Children and the Natural Environment
An exploration of Adult Memories of Childhood Nature Play

by

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ABSTRACT

Children and the Natural Environment An Exploration of Adult Memories of Childhood Nature Play

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Many studies suggest that children are increasingly disengaged with the natural environment and in contrast to past decades spend significantly less free time exploring natural play places. Other studies suggest that from the ages of three to eight, foundational childhood memories are formed, and these memories likely influence adult beliefs regarding the natural environment. The goal of this study was to examine the character and ecology of adults’ childhood memories of nature, along with how they potentially shaped the individual as they progressed through life. Adults between the ages of eighteen to twenty-seven were interviewed using a semi structured format, and asked to fill out two questionnaires to detect themes between memories and environmental beliefs. Responses were analyzed using qualitative content analysis. Results help to identify the behaviours and experiences that encourage children to engage with the natural environment, allowing play spaces to be designed in order to foster environmental connectivity.
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To Mom, Dad, Ash and Tyler,

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I love you all!

◊

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CHAPTER ONE

Introduction

Overview

Children are a very important part of culture. Children: become future adults and ultimately the values and beliefs formed in childhood find expression in adult behaviours. Our hopes of what the future will be lies with children. In order to experience changes within the way that we operate and function as a society then children become the building blocks for these changes. Therefore it is important to protect the developmental capacity of children and present them with a variety of environments and challenges that will keep them interested and intellectually engaged throughout their formative years. There has been an overwhelming amount of research conducted in the last few decades that indicates children spend far less time in the natural environment than previous generations. However the natural environment and being outside exploring can affect children positively in their early years (Charles, 2009). In short natural environments are losing importance and this is why emphasis should be placed back on nature play.

Children gain several beneficial qualities from interacting with the natural environment on a regular basis such as creativity, confidence, and the ability to handle challenges. Furthermore children who spend time in natural environments have the ability to create their own entertainment easily compared to children without this experience (Mikels-Carrasco, 2010). This is far different from passive forms of digital entertainment such as television or computers. Nature can provide
environments that encourage intellectual growth and provide a healthy amount of daily exercise (Cosco, 2005). Protecting nature is not only important for the potential health benefits and stress relief, but also because humans connect with nature on a deeper level (Kellert & Wilson, 1993). However it is also important for children’s healthy play development when they are young because it is crucial to their maturation and development (Kellert, 2007).

Children are very sensitive to aesthetics and they interact with their surroundings on a much deeper level than may be understood at first glance (Jubenville, 1978). Most importantly it is through play that children are able to explore and experience their surroundings (Jansson, 1983). Children relate to the natural environment through play and their connection to the places that they play might best be understood by examining the types of play they choose; and the places they choose to play in. It follows that examining how children interact with their natural surroundings and whether specific nature play experiences influence them later in life is important. Research has uncovered some connections between outdoor exploration and the positive effects on ecological attitudes or behaviours of children (Duerden, & Witt, 2010). Therefore exploring children’s nature play and how this may influence later environmental attitudes and behaviours is a broad goal of this study.

This research relates to Landscape Architecture more largely because it can provide additional evidence that natural environments – be they small wild places such as creeks or hedgerows, or leftover nature in urban areas – are important to healthy
child development and attempts to preserve natural areas are worthy. Not only can Landscape Architects work towards identifying and preserving nature for children, they can continue to promote and create environments that are appropriate and beneficial in childhood development. Along with this the design of child friendly spaces is important in order to encourage as much use as possible but also to include the elements that children are most fond of.

**Research Problem**

Although there is substantial literature on childhood play and indeed a rather rich source of writing on the value of early nature in the lives of children, there seems to be a missing link between children having these experiences and what their future attitudes towards the natural environment as adults may be. Also whether or not adults remember feeling connections to the places that surrounded them as children or if there are other features which would have heightened their interest further is another aim of this research.

What are the features or physical attributes to a space that make it interesting and make it special enough to be remembered as an adult? Lastly, does having a deep and seemingly meaningful connection with the natural environment as a child produce an adult that has specific beliefs and attitudes towards the natural environment?

Although these questions are larger and more complex than one study can answer this doesn’t mean that an attempt should not be made to begin to explore the connections between childhood nature play and adult attitudes and behaviours.
Goal

The goal of this study was to explore adult memories of childhood nature play, and how these memories may have shaped adult attitudes towards nature.

Objectives

- Explore any themes and patterns of remembered nature play among a sample of young adults through semi-structured interviews.
- Measure environmental attitudes and beliefs among a sample of adults using the New Environmental Paradigm questionnaire by Dunlap and Van Liere.
- Compare participant’s nature play themes with results from the New Environmental Paradigm questionnaire through the use of qualitative content analysis.

Developing a narrative with participants was an important aspect of this research in order to become immersed within the childhood memories and experiences of young adults to try and understand how they interacted with nature as a child. It was also assumed that these experiences might have influenced adult environmental beliefs or attitudes. The information obtained through participant interviews was compared against the literature. Qualitative content analysis was used in order to pull themes and similarities between participants out of the interview transcripts in order to create a base list of themes that seemed to be of interest to the interview participants. These themes and memories were then
compared against the New Environmental Paradigm responses as well as scores in order to determine whether childhood memories and experiences influence the adults’ attitudes or preferences towards the natural environment in the future.

Hopefully the results of this study will open the door to more research on how a childhood full of outdoor exploration and nature can benefit a child not only when they are developing, but also as they grow up to become an adult. Do childhood memories and experiences shape the decisions you make about what environments you choose to surround yourself with as an adult? Also would different childhood experiences potentially shape a different individual with different preferences and feelings towards the environment?

These questions are areas that future research with more time and resources could expand on, and potentially contribute a significant amount to the existing body of research on the subject. However short term benefits of the research would potentially be utilized to aid Landscape Architects with determining the qualities of place that are most attractive to a child looking for play. Furthermore determining whether or not adults become more attached to place; or whether they have specific environmental attitudes as a result of their childhood nature experiences was a key interest of this study and area for future utilization of the results.
CHAPTER TWO

Literature Review

Overview

The following chapter provides a detailed account of the literature available on the stages of childhood development, the importance of play and the types of play that are the most beneficial to a child. It then goes on to describe how nature play benefits children and finally whether or not children take their childhood memories with them as they grow up. All of these topics fit together to construct a story of how a child develops and what encourages their creative capacity. This can be used to compare against data showing how a person feels connected to the natural environment when they move into adulthood.

Loss of Green Space

One of the first things to examine is the current trends in the loss of green space in many parts of the world. Green spaces are being converted into subdivisions and commercial areas taking over old growth forests, natural environments and most of our best agricultural lands (Environmental Commissioner of Ontario, 2008). This exponential type of growth is even beginning to reach into untouched areas of rural communities leaving much less “nature” (Needham & Dieterich-Ward, 2009). Many places of interest for children are contained within these loose definitions of nature and many places that have not been developed have fallen under the pressure of authorities to develop (Jansson, 1983). This leads into the understanding that many places older generations had available to them for play are disappearing at an
alarming rate, and we are not yet aware of all of the potential consequences to these actions.

Another important area that is facing pressure is the informal green spaces within cities. These are the places of interest for recreation and exploration by children and yet these are disappearing at alarming rates as well (Ennos, Golding & Pauleit, 2005). Therefore most of the natural places children from older generations used to play have disappeared in this process of urbanization and expansion as previously mentioned (Castonguay & Jutras, 2009). Overall there is evidence that a decline in access and/or availability of outdoor spaces that children are able to go to and play exists (Castonguay & Jutras, 2009). These trends are seemingly problematic and evidence suggests that these trends will continue unless a conscious effort is made to rectify the problems we have created and save natural play places for children.

These losses in green space have many impacts on the natural environment itself but for the purposes of this research the most important effect concerns children and what they are losing as a result. Activities for children to do are lacking and consequently children end up sitting in front of the television or playing video games and this may be as a result of the lack of nearby nature (Berger & Lahad, 2010). This is problematic and enhances the importance of natural spaces for children because it can reverse the effects of children staying inside their houses. Children need to get out and get involved in activities which improve brain function, increase their activity level and also their creativity. These spaces can be found in nature however altering the natural environment has many catastrophic
consequences and impacting childhood play and development is one of the social implications.

**What is Play and why is it Important?**

Research shows that there are many ways of describing and understanding play and what play means for a child. At first glance it may seem to be something trivial and without a real purpose other than for having fun. However there are many important reasons why play should be encouraged and cherished as a child and a parent.

Play is something pleasurable for a child that does not necessarily have to have a goal in mind and they do not need to be playing a specific game with rules. Rather the progression involved in play becomes important. Play allows children to learn about themselves, their strengths, weaknesses and their preferences. Encountering challenges through play also allows children to develop and strengthen their personalities (Jambor, 1986). Play helps a child to understand as well as become familiar with their surrounding environments and this is where natural spaces become important (Yawkey & Pellegrini, 1984). If children are only offered sterile environments they potentially will develop a view and understanding of the world that will reflect this. There needs to be variety in the types of environments that children interact with in order to give them a challenge, but also so that they have mental stimulation (Staempfli, 2009). If there is no mental stimulation children will then become uninterested in the activity; in this case outdoor play and the natural environment. If the child isn’t getting the stimulation they are looking for then they
will switch activities to something that is more desirable and this is why the variety offered by nature is unique.

There are important considerations in order to understand which elements need to be present in order to have constructive play time. Firstly play needs to allow for movement because movement allows a child to feel interest in their surroundings (Yawkey & Pellegrini, 1984). There are also various stages of movement that become interesting to understand when designing for a specific age group of children. From the first months of a child’s life they can eventually hold themselves upright leading to the ability to stand and support more considerable types of motor development. Next children begin walking and running which require more intense forms of entertainment and also a challenge (Johnson, Christie & Yawkey, 1999). These developmental stages all require different elements such as learning locomotive skills; and stability all the way to recognizing patterns and reigning in on specific abilities of each child (Yawkey & Pellegrini, 1984). This is important because as a society there is a need to control all things that are seen as “wild” and this control is eliminating the physical diversity of the natural environment that can positively influence a child’s behaviours and learning process. The wild elements of an environment are what children navigate towards and we should not be eliminating these.

Furthermore by their selection of activities children are able to hone in on their talents, interests and abilities. This allows the child to develop their personalities and express themselves in a way that is much easier at that time in their lives. All of these things are important for many reasons. Firstly children are very curious,
adventurous and love to explore the possibilities that their surroundings offer them. This exploration presents children with challenges and helps them develop confidence. The blank canvas that the natural environment offers children is of great importance because it helps develop creativity and heighten a child’s awareness and ability to understand the world around them. Secondly children can develop their self esteem and sense of self worth through this discovery because they learn the things that they are good at (Yawkey & Pellegrini, 1984).

The Importance of Free Play

Between the ages of two and nine children develop the ability to relate to the living aspect of the environment (Jansson, 1983). This means that free play during these years is most important if we want it to have maximum benefits for children because at this time they are most curious and excited. This excitement leads towards an understanding of the environment and an interest in how it works.

Free play is when a child is able to make his or her own decisions about the types of activities to partake in. This is based on surroundings, availability of props, and the motivation of the child. Free play gives the child a first opportunity to express his or her creativity, adventurousness and personal preferences at an early age. If a child is able to develop these skills early on in life this leaves plenty of room for growth in the future. Our brains utilize mental images along with significant elements in order to remember, create and understand the environments around us. Therefore it is so important to develop our creative thinking ability young as it drives our personalities and memory function as we get older (Zeisel, 2006).
Nature Play

Nature is such an important aspect of a child’s behavioural and creative development. It can increase learning capabilities, self esteem, and also a child’s behaviour (Moffat, Johnson & Shoveller 2008). Along with this nature is linked to mental wellbeing and a child’s ability to learn and absorb knowledge (Maller, 2009). It is evident through research that without nature play and a connection to the environment at an early age children potentially grow up stunted in terms of mental capacity, creativity and also their emotional wellbeing (Brown & Taylor, 2008, Jackson & Tester, 2008). These issues can occur because nature presents children with complexity and also the diverse opportunities to create play. Types of play such as role playing and constructive play can be achieved with nature. These are relevant to the child’s life even as they age (Kirby, 1989). Children do not discriminate against the environments that they enjoy; they simply look for the places with the most interest. Therefore providing more options in order for these occurrences to happen will be important along with determining what specific elements provide the most interest. However children are resourceful and this is why nature appeals to them to such a high degree (Moore, 1986) because they can do so much with it.

Nature is also important to children for other reasons. Children can use nature as a refuge. Trees, hedges, grass and wild places all provide shelter and comfort for children. This is important because children practice ‘watching’ in order to learn and they are able to see and not be seen in nature (Moore, 1989). Children enjoy
having a safe place or a special place and nature provides stimulation along with this feeling of safety. Yet there is also the safety to their health and wellbeing. Children who spend more time in nature are shown to get sick less often (Esterl, 2008) and also be engaged with higher levels of physical activity. All of these factors combined shown how important nature is to children. Nature provides other health benefits such as a reduction in stress, and the pressures of everyday life as well (Kaplan, 1995) because of the calming effects related to natural elements.

**Structured Activities**

There has been a significant increase in the number of after school programs and organized sports that children are involved in over the last few decades. Organized activities and sports offer many benefits to children however a balance needs to be reached between the hours spent in structure and the hours spent engaging in free play. This increase in structured activities has decreased the amount of free play time children have available to them highlighting the need for balance.

