

Picnic Point

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Interest in the 21st century understanding of green space sparked research on university students' perceptions and uses of the Lakeshore Nature Preserve, specifically Picnic Point, which has belonged to the University of Wisconsin – Madison since 1941. After historical research and analysis of a survey distributed to UW students in their student union, this study strongly indicates that past physical and social changes have shaped Picnic Point into an escape that university students hold dear to their hearts whether they go there for exercise, coursework, to party, or anything in between.

A Study on Student Use and Perception

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Introduction

The purpose of this project was to assess the significance of Picnic Point and the surrounding Lakeshore Nature Preserve as it pertains, particularly, to University of Wisconsin – Madison students. The primary focus was on the use and perception of the area through the examination of patterns and correlations derived from a series of survey questions. Basic information and guidance was derived from past studies on green space, literature on the natural and political history of the area, and a survey of our own to which we administered to the campus body directly through multiple mediums. With all these factors included, we aimed to make an argument about the identity of the Lakeshore Nature Preserve in the university student community, as well as the role that it plays in the lives of these students. The following is the research design of our project and the subsequent conclusions that we developed based on our final analysis.

Importance of Green Space

The idea for our project was motivated by interest in the 21st century understanding and implication of green space, as well as its historical and current importance within local communities. Many current studies affirm that green space is correlated with increased exercise and general outdoor use, and ultimately promotes both mental and physical health among local communities (Bedimo-Rung 2005; 161). This modern understanding of green space has compelled us to ask questions about our own local community, about the University of Wisconsin campus, and led us inevitably to one of the focal green spaces on campus: the Lakeshore Nature Preserve.

Understanding the effects and importance of green space is necessary for its maintenance within our preexisting cities and in the urban development to come. Studies have not only shown that green space increases resistance to floods and droughts and promotes urban ecological biodiversity, but also encourages exercise, relaxation, and social interaction among city residents (ICLEI, 2008). The lack of established green space within older cities has become a pressing factor for urban sprawl as residents move closer to the city edges for the purpose of proximity to the more “natural” environment. An article in the Toronto Star (Hume, 2007) noted that even municipal politicians have realized that parks, in the midst of rapid 21st century population growth, are not just “civic frills” but “urban necessities”. This modern understanding of green space suggests that city parks and largely open-spaced neighborhoods may be more impactful than just their aesthetic appeal (ICLEI, 2008).

The excessive urban expansion leading into the 21st century and has caused city planners to pose more questions about green space and its effect on urban life. As seen in several analyses, these studies are usually intended to answer questions on the relation of green space to well-being/health, social value, economic impact, environmental value, and urban planning (Vanier et al, 2006) (Bell et al, 2008) (McFarland et al, 2008). Most notably, however, is the inquiry of public perception towards green space and is typically the choice of methodology for understanding the correlation to health and social values.

A review of a major project in Scotland determined several correlations between health factors and green space through a series of case studies and GIS work. Their

studies ranged from simply administering surveys about exercise and general happiness to doing more direct studies with differing age groups. Notably, they discovered significant association between green space and recreational outdoor walking, stress reduction, and overall happiness. More obscure studies revealed positive reactions to images of the environment when presented to them after viewing other photographs intended to arouse various emotions (Bell et al, 2008).

A survey study at Texas State University was conducted for the purpose of determining whether green space affects quality of life in college students. Respondents were ranked as “low”, “medium”, or “high” users of campus green space, depending on their response to their use of it. Of all of the respondents, ninety percent were reportedly medium or high users of green space. The students were also asked to rate their perception of their own quality of life. The students who habitually used outdoor recreation and green space responded much higher than those who did not. The study also addressed several other factors and stated many conclusions relating to students and green space. Results showed that “in general, students who used the campus green spaces more frequently perceived their quality of life as higher when compared with those students who used green spaces less frequently”. Also, “undergraduate student use of campus green spaces was correlated with the individual areas of overall quality of life , the affective domain of quality of life of university students, and, specifically, the total positive affective dimension and the interaction with students dimension”. However, “student use of campus spaces did not appear to benefit any particular gender or ethnic group more than others” (McFarland et al, 2008). Because of the level of detail and its high relevance to our project, this study at Texas State University was used as a model

for our own survey study. In our methods section we further discuss the topics addressed within the survey and the implementation process for our distribution of it.

What is Picnic Point?

Picnic Point is the peninsula that extends nearly a mile into Lake Mendota from the Lakeshore Nature Preserve. It is one of the more recognizable natural formations in a Madison area that does not lack for unique natural beauty. Located at the northwest corner of the University of Wisconsin Madison campus, the point is visited by thousands of students as well as local residents every year.

While it has undergone a number of changes in its rich history, Picnic Point today is owned by the University of Wisconsin and is designed for regular visitor use. The promoted uses range from casual recreation to extensive research. The university purchased the land (formerly known as Gooseburry Point) in 1941, and shortly after began a restoration process. The mesic forest that characterizes the point today is a result of that restoration.

The numerous visitors to this part of the nature preserve are a result of the infrastructure in place. The walking paths, fire pits, benches and beaches are all designed to encourage people of differing interests to visit the point. There are culturally significant burial mounds on the peninsula, as well as scenic viewing locations. Visitors who reach the end of the point are rewarded with what many consider to be the best view in Madison. In 1992, it was described as one of the most romantic locations in North America as it made the top 10 kissing locations in the world in a “scientific” study done by the San Francisco Examiner (Lakeshore Nature Preserve at the University of Wisconsin). Current renovations to Picnic Point are underway and will create an even greater visitor presence out at the point.

Methods

Because the project is focused on user experiences and information, a survey was the primary method of data collection. The survey was 19 questions long and was completed in an average of around three minutes. We distributed the survey to students through two methods. One strategy involved us administering the survey to willing participants at the Memorial Union. As one of the most highly trafficked areas on campus, the union provided us with a unique opportunity to sample a large group of students.

