

# Nature Based Recreation: A Recipe for Community Health

## North Team



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### Prepared on Behalf of

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**University of Minnesota**

REC 3281

# Brooklyn Park Nature Based Play

21, November 2016



Nature Based Play Evaluation

By: Samuel Gustafson, Samuel Duchow, Adam Bulgach

University of Minnesota - 2016 parks evaluation from students of the department of Recreation, Parks and Leisure Studies

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# Project Summary

## Objectives

To assess and evaluate the current nature based play elements available within the parks in the city of Brooklyn Park, MN. This evaluation is aimed at better providing both a fulfilling and enriching opportunity aimed at getting children outdoors and involved with their community. Nature based play encourages spontaneity, problem solving abilities, social skills and increasing physical activity. These are essential elements for children, and are what we aim to enhance within a series of parks in the city. The purpose of our evaluations are to bring attention to possible improvements that could be made, and will be assessed by the city as to their viability.

## Goals

Brooklyn Park already has many established parks that provide nature based play elements for the public to enjoy. Our goal as a group was to assess these existing nature based play elements and evaluate the parks to figure out what new nature based play elements could be implemented to improve the parks. After we collect the data on the parks our goal is to present our discoveries to the city of Brooklyn Park in hopes that they find our research valuable when they evaluate their parks.

## Project Outline

The nature based play project outline is a very basic and easy to understand three step process that consists of defining nature based play, data collection, and evaluation of current parks in Brooklyn Park. The first step, defining, was as simple as defining what nature based play is. As a group, none of us were experts on nature based play, so some research was necessary. Looking up what defines nature based play, aspects that encourage nature based play, and examples of pre existing nature based play areas are key to our understanding on the evaluation. Data collection, the second step, simply consisted of visiting the parks, and looking or taking inventory of what the parks already had in relation to nature based play. The final step was to look at the data that was collected and evaluate what the parks could use in regards to nature based play, and format it into a presentation.

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# Work Breakdown

<b>Date</b>	<b>Agenda</b>
Sep. 19th	Project launch
Oct. 3rd	Status report 1
Oct. 17th	Status report 2
Oct. 29th	Define/Research NBP (nature based play)
Nov. 2nd	First site visit
Nov. 9th	Second/ final site visit
Nov. 13th	Data Analysis
Dec. 5th	Project Presentation

## Presentation

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After the first three steps are completed the group will present findings and recommendations to employees at the city of Brooklyn Park.

### **Inputs**

The inputs of this project would be the money that is granted to the city for construction and renovations to their parks, the amount of time given to complete the project, any staff needed for the project, any equipment needed to finish the project, and finally, all of the land that is being considered for the project.

### **Outputs**

The outputs that will hopefully occur as a result of this project will be an increase in participation levels within certain demographics within the city of Brooklyn Park.

### **Learning outcomes**

To introduce the youth in the city of Brooklyn Park to the benefits of engaging in nature based play. Emerging oneself in nature to promote mental and physical well-being, while engaging with their environment. Ideally children will learn ways to relieve stress and have different outputs to stay out of trouble and participate in the community.

### **Behavioral Outcomes**

Our intended behavioral outcomes of our project is to improve the overall health and wellness of the children in Brooklyn park, as well as better connect these kids with the surrounding environment in Brooklyn park. With our ideas focused on the possibilities of additional nature based play elements in Brooklyn Park we also hope to improve how the citizens see perceive the environment and natural spaces in general.

### **Impacts**

There has been a significant decline in nature based play over the years according to the book “Last Child in the Woods” as well as many other journals and studies. Impacts of this project are aimed at physically changing or altering parks within the city of Brooklyn Park so that children are more likely to be actively engaged with nature. It has been proven in multiple different studies there are several benefits to nature based play that are but not limited to the following: higher social skills, increase in reasoning skills, and lower stress levels. Factors such as the ones previously stated are what the project is aimed at impacting as a long term goal.

### **Who Will Use these Results and How?**

The city of Brooklyn Park will be receiving all of the data and recommendations that this project has, and will be using them in consideration when changing the parks that were studied in this project. Ideally the city will be taking the data and recommendations in direct consideration when making alterations to their parks. The results of this project can also be extrapolated and used in different settings such as school playgrounds that are in need of more features that will encourage nature based play.