Structure is a great way to add order and organization to life especially as adults and parents; however children benefit more from free play activities. Research shows that free play reduces stress, anxiety and a lack of focus because when given the choice children choose the unfinished or wild places, ones that do not have explicit structure (Francis, 1984). Children enjoy being able to have freedom in their environments and in their play. The change that is needed in the way children’s time is being structured is also needed in the way we see childhood play. The structured environments children have available to them for play time are generally still based
out of playground design from the 1980’s. Children need comprehensive play environments with the same lack of structure they enjoy (Frost, 1989). The way playground development has progressed shows that it has been matched with our social needs, in this case having structure and a rigid component (Gagen, 2000). Luckily there is a major push towards natural playground design and incorporating some of the wild elements from nature into urban play spaces which is a step in the right direction.

**Creativity**

Creativity is a very important personality trait for children as mentioned. Children are inherently curious and excited to play with as well as alter their surroundings. This is how he or she expresses their creativity until greater motor function is gained. This drive and excitement is carried over into their play and children tend to choose areas off of main playgrounds as well as natural areas that they can alter (Pellegrini, 1987). Furthermore creativity allows children to develop self esteem and the ability to be resilient with their play surroundings and play groups (Cosco & Moore, 2002). Anything that allows children to express themselves while playing and performing something that they enjoy should be encouraged; the natural environment simply offers more opportunity for this expression.

**Independence**

Independence is also a desirable quality for a child to possess and exploring natural places allows children to develop this independence. Having the freedom to stray away from parental figures gives children the feeling of freedom but also challenged.
In today’s society there is much more fear surrounding where children are allowed to go and play which limits the range of possibilities available to them. Therefore play spaces in urban areas need to be designed so that they offer children all of the elements that they are missing (Striniste, 1989). This leads into the understanding that children will not accept the evaluation of their play spaces with all of their advantages and disadvantages but take control and alter their surroundings (Homel & Burns, 1986). This is so interesting because children have the innate ability to be the creators of their play and similarly have the ability to showcase their likes and dislikes.

These are just some of the qualities that children can develop as a result of the independence gained in nature. Children take what is given to them and change it in a way that best suits their needs. Wood, branches and blankets can be made into a tent or hiding place within a hedge or tree. Empty water jugs, rope and an old board can become a raft or boat. This simply illustrates the endless possibilities children have when able to use their imagination.

**Pull of Place**

As a result of the unique experiences gained as children and the places encountered while developing, adults may carry many memories and preferences with them as they age. Becoming emotionally attached to places which feel like ‘home’ cause some individuals to crave the company of locations that resemble their memories. Memories, attitudes and the overall identity of a place are the things that stick with a person (Lim & Barton, 2010). Nature has this same affect because it offers many
elements of interest but also the feeling of being immersed within a safe place (Gong, McBride, Yang & Zhao, 2009). Memories of place as well as experiences from our childhood stay with adults in the same way that positive feelings of nature do.

In some instances individuals will look for places that resemble where they are familiar with to live, play and spend vacation time. The pull of place is a very important factor in determining aesthetic preferences, but it is also interesting to understand how exactly places impact their users.

**Summary**

Children are such an important aspect of society and focus needs to be placed on protecting their needs in terms of play. Play is an integral part of a child’s life and having sufficient space to perform various types of play is important. Nature itself offers a unique situation in which the space can grow with children through periods of motor development where they have different play needs all the way to maturation. Nature is unique in this sense because it offers potential for so much creativity and independence. Allowing children an opportunity to incorporate more free play into their time is also very important. Children will adapt their play based on what is available to them (Brown & Hannon, 2008) which is why we need to have appropriate places and allotted time for play. There is so much potential for interaction with nature through our play yards (Herrington & Studtmann, 1998) and this research intends to explore why nature play in children is so important as we grow up to become adults.
CHAPTER THREE

Methods

Overview

A qualitative approach was used in this study as it was considered to be the most appropriate method to gather the required information. From here the methods were divided into three sections including a short questionnaire gathering demographic information, a brief semi-structured interview and finally participants were asked to respond to the New Environmental Paradigm questionnaire (Dunlap, Van Liere, Mertig & Jones, 2000). Demographic information was important to gather for basic classification purposes and an open ended interview was selected as it offered the flexibility to explore unanticipated avenues, as well as allowing for clarification of any issues on the spot (Palys, 1992). The Revised New Environmental Paradigm is a 16 item likert-type scale set of questions used in order to get an understanding of how the participants see environmental problems and whether or not they lean towards pro-environmental orientation (Dunlap, et al, 2000). These approaches all work together to give an understanding of these childhood experiences involving nature play and whether or not those experiences or lack of experiences with nature play contribute to how young adults currently perceive the natural environment.

Research Design

The basic design of the research project contains three sections to gather information. Firstly a literature review was completed in order to assemble existing
information on the subject and to determine if there were any gaps in the literature. Semi-structured interviews and questionnaires were completed within the same meeting in order to gain information on the participant’s specific nature experiences as a child. The questionnaire was the final stage of gathering New Environmental Paradigm scores for the participants.

The following figure represents the research process followed and how each portion of the process relates to the research design as a whole.

Sample

A convenience sample of twelve (12) individuals including males and females was selected. Six (6) participants were chosen from the Lanark County region of Eastern
Ontario and the remaining six (6) were selected from the Wellington County and Waterloo County regions of Southwestern Ontario. Sites for recruitment were based on my location, personal experience as well as regular access to both locations. Also attempting to get a varied array of stories to detect any patterns between locations was a useful component. The idea of a convenience sample was developed based on interest in exploring memories of participants as opposed to making comparative distinctions between participants.

In addition to the regional criteria an age range was developed. The age of participants was selected to fall between eighteen (18) and twenty seven (27) years old as the study is concerned with examining how young adults remember their childhood play experiences. Furthermore a sample of participants who would be able to share more detailed memories of their experiences was chosen based on the perspective that younger participants would recount memories in greater detail.

**Questionnaire**

A short questionnaire was presented to the small sample of participants first (see Appendix B) in order to ease participants into the interview and sharing information. Participants were asked to respond to basic socio-demographic questions such as what year they were born in, where they grew up, current occupation and how their childhood time was spent (Appendix B). Being able to place participants within a context proved meaningful as where they grew up may have determined how their time was divided between free play and organized activities. Also having a background was important to examine interview responses
against to see if current location, occupation or schooling were affected by childhood experiences involving the natural environment.

**Semi Structured Interview**

Participants were subsequently asked to partake in a semi-structured interview where responses were documented with a digital voice recorder in order to allow the freedom to interact with participants and have responses available for transcribing at a later date. Notes were also taken on how the participant responded during the interview, how the questions were interpreted as well as general details about the surroundings. The questions themselves began broad (Appendix C) asking participants to recall their childhood and the surroundings that they encountered on a regular basis. Describing these places in detail along with what behaviours they participated in and the experiences that they had with nature was the beginning point for the interview. It was important to draw on descriptive words about why these places were memorable. It is these descriptors that help work towards understanding why nature play is attractive to children as well as trying to gain an understanding of why children choose where they play.

The design of the interview then began to focus in on the most memorable places the participant recalled from their childhood and why they were so interesting. Furthermore questions asked whether the participants experienced any formal or informal learning about the environment and natural places in order to gain an understanding of any factors that may have contributed to their interest or lack of interest in nature play. Finally asking the participants whether their childhood
experiences shaped them as young adults as well as whether or not nature play had any impact on these changes finished up the interview. Gathering stories and listening to people excitedly explain about how they used to play as a child was the goal of the methodological process and it really highlights why this narrative approach was chosen.

Revised New Environmental Paradigm

The final portion of the methods included an element that could be referenced. A valid and accepted questionnaire involving how participants feel about environmental protection, limiting industrial growth and other population issues was chosen (Pelstring, 1997). The New Environmental Paradigm was selected based on the appropriateness of the questions that it included (Appendix D). This questionnaire was developed in the 1970’s in order to measure participant mind sets through the use of twelve specifically worded questions (Dunlap et al, 2000). Minor revisions were made to the questions in order to clarify what was being asked of the participant and some basic alterations were made to include four more appropriate questions from the Nature Relatedness Scale (Nisbet, Zelenski & Murphy, 2009). These revisions were made so that the questionnaire was as fitting to the research goals and objectives as possible, while still retaining the spirit of the original questionnaire. Also the fifth point on the likert-type scale was eliminated in order to force participants to respond either positively or negatively to each question they were being asked. Having such a small sample size dictated that a response was necessary for each question in order to get the most information out
of participants. Finally this questionnaire was given to the participants last in order to bring the research full circle and examine their relationships with environmental attitudes, their environmental intentions and any personal responsibility they may feel towards nature (Luo & Deng, 2008). Questions concerning whether they feel industrial growth is too large, whether animals are being taken advantage of as well as whether or not they specifically think about how their actions will affect the environment were proposed. The information gathered from this portion of the interview was useful in determining whether a person’s childhood memories affect how they go about living their life. Whether growing up in a natural setting makes a person crave this interaction as they grow up, whether they pursue career possibilities that reflect their childhood, what they grew up learning and most importantly how nature play memories persist in a person as they grow up.

Procedure

The interviews varied based on the time that the participants were available. The interviews were conducted within an appropriate location for both parties. All participants from the Perth area were interviewed at the same location and the interviews which took place in Guelph took place at various locations within The University of Guelph.

All three portions of the interview lasted around twenty five (25) to forty five (45) minutes depending on how much information the participant was interested in revealing. Also how comfortable a participant felt with the questions as well as their memory capacity contributed to the length of the interview.
All of the interviews were transcribed from voice files into Microsoft Word and attached to questionnaire responses (Appendix E). Participants were each given an identification using a classification system of “ID1, 2, 3...” in order to protect confidentiality. Furthermore each participant’s completed packages were coded simply by using “Interview 1, 2, 3...” written on the cover. The Interviews are also coded with Q (meaning question) and A (answer) in order to protect the identification of any and all participants from all three portions of the process.

Analysis

The first step in analysing the collected data included a transcription of all of the interviews and reading through the 45 collected pages of data. Qualitative content analysis was selected and then used to work through the data. Qualitative content analysis was used in order to detect any patterns, repeating themes and core consistencies through the use of coding and identifying themes (Patton, 1980). Picking up on key words that participants used to describe how their environments made them feel is a large portion of interest for this study and it goes beyond counting the words to examine the deep meaning (Yang, Zhao, & Wildemuth, 2009). The experiences that individuals derive from behaviours that they participated in gives an understanding of why play places are memorable and whether or not nature play has the potential to fulfill these requirements. Grouping these key words together to see if there were similarities in the data was done through bubble diagrams and colour coding of specific wording used within the interviews. These themes illustrated the range of meanings as opposed to simply highlighting the
occurrence of themes (Yang, 2009). Utilizing quotations throughout the analysis chapters was useful in highlighting exact references of how participants remembered their childhood nature play memories. The New Environmental Paradigm was used to compare against the interview data by graphing question responses as well as calculating overall paradigm scores (page 47) (Dunlap & Van Liere, 2008). The combination of all data presents a diverse picture of how childhood memories follow adults as they age.

**Summary**

Overall the three portions of my methods were selected in order to obtain a well rounded picture of the participants’ childhood memories and how exactly they interacted with nature on a regular basis. Demographic questionnaires combined with semi-structured interviews allowed for an understanding of how each participant experienced their surroundings from a different perspective. The final portion relied on the New Environmental Paradigm questionnaire in order to understand participants’ current environmental beliefs and awareness. Overall how these three portions related to one another to form a cohesive set of preferences, experiences and beliefs regarding the environment was the main intention.
CHAPTER FOUR

Results

Overview

This chapter presents a comprehensive overview of the results from the three portions of this study. First, socio-demographic characteristics are presented through a summary table followed by results from the interviews and finally the results from the New Environmental Paradigm. Demographic information and New Environmental Paradigm scores were compiled into one master table for easy interpretation followed by the use of qualitative content analysis procedures which detected themes and similarities between the interview participants. Finally each question from the New Environmental Paradigm was given a score in order to tally the results from each question. All of this data was compiled and used in the final discussions and conclusions.

Demographic Information

The results from the demographic information survey showed many patterns.

![Figure 2: Proportion of Male to Female Participants](image)
Firstly 67 percent of respondents were female and 33 percent of respondents were male. The age range of participants extended slightly past initial criteria spanning eighteen years of age all the way up to thirty years of age based on participant availability for the convenience sample. The range of participants gives the study a varied character of responses as well as a wide array of childhood experiences to draw upon. This age range was chosen because during the ages of three to eight years old children gain the majority of their cognitive development ability and are affected by their surroundings to a much greater degree (Castonguay et al, 2009).

Another defining characteristic of the participants’ besides their age lies within what city or town they lived in for the majority of their time between the ages of three years of age to eight years of age as cities vary such a large degree in character and size. The city then becomes an important defining characteristic which can give a bit more interpretation as to why a child from this area feels the way they do towards the environment. Consequently some cities or towns offer children more or less in terms of their play and this is why it becomes an important consideration.

The following map shows the distribution of cities or towns that the participants resided in as a child. The distribution again following the pattern of the two outlined counties; and current locations also following closely within the boundaries of the two counties. It is important to note that most participants’ locations changed based on educational choices and life circumstances not necessarily based on preference of location. Therefore a question addressing this was needed in the interview portion asking where individuals would prefer to live given they were in charge of the
choice, and why. Whether or not a person would chose to return to a similar location as the one where they spent their childhood becomes a matter of the pull of place

and for the purposes of this research it was a prominent theme that participants did experience some form of pull from their childhood places of importance.