The union was an ideal location not only because it provided us access to a large number of students, but also as a major hub on campus, it provided a widely diverse selection of students. In doing this we attempted to eliminate some of the bias that would be present at a location that primarily attracts specific types of students.

The second method for distributing the survey was online. This strategy appealed to us as it allowed us to reach a large number of students in a short period of time. We created our survey through a survey program that was available through the university called Qualtrics. We reached out to friends and acquaintances by posting a link to our survey on Facebook. We also took advantage of our class lists on WiscMail and distributed the link to our fellow geography students. In this we were limited to offering the survey to the select group of people whose contact information we have, and in that there was some bias. However, we still believe that online surveys provide a rare opportunity to reach out to a large portion of the student population and enhanced the quality of our data.

The content of the survey is geared to grasp an understanding of who uses Picnic Point, how they use it, and why. To determine this we asked students a variety of questions to determine what their own experiences with Picnic Point have been. This included types of use, frequency, and personal opinion. Paired with questions regarding student's characteristics and backgrounds were gathered a large amount of data relevant to finding patters pointing out connections between different demographics of students and the importance of Picnic Point to them.

The demographics we explored included sex, age, educational classification, perceived health, location near campus, and several others. This information set was collected in the survey before we posed any questions regarding Picnic Point. The intention was to get unbiased answers from students before they knew we were interested in their experiences with Picnic Point.

Overall, our methods in this project produced successful results. With over a hundred surveys taken, we collected enough data to answer our research question with a high level of certainty. Due to time restraints and lack of funding, our methods resulted in some obvious bias. For example, we had very little representation of freshman and sophomore students in our data set. This is a result of us reaching out to our own acquaintances for the data, many of who are of a similar age to us. Yet our distribution was highly successful in reaching both sexes, as our results in that category came in at almost exactly even. While far from perfect, our methods provided us with adequate data from which we were able to draw relevant conclusions regarding student use and perception of Picnic Point.

Physical History

The timeline of our historical research of Picnic Point spanned from its physical creation of more than ten thousand years ago through the political changes of the last century. We felt that looking into Picnic Point's early geographical and geological histories was relevant to our project because without them, there would be no location known as Picnic Point to which this project could address. For what we can infer are the same reasons, we also found that literature on its history was not hard to come by. Likely the primary piece was the "Lakeshore Nature Preserve Master Plan" – an objective, in-depth study of the first ever proposal to architecturally landscape the Nature Reserve surrounding Picnic Point. The Master Plan makes recommendations for addressing threats to the Preserve, as well as restoring natural habitats and enhancing the visitor experience. The plan is very comprehensive and covers historical use and change in the Preserve, both of which were used to compare to our results. The author, Keeley, incorporates observations from other studies on the Preserve to enhance many of his descriptions of the specific areas within it. The site analysis is very helpful to the reader as it aids in the visualization of the areas discussed in the Master Plan. Another key piece to our historical research was a University of Wisconsin student's masters thesis from 2001 that outlines the formulation of Lake Mendota, University Bay, and Picnic Point from the last ice age to the present by describing the glacial melting process, the erosion and depositional changes, and the outcome of the Tenney Park locks. The graduate student undertook a very objective approach to answering a question very similar to ours.

The Picnic Point peninsula originally stood as a high sandstone ridge between two stream valleys prior to the glacial melting of the last ice age. (Baum 2001) Around 12,000 years ago, when the glaciers began retreating, Picnic Point formed as the outstretched segment of land between two glacial rivers: “Pre-glacial Middleton River” and “University Bay Creek”. The Point was originally larger in area but erosion and deposition has since decreased the size of University Bay, the inlet of the lake which harbors the base of the peninsula. Prior to the early 1900’s, the area was classified as oak savanna – meaning that it was primarily composed of open grassland. Since then the area has significantly reforested (due to processes described later), the Picnic Point marsh has drastically shrunk, and there are now several dirt hiking trails that wind throughout the Lakeshore Nature Preserve.

A significant change occurred in 1847 when the Tenny Park locks were built to connect Lake Mendota with Lake Monona. The locks were designed to allow direct naval travel between Madison’s two primary lakes, which formed at differing sea level heights. The damming at this location, however, raised Lake Mendota’s and the subsequent rivers’ water level by nearly four feet. Doing so caused much of the vegetation along the lake to simply float away (they were often described as “floating bogs”). Aside from disrupting some of the local natural ecosystems, the heightened water level also minimized Picnic Point’s area and drastically increased the size of the Picnic Point and University Bay marshes near the base of the peninsula.

The Class of 1918 marsh is also an anthropogenically modified area within the Lakeshore Nature preserve. Originally an expanse of several acres that was separated

from Lake Mendota by a high sand bar, it has since been diminished by university-implemented sporting facilities. The baseball and tennis stadiums, parking lots, roads, open fields, and residential structures have all aided in bringing this once large natural area into what is now only a fractional remnant of what it used to be. The site is now protected, however, and is now modified with boardwalks for accessible public use. (Keeley et al, 2006)

Due to cultural and political processes described in more detail in the next section, the forest has also undergone drastic change in recent history. Because of the change from private to public, the forest area has more than doubled in area over the last seventy years. There are two reasons for this transition: the implementation of UW restoration projects and the removal of grazing cattle. Removing the cattle took away a major herbivore in the area and allowed for vegetation to grow over the open grassland. Adding the various student-implemented restoration projects helped the vegetation grow more rapidly – particularly in the areas surrounding the community gardens and the Picnic Point peninsula.