### **What is Play? And How Does it Work in Nature Based Areas?**

Play is word that can be defined in many different ways. Merriam Webster defines it as “recreational activity, especially the spontaneous activity of children”. Webster also defines it in many other ways such as “one’s turn in a game” or “a stage representation of an action or story”. This presentation is focused on play as a spontaneous component of recreation, in regards to elements of nature that parks in Brooklyn Park may or may not have. Certain elements and features within parks are more likely to attract children's attention, get them to engage in nature based play as well as start the stimulation and growth processes.

### **What is Nature Based Play?**

Nature based play can be defined as someone engaging with nature in a playful way. For play or an activity to be considered nature based is very easy and simple to determine, it simply needs to stimulate the participant while the participant is engaged with nature in some fashion. There are also many different benefits as a result of children playing, and even more benefits when children are engaged in nature based play. Some of these benefits are: Supports creativity and problem solving, Enhances cognitive abilities, Improves academic performance, Reduces Attention Deficit Disorder (ADD) symptoms, Increases physical activity, Improves nutrition, Improves eyesight, Improves social relations, Improves self-discipline, and Reduces stress (naturalearning.org 2012). The benefits from nature based play aren’t crucial to the future success of a child, however many of the benefits can be linked to positive outcomes.

### **Park Evaluation Checklist**

Evaluation checklist (Rosemount Nature-Based Play Ideals Eval. Checklist)

#### Natural Features:

- Natural Spaces
- Trees & foliage
- Open un-landscaped fields in the area
- Minimal design structures but still functional
- Natural structures
- Rocks to climb and play on
- Shaded spaces
- Natural Habitats
- Multipurpose Lawn spaces

- Water feature (Pond, lake, swamp, etc)
- Gardens
- Sand, mulch, recycled rubber, playground, pebble gravel, etc.
- Path’s through plantings
- Animal attracting features
- Places for climbing and crawling
- Gathering spaces

- Messy materials (mud, sand, twigs, etc)
- Levels (stone walls, stairs,etc)

#### Physical Features:

- Hard-surface play area
- Hard-surface paths
- Dramatic play structures
- Trees and natural areas
- Active-play equipment

- Large soft areas (grass, etc)
- Fences, gates, walls
- Semi-private spaces
- Pet/animal-friendly areas
- Flower gardens
- Green houses - Butterfly gardens
- Transitional spaces
- Access to amenities
- Accessibility

#### Safety:

- Fences around hazards
- Appropriate Equipment

- Litter-free area
- Fully-functioning equipment
- Secured equipment
- No water hazards
- No entanglement hazards
- No traffic hazards

#### Does the area:

- Encourage play?
- Stimulate senses?
- Stimulate curiosity?
- Support physical needs?
- Support social needs?

- Allow adult-child interaction
- Allow child-child interaction? - Support active play?
- Support creative play?
- Support imaginative play?
- Support group play?
- Support games?
- Involve art or music?
- Involve science?
- Support child
- Nature interaction?

### **Post Evaluation**

There were a few questions we asked ourselves once we had gone to all the parks, such as: Did the environment stimulate play? Were there natural areas to interact with or rest, or was there mostly just structured materials to use? If there was a pond/lake, was there a dock to go out on? Were there natural structures such as rocks, trees and hills to climb on or play with? These, along with many others, are all important questions to ask when evaluation parks for nature based play. They don't need to meet every requirement, but it is crucial to at least meet a few.

### **Park Breakdown**

#### **Oak Grove Park**

This park is located nearby to housing developments, however largely secluded within the natural woods of Brooklyn park. The signage was difficult to read, making it slightly difficult to find your way there. However, once there, there are many things it interact with for NBP, such as trees or foliage. The private space for people was very good, with the pavilion and benches, and had many pre existing opportunities and elements that stimulated nature based play.

#### *Oak Grove park recommendations*

The park did have plenty of space for possible additions that would stimulate NBP, such additions like boulders to climb on, or other natural structures. As well, pet waste bags could be a cheap and very handy addition to the park.

#### **Founder's Park**

This park is easy to find, right off the side of the main road. The park had lots of potential for NBP, however there was very little. It contained a playground with a couple benches and tables, as well as a basketball court and kickball/baseball field.



