interviews may be important, because certain individuals may not give the most truthful answers if they have psychological pressures on them, and do not feel confident in giving their opinion. Bias may also become a factor, due to dishonesty or even exaggeration (Crawford, 1997). Certainly when conducting personal interviews, coming prepared is of the utmost importance. Being able to comprehend what the interviewees are saying, as well as being friendly are keys towards obtaining useful information.

All in all, after interviewing the results should be clear, and the conclusions that are made need to be convincing. These conclusions come from solid analyses, which take into account other possibilities other than the thesis. It is important to remember also that quality research takes research ethics seriously. Giving privacy statements will help assure confidentiality. Treating them kindly, fairly, and respectfully are also all important aspects of an interview. Additionally, interviewees should be offered the

chance to see the results of your study (Secor, 2010, p.203). Interviews are very useful tools in gathering primary data. If all the proper guidelines are followed, the information retrieved from an interview will be useful for future analysis. Individual interviews of park enthusiasts and park rangers will provide a better understanding of park conservation policies as well as the number of people that are aware of and follow them. Information retrieved from these interviews will be used to analyze if state parks are upholding and maintaining the conservation goals and policies that the park had set forth.

Project Results

Devil's Lake State Park

Park Ranger Interviews

Activities vary through the seasons at Devil's Lake State Park, and in the fall there is generally more camping and hiking, with the leaves turning into their beautiful colors, and the weather becoming colder. Visiting and collecting data from Devil's Lake State Park on Sunday, November 7th, 2010, offered an opportunity to learn more about park policies, as well as the fall activities seen in the park.

Upon entering the park, it was clear from the beginning that even in the fall the park is still frequented by a large number of visitors. Granted, the lure of beautiful weather offered an excellent opportunity for park visitors to take in the sights of the park, but it also offered quality data on park activities. Perhaps the most important information to be collected was from the park rangers, who are responsible for law enforcement and preservation in Devil's Lake. Thankfully, two park rangers were on hand at the visitor's center, with one more than willing to answer questions.

The interview questions placed in front of the park ranger garnered an uneasy response; from the tone of voice, the body language, and the responses, the ranger did not feel comfortable answering most of the questions. This is because the ranger claimed not to be the most qualified person to answer these questions, and instead referenced a park manager. Unfortunately, to date, the park manager has not responded to the attempts made to contact him or her.

Even though the ranger was for the most part unresponsive to the interview questions prepared, the ranger was more than willing to offer insight and knowledge on to the everyday on goings of the park. From this much was learned of the recreational activities, and the human impact on the conservation goals of the park. When asked on the policies of the parks, it was learned that the “policies are decided by a DNR management team in Madison, and that the budget for state parks has decreased” (Park Ranger, 7 November 2010). The proposed two-year DNR budget is \$576.0 million for 2009-10 and \$567.6 million for 2010-11. In total, the two-year budget includes a net decrease of \$22.3 million. This reduction includes ongoing base reductions of about \$15.4 million annually (WDNR, 2010).