Cultural and Political History

Like the physical landscape, there has also been a great deal of change in anthropological use and perception. There is evidence that Picnic Point and what is now the Lakeshore Nature Preserve have been inhabited and used by human beings for over twelve thousand years. Since then numerous groups have moved through the area using its various resources. It was not until the 9th century that a Native American group settled in the Madison area. This effigy mound culture existed up until the late 12th

century, leaving behind several mounds on the peninsula and throughout the Lakeshore Nature Preserve. Many of these effigy sites have been destroyed due to late 19th and early 20th century farming, however. Archaeological analyses revealed that this culture likely migrated to this location because of the easy access to trade and wildlife that the lake and river systems in the local area provided. There is also evidence that this culture may have set fires to keep the land open for farming – a primary use that would carry over into the latter part of the millennium. (Baum 2001) Unfortunately, we found very little literature regarding their disappearance in the archaeological timeline.

The most significant changes in Picnic Point’s cultural and political history, however, have occurred within the last two hundred years. As European-American settlement in the region began to grow, the naturalistic area became a hotspot for touring. In the late 19th century the Madison Park and Pleasure Drive Association (MPPDA) and the University of Wisconsin began organizing horse-drawn carriage rides through the Picnic Point countryside. These “pleasure drives” were typically a recreational activity for family and courting couples and became a popular weekend event as trails were being implemented and expanded. The UW farm superintendent Professor William W. Daniells described these tours in an 1871 university newspaper with better detail:

“...one and three fourths miles of avenues have been constructed, three fourths of a mile extending along the shore of Lake Mendota. These avenues afford pleasant drives, and add greatly to the attraction of the grounds by giving an opportunity to visit in carriages localities from which may be seen some of the most beautiful landscape views in this vicinity...” (University Press, April 15, 1871)

The MPPDA disbanded in 1938. (Einstein, 2006)

Throughout the late 19th and early 20th centuries, several farms were installed in and around Picnic Point. One in particular – the Picnic Point farm – was implemented in the northeast corner of what is today known as Bill’s Woods (located just west of the peninsula). It included a barn, outbuildings, and a farmhouse that was cited on a small rise that maintained a commanding view of University Bay to the southeast. During the early 1900’s the fields were being rented out to tenant farmers and the farmhouse to families who were not always primarily engaged in maintaining agriculture. However, in 1924, Edward Young purchased the property and quickly set about doing major renovations to the old farmhouse. After turning it into a massive 15-room mansion and constructing a stable, the Young family moved to the site in 1927. The mansion burned to the ground in a fire in September of 1935, and eventually (in 1941), Mr. Young sold the entire 129-acre property to the University of Wisconsin. (Einstein, 2006)

The private ownership of Picnic Point up until 1941 hindered much of the recreational use of the area for students and faculty. While the pleasure drives were allowed on the trails, openly stepping foot (especially in regard to university students) on the farm owners’ properties was not taken lightly to those who owned lots in the Lakeshore Nature Preserve area. With the owner’s consent, however, UW students and other permissibles would occasionally go out to the point for either academic or communal purposes. To the student body, Picnic Point was a place they could study physical sciences on a rare occasion outside of the classroom. The university began to acknowledge this significance, both as an academic and as a social promoter, and is one of the key reasons for purchasing the land from Mr. Young in 1941.

The conversion from private to public is, based on our analysis, the most important and most drastic transition in the history of Picnic Point. The change completely altered the perception and use of Picnic Point, and, more importantly, affected the political decisions on how the area should be managed and renovated. Seeing the area as a place to potentially turn profits, many voiced their opinion for a resort at the edge of campus. On the other hand, many officials and alumnus began to fear the loss of Picnic Point's scientific value as an open-use nature laboratory. In May of 1948, the university eventually "turned the place – like its arboretum – into a wildlife refuge, began to use it for study, and reopened it to the public." (Baum, 2001)

Various other debates have surfaced since regarding how developed the area should be, where amenities should be implemented, and how the university should be using it for specific educational purposes – all typically resolving with an outcome that benefits both the public and the academic aspects. The results, over the course of the last seventy years, have brought in a wave of new community gardens and recreational amenities.

As the development of the Eagle Heights Community began just west of the Lakeshore Nature Preserve around 1940, so did the desire for a community garden in the open field just opposite the neighborhood. By 1962, with the collaboration of the university, the Eagle Heights Community Gardens were established as a site offering "Eagle Heights residents and the UW and Madison communities the opportunity to have an organic garden and participate in garden activities." (EHCG, 2006) Their website states that their purpose is to promote four primary aspects of everyday life: nutrition,

recreation, education, and community building. The garden has become one of the largest and most successful community gardens in the United States, boasting a pool of gardeners that speak approximately sixty languages and featuring gardening techniques from around the world.

The F.H. King Farm (or the F.H. King Student Gardens) was founded in 1979 adjacent to the Eagle Heights Community Gardens. It was created by the Students for Sustainable Agriculture, a university organization aimed at encouraging education and hands-on experience with small-scale sustainable agriculture. Through various means they “strive to establish the relationship between land, food and the UW-Madison campus community as well as the surrounding community.” (Hahn, date unknown) The garden, which is now a full two acres, relies primarily on volunteers from the local residential and academic communities to run the farm. Seventy-five percent of the sixty varieties of grown produce are donated back to students on campus.

In 1997, the UW-Madison Biocore Prairie Project was started near the two community gardens as a means of restoring the old farmland (from the early part of the century) back into a tall grass prairie. The restoration process is run by students who take part in a four-semester laboratory-intensive honors sequence through the Biology Core Curriculum. The project leaders also offer summer independent research projects, service learning, and collaborative research and teaching efforts with many other UW programs. The field, which occupies around eleven acres of land, is slowly being restored section by section. As time passes and more students join the efforts they can

finish the restoration process and possess a public prairie for both the Biocore student and local communities. (Burgess et al, 2006)

Other than academic and community based plots, the university has also implemented several amenities on the Picnic Point peninsula and throughout the rest of the preserve. With the purpose of making the area more recreational, the university has added benches in various aesthetically-appealing locations, fire pits, restrooms, three parking lots (two of which are designated primarily for the users of Picnic Point), and the small but peaceful Picnic Point Beach. Over the course of the last 70 years, the amount of trail has been renovated and more than doubled, allowing for easier access to all sections of the Lakeshore Nature Preserve. Doing so has “[helped] people get to where they want to go on Picnic Point so they don’t go where they shouldn’t.”