Another note worthy trend emerged from the final question in the demographic questionnaire showing that 50 percent of participants spent the majority of their time engaging in free play and 25 percent of individuals spent their time equally divided between free play and organized activities. The final 25 percent was divided between individuals who lean more towards organized sports and those who provided a more specific breakdown of their time, for example sixty percent organized activities versus forty percent free play.
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*Table 1: Results Summary*
Another trend was that some participants who reported a higher percentage of involvement in organized activities would state that their parents made them participate in these activities and it was not a choice they made for themselves. In the case of this example participants in some instances stated that they would have much rather been outside playing instead of being involved in so many structured activities. Finally this table also showed that participants who stated they were involved in a higher percentage of organized activities were also the younger respondents. This correlates with the new trend involving lots of childhood structure as opposed to free play and unstructured time.

Semi-Structured Interviews

All interviews were transcribed from audio files and typed into word documents for printing and analysing (41 pages included in Appendices). Interview transcriptions were read over approximately a dozen times in order to pick out themes and patterns emerging from the interview data.

Qualitative content analysis became the most logical choice in order to organize themes and underlying meanings behind the interview data. Furthermore participants can ask questions about the interview if they arise and you are able to probe for more information on a response if necessary (Palys, 1992). Consequently a comprehensive list of five major themes was pulled out of the interview data. Qualitative content analysis helped group various opinions and experiences under these categories found to repeat throughout the twelve interviews. Firstly water, followed by trees, freedom, boundaries and finally parental influences.
The first theme to emerge from the interview data was the theme of water. In one way or another all participants managed to mention water in their responses. Whether participants were telling a story where they interacted with the water or their favourite places were adjacent to various water elements, everyone felt some sort of connection with water. Therefore the theme of water needed to be divided into four more specific interactions. Firstly the theme of playing in the water, playing with water, watching or being around water and the theme of playing any type of sports that involve water. These subcategories were chosen as their incidence of occurrence was higher than any other activities involving water or being near a body of water.
“There was this kind of sway thing that water built up in when we were living at the farm, and John (*names changed for personal privacy) and I would go out there and take the lid of our sand box and paddle around and stuff. Yeah that was probably the best.” – ID4

Another participant also recalled the many opportunities that water allows you as a child exploring and becoming acquainted with the natural environment.

“Not just an area to be in, like climbing a tree or anything, more stuff to do. Like I would be like catching fish and all that kind of stuff. And like we would you know, walk along the stream just looking around. You know we could find something...” – ID9

Water is something fluid and changing. The way water changes form as well as the wide array of activities it offers seemed to be the basis for participants’ curiosity towards the element. Children are inherently curious and this is enough to pull them towards any water body because of its interesting qualities.

Trees

The second theme to emerge was the matter of trees. Their strong and protective qualities seem to intrigue and interest children (Heft, 1988). They offer such a wide array of possible activities that regardless of a child’s personality there was always some type of game or pastime that they were able to develop. Similar to the element of water participants all seemed to mention trees in some form or another therefore it was selected from qualitative content analysis.

“Our yard was fairly big though, so in the front we had these two giant pine trees, and there was this little fort underneath, because, you know, tree canopies. Um and then the back yard we had two apple trees, and a garden. So like there were trees to climb, and enough room for like baseball, and like romping around and playing, and stuff like that.” – ID12
In some instances children would travel to certain locations in order to be nearer to a forest, small grove or even a single remaining tree within the city. This depiction of the tall and strong tree offered a place of refuge, many challenges and also the ability to express creativity and independence.

“Riding bikes with my younger sister in our backyard around an old butter nut tree [was one of my favourite memories].” – ID6

Furthermore when participants were asked to describe where they played and the places that were most memorable to them in their childhood years many of them would use trees to describe the places that they remembered. Trees seem to become landmarks, and the focal point of many spaces.

“...A back yard, it was fairly large, there were a few fields that we used to play in. Climbing trees, playing tag, and all kinds of sports... Some yards were bigger than others and we made what we had work for us. It was an oddly shaped backyard though it came to a point in the corner. There was this tree that we always used to climb. It is still there, and the fence that we put up... but I do remember climbing trees and building tree forts.” – ID11

Again, many participants felt that places concealed by trees offered them the qualities of a favourite place.

“I would have to say back in the forest across from my house. We used to go back there all the time and build tree forts and stuff. I was always running around back there and in the winter we could sled down this hill, and make snow forts too.” – ID3

Freedom

One of the other main attributes that comes to mind when thinking of the natural environment is the freedom that it offers you. This can mean freedom of choices, the freedom of space or even an increased amount of privacy. However one of the most
significant descriptions that arose through the interview data was that the natural environment offered more freedom in terms of supervision.

Parents in some instances feel more apt to allow their children the liberty to roam if they are in the natural environment because it is seemingly farther away from the unsafe city environments (McCann, 2004) and this quality was detected by many of the interview participants. The city can be seen as a more dangerous place so feeling like you have escaped the city by being around trees is an important factor in creating a more laid back parental view; allowing children to roam free.

“Yeah and I was always kicked outside so I didn't break anything. And we did have more freedom outside because mom wasn't out there with us.” – ID11

The space available to participants also became a very significant aspect because children are very active and the more space they are given the more creativity they are able to exercise. The more space they have and also the more choices that were available to the participants when they were children resulted in a higher degree of intrigue and encouraged playing in the natural environment. This freedom is such a huge draw for children.

“It was not congested and there was lots of room to roam around and explore.” – ID3

“No boundaries yes, a lot of acres so I went and toured around with my brother quite a bit.” – ID1

Children enjoy the freedom that comes along with open space; therefore there is a feeling of confidence when they are exploring a place that is considered to be natural.
“No I want to live out in the country now because there is so much more space and privacy.” – ID3

Boundaries

The fourth theme that emerged from the interview data was the theme of boundaries. This theme is similar to the theme of freedom however it differs in the way that children exercise their creativity. They are offered a wider array of challenges and these challenges also increase their creative capacity. This can be attributed to the apparent lack of rules that accompanies wide open spaces and a lack of boundaries.

“I used a lot of imaginary play pretending I was part of the role that I was doing. It was calming, and a lot of fun.” – ID6

Consequently being outside and having a lack of boundaries is something that allows children to do the things they may not be allowed to do inside the home.

“I think it let me kind of express my rambunctious side which my parents were always like “stop climbing around the house”, so I got to climb around at the park.” – ID7

There are no boundaries in terms of what you are able to do. Activities can change at any time and yet there is no need for the use of props or to change locations as the sky is the limit in terms of free play. The natural environment is mouldable and can suit whatever you need at that particular moment.

“I was able to spend time with myself as well living in the country. Umm I... my neighbour though we always made a lot of games outside and just even going over to her house too there was tons of space and stuff to play with outside.” – ID2

“Yeah, you are very creative when you have to make your own games, and when you are playing outside. It is just nature it is up to you to come up with what you are going to do with it.” – ID2
Parents and Family

The final theme that emerged as being a significant factor in my research was the impact that our parents and family have on preferences. Growing up with their families allows children to become accustomed to activities based on the things that each family does. Also, children look up to their families and want to do the things that they are interested in because they are trying to find their way, but also because children like to be near these people. Therefore this encouragement is important and if this encouragement is missing it can be problematic for the child because they do not know where to look in order to develop their personalities.

“Yeah, um, for sure, I think um, I think our parents probably moulded that. They were outside pretty well the majority of the time. And my dad did work on the farm, and so for us to be outside with him was a really big component, and even if we weren’t directly doing what he was doing, you know we were kind of outside.” - ID8

From one perspective parents may have two totally different views of the natural environment and then reflect this onto their children.

“I think [my parents] associated nature with getting like, exposed to germs and then getting sick. So they never encouraged us to climb trees or that sort of thing.” – ID7

Parents seemed to be such an important factor in the choices that children make at a young age. Therefore encouragement in the natural environment is important and is most beneficial when it comes from parental figures, or other persons close to the child as they are the most looked up to and can have the most impact on what a child finds to be of interest.
“Yeah, just like little questions, about, they could always be answered. Like I remember seeing a frog frozen half out of the ice, and I learned all about hibernation, I don’t know you just have more opportunities because as a kid you are asking questions. So if you are surrounded by nature and stuff that is what you are going to ask about and that is what you are going to be asking about.” – ID2

The teaching aspect is very significant as well. Parents are teachers and children look up to their parents and older siblings in order to learn. They are more interested in what these individuals have to say and it is a much more effective method of teaching. Furthermore this type of learning generally comes in a much more relaxed environment and children don’t feel the pressure that sometimes comes along with being forced to learn and remember something in school.

“I think I learned more by exploring, and by like offhand comments from more knowledgeable people, like adults, and my sister.” – ID12

The family interest goes beyond the learning and teaching that comes from being with your parents but it also encourages the pull of place. This means that children grow up in their childhood environments and become attached to these places. As a child grows up they are interested in staying true to these preferences and feel that they are pulled towards environments similar to the ones where they played as a child. However there are exceptions to this trend and sometimes children do chose environments that differ, but in most cases children feel an attachment to their childhood homes and neighbourhoods because they have such a feeling of security.

“Yes, I do not like living in the city. I would like to move back to a town that resembles the place where I grew up.” – ID5

“I believe my childhood experiences helped me to appreciate nature and the different things nature has to offer. I can grow gardens to help feed myself, I enjoy planting trees knowing that they help filter out the
bad and produce the good. I learned a lot and through my experiences growing up I think it has helped.” – ID6

“I honestly I wonder, I don’t know what I would be like if I had of grown up in a more of a city environment because we really had so much freedom, like we really did, like we just went anywhere we wanted to go, or you know as long as you said “hey we are going here” and if we weren’t back at a reasonable time, then someone would come looking for us.” - ID8

The experiences that we have as children do follow us through the rest of our life and the preceding quotation really highlights how what we learn as children really does follow us as we grow.

New Environmental Paradigm

The final portion of this chapter shows the results from the New Environmental Paradigm questionnaire that participants were presented with after the interview had been completed. The New Environmental Paradigm was first compared against the demographic information questionnaire in one master table in order to detect any patterns between personal characteristics and paradigm responses. Table 1 (pg.27) shows this data and is colour coded in order to make themes and patterns more easily visible.

From here the responses from the New Environmental Paradigm were further broken down by question in order to determine any themes and patterns that emerged from this data. The first question began by asking participants whether they agreed that we are approaching the limit of the human population that the earth can support. This question was well understood and participants mostly had the same understanding and responded similarly.
The second question included in the questionnaire was black and white to participants. All responses were on the agree side of the figure therefore everyone felt that nature was a delicate thing and it could be harmed very easily.

Question three did not follow the same distribution as previous questions. Participants were divided about how they felt regarding humans having the right to alter the environment to suit their needs.
There were however questions that participants were on the same page about. The question was easily understood and therefore allowed participants to make an informed decision about how they chose to answer. In some instances questions were hard to understand and confusing for the participants. It was nice to have a question that did not have multiple possible answers because participants didn’t need to guess their answer. In some cases participants would talk through their response and try and determine how to answer, or try and determine what the questionnaire was actually asking of them.

Had I sent out the questionnaire there may have been even more problems because I would not have been there to help the participants with any issues that did arise.

All of these things made some questions difficult for participants and having something that was clear and easy to understand made things more simple. These issues will be further discussed later on as I touch on the limitations of this research and the research methods chosen.

Figure 6: Question 3 - Humans have the right to modify the natural environment to suit their needs (n=12)
Moving on to question number five, there was also some discrepancy between participants. Therefore responses were spread across the board as there are many different ways for participants to interpret what is being asked of them. Again being another problematic question.

One of the most interesting questions in terms of how participants responded would be question six. There are absolutely no patterns that emerge from this data in terms of which participants responded on which side of the scale. It is seemingly
random in responses which is interesting in itself; but continues to allude to the unclear nature of the questions.

![Figure 9: Question 6 - I always think about how my actions affect the environment (n=12)](image)

Again participants were split with how they have responded to this question but participants all remained on the "disagree" side of the figure with varying degrees of intensity between the participants. Potentially this has been impacted by upbringing.

![Figure 10: Question 7 - Plants and animals exist primarily to be used by humans (n=12)](image)
Question eight presented participants with the hardest time understanding exactly what was being asked of them. The wording of the question and the many different ways that it can be interpreted made it challenging. Several participants asked for clarification and help in understanding the exact way to go about answering because of the wording used.

![Graph showing responses to Question 8](image)

Figure 11: Question 8 - To maintain a healthy economy we will have to control industrial growth (n=12)

It was interesting to see how participants differed in their view of the environment. The understanding that we need to be at one with nature seems to be split. On one hand if a participant was not involved with the environment as a child they may not feel as strongly that they need to respect nature. Yet on the other hand a person may take nature for granted because it has always been easily accessible to them.
Another question that was well taken by participants was number ten. Participants chuckled and were able to easily respond. Everyone agreed earth only has limited resources.

Question eleven had participants all over the board and there was no clear consensus between responses.
Again there were problems with question twelve as participants were spread across the board. There was some confusion around the wording of this question because it is confusing to readers.

There were also problems with questions that were misinterpreted. If a participant responded on the positive side of the scale unknowingly then the question is swayed significantly. Therefore in the future it will be important to change the wording with some of the questions for clarification.
There is no denying that some of the questions were clear cut to participants and all responses for question 14 showed that we are abusing the environment at this point in time.

Similarly participants all felt that conservation is very necessary to some extent because we have impacted the natural environment to such a substantial degree. Changes need to be made in order to attempt to rectify and reverse some of societies negative impacts on the environment.
Finally the increasing number of extinct or endangered species is a bad indicator towards the health of the remaining organisms on earth. This also includes the human population as we are not strong enough to overcome all of the damage that is being done to the resources that we depend on for life. We need to continue to raise awareness about the increasing number of extinctions as well as the depletion of resources.