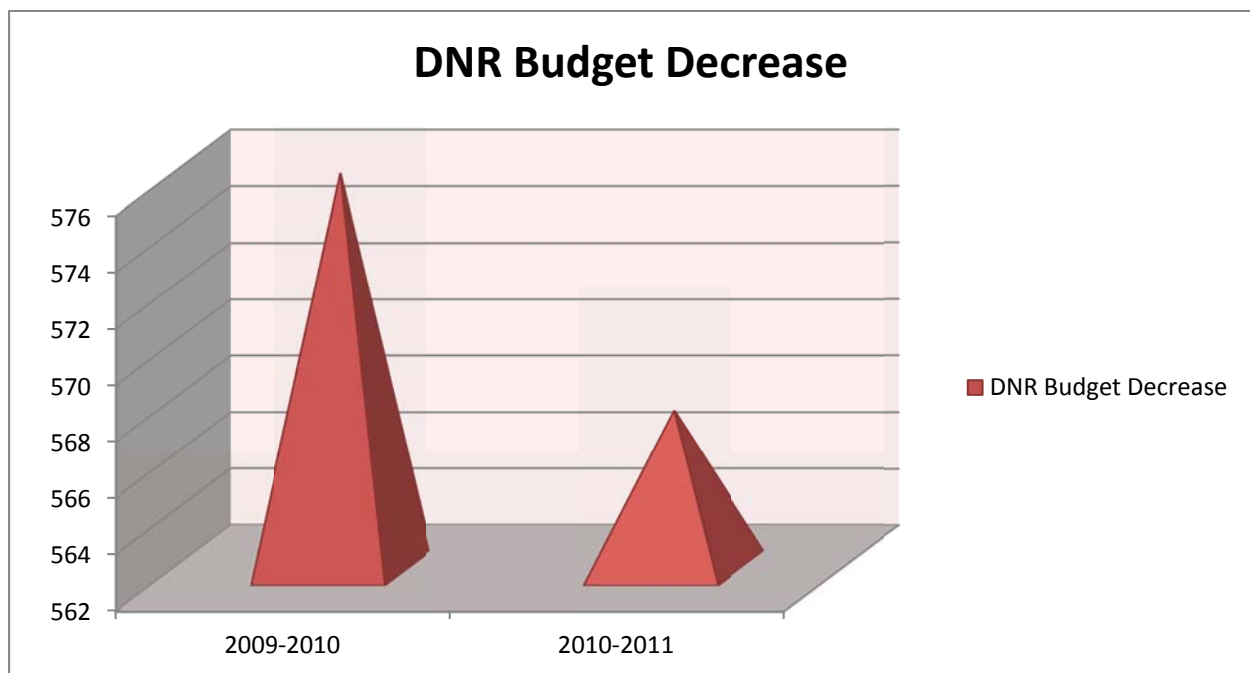


Figure 4. The budget for state parks has been decreasing annually by \$15.4 million. Shown above is the DNR budget decrease over the past two years (in millions of dollars).

When asked whether Devil's Lake State Park is currently more concerned with environmental conservation or recreational activities, the response was: "All State Parks are definitely concerned much more with tourism right now; it is that way throughout all State Parks in Wisconsin" (Park Ranger, 7 November 2010). More detail was given of how there is a lot of political pressure right now on this subject matter; there was a sense from the ranger that they wanted to deal more with conservation efforts, but wanted to respond to the questions in a politically correct manner, saying that right now creating tourism and the revenue that follows is the most important.

It is interesting to note, as well, that the ranger called the Wisconsin State Park System "primitive when compared to other State Park Systems, such as Ohio" (Park Ranger, 7 November 2010). This was referring to the overall park system; there are not as many opportunities at Wisconsin State Parks as there are in other states, and the current budget in this state is a cause for concern.

In terms of the law enforcement of the park, the ranger has "full authority." When asked what some of the effects of recreational use were at the park, the response was "There is a lot of littering, in the summer, every morning, we have a cleanup crew circulate throughout the shore areas, picking up trash" (Park Ranger, 7 November 2010). The ranger also mentioned that underage drinking is among one of the biggest problems seen; it is apparently quite prevalent. There are also cases of illegal drug use seen in the park. In terms of actual litter though, the ranger remarked that, "the day use area is the worst" (Park Ranger, 7 November 2010).

Also, when asked about whether there are conservation signs throughout the park, in regards to limiting the impact on the environment, the ranger said that there are

“no direct signs”, and that they “try not to overdo it.” On campgrounds, many visitors will “bring BB guns, as well as slingshots, to protect themselves.” Hunting is allowed, however, “illegal poaching is still seen, with one case of a visitor shooting at a swan” (Park Ranger, 7 November 2010). Surely this type of information gives insight into the impacts that visitors are having to the park, and to the goals of conservation set forth.

When actually looking around the park and the trails, there was a slight amount of trash seen, even after learning of the extensive efforts to clean up trash by the park. Most of this trash was seen in the shore areas, as well as on the low lying trails. On the trails that climb the bluffs, and up on the bluffs themselves, there was little trash to be seen. This gives insight into the type of visitor that is in each part of the park. On the low lying trails, visitors had littered and thrown their trash and empty beer and soda cans into the rocks by the shoreline. However, up on the trails high on top of the bluffs, there was little to no trash seen. A possible conclusion could be people who are there for a nature experience, and who are willing to hike up the bluffs, are seemingly more respectful of the surrounding environment.