(madison.com, 2009) A \$750,000 renovation has been taking place over the 2010-2011 period at the tip of the Picnic Point peninsula. An article in the Capitol Times newspaper suggested that there has been a “failure to accommodate and properly manage those who want to enjoy [the end of Picnic Point].” (madison.com, 2009) The goal of the Picnic Point Improvement Plan now underway is to keep the “romantic charm and scenic view of campus” by clearing the invasive species that block the view of Lake Mendota and downtown and renovating the seating area. The project calls for forum-like stone steps and an expansion of the fire pit that would make the area a hot-spot for both day and night users of green space.

To summarize, the cultural and political history can really be split into two sections on the timeline: the pre-university owned and the university-owned eras. Prior

to the university's purchase of the Lakeshore Nature Preserve in 1941, the area was primarily a privately owned and used landscape. The restriction of who could use the land for recreation and education disallowed the plot to be used to its full potential. When the ownership changed, the desire for this urban green space as an academic and recreational tool blossomed into the "cherished peninsula" that it has become today.

Results

The results of our survey yielded many trends, both expected and unexpected. By the end of the semester we have gathered 117 responses, split about evenly between the Memorial Union and Facebook, the two mediums we used in distribution of the survey. While we concentrated mostly on trends within the student body as a whole, we also examined student demographics to see if we could uncover any trends of use or perception that was specific to a certain demographic. Our survey asked students about their year in school, gender, race and current area of residence. Students' responses on all demographic questions except race yielded some very concrete trends that will be discussed later in this section. The responses on race proved to be unusable as the very high proportion of students who identified with the race "white" made it impossible to correctly identify any trends in the data. The next part of our survey asked students to evaluate how strongly they felt about certain statements made about Picnic Point, which we used in order to gauge the perceptions and opinions of the students surveyed. Lastly, we focused on identifying trends of use by examining the responses by students when asked what activities they use Picnic Point for. Also, although not a large part of our analysis, our survey left a space at the end for students to write any comments they

had Picnic Point and their opinions or views on the it. We used these comments as a supplement to our results directly derived from the main survey question responses. In order to better clarify and explain the results, they are broken down into three categories; visitors of Picnic Point, use of Picnic Point, and perception of Picnic Point.

In order to get a better understanding of the use and perception of Picnic Point, our initial survey questions were focused on finding out who has heard of Picnic Point, who visits Picnic Point, factors that may encourage or deter students from visiting. The responses from our survey indicated that all but four respondents had heard of Picnic Point, and 80% had visited there at some point in there time at UW. The four students that hadn't heard of Picnic Point were international students and freshmen. This was expected, as most freshmen have only been here for four or five months, and international students may have only been here for a short period of time or simply haven't heard about it. While the 80% that answered yes when asked if they have ever visited Picnic Point implies that a high rate of students have been out there, the frequency of those visits is where we found more surprising results. When examining the frequency of visits, only the responses from students who had heard of Picnic Point were included. As Graph 1 shows, the majority of students visit Picnic Point "a few times per year", with 65% of students marking that choice. Only 15% of students claimed to have "never or almost never" visited Picnic Point, most likely students that have been to Picnic Point only once in their lifetimes or have never been there at all. 18% of respondents claimed to visit Picnic Point monthly, while only 2% claimed to visit weekly. These results make it clear that while most students on campus have visited Picnic Point at one point or another, the majority don't regularly go out there. One trend

that did stand out in our data was that the older the student was, the more likely they were to indicate a higher frequency of visits. When frequency of visits was cross tabulated with year in school, Junior, Seniors, and graduate students made up the majority of those who visited monthly or weekly. There are many possible reasons for this, although many upperclassmen indicated in the comments that they didn't realize how much they enjoyed Picnic Point until they had visited a few times. The longer they were here in school, the more they were able to appreciate the variety of activities and beauty of the area. Next we looked at how the location of Picnic Point may have been in factor in visitation rates.

As Picnic Point is a little farther off campus than most other popular student green spaces, another goal of our survey was to determine if distance was a factor for the average student. In the middle section of our survey, students we're asked to evaluate the statement, "If you lived closer to Picnic Point, would you take advantage of this natural area more often than you currently do?", by choosing either "Yes, definitely", "Probably", "Not likely", or "No, definitely not". As Graph 2 shows, over 80% of students answered "Yes, definitely" or "Probably" to this statements, indicating that the longer distance from the heart of campus is a factor in how often students visit. We also saw this in the comments as well, as many students stated that the primary reason for not visiting Picnic Point more frequently was the longer distance away from campus than other outdoor areas such as Bascom Hill or the Memorial Union Terrace. Next in our survey we asked students questions in order to get an idea on how students perceive Picnic Point as an asset to both themselves and the UW community.