Figure 18: Question 15 - Conservation is unnecessary because nature is strong enough to recover from any human impact (n=12)

Figure 19: Question 16 - The state of non-human species is an indicator of the future for humans (n=12)
The final way that results from the New Environmental Paradigm were analysed was through the use of a scoring system. Each question in the paradigm was given a ranking based on the orientation of the statement being responded to.

- Some questions are flipped as the question is asked from the side of pro environmental orientation and some questions are being asked from the opposite side of the spectrum.

Therefore each strongly agree was given a 4 and each strongly disagree was given a 1 for the positively oriented questions, and the reverse was used for the negatively oriented questions. From here each participant’s responses were tallied and each person was given an overall score (Table 3).

The lowest total score was 46 out of a possible 64 points meaning the person scored a 72 percent on the questionnaire. The highest score was 61 out of a possible 64 points amounting to a 95 percent pro environmental orientation.

These scores are useful because they show each person’s overall relatedness towards the natural environment. It can also be used for comparative purposes. The table makes it easy to see how each participant relates to all other participants. This will allow for comparison between childhood memories and the overall final score received for the New Environmental Paradigm. Depending on the type of memories each person recounted they may have scored differently on the paradigm. However it is not as reliable because each question can be reinterpreted and alter depending on how a participant understands the questions. This becomes problematic and needs to be examined further on in the research.
Table 3: Revised New Environmental Paradigm Scores

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1 Scoring for these questions has been reversed
2 Questions have been edited for clarity purposes
3 Added questions from Nature Relatedness Scale

Summary

Each result is important and fits within the larger framework of research. Participants all contributed equally and shared rich memories of their childhood which were truly interesting. After putting all of the results together it is easy to see that children are beyond doubt impacted by the environments that surround them when they are young. Furthermore as the comparisons were made between the recounted memories and themes that emerged the scores from the New Environmental Paradigm became an important telling feature as well. Overall the themes that were pulled from the semi structured interviews can be used to select environments that Landscape Architects will be able to make more enticing for
children. All other results give a window into the minds of children and show why it is important to encourage their connection with the natural environment.
CHAPTER FIVE

Discussion

Overview

Many important themes emerged from the semi structured interviews and also the New Environmental Paradigm data. This chapter will introduce these themes in terms of why they are important to children and will also comment on the effectiveness of the New Environmental Paradigm. The links between childhood experiences and adult attitudes and preferences have taken an interesting turn as our childhoods affect not only the way we feel about the environment but also our preferences. These themes and patterns will be discussed along with what these results mean to Landscape Architects.

Semi Structured Interviews

The most rewarding portion of the methods would be the interviews because it is at this time that I was able to probe deeper into the lives of the participants. People are very eager to share their memories especially once they began to feel more comfortable. Participants would begin to remember things they thought they forgot and I was able to be a part of that lost piece of their history. Furthermore participants would get excited to continue telling stories about their childhood whether they were relevant to the interview or not. This may be because for the most part participants were very fond of their childhood memories and also the structure of the interview was so relaxed and informal to allow for this comfort. It is also fun to sit down and recall the exciting things that you experienced as a child.
For the moment participants could pretend they were back in those exciting periods allowing for a brief reconnection with their past; which is something taken for granted.

“Like, I still can vividly remember so many things that I did when I was little, I had so much fun... I am jealous of my childhood right now.” – ID2

Participants did not initially realize how much their childhood’s affect their decisions and their choices now; or they had never took the time to think about this connection. However after the interview progressed these connections became clearer to participants. This was rewarding because through this research participants were able to tap into the importance of their pasts. Furthermore hopefully this research may highlight the importance of passing on these memories and allowing our children to experience similar pastimes.

Another interesting fact emerged with further discussion: the realization that nature experiences do actually allow children a pathway for connecting with their surroundings as well as understanding them. All of these issues seem to be interconnected. Opening the eyes of participants towards the connections that do exist between childhood experiences and their concern for all things natural is a way that the benefits associated with free play can be highlighted.

This is the first look into the role of Landscape Architects because they can work towards implementation of policy that protects hidden pockets of wild and natural places within cities. This in itself could be a very beneficial way to encourage children to interact with these diverse and invaluable places. Most participants who
grew up in a city environment really felt the pull from these wild spaces because they offer more than city parks in the way of imagination.

“I grew up in Toronto suburbs so there wasn’t a whole lot of open space. The like tree fort we had in the front yard... So you would duck under the branch, and there was a space underneath, because trees grow together and then branches die... you know how it works... And my dad moved these giant concrete blocks, so they were maybe two feet by two feet squared, so that we had a good whatever, non muddy area to work on and stuff.” – ID12

This is one example of how a child will search for any hidden space that they can call their own, even within the confines of a city.

Water

Water is interactive, fluid and it is changing. This seems to intrigue children and they love the potential that a water body allows them. Water resembles the natural environment in the way that it seems to hold with it a wide range of potential opportunities. Many participants enjoyed playing with water as kids.

“At school I loved playing in the sand, and there was a water table... I used to make mud all the time and I would get in trouble because I was so dirty. But it was awesome.” – ID3

Along with this sports or more structured activities were mentioned by many of the participants and activities from fishing, to skating and also swimming were prominent. This was attributed to the family and friend time that these structured activities allow for as children enjoy this closeness with the people they love. Furthermore living in close proximity to a water body alluded to the feeling of calm and adventure that the location provides. These surroundings became places a child looks back fondly on.
The second theme of importance became the trees that children encountered. Every participant mentioned trees in some form or another and in one way or another trees impact all forms of life whether we vividly realize it or not. Most people however do feel a close connection with trees from their childhood. Trees are a part of us.

“Because I was really kind of always have been involved with trees, from that childhood connection, then, to realize that they are being chopped down, like, hurts.” – ID12

Trees are strong and supportive elements of our surroundings. They provide children with the feeling of security and in some cases a challenge but they can also become a comfort.

“It felt safe, and comforting. I think the noises of the trees and stuff like that. So that you could see out, but other people couldn’t see you.” – ID12

We continue to seek places of comfort as we grow older; the same type of comfort that tree forts and the branches provided when we were young. This comfort also allows us the opportunity to challenge ourselves. The security children feel when they are young allows them the ability to face challenges and utilize their surroundings to strengthen their personalities. These patterns are easily detected from interview responses and it goes beyond how the trees make you feel as a child, but how these feelings have followed us and been adapted to suite our adult personalities.
“For example I spent a week in town staying in an apartment and I actually had to go down after a couple of days and just sit in the [Park] and have my breakfast and just sit by myself under a tree for an hour because I didn't like being inside all the time.” – ID2

This is just one of the ways that our childhood connections follow us throughout our lives. We may not realize at first glance that these seemingly trivial details about persons’ younger years do find their way into the fibre of our adult personalities. We have innate and learned responses to our surroundings which are evident through this research as well as previous work that has been done on the subject (Nassauer, 1995).

**Freedom**

Freedom allows children the opportunity to develop their personalities and sense of self. They are allowed the chance to choose which activities they prefer in order to challenge themselves by expanding their interests and become more creative in the way that they act and play. These are a few qualities that are crucial in creating well rounded children. To examine the freedom from the point of view of supervision children seemed to feel that they could more easily express themselves when not under the direct supervision of parents or guardians. Having environments available to communities where fear is not a problem is a very important issue (Cosco & Moore, 2002).

More natural environments offer children a lot more freedom and a slightly less strict attitude towards keeping a watchful eye. This gives children a wider range of creative play that they can partake in. Furthermore the elements such as dirt and water allow children to get so caught up in their play that they are able to get to a
point where they may not even realize they are being supervised (Bienenstock, 2010).

“But you know if you left the barn you had to go and say you were leaving the barn. If you left an area you had to like report back and not that there were really any consequences when you didn't but I mean we were still, there was a very loose framework which we had to work in.” – ID8

The less rigorous structure that the natural environment allows for in terms of supervision and rules is a benefit to children. However children who lived in city environments did not experience these benefits because there is a fear of letting your children stray too far in these environments. The feelings of freedom seemed to make such a large impact on the ‘memorable’ memories that children have of their youth. When they were able to do their own thing they seemed to remember this more fondly.

**Boundaries**

Boundaries can mean similar things as freedom however boundaries go even further to say that children have limitless challenges available to them. It is through these challenges that children expand their creativity because there are so many more choices at hand.

“So smaller trees, more dense cover, so it was darker, and there were more rocks there in particular, it was quite hill[ie] so there was quite a steep little hill going down to a little river. So then that opened up... in winter or summer we were there a lot of the time because we could skate... But so it offered us the opportunity to go in whatever season, and then we could easily go to where it was brighter or more open and it was right off a field so we could always go in the field and it would be much more so. But to us, it seemed really magical in our minds.” – ID8
The open fields and spaces allow for limitless possibilities and children feel that they are able to push the boundaries in terms of rules and the types of activities they are willing to try. This amount of space brings with it a feeling of confidence for children.

“I can’t remember exactly how I felt, but I probably felt like, you know, like I was competent.” – ID10

Focus needs to be diverted away from the idea that children need structure and need to be involved with as many organized activities as possible. These things do provide children with beneficial skills not only talent wise but socially and culturally. However they are not the only important points on the spectrum of childhood development. The assumption that keeping children busy will keep them out of trouble is false because if we offer environments with diversity that allows children to maintain interest then this would not be an issue. Free play is as important if not more important than organized activities and structured play.

“I think it would have been extremely passive learning. All passive learning.” – ID10

Learning is easily absorbed because the child is in such a relaxed environment and is able to learn as they please. The structure of formal learning in some cases discourages the amount of learning a child is capable of because they feel forced or pressured by the order of things. Structure is such an important part of life and we are now beginning to enforce this on our children as well thinking it will carry on the good benefits. However children are not at the correct stage in their development to be able to withstand these pressures. It seems to be a belief as well that the more activities children are involved in the more developmental benefits
that will follow as a result. Importance should be placed back onto free play because it so much more beneficial to children. They are able to learn, explore and challenge themselves to a much higher degree during free play. Therefore shifting the focus back on free play in order to allow children to experience these developmental benefits is key, but also so that children do not experience as high levels of stress as have been shown in recent years (Berger & Lahad, 2010).

Parents

Attempting to find the things that impact our decisions and our choices was a focal point of this research. Looking to the Theory of Planned Behaviour in order to determine which elements impact our personalities and behaviours became useful. According to this theory, behaviour is ultimately a function of the information we have gathered over the years either from our teachers, parents, friends or other family members. Equipped with this information children have gathered they are then able to make informed decisions on the beliefs that they have for themselves (Ajzen, 1991). Furthermore developing attitudes by looking to past experiences; characteristics, events and even objects helps to understand chosen preferences and beliefs. This is important to the topic of parents and how they act as guiding bodies during the time children develop.

The final theme that emerged from the interview transcripts was that parents and those closest to children really do have an effect on their personalities. Time spent with parents also impacts our cognitive and social-emotional development which is why parents play such a large role in the development of their children (Sandberg &
Hofferth, 2001). Overall there is no denying that childhood experiences shape the adults they become and the choices they make. However whether adults interacted with the environment as children is not as important a factor in determining how a child will relate to the natural environment when they grow up as parental influences. This is where the outcome of the New Environmental Paradigm changes direction and fits within the interview data collected. Initially it was thought that if you grew up playing outside and interacting with the natural environment on a regular basis that you would grow up feeling a deep connection towards other areas of the natural environment as well. It is now understood that interaction with the natural environment as a child is not the only determining factor of how close a child will feel to the natural areas that surround them.

Our childhood does however affect the decisions we make in the future about the types of environments we choose to surround ourselves with, where we choose to live and more broadly where we will spend our time.

“So, by growing up in the closeness to nature that I did with the school yards and the plants around my house and stuff. It’s definitely caused me to be more inclined to seek those things, as I am older. I don’t know if that the “oh it’s like when I am a child and when I was safe I would go back to nature”. But yeah I do feel really comfortable in nature and I think that was initiated through my childhood experiences.” – ID12

Children are also more apt to choose the activities that interest them based on the activities they are introduced to by loved ones. Also a child’s interests are shaped by the activities that their parents partake in and pass on to their children when they are young.
“[It was all free play.] Generally it was just family, and other like extended family that were our own age. And so anything in the bush. So making forts, ah, looking for animals that were in the bush, um looking for our horses which were in the bush.” – ID10

Sparking the initial interest in these areas will carry on with participants into their adult life because nature has so much of an impact on children when they are young and impressionable.

“I think it did have an effect on my personality, and upbringing and who I am and stuff, definitely. Cause in part the just being outside in the dirt and the mud and more rough and ready rather than “oh my hands need to be clean all the time” whatever. Probably also has something to do with my willingness and propensity to go barefoot. Because not that I was barefoot that much as a kid but, I mean you are barefoot when you are a kid. It just happens.” – ID12

The New Environmental Paradigm

Results from the New Environmental Paradigm Questionnaire were difficult to use because the reliability of the responses have been compromised by the problems with the clarity of the questions. If a better questionnaire was developed to try and classify how a person relates to the natural environment it may become much clearer how exactly these two subjects are related. The New Environmental Paradigm attempts to do this however fall short because of the questions asked, the way they are worded and also the overall clarity and relevance of the questions. These things all remain something to be considered.

Regardless of the flaws with the questionnaire it is still interesting to see how people respond to these types of questions. Several responses produced unexpected outcomes and all previous assumptions had to be left behind. By comparing this data against the interview data a better picture of how our childhood experiences
relate to feelings about environmental protection and awareness is gained (Hawcroft & Milfont, 2009).