The question to answer then is the original research question, which was looking into how recreational activities at the park affect the park’s conservation plan. Devil’s Lake has a master plan set forth, and from this master plan the goal of the park can be obtained and is as follows: “To develop and manage Devil’s Lake State Park to provide park visitors with quality recreational and interpretive experiences, and to preserve and protect the unique geologic and other natural features of the park as a unit of the National Ice Age Scientific Reserve” (Moorman et al, 1982). In analyzing the data

collected, one must look into whether or not the ranger is upholding this goal, and whether or not human activities are actually affecting the conservation plan.

Certainly the park ranger is protecting the features of the park and the conservation plan set forth; however, it was interesting to learn that tourism is the number one concern. It seems apparent that the state is willing to forfeit the cleanliness of the park, as well as some of the values the park tries to uphold, in order to bring in more visitors. If there was stricter enforcement such as expensive citations for littering and other negative impacts seen in the park that were listed earlier, the number of visitors could potentially decrease.

The rangers are doing everything they can to uphold the conservation plans set forth, while still appeasing the political higher ups. The expected love of nature and keeping the park clean and eco-friendly was seen, but as mentioned, bringing in the most tourists seems to take current priority. Overall, the goal set forth is being achieved. From the information gathered from the park ranger, it is clear that recreational activities are being offered to the general public, and for the most part conservation and protection of the park and its ecosystem is being achieved. There are some instances, as mentioned earlier, where these goals are not protected, such as the illegal poaching acts. Also, Devil's Lake is a park that offers activities for a wide variety of users, ranging from environmentalists or avid hikers, to families looking to grill out and have a relaxing day on the shore. It is apparent that human activities are having an impact on the environment, but Devil's Lake is doing a good job of keeping those impacts minimized, especially given the number of visitors they receive each year.

Park Enthusiasts Interviews

On Sunday, November 07, 2010 we conducted in-person, verbal interviews at Devil's Lake State Park. The weather was perfect for people to visit the park, and we were able to interview one individual and four groups of park enthusiasts. After the interviews at Devil's Lake State Park, we were able to analyze how many times people visited the park, why specifically they were at the park, and what their favorite recreational activities were at Devil's Lake State Park. Also, we learned if park enthusiasts were aware of conservation efforts, and whether or not they took steps to minimize impacts on Devil's Lake State Park.

Rehearsing the interview process (Appendix A) ahead of our visit to the park and having background knowledge on the park made interviewing visitors quick and unobtrusive. This led to excellent data collection. Also, after we explained that we are University of Wisconsin- Madison students and reading the privacy statement (Appendix B), people were very willing to talk with us. We had some short yes or no questions but we also asked open-ended questions so people could elaborate on their answers. It was very easy to transition into the next question because we were able to keep a smooth dialogue going with all of our interviewees.

In order to get varying answers to base our analysis off, we decided to interview a range of people doing different recreational activities at the park. So, we spoke with mostly groups of people but also interviewed a single person. We interviewed people in different areas of the park; they ranged from the beach to family friendly shore trails to more difficult bluff trails. Park enthusiasts were participating in recreational activities like relaxing, reading, playing, walking, and hiking.

People at the park enjoyed sharing their thoughts and answers with us because we were discussing ideas that were of interest to all of us. It was easy to set the tone for the conversation after we asked the first question. We were energized about park conservation and people were excited to share their contributions to park conservation. Group #4 stated that “they are aware of park conservation and participate in conservation efforts.” They were very eager to tell us that they “participated in events held by the Friends of Devil’s Lake State Park such as moonlight hikes, snow hikes, and season opening cleanup efforts.” Group #4 went on to tell us that “local school groups come to the park to learn about nature and conservation.” This last statement shows that there is a local effort to conserve the park’s natural environment and effort to educate young people in the community about conservation. Refer to Appendix Table 1 for complete data results (Group #4, 7 November, 2010).

Group #1 was exceptionally perceptive of our questions, and what we were trying to accomplish with our primary data. After answering all of our questions very clearly they went on to tell us a personal story about their childhood vacations to Wisconsin; Devil’s Lake State Park was always a destination point. Devil’s Lake State Park seemed to have a very deep meaning to them so we had a better understanding as to why they left the park as they found it. Reference Appendix Table 1 for complete data results from the interviews conducted.