Student perception was one of the biggest focuses for the Picnic Point project, as it is important to gauge not only how students use it, but also how they view Picnic Point as one of the premier green spaces on campus. To assess how students felt about Picnic Point, our survey presented them with two statements and asked them choose what level of agreement or disagreement they felt about them. The first statement simply stated, “I feel that Picnic Point is important to the UW-Madison campus community as a whole”. There was a strong sense of believed importance to the community, as 25% of students chose “strongly agree” with the statement, and a little over half chose “agree”. The second statement students were asked to evaluate was, “Picnic Point is an important campus area green space to me personally”. Results for this question were similar to the previous, with about 20% marking “strongly agree”, 35% marking “agree”, 20% marking “neither agree nor disagree”, and 15% marking disagree or strongly disagree. These statistics show that over half of students feel that Picnic Point is an important green space for them, even though many of them only indicated in previous questions that they only visit it a few times a year at most. This makes it clear that even though the majority of students don’t visit Picnic Point as often as places such as Bascom Hill or the Memorial Union Terrace, they believe it is a vital green space for the community and themselves. Even with lower visit frequency levels, the majority of the student body perceives Picnic Point as an iconic campus landmark. While there was no obvious difference when comparing male and female responses on perception, comparing responses on perception to the students’ year in school yielded different results. As the graph shows, upperclassmen showed a tendency to agree more strongly to the statement “Picnic Point is an important campus area green space to me

personally". While only 30% of sophomores and 45% of juniors agreed or strongly agreed with the statement, 75% of seniors and all of the grad students agreed or strongly agreed with it. While not inconclusive evidence because of our smaller sample size, this does show an obvious correlation between a student's year in school and the likelihood that Picnic Point is an important green space to them. A possible reason for this, and one that several comments by students pointed out, is that older students put more value on things they might have not realized were important to them when they were younger. This change in perception is likely related to the rise in frequency of visits by older students we found, as the majority junior, seniors, and graduate students seem to value Picnic Point as a green space more. For the final portion of our project, we examined how students used Picnic, and any differentiations in use between different student demographics.

In order to get a better idea of how students use Picnic Point, we simply asked them to choose what activities they have participated in from a list of fourteen popular ones that we came up with. Students were allowed to choose multiple activities, and a follow up question allowed them to write in an activity that wasn't on the list. These activities can be seen on Graph 3. As the graph shows, the frequency of activities students do at Picnic Point varies immensely. The most popular activity reported was relaxation, with 55% of students choosing this as an activity they do there. Relaxation was followed up by jogging at 45% of students, biking at 35% of students, and sightseeing at 33% of students. Going into this project as well as going off of our own personal experiences, we expected the majority of students to indicate they use Picnic Point for physical activity. However, this is clearly not the case, as three out of the top five activities

chosen are not exercise oriented. We also examined our survey results for any differences in activities between the different demographics. A student's year in school had no obvious effect on what activities they have done at Picnic Point, as each classes responses were spread across the activities evenly. However, when we compared the activity responses to the gender of the student, we found that while males chose physical activities like swimming, hiking, and sports-related recreation twice as often as females. Also, almost a third more of females chose jogging or biking as an activity at Picnic Point than males. This shows that while males and females were split equally in exercise or physically exerting activities, the types of activities each were likely to choose were different. As stated above, our survey also allowed students to write in there own activity if they participated in something that wasn't on the list. Unsurprisingly, as this is Wisconsin, the activity most written in was "drinking", or some variation of that. Its clear that while there were a few trends in uses, the student body uses Picnic Point for a variety of recreational, educational, and relaxing activities. The reason for this once again boils down the fact that Picnic Point has changed substantially in the past few years, going from a primarily agricultural space, to a premier campus green space where students use it for a variety of activities.

Discussion

One of our main focuses while planning for, and executing this project was to eliminate as much bias as possible from the research. We spent a lot of time brainstorming how we could get a good representation of the University of Wisconsin student body with out limited amount of time and resources. The results, unfortunately,

were far from ideal. 92% of the participants were white which is actually not far from representative of UW-Madison and by gender it was split 51% male to 49% female, also very close to reality (UW Madison Green Space Survey, Appendix)(Student Profile, 2009). The problems we ran in to, as it became clear, were due to sampling biases based on the location we distributed our survey in person (at the Rathskeller in the Memorial Union), the fact that we gave it out through our social networks via Facebook (which we originally hypothesized would not be an issue due to each having our own diverse circle of friends that do not overlap significantly), and electronically to our classmates in the Colloquium for Undergraduate Geographers. We immediately recognized an unusually strong response from college seniors for our survey during analysis, and have concluded that this is due to two major factors: our social networks consist mostly of students in our same age group (mostly seniors) and also the fact that probably almost every student in the undergraduate colloquium participated in our survey and they are all fellow seniors as the colloquium is a senior year course.

Even with the rather large response from seniors our data still showed some conclusive trends as previously discussed in the results section. If anything the high response rate from UW-Madison seniors gave us a clearer picture of how that age group uses and perceives Picnic Point, it emphasized those results but it did not detract from the quality of data from the other grade levels. Most of our organization and planning efforts geared towards reducing bias in this report were to avoid skewing results were along the lines of trying not to attract an exaggerated amount of outdoors people or runners (many of which frequent picnic point). Picnic Point was not mentioned in the title of the survey or in our efforts to encourage participants to respond. Rather, we

simply promoted the survey as “having to do with green space” so we did not attract those people that love Picnic Point and would be more interested in a survey about Picnic Point (also a protection against putting off people that do not care for Picnic Point). We placed all questions about Picnic Point towards the end of the survey in an effort to avoid one question providing bias for another. For example, prior to asking any question about Picnic Point (and revealing the focus of our project), we first asked if the survey taker had a favorite location on campus so we could record their response without introducing bias (UW Madison Green Space Survey, Appendix).

Perhaps if we had more time and resources or if we had an opportunity to continue research in the future, one of the additions we would make to this project would be to perform a duplicate survey where potential participants were intentionally informed of the survey subject beforehand. This would allow us to collect more information on the use of Picnic Point because it would gather a separate group of responses from those who know of, use, and likely enjoy the site more than the typical UW-Madison Student (also to avoid some pointless data collection/get more relevant data while at the same time still knowing the fraction of UW-Madison students that use Picnic Point and know of Picnic Point as we have discovered in this round of surveys).