**Pull of Place**

Emotion is a huge portion of how a place will pull on a child (Kaplan & Kaplan, 1982). There is a very important relationship that develops between a child and the places that they interact with. Nature provides children with something to stimulate their development through allowing them to play and also through exploring (Morgan, 2009). This pull of place was a trend that followed very closely with the parental impact on our choices. The pull of place is defined as the pull in the back of our mind that directs us towards environments that resemble our favourite childhood spaces or any space that is cherished. The pull of place also provides children with interactive experiences that will regulate their emotions (Morgan, 2009) and also help them relate to their surroundings. Consequently environments that provide the same behavioural feelings that favourite environments provide when we were younger. This is so important that even when we do not have the resources to create surroundings that resemble those closest to our hearts we still try to get as close as possible even when living in a city environment. This can be done through finding small spaces of reflection or even something as insignificant as including the colours that we recall.

“That is exactly it. I have a nice backyard but it doesn’t feel natural, even though I love it, and it’s still outside, and it’s green [well not right now, but] you know it doesn’t feel na- I shouldn’t use that word... it doesn’t feel as I guess wild or separate from humans as I remember my childhood.” – ID10
Another participant felt similarly in that they missed the potential that having so much space available to them offered.

“...Because I live in town now, [and I at least live in a house], but I you know, I even feel bad for my dog that I have because I just think you have to be on a leash so much of the time.” – ID8

Which Came First?

An interesting trend emerged when probing for information about participants’ connections to the natural environment. They were asked if they noticed any difference in their connection to nature but also whether or not they feel it was a result of their childhood experiences. There were a few varied responses to this thought. One of the unexpected trends that emerged was that participants were unaware of whether their love of the environment happened because of some random other coincidence, or whether their childhood experiences resulted in their love of the environment.

“That is because of my childhood nature(ie)(ness). And I mean right now seeing trees as lungs, even just in the like branches. Uh I do feel connected to the earth and I honestly can’t say for sure whether that is from my childhood or because of something that happened or whatever. But I mean it had to of played a role.” – ID12

A second participant felt a similar feeling; they were unsure of whether their childhood interaction caused the interest in nature or the interest was already there and as a child they simply acted on these feelings.

“I would say it is hard to tell because I have always been interested in animals and um and nature, and I don’t know if it was being interested in that, that made me want to play there? Or if it was playing there that made me interested in it? Kind of like a chicken versus egg? I am not sure which one was really...” – ID9
However a child’s interest in the natural environment is related to their parents views’ of the natural environment and also if they experience exciting and fond memories of the natural environment as children. Therefore becoming adults they would be more apt to continue to be affectionate towards nature as they progress through life.

Summary

It is undeniable that everything encountered as children has an effect in terms of creating preferences, personalities and creative capacity. It is possible that children pick up small bits of their personality along the way when traveling life’s roads and these all compact and build to become our final adult self (Melzack & Scott, 2007). Children then can grow up equipped with likes, dislikes, preferences and needs from the natural environment. Important defining characteristic of personalities come from learned behaviours along with experiences and they have a profound effect on life (Melzack & Thompson, 1956). Therefore examining how each participant interacted with their surroundings developed a rich body of information. The themes children enjoy or relate to the most being water, trees, freedom, boundaries and parental influence. Overall protecting the elements of interest to children will be one of the first steps in reversing the effects of disengagement with the natural environment.
CHAPTER SIX

Conclusion

Overview

This chapter will include a brief summary of the main research goals and the process of gathering information. It will touch on the main points gathered from this research and will also comment on any limitations or problems with the research itself or the findings. Finally there will be a brief mention of the many different avenues for future research and exploration surrounding the topic of children and the natural environment.

Research Summary

The main goal of this study was to determine whether or not our childhood experiences and memories of these experiences have any impact on our relatedness to the natural environment when we grow up. Semi-structured interviews were conducted in order to become immersed within the memories adults have of their childhood. Following this participants were asked to fill out the New Environmental Paradigm questionnaire. These responses were compared against the recorded interview data to try and determine if there are any correlations between experiences and future preferences.

Emerging Themes

There were many themes to emerge as a result of qualitative content analysis that were interesting to consider as they seemed to be such a draw for children. The
themes of water and trees were mentioned by nearly all participants indicating that these elements are of interest to children and keep them entertained. If we insert these elements into the landscapes we construct so that they are as natural as possible and their utilitarian value is at maximum it is thought that children will have more interest in these spaces. The elements of trees and water are more natural elements that childhood memories describe as secure, comforting, exciting and challenging. All of these qualities are beneficial for children to encounter at a young age; as it has such an impact on our personalities.

The second portion of qualitative content analysis uncovered another important factor that contributes to the amount of interest a child will have in their surroundings. Firstly freedom, followed by boundaries. These qualities exist within the natural environment and children enjoy the opportunities they get from being able to be on their own and to explore. In the city with the loss of green space this is not as easily available for children. In urban areas nature is something that can conceal dangers and has the potential to harm. In addition parents fear letting their children wander off and explore because of increases in crime and an overwhelming lack of trust towards anything unknown. This however is not unfounded which is why parents need to get out with their children at any possible time and encourage this important interaction.

The freedom of space that is available in natural environments such as a forest or field is so important. Space is something taken for granted and yet it is so important to allow the freedom to ‘be’ in our environments. This becomes especially important
as the overarching trend leaning towards the growth of all our cities continues to take place. Other reasons children feel closeness with the natural environment when they encounter it are because they enjoy the opportunities to use their imaginations and challenge themselves.

“But I would find that there is a trend for kids not to gravitate towards imaginative play outside because it is always easier to do something structured. You know if you play a board game or you play a sport, that’s structured. It is always easier to do that. It is not so easy to use your imagination...” – ID10

Having the elements that interest children available in city parks and wild pockets of nature is not the only item in question. Parents also need to encourage their children to be more active in the natural environment and children need to learn that free play is something exciting and important in their lives. Encouraging this creativity and energy for life will help encourage the love of all things creative. Continually, if parents do encourage children to get outside, and go out with them, then maybe this will heighten the interest of future generations and stop the negative trend of being disengaged with nature. Children do not get mental stimulation from sitting inside and watching TV or playing video games and this is important for parents to realize; as the natural environment presents us with this challenge.

Implications

The information gathered from the methodological portions of this research has many implications and can be used to benefit Landscape Architects as well as
parents alike. An underlying objective of this study became; how to design the remaining pockets of green space within cities to the best of their ability?

Taking the elements mentioned from interview data and even combining this with theories of natural playgrounds these intuitive spaces subside to the evidence that; exposure to nature truly does guide the healthy development of a child (Bienenstock, 2010). This diversity and also complexity of natural spaces and the spaces designed to mimic natural spaces is fundamental to physical development (Fjortoft & Sageie, 2000).

“You would gravitate towards them [more complex spaces] because there is just more to do around them right.” – ID10

This complexity will consequently increase the park/playground usage and ultimately exploration of outdoor environments by children because spaces are more suited to their interests and needs. Continually, I suspect parents would enjoy having a safe place for their children to explore and Landscape Architects can make this happen based on childhood preferences pulled from this research.

Lack of Free Play Time

Another major conclusion that was drawn from this research is that there is a significant lack of free time for children now compared to twenty years ago. It seems the more structure a child has the more well rounded they will be in today’s society. We continue to structure and plan more and more of our children’s lives thinking it will benefit them when really it causes elevated levels of stress, anxiety and other newly detected health problems (Hofferth & Sandberg, 2004). If we compare these
statistics against the positive ones available on increasing amounts of free play in a child’s day the differences are amazing. We should be allowing children to have this free play time planned into their day and research such as this will be evidence as to why this is beneficial.

**Risks**

A final finding of note in this research is that; younger children seemed to have less freedom than the participants who were a few years older. This may be attributed to the lack of green space available now in comparison to years ago. However it may be attributed to the increase in crime and increase in fear parents have when thinking about allowing their children more freedom to roam.

**Limitations of Study**

All research comes with limitations. As a student; budget, time and the number of participants are all limited and this does have an impact on the research findings. If more participants were involved themes could have been more concretely stated and understood. Regardless of the limitations that do exist within the data the interview participants gave detailed accounts of their memories. Even though they were limited in numbers they still allowed a glimpse into the things that are of importance to a child and how the natural environment can affect adults. The intimate interview setting allowed for every participant to expand as they felt necessary and because of this a lot less was loss through such a small sample size. A larger sample size would most certainly present a larger set of data and may highlight other themes not picked up on by the particular group of participants used.
for this study. However for the purposes of this research the sample size was adequate and was a very successful method of gathering information.

The second major limitation existed with the New Environmental Paradigm questionnaire. This questionnaire was problematic for many reasons firstly the lack of clarity in the questions being asked. On many different occasions participants would need to ask for clarification on the wording of the question and what was being asked of them. This is an issue especially if the questionnaire was to be completed through mail or the internet as clarification is not possible. Another issue comes from the repetition of questions. There is an element imbedded within the questionnaire that is testing participants and trying to ensure they answer each question truthfully however, it ends up confusing participants. If it is necessary to keep these repetitive questions then the wording needs to be addressed so that they are as clear as possible.

Finally the relevance of the questionnaire is questionable because at the end you are left with a score and yet also unconvinced that this score actually is meaningful enough to base participants' environmental beliefs on.

Overall for this research to be as effective as possible a new questionnaire needs to be developed or utilized so that a better understanding of how an adult relates to the natural environment is possible (Shanahan et al, 1999). Despite the negative problems associated with the New Environmental Paradigm it does give the research a starting point to compare against interview data which did seem to be functional.
**Future Research**

This study was able to begin the discussion on the way childhood memories impact their preferences and personalities [including environmental connection and beliefs] as they grow into adulthood. However there is still room for research in the area of designing these spaces that include themes of interest to children, along with developing a better form of measuring environmental relatedness. There is room for a questionnaire that measures how a person relates to the natural environment because it would contribute well to the existing body of knowledge.

Research interests also emerged with the idea of children’s lives being so structured. How does this impact their lives as children as well as into their teenage years? If a child’s time is constantly structured when they are young will they be less motivated to go to post secondary school right away or get a job. Is this the case or does it help children become organized and motivated early on?

**Closing Statement**

There is no denying that children generally have fond memories of their childhoods when they enter adulthood. It is also clear that children are impacted by their childhoods and more specifically their significant memories of the places they went and the things they enjoyed, specifically in terms of their play. It is not as clear however whether these significant memories directly relate to our environmental beliefs because the tool utilized was not as fitting as it seemed in the beginning. This became problematic however many other interesting themes and ideas emerged in its place.
Variations on experiences and environments may encourage or discourage a close bond with the natural environment. Also while working through the research data a very prominent trend emerged; that parents hold the key to a large chunk of the way we develop our personalities and preferences. This can in some case follow the initial assumption; that growing up in nature results in a higher degree of closeness with nature as an adult; or in other cases follow the complete opposite path. Therefore this is why there still remains room for further research on developing a questionnaire to better measure this personality character in adults. Yet there is no denying that nature is such an important element in not only the lives of children but also parents and adults.
REFERENCES


APPENDIX A

Participant Letter

Dear Participant:

Thank you very much for agreeing to participate in the research for my Master's thesis in Landscape Architecture. The results gained from our discussion, will help me work towards the goal of my study which is to explore the character and ecology of childhood play memories in young adults, along with their current relatedness to the natural environment, and their attitudes towards it. If we can understand how play spaces shape children, and how children carry these memories with them as they grow up, then we may be able to understand whether play experiences can impact their future attitudes, and connections with nature.

There are three parts to my data collection methods; the first is a demographic questionnaire where you will be asked to answer basic questions regarding your age, profession and education. The second portion will be a short semi-structured interview in which I will be asking questions about your childhood and the places and activities that were most memorable to you. In the final step I will ask you to fill out a brief questionnaire, answering by checking boxes ranging from strongly agree to strongly disagree, depending on your overall feeling of each question. These questions are based on your understanding of environmental issues, as well as feelings towards the natural environment.

Throughout this process I will be requiring the help of a voice recording device in order to capture all of the important information you will be providing. However all of the information gained throughout this process will be kept confidential, and names will not be used in the final write up of the thesis, in order to respect any and all privacy issues.

Thank you again,
Sincerely

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APPENDIX B

Demographic Questionnaire

Demographic Information Questionnaire

Please provide answers to the following general information questions for classification purposes.

1. What year were you born in?

2. What is your sex?

3. What city/town did you live in as a child*?

4. What city/town are you currently living in?

5. What is your highest level of education?

6. Please specify any degrees/diplomas etc. that you have received.

7. What is your current occupation?

8. Was the majority of your time as a child* spent in organized activities or engaging in free play (play as you decided)?

*For the purposes of this interview “childhood” refers to between the ages of three (3) and eight (8) years of age.
APPENDIX C

Interview Questions

Before we begin the interview please think about memories of your childhood. Where you played, and what kind of surroundings there were. I will be using a recording device throughout this interview in order to accurately capture all of the information provided, as well as taking brief notes.

1. Think of the place where you grew up*, think of your house, neighbourhood and town. Describe the size and qualities of these places (was it small or big, closed in, open, quiet, exciting, challenging etc.).

2. Again think of the place where you grew up*, and describe this place in terms of what it offered you as a child.
   a. What behaviours (what you did) and experiences (how you felt) did it allow you?
   b. What kinds of play do you remember (free play, imaginative play, sports etc.)?

3. Describe your favourite/most memorable outdoor play place. What are the qualities of this place (again what did it offer you in terms of behaviours and experiences)?

4. Did you spend the majority of your memorable play time indoors or outdoors (why do you think this was)?

5. Do you recall “learning about nature” as a child (nets in water, frog eggs, minnows etc.)?
   a. What did you do?
   b. What do you think you learned?
   c. Who were you with?
   d. When did this occur?
   e. Was it formal or informal types of learning?