Recreational activities will always have unintended consequences on Devil’s Lake State Park. It spans from beach activities to hiking trails to camping areas. However, after talking with park enthusiasts we have realized that they are all willing to leave as little impact on the park environment as possible. As long as park managers,

rangers, and enthusiasts do their designated conservation responsibilities at the park, recreational activities will leave minimal effects at Devil's Lake State Park.

Wyalusing State Park

Park Ranger Interviews

On Saturday, November 20, 2010, our group headed out to Wyalusing State Park. We recognize that it was opening weekend for deer hunting season and that this was not the best time to go, but the research had to be completed. The goal of the trip was to conduct interviews that would assist in supporting our research question. Reference Appendix A and B for the interview questions and privacy statement used to conduct interviews.

In this case we were looking at the recreational activities of Wyalusing State Park, and how the conservation practices and plans were affected. Due to the hunting and the weather this late in the season, we primarily interviewed only hunters versus other park enthusiasts, as well as one park ranger.

The park ranger interview yielded fairly useful results including an explanation of the most common activities, conservation efforts, and deficiencies of the park. Wyalusing State Park has a much smaller annual visitor rate than Devil's Lake and as a result experiences fewer negative effects from recreation on the park's conservation efforts. The most common activities in the park are canoeing, bird watching in the spring, hiking on the many trails, camping, and visitors coming to experience the scenic views. These recreational activities are done in smaller numbers, and are less damaging than the camping and partying done at Devil's Lake.

“Conservation efforts in the park are fairly extensive ranging from yearly controlled burns to youth scout groups volunteering to fight invasive species and pick up trash” (Park Ranger, 20 November 2010). Combatting invasive species was a conservation effort that the ranger repeatedly brought up during our conversation with her. “One such species is garlic mustard which the park does not have enough resources to fight on its own, so they rely on volunteers to come and pick it” (Park Ranger, 20 November 2010). Another species is the honeysuckle that is found throughout the park. The park actually started a ‘pick a suckle program’ that brings groups of kids out to pull them out of the ground and then burn the pulled plants. At the camp ground section of the park, the facilities are maintained during the camping season by the campground hosts. The hosts are in charge of ensuring the sites are maintained for the next users, as well as promoting leave no trace policies. According to the ranger, “conservation within Wyalusing receives a lot of attention because of its lower visitor volume, its mindful staff, and the type of visitor who comes to the park” (Park Ranger, 20 November 2010).

Another notable part of the interview was when the ranger covered deficiencies of the park, particularly in staffing. “Formerly the park had a naturalist, but that position is currently not filled, and at present the park is without a superintendent or assistant superintendent to manage the park’s administration” (Park Ranger, 20 November 2010). The naturalist normally would be involved in bird watching, hiking, visitor education, etc. but the park has not been able to continue that service. The interview with the park ranger was quite productive because she really helped answer our question well. There

is a lot of conservation that is not deeply affected by recreation, but the park is currently lacking the staff to do more.

Park Enthusiasts Interviews

During our visit we also interviewed park users in addition to the park ranger. The users all happened to be hunters, since weather was cold and no one really wants to hike around through a hunting zone. The hunters ranged in regards to their frequency of visiting the park but were fairly consistent with their lack of knowledge relating to the park's conservation efforts.

Frequency of visits was biased by the users that weekend because all but one hunter came to the park for hunting. The hunter, known now as hunter #1, who does visit the park more often comes primarily for use of the boat docks, but he has camped in the park before. It might be a gross generalization to say that hunters did not really appreciate the park and only attend for hunting but the results suggest that. The lack of knowledge about conservation that pervaded the hunter interviews seems contradictory because they should desire a healthy and preserved ecosystem in order to have good numbers of game for hunting season. Nonetheless, the hunters' only relation to the conservation efforts was making sure they were in accordance with the DNR hunting regulations in order to prevent getting in trouble. Notably, hunter #1 participates in the DNR's "duck wing" program which helps monitor duck populations. Other than that one instance, the hunter's disappointingly did not attend the park often nor did they care about conservation efforts.

We did have one exception to the hunters, which was the visitor that tagged along with our group collecting primary data. He was not a hunter, and noticed the conservation signs without any member of our research group pointing it out. This of course is also a biased interview because we brought with us an environmentally conscious college graduate so his opinion and knowledge on the subject will be different than the average visitor. Reference Appendix Table 2 for complete data results from the interviews conducted.