Despite our best efforts, there were characteristics of our research that left room for improvement. Unfortunately, while we attempted to collect responses from a diverse group of students, up to this point we have received a significant amount of data from white, male students. This could be contributed to several factors. Our method of approaching students at the Memorial Union may have resulted in this trend – perhaps

the Union itself was a location prone to attract that specific demographic. A great deal of bias is also present in our efforts to distribute the survey online due to the fact that we primarily distributed it to friends. Because two of the members of the group were from the area, a higher percentage of people from Madison were represented than is true for the UW student population. Originally we had hoped that characteristics such as gender, race, age and perceived physical condition could be taken into account when analyzing our results to better classify students. After analyzing our results it has become clear that this dimension of our study is an enormous task that would not necessarily return pertinent information for our final analysis.

Unfortunately due to time constraints we were not able to get a large enough sample to fully represent each “neighborhood” that students currently live in. Question 8 asked participants to specify which neighborhood they currently live in on a map we created, the majority of participants reported living in sections 2 (28.2%), 5 (11.9), or 8 (23%), all of which are very close in proximity to the

Section	Percent of Total Participants in this Section
1	0
2	28.2
3	4.3
4	6.8
5	11.9
6	2.6
7	0.9
8	23
9	7.7
10	1.7
Other	7.7

Memorial Union (UW Madison Green Space Survey, Appendix). These results suggest using the Memorial Union as our survey distribution site did introduce some sampling bias. This was something that we assumed would not occur because of the large and diverse amount of students that utilize the student union on a daily basis.

Given more time one of the greatest improvements on this project would be the ability to distribute our survey in more student centers and student-oriented areas like

Union South, the “sophomore slums”, housing cafeterias across campus, and in large lecture halls or email list serves. In doing so we would have also been less dependent on our own friends to provide us with completed surveys. While our data shows some definite trends we would be able to perform a meaningful spatial analysis between students living arrangements and their use and perception of Picnic Point, it would allow for a more full spectrum of how different attitudes and student activities are painted across the UW-Madison campus and downtown Madison. Funding may also have provided us the means to monitor picnic point via first hand observation beyond reading the landscape through photographic comparison. Investigating use of the park first hand and comparing those observations to student uses from our survey results would help us better understand how student use differs from non-student use.

If funding was brought into the equation we could have distributed the survey professionally, we could have mailed surveys to every student at their current address (which would be a great resource for spatial analysis). in doing so we would not only be eliminate reliance on friends and social networks to get results, but we would get a more full representation overall.

In an ideal setting we would have distributed our survey over the course of a full year eliminating any seasonal bias that could possibly affect participants that do or do not brave the weather to spend time in the Rathskeller while we conduct our survey and also the number of students that have outdoor activities on their mind. Our survey was conducted towards the end of November and at that point not many people were spending time outdoors anymore given Wisconsin’s chilly autumnal weather. Spring and

summer months may be a better-suited timeframe for distributing this survey to eliminate any possible seasonal bias so that we can be very certain that our claims about the identity and purpose of the Lakeshore Nature Preserve hold true.

Picnic Point has gone through many geographical, environmental, and social changes in the past century. Over the last one hundred years, the desire and need for this particular green space within the University of Wisconsin community has increased drastically, both as an academic and a social venue. This longing is what caused the university's eventual purchase of it in the early 1940's from Edward Young, and has been the driving factor for both its changing physical landscape and its use. As students and staff became more aware of this wonderful natural area to which they had complete access, the more popular the site became. By the 2000's, Picnic Point had undergone several major renovations which allowed for more public viewing and easier access for students to carry out projects and the like.

While it was originally used for agriculture, Picnic Point has transformed into a completely different space over the years. Since the area stopped being used for grazing and other agricultural purposes, new vegetation has sprung up all over the peninsula, adding more to its *naturalistic* appeal. Due to this environmental factor, combined with the university's implemented amenities and the 21st century desire for green space, Picnic Point has become a location that encourages outdoor use, social growth, empirical education, and exercise.

Today, Picnic Point stands as green space to which some of our survey takers have called "easily accessible", "awesome", a "getaway", "pretty and peaceful", and

“invaluable”. In the comments section of our survey one student sums up our conclusion particularly nicely:

“I think Picnic Point is a great example of how beautiful the UW-Madison campus is, it really exemplifies the universities effort to protect the environment in ways that they can. UW was voted one of the most beautiful campuses in the nation and the recognition specifically mentioned picnic point as a reason. Vast green space is hard to come by in a city that is constantly growing like Madison, but areas like Picnic Point and the Arboretum show what the city really cares about.”
(Anonymous, 2011)

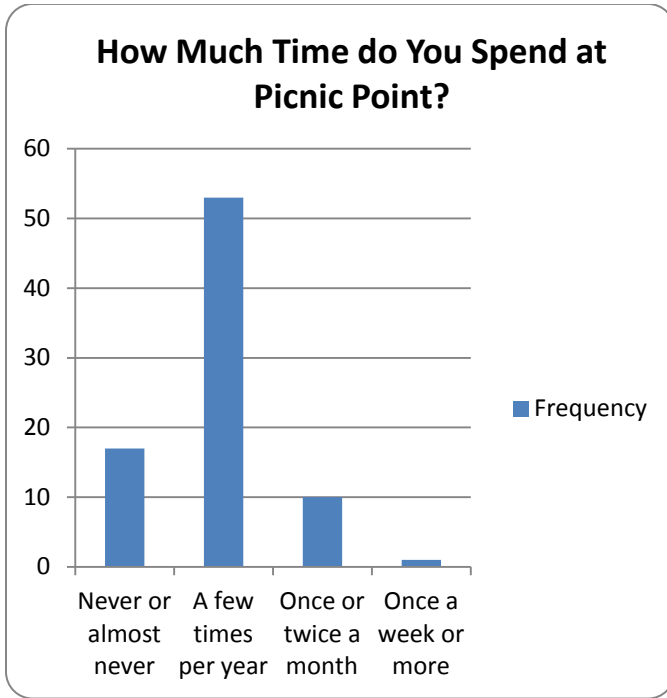
Our analysis has revealed some pretty clear conclusions of how the physical and social changes have shaped Picnic Point. Through our research we have come to understand the current perceptions and uses of local students and ultimately can make the claim that the significance of Picnic Point as a whole to this generation of students is a place that is loved by many and appreciated by all.