6. What are the most significant memories you have of childhood? Do they include nature play? Or play of any kind?

7. Do you think those nature/play experiences shaped you?

*For the purposes of this interview “childhood” refers to between the ages of three (3) and eight (8) years of age.
APPENDIX D  
Revised New Environmental Paradigm Questionnaire

Revised New Environmental Paradigm

Please answer each question thoughtfully and truthfully, carefully reading through the wording. Answer the questions by using a four point likert-type scale, by placing an X in the corresponding box ranging from strongly agree to strongly disagree.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Mildly Agree</th>
<th>Mildly Disagree</th>
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<tbody>
<tr>
<td>1. We are approaching the limit of human population the earth can support</td>
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<td>2. The balance of nature is very delicate and easily upset</td>
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<td>3. Humans have the right to modify the natural environment to suit their needs</td>
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<td>4. Mankind was created to rule over the rest of nature</td>
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<td>5. When humans interfere with nature it often produces disastrous consequences</td>
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<td>6. I always think about how my actions affect the environment</td>
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<td>7. Plants and animals exist primarily to be used by humans</td>
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<td>8. To maintain a healthy economy we will have to control industrial growth</td>
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<td>9. Humans must live in harmony with nature in order to survive</td>
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<td>10. The earth is like a space ship with only limited room and resources</td>
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<td>11. Animals, birds and plants should have fewer rights than humans</td>
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<td>12. Humans do not need to adapt to the natural environment because they can alter it to suit their needs</td>
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<td>13. There are limits to growth beyond which our industrial society cannot expand</td>
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<td>14. Mankind is severely abusing the environment</td>
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<td>15. Conservation is unnecessary because nature is strong enough to recover from any human impact</td>
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<td>16. The state of non-human species is an indicator of the future for humans</td>
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*This questionnaire was designed using the New Environmental Paradigm, with minor revisions based on the Nature Relatedness Scale, in order to get a more in depth understanding of how each participant relates to the environment and how they feel about environmental issues.*
APPENDIX E

Interview Transcripts

Interview #1

Q – Okay, so the first question that I am going to ask you is to think of the place where you grew up. And for the purposes of this it is from the ages of three to eight, that kind of range. Umm think of your house and your neighbourhood. The town, so kind of describe this place. Was it kind of big?

Q – I know it is kind of weird talking about Perth, but like big or small, or open? Use words to describe where you grew up.

A – Uh I grew up in the bush I guess. I did a lot of fire burning, shit disturbing.

Q – So it was quiet, umm small, but it was kind of open.

A – Yeah I guess. I was in the forest

Q – No boundaries

A – No boundaries yes, a lot of acres so I went and toured around with my brother quite a bit

Q – So it had lots of opportunities for you to kind of explore or...

A – Oh yeah for sure

Q – Okay, so, describe it in terms of what it offered you as a kid. So what behaviours and experiences did you, like, what kind of play did you do?

A – I don’t know a lot of the time I just hung out with my brother and cut down trees, burn stuff, broke stuff. That is pretty much about it.

Q – So those are the behaviours, so how did it make you feel. Did it make you feel...?

A – It was a great time!

Q – Did it make you feel like challenged and free and like...

A – I felt like I could do whatever I wanted

Q – Yeah so it allows you more opportunities, kind of

A – Yeah I guess it gave me a chance to express myself or whatever

Q – Yeah, so what kind of play do you remember? Was it kind of sports or just free play kind of?
A – Just free play, pretty much

Q – So imaginative

A – No, just whatever we found to play with, we played with really.

Q – So you just created your own type of entertainment

A – Oh yeah, tour in the bush and figure something out

Q – [Ha ha] yeah

Q – Okay, umm, so I was going to ask you what was your most memorable outdoor play place? And to kind of describe it. So what you did and how it made you feel?

A – Ah, I don’t know really. I can’t really think of anything off the top of my head really.

Q – So like umm, it would probably be somewhere outside?

A – Yeah umm

Q – You don’t have to be specific

A – Actually probably by the pond at my grandma’s house, I used to go skating there all the time

Q – Yeah, so you went skating, and umm

A – Broke the beaver dam that was there

Q – Yeah? So challenges and kind of freedom to do what you wanted to do with the environment

A – Yeah pretty much

Q – So you spent most of your memorable play time indoors or outdoors?

A – Pretty much outdoors when I was younger yeah.

Q – Is there a reason why you think that was?

A – I don’t know I just always got bored inside, and then went outside and just did whatever there was to do.

Q – It offered you more as a child?

A – Yeah
Q – Okay, umm the next part is do you remember learning about nature, in terms of education or just kind of experiencing it yourself? For example catching minnows or stuff like that...

A – Lots of the times when I was like in the bush I was with my dad and he knows a lot about like trees and types of fish, types of animals, whatever, he would pretty much tell me what is up

Q – Yeah, so do you think you learned a lot from him?

A – Yeah definitely for sure, about nature anyways

Q – So it was informal learning, from your dad not like necessarily at school?

A – Oh I definitely learned stuff at school but not really nature wise

Q – Kind of more about the environment?

A – Uh huh

Q – So some of your most significant memories of childhood, do you think they do include playing outside and nature play?

A – Yeah definitely

Q – So it kind of impacted your childhood play

A – Oh yes definitely a big impact

Q – So you think that they shaped you in anyways? Like your interests now?

A – Oh yeah I still love being in the bush, definitely not a city guy

Q – No

Q – Just the kind of freedom and ability to do what you want

A – Pretty much

Q – Okay, umm that is all of that part...

Interview #2

Q – Okay, so before we being the interview please think about memories of your childhood, where you played, what kind of surroundings, and I will be using a recording device throughout this interview. But everything is going to be kept confidential, and I am going to be writing down some information while you are going to talk to me.
So the first question that I am going to ask you is to think of the place where you grew up so think of your house, your neighbourhood and town. And describe the size and the kind of quality of the place. So was it big or small, closed in, open, challenging etc.

A – Well I grew up on a farm, so I had lots of free space to roam around and do whatever I wanted. I was always outside. So, I believe I was a very creative child because I always had something to come up with because it was kind of “make your own games” growing up.

Q – Excellent, so it was pretty small, but yet open, and probably pretty quiet.

A – Umm, yeah it was really quiet, but I remember when I was younger I felt like I could do anything I wanted because being younger I felt like I had so much space, because there were the fields and the backyard, like just everything.

Q – Okay, excellent, so for the second question I am going to again ask you about the place where you grew up, and describe it in terms of what it offered you as a child. What kind of behaviour, so what you did, and experiences, how they made you feel. Did you...

A – [Ha ha]

Well I got dirty when I was little; I remember never being allowed in the house until I got hosed off, because I used to love playing in the sand, and I had a fort out behind the house that I made into restaurant. I don’t know I remember being really little and when the grass got long; I would hunt through the grass, and crawl through it. So much fun!

Q – So how did all of those experiences make you feel?

A – Like, I still can vividly remember so many things that I did when I was little, I had so much fun, like I am jealous of my childhood right now.

Q – [Ha ha]

Q – So it made you feel so creative and probably definitely free.

A – I was able to spend time with myself as well living in the country. Umm I, my neighbour though we always made a lot of games outside and just even going over to her house too there was tons of space and stuff to play with outside.

Q – Excellent, so I am going to ask you to describe your favourite or your most memorable outdoor play place.

A – I can only pick one?

Q – Well just one of the most memorable. You can tell me more if you like!

A – Umm, well there were so many favourite places. I used to play in the hay loft and we had the stacks of hay and it was all tarped, the big round bails. I remember climbing up those and then sliding down with Emily. The trees, we had a big line up of trees and I just played in every single one of those trees. There was like twelve of them, just climbing all through those, and I used to play out back a lot in the play house that I turned into a restaurant. And
then the sand box was definitely another favourite. There were so many favourites I can’t pick one.

Q – So umm they probably just offered you the same kind of experiences as before. Just being free, and creative...

A – Yeah, you are very creative when you have to make your own games, and when you are playing outside. It is just nature it is up to you to come up with what you are going to do with it.

Q – So did you spend the majority of your memorable playtime indoors or outdoors?

A – Oh outdoors.

Q – Yeah, do you... is there a reason why you think you were always outside?

A – Umm I think it was because my dad was always outside, he was always working outside so I went out with him a lot. And then it was just quiet and I didn’t like being inside with mom all the time when it was just the two of us because she would be doing work. So I would just go outside and play and explore.

Q – So do you recall learning about nature as a child? So did you go out and catch minnows? Or do anything like that?

A – Like fishing and stuff like that, learning about umm even the cows and everything at the barn. I remember being very interested in all the barn chores and what was going on.

Q – So do you think you learned anything from being kind of in touch with nature?

A – Well it’s always important to take like time. Does that make sense?

Q – Yup...

A - Like growing up I always had the free space and everything to do so now I find that it’s important to have in my life still. For example I spent a week in town staying in an apartment and I actually had to go down after a couple of days and just sit in the Stewart Park and have my breakfast and just sit by myself under a tree for an hour because I didn't like being inside all the time.

Q – Yeah, so you mention you were with your dad a lot, so did he kind of teach you a lot about trees, and plants and animals?

A – Oh yes. Just kind of anything that popped up I guess. I don't know I learnt a lot about...

Q – Was there any ponds or anything like that around?

A – Oh yes skating, and...

Q – So he probably taught you basically what he knew about outside?
A – Yeah, just like little questions, about, they could always be answered. Like I remember seeing a frog frozen half out of the ice, and I learned all about hibernation, I don’t know you just have more opportunities because as a kid you are asking questions. So if you are surrounded by nature and stuff that is what you are going to ask about, and that is what you are going to be asking about.

Q – So it was more kind of informal learning. So you were not involved in any school groups about stuff like that?

A – Well I know going on field trips and stuff when we were in school, like Foley Mountain and stuff like that. Being out in nature and doing scavenger hunts having to learn different leaves and plants and stuff like that.

Q – So you got kind of both.

A – Yup.

Q – Okay, so if you could think of your most significant memories of your childhood do you think they include a lot of this nature play? Or play in general?

A – Those are, most of my memories are being outside. I used to love running around outside and getting dirty. [Ha ha]

Q – So do you think those nature experiences shaped you today in any way? You mentioned you need that connection still?

A – Yes I don’t like having to be, it would drive me crazy to live in the city all my life. I know that I am not as much of a girly girl as what a lot of other people are because I still like to go out and get dirty, and go fishing and camping, and just be surrounded by nature and stuff like that. I love being outside.

Q – Do you think that umm being so exposed to the environment made you respect it anymore?

A – Yeah I definitely, I think it’s umm, I don’t know some people drive through the country and they will be like it smells, going through the barn yards and stuff like that. I smell it and I am like wow.

Q – Brings back memories?

A - Yes you don’t mind that, it brings back memories and stuff like that.

Q – Excellent, well that was the last question. Thank you very much for participating.

A – You are welcome!
Interview #3

Q – Okay so before we begin the interview I really want you to think about the memories of your childhood. So where you played, what kind of surroundings there were, and I am going to be using a recording device throughout this, in order to accurately capture all of your information.

Q – So the first question is, think of the place where you grew up, so think of your house, your neighbourhood, your town and describe the size, and kind of the qualities of this place, places. So was it big or small, closed in or open, quiet, exciting, challenging etcetera?

A – I lived in a village with about twenty houses, not a lot of traffic, huge open play fields. Lots of forests

Q – So it was open, and quiet. Did you find this environment challenging or relaxing or anything specific?

A – It was not congested and there was lots of room to roam around and explore. There were also lots of cows and pretty I guess...

Q – Excellent, so I want you to think of these places where you grew up again and describe them in terms of the things that they offered you as a child.

So what behaviours did you partake in, activities and what not. Then let me know how these things made you feel.

A – It allowed me to partake in tons of different outdoor activities like fishing with my grandpa and my mom. We always used to go camping up on Snow Road, but my parents took me camping all over the place even down to Yellowstone National Park. We had tent trailers and we would drive all over the place when I was really young.

But there were also lots of other kids, and we would build tree houses.

In terms of how these things made me feel? Excited and free.

Q – What kinds of play do you remember? Like free play or imaginative or more sporting activities?

A – I played a lot of soccer and different sports but I also did a lot of free play, running around, exploring in the bush, building forts. Just playing with anything I found lying around.

Q – So I now want you to describe your favourite or your most memorable play place...

A – I would have to say back in the forest across from my house. We used to go back there all the time and build tree forts and stuff. I was always running around back there and in the winter we could sled down this hill, and make snow forts too.

Q – Do you think that you spent the majority of your play time indoors or outdoors? And is there any reason why you think this was?
A – Probably outdoors. But I also liked watching cartoons in my house.

Q – Do you recall learning about nature at all as a child?

A – At school I loved playing in the sand, and there was a water table... I used to make mud all the time and I would get in trouble because I was so dirty. But it was awesome.

Q – Okay, that is more exploration and informal, was there any formal learning that you remember?

A – I was really influenced by formal education but from my parents as well. I was in Beavers and Scouts. Most of the learning was when we would go on camping trips and learn about the woods and what to do if you ever got lost.

Q – So you remember a lot of outdoor exploration and learning both from vacations with your family, but also through organized programs.

A – Yeah

Q – So do you think that the most significant memories you have from your childhood include nature play?

A – Well I would say half and half because I used to be in a lot of sports like t ball, which doesn't have much to do with nature play, but when we were camping, those were my favourite memories, and we were always interacting with nature.

Q – Excellent sounds like you had a great time with your family.

So I now wanted to know whether you think that these nature experiences shaped you in any way.

A – Yeah, they helped me with my strengths and abilities. I think I learned a lot that would be useful even now. I feel that I could get stranded in the middle of nowhere and be able to survive better than most people because of how I was raised and the things that I learned when I was a child.