Primary data collected during our visit to Wyalusing State Park was successful because of the park ranger interview. Our visit was not ideal because of the time of year, but it did give the research a different perspective to the diverse types of recreation within the park.

Though the analysis of our data collection and interviews are still in the early stages of development, which will be addressed further in the future research portion of this paper, we have already begun to see some significant trends in the data. Both Wyalusing and Devil's lake are having budget concerns, which have led to important position at the parks being left vacant. As mentioned before, the two-year DNR budget includes a net decrease of \$22.3 million. This reduction includes ongoing base reductions of about \$15.4 million annually (WDNR, 2010). This has directly led to certain programs being unavailable to park visitors, and the park rangers having to rely on volunteers to help with conservation and reduction of invasive species within the parks.

Future Research

Although this research brought to light many issues surrounding recreation and conservation in Wisconsin State Parks, future research would provide a much more in depth and detailed view of what conservation and recreation in State Parks is like. There were numerous factors that limited the depth of the research that could be conducted. The first of these factors is the amount of time; this study was developed, implemented, and analyzed in one semester. On top of this, the researchers all had heavy class and work load outside of the study itself. More details could be obtained in the future if more time was available to conduct and analyze the research.

Secondly, the budget, or lack thereof, hindered the amount of research that could be conducted. Future studies with a budget could implement more travel, better equipment, and more resources in order to obtain the data required. This would allow for research to be conducted much more often, as well as over a wider area. Many more State Parks could be examined with more time and a larger budget.

To add on to this, a much larger sampling size could be obtained with more time and more resources. The sample size in this study was limited to visitors seen on one day in each of the two parks; in the future more consistent visits to the parks and more interviews could be conducted. Also, realizing that different seasons bring about different visitors and other types of recreation, gathering data throughout the year on all types of activities and the effects they're having on the park would be ideal.

Not only gathering more data would be an improvement in the future, but also more quality data as well. People in higher positions could be interviewed, such as park

managers, political figures, and DNR officials. They would give more insight into the political on goings of the State right now, and how the parks are truly managed at the highest levels.

Conclusion

Looking back and analyzing our data and results leads to only one conclusion; currently in Wisconsin State Parks, tourism and revenue production has become the main focus and goal, with conservation and preservation being far less important. Due to political pressures, as well as the current economy and budget situation, State Parks in Wisconsin have been forced to put forth most of their efforts towards bringing in more visitors. With more visitors, more revenue can be generated. Park rangers that were interviewed expressed their concerns over the conservation and preservation of the natural environment within the state parks, but the political higher ups and those in managerial positions have made it clear that bringing in revenue is of the utmost concern.

It is hard to blame them in this day and age; budget cuts have been seen nationwide in government and state programs. The park ranger at Wyalusing State Park had spoken of how there were two vacant positions in their staff due to the fact that there is not enough of a budget to fill them.

The implications from this viewpoint, however, are apparent; when parks tend to stride more towards bringing in visitors rather than preserving the environment, certain consequences may arise. As mentioned in this paper, some state parks that are seen as tourist attractions are plagued by certain recreational activities from some of their visitors. Whether it be leaving trash behind, illegal alcohol consumption, or illegal poaching, all of the recreational activities have an effect on the ecosystem.

In Devil's Lake State Park these types of detrimental activities were apparently more prevalent than in Wyalusing. Devil's Lake is seen as more than just a state park; it is located near the Wisconsin Dells, is situated near an area of high population, and quite frankly is a main tourist attraction. People will visit the state park to hike, eat, drink, swim, camp, and have an overall good time. Some are aware of the conservation efforts and goals set forth from the park, but others are not. Either way, certain recreational activities have their consequences; Devil's Lake devotes much of its time and effort into picking up the trash left behind, and regulating and policing the park, rather than making sure that the conservation efforts are being met.

Wyalusing, on the other hand, does not see as many damaging recreational activities. The primary data collected from this particular study documented the hunting season in Wyalusing, and the results were quite interesting; gentlemen who were hunting would state how they were unaware of the conservation efforts, and stated that they had seen little to promote them. This statement is quite ironic, however, because when this question was asked to a particular set of hunters, large, broad signs conveying messages of conservation were no more than twenty feet away (Figure 5).