Bibliography

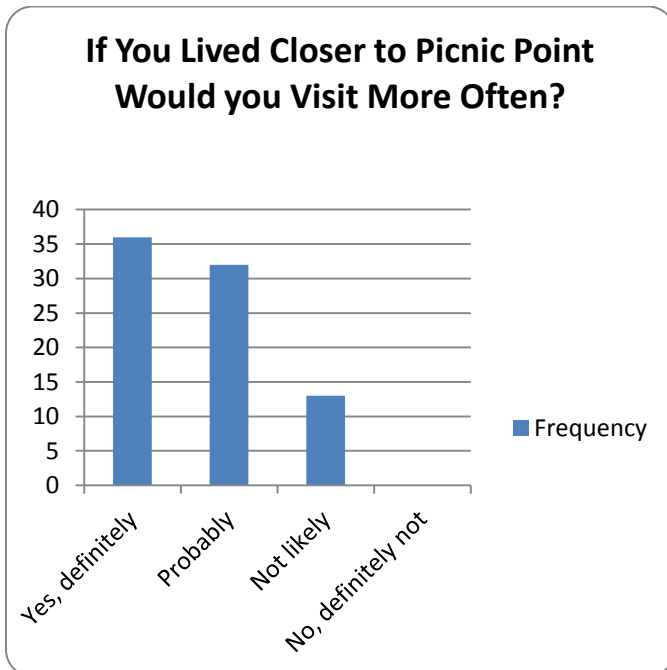
- Anonymous Survey Participant. "UW-Madison Green Space Survey". Survey. 11 November 2011.
- Student Profile*. University of Wisconsin – Madison. Updated Fall 2009.
<http://www.wisc.edu/about/facts/community.php#students>
- "Eagle Heights Community Gardens." EHCG. 2006-2010. Accessed: December 19, 2011.
<http://www.eagleheightsgardens.org/>.
- "History of F.H. King Students for Sustainable Agriculture." Hahn, Micah. No Date.
 Accessed: December 19, 2011. <http://www.fhkingstudentfarm.com/history>.
- "Biocore Prairie." Burgess, Ann et al. Nov 12, 2006. Accessed: December 19, 2001.
<http://www.lakeshorepreserve.wisc.edu/visit/biocore.htm>
- Brown, Harriet, and Jamie Young. *Madison Walks*. Madison, WI: Jones, 2003. Print.
- Baum, Jill M. *Determining Wetland Management Alternatives: the Natural History of Picnic Point Marsh*. Thesis. Madison, 2001. Print.
- Keeley, Ken, and Rebecca Flood. *University of Wisconsin- Madison Lakeshore Nature Preserve Master Plan*. Publication. University of Wisconsin-Madison, Mar. 2006.
 Web. 05 Oct. 2011.
 <<http://lakeshorepreserve.wisc.edu/plans/docs/LakeshoreNaturePreserveMasterPlan.pdf>>.
- Bedimo-Rung, Ariane L., Andrew J. Mowen, and Deborah A. Cohen. "The Significance of Parks to Physical Activity and Public Health: A Conceptual Model | RAND." *Sciencedirect.com*. RAND Corporation, 4 Feb. 2005. Web. 15 Oct. 2011.
 <<http://www.sciencedirect.com/science/article/pii/S0749379704003046>>.
- Hume, C. (2007, July 13). Why Parks Are Important. *The Toronto Star*.
- ICLEI. (2008). Managing Green Spaces for Urban Biodiversity. *Local and Regional Authorities for Biodiversity*.
- Bell et al, S. (2008). *Greenspace and Quality of Life: A Critical Literature Review*. Stirling: Greenspace Scotland.
- McFarland et al, A. (2008). Campus Green Spaces Enhance Quality of Life. *HortTechnology*.

Appendix

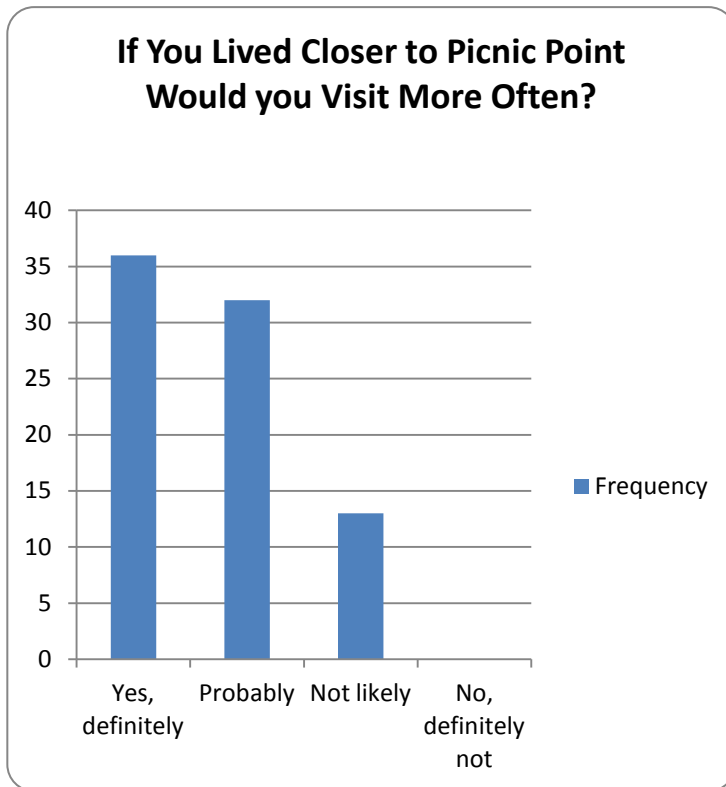
Graph 1



Graph 2



Graph 3



UW – Madison Green Space Survey (pages 28-30)