Q – Okay how about as a person and your likes and dislikes?

A – No I want to live out in the country now because there is so much more space and privacy. But in terms of protecting the environment I don't think it affected me as much as it would other people. But I still feel like I would want my children to have the opportunities I did, to explore and be able to roam free without any worries.

Q – Yes I definitely understand that.

Great, well thank you for your help, and sharing your memories with me.

A – No problem.
Interview #4

Q – Okay, so think of the place where you grew up, so you can think of your house, your neighbourhood, your town and describe the size and kind of the qualities of it. So was it small or big, open or close. Quiet?

A – Small for sure

Q – Yeah?

A – Ah, quiet in the winter but busy in the summer. Umm I don’t know

Q – Was it exciting to you as a kid, or boring?

A – I don’t know, played around at school on the rink and stuff. That was always exciting. Yeah I didn’t really do much in town because we lived on the outskirts of town.

Q – So again think of where you grew up and describe it in what, in terms of what it had to offer you as a child. Like in terms of play... So what behaviours, what you did, and how it made you feel kind of.

A – Well, up until I was five I was on a farm and we had horses and everything so that really kind of built who I am now

Q – Yeah?

A – And then when I was six we moved to the lake so I was always on the water. Swimming and skating and all that stuff

Q – So, you remember a lot of kind of free play, what about imaginative? Like making up your own games or playing house or something or building a fort. Anything like that?

A – This is an interesting part. My brother used to pretend that he was a student and I had a horse crop and I was the teacher and I would beat on him and we’d run around outside and beat on him and stuff. That was probably our main game.

Q – Yeah, So it is very kind of imaginative?

A – Oh yup!

Q – So describe your favourite or your most memorable outdoor play place?

A – There was this kind of sway thing that water built up in when we were living at the farm, and Pete and I would go out there and take the lid of our sand box and paddle around and stuff. Yeah that was probably the best.

Q – So umm can you think of any like descriptive words for like behaviours? So like challenging or free or any kind of words like that, that describe how it made you feel?

A – ...
Q – Did it make you feel like independent and like adventurous or anything like that?

A – I felt pretty tough when I was beating on my brother.

A – [Ha ha]

Q – [Ha ha]

A – I don’t know we were adventurous. We were always exploring and stuff... yeah. Free for sure.

Q – So did you spend most of your memorable play time indoors or outdoors?

A – Outdoors, yeah.

Q – Is there any reason why you think that was or is it just because that was the kind of...

A – Mom used to get sick of us so she would kick us outside. We would kind of do our own thing.

Q – Okay, so, question five. Do you recall learning about nature at all? So umm that could be from school or from a parent being outside with you?

A – Both of my parents took environmental stuff in like college and university. My dad actually took like an outdoor kind of, naming trees and all that stuff. So he would teach all of that kind of thing to us, and about all the animals and that kind of stuff. So I learned a lot from my parents.

Q – Umm, so it was kind of informal learning, from being around your parents?

Q – Do you think that, helped you in anyways. Like do you think that shaped you at all?

A – Umm

Q – Did it make you more interested in the outdoors? Or...

A – It kind of did the opposite, like I don’t want to do what my parents did. I don’t... I was interested I guess at the time just playing with all the salamanders and stuff. But now it is just I want to do something different.

Q – Yeah

Q – So, umm I know you said a lot of your outdoor play was the most memorable, umm so do most of your significant memories of your childhood, do they include the outdoors? Or nature play at all?

A – Yeah cause when... A lot of stuff I remember from when my parents were still together and stuff we were just playing outside in the barn and all of that stuff. A lot of the good memories are like that.
Q – So, I think I already asked you this a little bit, but do you think those nature experiences shaped you at all? Like...

A – Yeah

Q – If you are interacting a lot with nature, it can make you more creative or inventive...

A – Well I still have quite the imagination

Q – [Ha ha] Yeah

A – Umm so yeah just like I said it kind of did the opposite. Now that is not the path that I want to take even though I enjoyed it when I was younger. But yeah...

Q – Do you think it made you respect nature anymore, or...?

A – I always turn off my car when I am parked... because it is better for the environment

A – [Ha ha]

Q – Yeah, so you are still kind of conscious?

A – Oh yeah, it is because of both of my parents probably though...

Q – Yeah

Q – Well those are all the questions that I have for you, and the next part is if you could just fill out this questionnaire.
So it is basically asking if you know about environmental issues or if you feel conscious of them like I said...

Interview #5

Q – I want you to think about where you grew up and that can include your house, yard, or even your town.
For the purposes of the interview try and remember memories around the age of 8 years old

So first I want you to describe where you grew up in terms of the size and surroundings. Was it big, small, quiet, closed in, open etc.

A – Small and Quiet

Q– Can you describe it in more detail?

A– I don’t know it was small, quiet, lots of kids, lots of land to play on....
Wasn’t very kid friendly though and we had to use our imaginations
Q – So you mentioned that it was not kid friendly. You think it didn’t offer you a lot as a child?

A – It did...you just had to use your imagination. There were open fields, small forests, and we did things like climbing up onto buildings. So I guess no it didn’t would be a better answer.

Q – Okay so think of what exactly you did end up doing if you played outside. What games or activities did you invent?

A – Hide and seek. Can I say Power Rangers? [Ha ha] Because that was huge

Q – Yes you can say that [Ha ha]

A – Also "House".

Q – How did these activities make you feel? Did you feel free or challenged at all?

A – Challenged I suppose

Q – Well just give me some descriptive words about what feelings chased after when you were playing. Did you like to be creative or imaginative?

A – No... It would have been easier to have a children’s area to play in.

Q – Did you end up playing more inside? And do you think this was because the outdoors didn’t end up meeting your needs?

A – Half and half. We’d watch TV, play video games. But we would go outside because our houses were small...

Q – Can you describe in a bit of detail a favourite outdoor play place that you would gravitate towards when you were outside?

A – Either the field and forest area where we’d play hide and seek. Or we also had a few forts that our parents helped us build; we used these as club houses.

I can’t remember much about what we did in the forts though.

Q – That’s okay. So you already kind of answered the next question, because you said that you spent your time half and half between indoors and outdoors. So for the next part I want to ask you about any memories you have surrounding learning about nature?

A –...

Q – So do you remember any formal learning about animals and plants?
A – A little...

Q – Do you think you learned more from formal learning like school, or were you in any activities like a garden club or anything?

Or even learning from class trips...

A – Class trips for sure...

Q – Where did you go on these trips?

A – There was Foley Mountain, where we learned about plants, animals and the food chain. Or to the sugar bush... We were taken all through the forest and experienced how Maple Syrup is made.

Q – Do you have any memories of informal learning like from being outside with a parent?

A – No..
Well, actually I should probably say yes if we’re including flowers.

Q – Flowers trees, anything like that does count.

A – Okay then yes.

Q – Did your mom garden then?

A – Indeed

Q – Is there a reason for this being the only form of learning?
Were your parents not outside?
Or did they encourage you to interact with the outdoors at all?

A – They didn’t really encourage or discourage interaction with nature. And if we were outside a group of kids were always playing, as opposed to being with my parents because there were so many kids around.

Q – Okay so if you think back on all or any prominent memories you have from your childhood... Do you think any of these memories include nature?

A – Yes

Q – Why do you think this was?

A – My mother made me help her plant flowers.

Q – Okay and I guess this is the last question, Do you think being outside as a child shaped you at all? So did you become more interested in outdoors, or less interested?

A – It did shape me... But more of an observant caring about nature type of situation.
I like looking at flowers, not planting them.  
I appreciate fresh organic vegetables, but I don’t want to plant a garden.

Q – But it did make you aware of these things.

Q – Okay...
Do you think that where you grew up is going to dictate where you want to live as an adult? 
Like do you want to be out of the city?

A – Yes, I do not like living in the city. I would like to move back to a town that resembles the place where I grew up.

Q – Excellent, well thank you very much for your time, and help completing this interview.

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Interview #6

Q – I am going to start the interview now, but to give you a background; I am looking to see whether childhood memories and interaction with nature lead to the adult being more environmentally conscious.

A – Ok sounds good

Q – Okay, so to start off I want you to think about where you grew up, this can include your house, yard, neighbourhood or town.
For the purposes of this think around the age of eight... And can you describe where you grew up, was the place big or small, open, quiet etc.

A – I grew up in a big house with a fairly big backyard. It was very quiet in our neighbourhood.

Q – Excellent...

Q – So think of the places where you played and again, describe what it offered you as a child. So what activities did it allow you to partake in?

It can be anything from playing hide and seek to climbing trees, just whatever you were able to do.

A – Riding bikes with my younger sister in our backyard around an old butter nut tree, also going biking on trails where the Independent grocery store and Canadian tire now stand. It used to be all bush and trees with trails there.
My dad would take us fishing on the canal where the train bridge is stuck in the up position.

Q – Great, is there anything else?

A – I played a lot of road hockey with my friends from around the neighbourhood out front of our house.
But we had a lot of freedom and no worries.
Q – That’s awesome, so how did these activities make you feel as a kid, you mentioned free, was there anything else like challenged, imaginative...

A – Well when riding my bike I had a sense of feeling grown up, pretending I was driving a motorcycle. I actually remember now, my cousins and I digging up my parents’ backyard and building a Jurassic park which was a big hit when I was younger. Also playing in the sandbox with Tonka trucks and GI Joes... I used a lot of imaginary play pretending I was part of the role that I was doing. It was calming, and a lot of fun.

Q – That is great!

So I now want you to remember your favourite, or most memorable outdoor play place. Can you describe this place for me?

A – My most memorable outdoor play place was at my grandpa’s house [dad's father]. Behind the garage was a very small sandbox. My grandpa, who was a big man, would come down and sit with me in the sandbox and play with toy cars with me. I remember my grandpa giving me my first remote control car. I didn't think much of it then but for my grandpa to go out and play with me in a sandbox was pretty special.

Q – That is special!
Umm okay, so I know I asked whether your time was spent in organized activities or free play, but do you think the majority of your memorable play time was spent indoors or outdoors?

A – Outdoors
As a kid my parents forced me into the hockey and soccer [Ha ha]

Q – [Ha ha] that is too bad you were forced into sports.
So is there a reason you think your memorable time was spent outdoors? Like was it more interesting or were your parents outside, and encouraged you to be outside?

A – I think the reason was really internally, I always loved being outside. I loved watching storms as a kid and thought it was just fascinating. I remember my parents told me that the thunder was God and the Angels bowling and the lightning was when they got a strike [Ha ha].

Q – [Ha ha] that is what my parents told me about thunder too.

A – [Ha ha]
But no my parents never really encouraged me to be outside, I just liked finding things to do outside. I was a very curious kid.

Q – Okay, so the next part is looking at whether or not you learned about nature and plants and what not as a child... So do you remember any learning? It can be formal through school or field trips, or from your parents teaching you.

A – I remember as a kid taking in a baby robin after it had fallen from its nest. My mom told me they eat worms and I would have to find worms. So I dug up some worms and attempted to nurse it back to health but failed!
[Ha ha]

Q – [Ha ha] that is cute.

A – I learned a lot about plants from my grandma and mom. My mom would love to plant geraniums and marigolds.  
I loved to help my mom make her flower beds pretty for her and she told me to water them in the morning to keep them healthy.
I used to love planting sunflowers; I loved how tall they grew.

Q – We had sunflowers too and I would hide in the rows of them [Ha ha].

A – [Ha ha] nice.

Q – So everything you mentioned is more informal types of learning?

A – Yeah and trial and error. As I got older I loved planting flowers and actually took off to Algonquin College to do the Horticulture program to learn more.
It was a phase, but I continue to love to grow gardens though.

Q – So you already started to answer the next question, but it was whether or not your childhood experiences, involving nature, shaped you in anyway.

A – I believe my childhood experiences helped me to appreciate nature and the different things nature has to offer. I can grow gardens to help feed myself, I enjoy planting trees knowing that they help filter out the bad and produce the good. I learned a lot and through my experiences growing up I think it has helped

Q – Excellent that was all of the interview questions I had to ask you
You gave great information thank you so much for your help!

A – No problem it was fun to think about all of the memories I have.

Interview #7

Q – Okay, so before we begin think about, kind of, memories of your childhood. So where you played, what kind of surroundings there were, and umm like I said I will be using a recording device to capture all of your information. And umm for the purposes of this interview childhood refers to the ages of three to eight, it is kind of loose, so if you can remember memories that is more of what counts.

Q – So think of where you grew up, your house, neighbourhood and town. And describe the size and the qualities of these places. So was it big or small, closed in, quiet... Just anything you can think of to describe it for me.

A - Umm the environment that I lived in?

Q – Yeah...
A – It was a, I would say, a medium-sized neighbourhood. Umm the houses were just normal houses it wasn’t big extravagant or anything like that. We had a yard in our back, our back yard. Umm it wasn’t too spacious either; it was really close to our other neighbours. And then there was a park right down the street that was quite big, and it was beside a school too.

A – How else would you like me to describe it?

Q – Oh that is good, so did you find these environments exciting to you as a child?

A – Yeah, I think as a child everything was kind of exciting.

Q – [Ha ha] yes. Okay so again think of these places where you grew up umm and describe it in terms of what it offered you as a child. So what behaviours and experiences did it allow you? So what did you do... like activities that you did, and how they made you feel.

So say you were kind of playing house or something and it made you feel creative. That kind of distinction...

A - So does it have to be outdoors activities?

Q – Ah nope it can be whatever you like... Just most memorable ones.

A – Okay, so a big one, a big part of my childhood memories is probably playing house with my sister. But not with each other, we played, well we played together but we were not involved in the house scenarios it was our stuffed animals. So we built extravagant towns, and took over the whole room, had apartments and stuff. Umm, that made us feel really creative. And she often destroyed the towns by pretending that there was a hurricane.