The message is clear; many who frequent these parks visit on their own terms, and pay little attention to the goals set forth by the park. This is how the parks would like it however. The more activities that a visitor can partake in the happier the visitor is, and the happier the visitor is with the experience, the more likely it is that they will return. This is currently the goal of the state parks, bringing in more visitors, making sure they have a pleasurable experience, and hoping they return, whether or not it affects the environment or not.



Figure 5. A large placard at Wyalusing State Park showing conservation signs concerning invasive species and the seven principles of leave no trace. (Figure source: Scott McPeake, 2010).

Hopefully in the future the parks can begin to focus more on the conservation efforts as well as the tourism and generation of revenue. Certainly Wisconsin State Parks offer a serene, beautiful, scenic getaway for many people, but these people need to realize and understand the effects their activities are having on the environment. The truth of the matter is that a majority of visitors have little effect on the preservation of the

natural ecosystem; however, those that do may have lasting impacts. Looking forward, hopefully the need for revenue may diminish slightly, and the rangers and managers can focus more on protecting the environment. Each and every year the world advances; populations grow, more ecosystems are lost, and preservation of what we have left becomes increasingly important. State parks represent an opportunity for people to see the true beauty of nature, and they are certainly something that we as a society need to preserve.

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Appendix

Table 1. Park Enthusiasts' Responses to Interview Questions at Devil's Lake State Park.

	Visits this year	Recreational activities	Favorite park attraction	Awareness of conservation effort	Do you minimize your impacts?	How?
Group #1	1	Reading on the beach, walking, hiking	Rocks	Yes	Yes	Leave it the way they found it
Group #2	1	Hiking	Scenery	N/A	Yes	Pick up garbage
Group #3	N/A	Swimming, hiking, family time	N/A	Not aware	N/A	N/A
Group #4	Once a week	Everything the park has to offer but specifically cross country skiing	Steinke Basin	Yes	Yes	Careful to pick up garbage and leave no trace
Enthusiast #1	~5	Hiking	N/A	Yes	Yes	Leave no trace

Table 2. Park Enthusiast Response to Interview Questions at Wyalusing State Park.

	Visits this year	Recreational activities	Favorite park attraction	Awareness of conservation effort	Do you minimize your impacts?	Extra
Hunter #1	6	Boating, camping, hunting	Boating	Doesn't pay attention, but knows hunting regs.	N/A	Participates in DNR "duck wing" program
Hunting group with boat	1	Hunting	Hunting	Don't care	No	Discontent toward DNR hunting policies
Hunter #2	1	Hunting	Hunting	Has heard but not involved	N/A	Complies with all hunting regulations
Visitor #1	First visit, but will be coming back	Camping, hiking, scenic views	Hiking	Saw signs	Yes	Interested in maintaining beauty of park

Appendix A

Interview Questions: Park Official

1. How long have you worked for the park service?
2. What are the management strategies of the park?
3. What are the most important conservation goals or policies at the present time?
4. How are these conservation policies evaluated?
5. How are these conservation policies enforced?
6. What are the conflicts between recreation and conservation?
7. Are there fines or penalties for violations of park policies?
8. What information is available for park enthusiasts on the conservation efforts of the park?

Interview Questions: Park Enthusiasts

1. How many times have you visited the park this year?
2. What recreational activities do you most enjoy while visiting the park?
3. What is your favorite attraction at the park that makes it a destination for you?
4. Are you aware of the Devil's Lake conservation efforts?
5. Do you take any steps to minimize your impact on the natural environment while at the state park, and if so, what are these steps?

Appendix B

Privacy Statement:

Greetings!

Thank you for participating in our research project for Geography 565 at the University of Wisconsin-Madison. We are all currently seniors at the University, and we are conducting research for our capstone Geography project. Our project involves looking into the recreational uses of State Parks and their impact on the conservation practices within the parks. We are also researching why people visit the park.

Your privacy and anonymity is of the utmost importance to us. We will not collect any personal identifying information without your expressed written consent. We will use an alias (eg: Interviewee #1) in our paper and presentation, unless you wish to be identified by your name. The answers you will provide us will be used in our research and presentation only. Your answers are entirely voluntary, and you may chose not to answer any question. There will be no electronic recordings of our interview.

If you would like an electronic copy of our research paper, or wish to attend a free public symposium in mid-December on the University of Wisconsin-Madison Campus, please contact Brian at bbultman@wisc.edu.