Default Question Block

1. Are you currently a University of Wisconsin - Madison student?

- Yes
- No, I am currently not a college student
- No, I attend a different university (please specify)

2. What is your classification?

- Freshman
- Sophomore
- Junior
- Senior
- Graduate Student

3. What is your gender?

- Male
- Female

4. In which city and state did you spend the majority of your life prior to college?

City:

State (if applicable):

5. In which country did you spend most of your life prior to college?

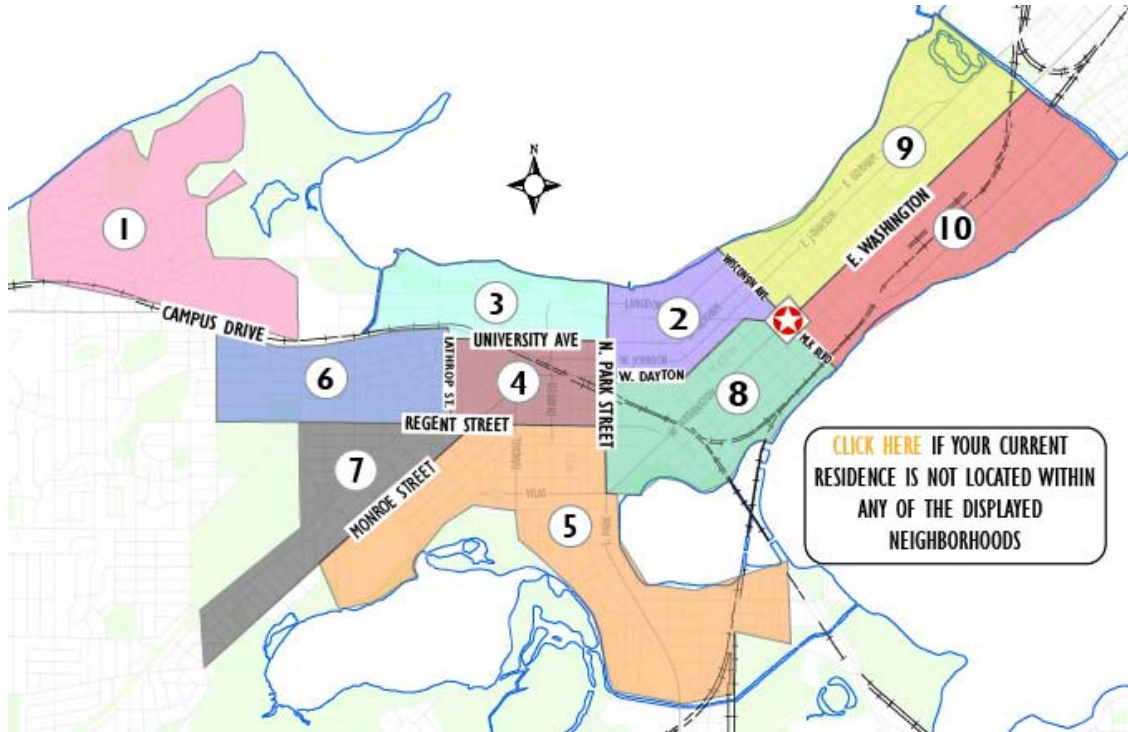
Select:

6. Which best describes your race? (*This list was taken from the 2010 United States Census*)

Select:

7. Please specify your race:

8. The following map contains 10 campus area neighborhoods distinguishable by color. Please select the neighborhood on the map that contains your current residence. Click the 'CLICK HERE' box if your residence is not on the map. When you have made your selection, click the 'next' button at the bottom of the page.



9. Briefly describe the location of your current residence.

10. Please indicate how each of the following statements applies to you.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I consider myself to be a physically active person in my daily life.	<input type="radio"/>				
I consider myself to be an outdoors person.	<input type="radio"/>				

11. Is there a specific place on campus that you prefer to spend time outside? If yes, where?

12. Have you heard of Picnic Point or the Lakeshore Nature Preserve on the northwest side of the UW-Madison campus?

Yes

No

13. Have you ever been to Picnic Point during your time spent on campus?

Yes

No

14. How often do you spend time at Picnic Point?

Never or almost never

A few times per year

Once or twice a month

Once a week or more

15. If you lived closer to Picnic Point would you take advantage of this natural area more than you currently do?

Yes, definitely

Probably

Not likely

No, definitely not

16. Please indicate how each statement applies to you.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I feel that Picnic Point is important to the UW-Madison campus community as a whole.	<input type="radio"/>				
Picnic Point is an important campus area green space to me personally.	<input type="radio"/>				

17. Please indicate all of your own past and present uses of Picnic Point and the surrounding Lakeshore Nature Preserve.
 (Select all that apply)

Class labs that require attendance in the area
 Jogging

Class projects or other assignments

Hiking Doing employment-related assignments

Biking Swimming

Skiing

Sightseeing

Relaxation

Other naturalistic observation (such as bird watching)

Grilling or picnicking

Reading

Sports-related recreation (such as throwing a frisbee/football)

Dog walking

Other uses that are not indicated in this list

Use of fire pits

18. Please specify any of your other uses of Picnic Point:

19. Please elaborate on any other thoughts or opinions of Picnic Point or the surrounding nature preserve that you would like to share:

A large, empty rectangular box with a thin black border, intended for the user to provide their response to question 19. The box is currently blank.

The Lakeshore Nature Preserve: A Changing Landscape