*Founder's Park recommendations*

The kickball, baseball and basketball courts were oddly placed. There was an awkward gap between activities, which could be nice if people wanted to use them in a more secluded manner. However the gaps between the areas take up space and fill the spaces where nature based engagement could be possible. The field is bordered by a large space of woods, which could easily be converted to have trails to hike and play on, as well as possible cross-country ski trails. This Park also had a surprising amount of Canadian Goose poop scattered about the kickball field, playground, and benches and could be more user friendly if it was cleaned up in some way. This park also has the most potential for a water feature in regards to the amount of space available. Also, there are some easy changes that could be made to induce nature based play, which could be adding benches made of logs, tree stumps to sit/climb on.

*Additionally*

This park would be the park that we would recommend the city move forward with first. This park had the least amount of features and would be the easiest to fully convert to a nature based area. This could be done by completely removing the existing structures and courts.

**Environmental Nature Area**

This place is very easy to find. They have a nice parking lot and lots of trails. Its very nature heavy, however there are very little structures to play on or interact with. There is a small body of water that includes some fish. There were also some tables as well as portable facilities.

*Environmental Nature Area Recommendations*

There should be bags for dog waste. With how many trails there were to walk animals along, there should be a way to clean it up. Also, there should certainly be a dock or pier to go out onto the body of water. There were small trails going through the brush from people going to the water, and these are not as safe considering you can easily sink into the mud or water without even noticing due to the tall plants. A small pavilion could be added at the entrance to the park also.

**Willows of Aspen**

This was a very structured space, being as it was in the center of a residential area. There was a playground with a few tables. There were a lot of saplings being as it is a newer park. There were three different types of courts, basketball, volleyball and tennis, with a large field in between.

*Willows of Aspen Recommendations*

The large field could be used for any number of NBP opportunities. Lots of potential if this field is to be utilized, otherwise there is very little.

**Eidem Park**

This park was very easy to find located off a main road, and contained large buildings and areas for what looked like urban farming. There weren't many trails, pavilions or picnic tables in the park available for use.

*Eidem Park Recommendations*

Being that this park was more of a learning center, there weren't as many chances for nature based play as there were for nature based learning. As a group we were slightly confused upon arriving at the park. However, beyond the group's confusion, there was a very large field that had great potential for nature based play opportunities, if only there were a few natural elements added.

**Northern Trail Park**

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This park has lots of trees, there is a playground on one side of the park near the road, as well as a baseball diamond on the opposite side. There is also a large field which is partially used in conjunction with the baseball field, and could be used for many other things. There is also a Regional trail that goes through the park.

#### *Northern Trail Park Recommendations*

Though there were lots of trees and a trail going through the park, there is still potential for a number of different nature based elements that could be added to fill up the space with leaving enough space for baseball games to have a proper outfield.

#### *North Woods Park*

This park had lots of athletic fields and was more of a new-age traditional playground, as opposed to a nature based environmental area. While the park was very innovative with the materials they used like the turf ground and the musical instruments, it is an excellent park for kids. However, there is lots of potential for adding natural elements here.

#### *North Woods Park Recommendations*

There is a large field with a lot of open area where nature based elements. There is plenty of potential with this field where you could even put in larger things such as a water feature. (Fountain, small pond, stream etc.) Our group also thought that adding nature based art installations and trails in the wooded section of trees would be a great addition to the park. Having artists come in and install works of art throughout the wooded area with trails that took users through the area would be a great way to catch people that aren't using the sports fields or the playground.

#### **General Recommendations**

As a whole all the parks have generally similar recommendations for what could be added. Depending on the space left, parks with the large open fields have more potential for big features such as fountains, ponds or climbing structures. Simple additions like boulders or benches made of logs are fun and cheap aspects that can be added rather easily and have a big impact on the overall functionality and aesthetic value. Elements like hiking trails or Alpine Ski trails are more expensive, but excellent additions to any park that has the wooded areas available; or, are willing to plant some new trees in excess space to benefit the environment and the willful spirit of children. Also, as a whole, pet waste bags are crucial in keeping the parks clean. Many people come to the parks to walk their dogs, and if they have nothing to pick up waste in then it makes it that much harder for children to run around and play in those areas.

#### **Thank You City of Brooklyn Park**

We would like to thank the city of Brooklyn park for valuing our input as University of Minnesota students and giving us the opportunity to evaluate your parks for aspects of nature based play. Experience in the field as Recreation majors is extremely valuable and this opportunity would not have been possible without you! For this, we thank you, city of Brooklyn Park.

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### Citations

Natural Learning Initiative. "Benefits of connecting children with nature: Why naturalize outdoor learning environments." *College of Design, North Carolina State University* (2012).

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