Thank you once again. Your participation is greatly appreciated!

Figure 1. Wyalusing State Park. (Figure source: Wisconsin Department of Natural Resources, 2010.)

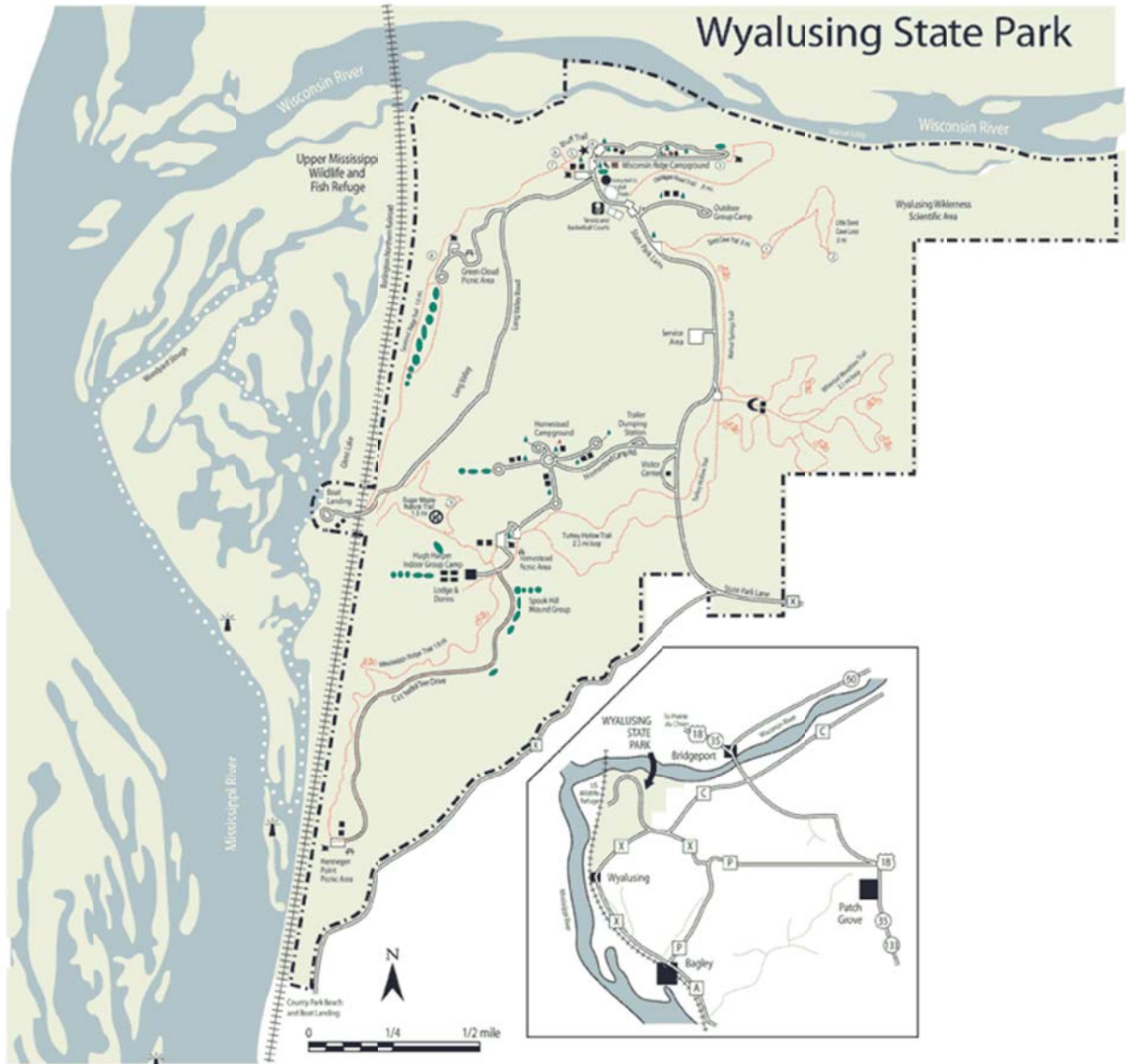


Figure 2. Devil's Lake State Park. (Figure source: Wisconsin Department of Natural Resources, 2010.)