A – [Ha ha]

Q – [Ha ha]

A – And I remember going to the park a lot. Umm I think I felt really free being on the monkey bars and swinging around a lot. I used to be a really big dare devil back then, and climb up on everything. Umm so those are the two main memories.

Q – So creative and kind of independent types of play...

A – Yeah... Definitely yeah...

Q – So were... these were kind of free play and imaginative types of activities.

A – Yeah definitely.

Q – So, okay the next part is to describe your favourite or your most memorable outdoor play place, and again the qualities and behaviour that you took part in.

I know you already said the park.
A – Is it okay to say that again?

Q – Yeah for sure.

A – Umm, like I did the normal kid stuff like ride your bike and rollerblading and stuff. But the most memorable was being on the park. Maybe more specifically on the monkey bars, and the swinging tire. Those let me be really... I think I enjoyed taking risks as a kid and they always made me feel exhilarated just being on top and trying new tricks and things. And I think it let me kind of express my rambunctious side which my parents were always like “stop climbing around the house”, so I got to climb around at the park.

Q – Oh that’s good!

Q – So did you spend the majority of your memorable time indoors or outdoors do you think?

A – Would it be right to say both?

A – [Ha ha]

Q – Yeah you can say half and half.

A – Yeah, because it is split between, I really enjoyed going to the park but I also really enjoyed playing indoors with my stuffed animals.

Q – Yeah...

Okay so the next part is going to be, umm, about kind of learning about nature. So, do you recall learning about it as a child at all? So kind of informal or formal, so say you went to the park with your parents and they told you about tree, or umm anything like that. I am trying to find out what you learned about the environment or how you did. And it can be at school.

A – Hmm

In the home environment not very much, my parents didn’t really garden, and I guess they were not very familiar with their surroundings either because they were coming from a foreign country. Umm so not in that sense but at school we did learn about, like we would have projects where we would grow plants and stuff and learn about the environment that way.

Q – So did you go on, say any class trips or anything like that that involved you with nature.

A – They were not very extravagant, it was just kind of going out into the garden at the school or taking walks in the park with the school. And maybe visiting things like the science center, I am not sure if that was that age but...

So if anything it was done at the school.

Q – Okay so formal types of learning.
Alright, so, I know you talked a lot about the park and playing outside on like the play structures and what not. But do you think any other significant memories include nature play? Or like climbing trees or anything like that?

A – Hmm, I feel like I didn't have that much interaction with nature around that age. Picking weeds out of gardens? Would that be something?

[Ha ha]

Q – Yes

A – Umm,

Q – Do you think it was because your parents didn’t want to let you go far on your own?

A – I think they associated nature with getting like, exposed to germs and then getting sick. So they never encouraged us to climb trees or that sort of thing.

Q – So do you think any of these, I’ll focus more on the outdoor parts now, so like the park, do you think those experiences shaped you at all, like as a person now. So those experiences made you more of a creative person, or more independent or anything like that?

A – Umm yeah, I think that, I guess because I have really fond memories of the park, and some of the things that I still really enjoy today are sitting up somewhere high, so back then when I was on the monkey bars, and then feeling the wind against your face. Umm and being out in the sun, I think it has made me appreciate outdoor activities like the park being available for kids. And I think it did help with facing challenges in the future. I guess when I was young and you wanted to do that flip backwards and you were scared, but then you kind of just pushed yourself to do it, and then I feel sometimes when I am worried I kind of try to just push forward and maybe that kind of reflects what I learned as a kid.

Q – No that is great, yeah.

Well that ends the verbal part of the interview... Thank you so much for participating in my research.

Interview #8

Q – Alright, so before we begin, like I said I just want you to think about your memories of your childhood. So kind of where you played, the surroundings, and um, just like your neighbourhood, your town, generally. So the first question is to think of the place where you grew up and your house your neighbourhood, your town and describe the size and quality of it. So big or small, open, closed, just the character of it.
A – Sure, so a specifically I grew up in a village, so it was small, um there, it was near a large town. Um, so there was a small subdivision but I would say more the community was fairly rural, in the farming element. So in terms of my house to as well?

Q – Yeah...

A – So um, a large house, with a lot of open space, and a lot of freedom. Which is kind of the nature of farms.

Q – So, I am going to move on to describe what it offered you as a child. So the behaviours, so specific things you did, and then the experiences, so how it made you feel.

A – Sure,

Q – So just if you could share some examples of that.

A – Um well, with the small um, community feel um it, from looking at a community as a factor even you know at a young age, you know walking home from school or, we were far enough that you could take the bus, we were bus[er][s]. But still small enough that we were the last ones off, the bus driver would drive down the laneway to let us off.

Q – Exactly

A – And he would um, you know stop and chat with my dad for a while before, before he drove home. So everyone really did know everyone. So in terms of the social aspect of the community it was very nit and small and very safe, in everyone is looking out for everyone. Um, and with the kind of lack of density of people, maybe, um, there was so much open space to go and do what you wanted. So we were very lucky to have horses and we would just get on our horses and ride to my grandma’s house. Like through fields: and yeah so really fun. So that is one of the most prominent memories.

It does often involve animals, but you know we had a lot of area that we could go and do things. So we weren’t restricted at all. So whether it was riding over a concession to visit our grandma, or riding over a few concessions down to the lake, or taking the horses through the subdivision and going to the lake again to visit a friend who we could then take our horses in through the lawn, and take the horses in through the water swimming.

Q – Yeah,

A – And even with that, then too, we didn’t, we played around the house but not a ton. Like I guess there was the opportunity with like you know sand box and swings and that, but we would go to the bush a lot and play, and particularly we would lean towards densely forested areas, because they are spooky... Or theories like that. So um, yeah it was small socially but in terms of I guess spatially was really large and lots of opportunity to different things all the time.

Q – Sounds like exactly where I grew up.

A – [Ha ha] Yeah?
Yeah it was pretty awesome.
Q – So, you mentioned kind of imaginative types of play in the forest, um, is there any other types of play? Like did you do sports at all, I guess riding is pretty much a sport, and then...

A – Yeah! Yeah, I would say um, that the age range of three to eight is more limited, you know we did do um, ballet which is sort of athletic, um, not technically a sport. Um, probably riding was the most dominant thing. And then in public school the defined sports so volley ball, basketball, track and field, those are probably the big things. Um, myself I didn't play baseball which was probably the big other thing that was in the community. I guess ringette or hockey for girls, but we weren't involved in those things, um soccer was not really big, which is so much bigger now, but it was not a big, there weren't big soccer leagues, there was pretty well baseball was the big thing.

Q – Cool, so the next part is to describe your favourite, or most memorable [whichever], outdoor play place. So again the qualities of it and what it offered you.

A – Sure, um, well yeah probably what would be the bush? Really exciting... [ha ha]. And in particular um one part of the bush; and we called it the fairy bush.

Q – [Ha ha]

A – So, um, so I guess imagination was pretty key, there weren't tons of toys. And with it, it was, there was um, the majority of it not a tremendous amount of light. It was actually fairly dark even in the middle of summer. And it particularly an area of the bush where the trees were a bit more stunted. So they weren't the really nice maples or you know that were throughout the majority of the bush. It was more the kind of the low end scale of the bush when you are thinking of it.

So smaller trees, more dense cover, so it was darker, and there were more rocks there in particular, it was quite hill[ie] so there was quite a steep little hill going down to a little river. So then that opened up... in winter or summer we were there a lot of the time because we could skate, I guess that was bad because we were bad skaters, but we would still go and I guess skate. And so in the winter we could go and shovel off the little stream... fall through it occasionally, and go home really cold. But so it offered us the opportunity to go in whatever season, and then we could easily go to where it was brighter or more open and it was right off a field so we could always go in the field and it would be much more so. But to us, it seemed really magical in our minds. I have two older sisters so that like there were no boys impacting on that, on our thoughts. So maybe that is why it was called the fairy bush [ha ha].

Instead of something more manly. So that was kind of there, wasn’t grass really in terms of cover, like there were a few leaves and things but it was pretty, it was just dark. So yeah there wasn’t a lot growing on the forest floor.

Q – Neat, um, so I am assuming you spent the majority of your memorable play outside? Just by what I am gathering?

A – Absolutely. I would say, yeah pretty well outside all the time.

Q – So is there a reason why you think this was. Like was it more exciting as a child, or like, any...
A – Yeah, um, for sure, I think um, I think our parents probably moulded that. They were outside pretty well the majority of the time. And my dad did work on the farm, and so for us to be outside with him was a really big component, and even if we weren't directly doing what he was doing, you know we were kind of outside, and you know he could pop in or keep an eye on us and see us. When we were really young we had a little play yard that was kind of fenced in and they would put our little pony in with us. Which is probably really not safe but you know, so we were there, our little pony was there and we were just kind of playing and hanging out, to kind of keep an eye on us. Um but also they were outside, and inside we didn't have, we had toys but we didn't have a lot of toys, and because we were in the country we got like two TV channels, so...

Q – [Ha ha] so did we.

A – So it was not like... indoor things you know that I think of that we would have wanted to play with, there just wasn't much of it there. So, and we didn't even have a VCR player, we rented it, or took it on loan from the library when we wanted to watch a video. So I doubt libraries do that now, I don't know. Um, but that was like a big deal and it was something special, so I think there was just so much more for us to do outside, and to be active and our parents definitely motivated that, and there weren't restrictions like you can't watch TV or, you know limiting those things, but it was just unspoken, you know they were a lot happier with you when you were outside.

Yeah, and even another thing, that really impacted on it, is if we did have um, babysitters or nannies, they all seemed to be very active in being outside, and go riding with us, or go swimming. We did have a pool. So, those were other things. Or other things, we would very often pack picnic lunches and go to the bush, and that like takes up your whole day. Like by the time you make your lunch and by the time you walk there when you are really little. Like it takes a while to walk there and to play and walk back. So the day is pretty well done.

Q – That is great.

Um, so the next part is more about kind of learning about nature. So do you remember learning about it as a child, so this could be kind of a formal type of learning from school, or more informal from your parents or kind of...

So some points, what did you do, what do you think you learned and who you were with.

A – Um, I think there was a mix of formal and informal, kind of um, through public school through things like, in our area like going to the Y Marsh, where they would have um, educational programs, and you know kind of like you would each get an animal. Someone would be the wolf and someone would be the squirrel, like they had different things, like someone would be nuts, and so it was kind of who ate what and who lived where.

So those were more formal things, so um, yeah those are probably the most prominent memories that I have of playing those types of games when going to places like the mash, or the, there was another park that we would go to... was it Spring Water Park. And so they have wolves and foxes and I remember at a young age and just going to just see them with our class. And in nursery school we went to different farms. I remember specifically we went to our farm, but we went to some other farms too. Um, I remember though just this one mom took her son home to wash him before he came back to school in the afternoon; because he smelled.

Um, but and then informally, yes some through just walking with my mom or my grandma. Probably would be the most prominent and that would be looking at flowers or weeds.
Different types of trees, which I definitely don’t remember very well. Beyond trillium I am a bit lost, but they tried.

Q – Okay, so it is kind of a mix for you. Um do you think that your most significant memories that you have of your childhood involve nature play? Or Play in general?

A – Yeah, I would say that, um, and particularly yeah involving animals, and just with the riding component, as being the really big component. Considering riding as kind of playing, then absolutely a big part.

Q – So do you think those play or nature experiences shaped you at all? Or kind of directed your path?

A – Oh yeah I think so. So um, I must admit the animal component has shaped my path a little bit more. Than specifically, I guess nature what I am thinking my perspective is of nature. It involves animals and kind of the flora and the fauna. And so for me it is more a little bit the animal component that I followed. But still given me at least a respect for nature, and yeah, a different story for my sisters.

Q – Yeah?

A – Yeah they would be interesting because they are very much more the environment is water, and they both are involved in that.

Q – So it kind of, yeah I guess the whole point is trying to determine whether or not where you played and what you encountered as you played stays with you and you, kind of, remember it as you grow up. Or um, also whether or not it directs what you are studying in school, or...

A – I think yeah, for me, you know in terms of yeah a small component of what I studied in school; with you know more of an emphasis towards animals, and the environmental thing. Or causes I guess in undergrad. And I guess more so I think it has impacted me in just a general appreciation for, you know it’s not maybe in the driving the environment, the actual physical one hasn’t driven my focus, but in studies, but my appreciation in life you know, the frustration of people when you go on a walk and you know there are signs “you carry your litter in, you carry your litter out”. People don’t do that. You know that understanding or even things like garden club, in public school. That was another structured things that you know dealt with um, with nature, and particular things, and watch them grow, and that is from kindergarten you know we kind of started to do that. And that has definitely impacted.

Q – I know I was in a garden club as well.

A – It was awesome, yeah and wanting I guess to, thinking about my whole life, wanting to grow my vegetables, or to do that. And you know growing up on a farm and being really exposed to that. And being in that activity is you know helping mom in the garden, and helping dad too. He was a bit more towards the animals but that we played in and around the garden when mom was doing that too, and I mean we were lucky, we were not made to help, and when we did they were so happy that you helped. And I think for us um, well for me, it made you want to help more because they weren’t making you do it, it was fun and there was so much praise given to us, we were really lucky. From what I remember I think
my parents were really good at praise and you wanted to then help them, and we wanted to then get that row done, because then it would look so great. You know and the carrots would grow better, and you know the joy of going and getting the potatoes from the garden then going in and cooking them, because who doesn’t love a potato really, in my world.

Q – [Ha ha]

A – Everyone loves potatoes, so like you know that is the more cultivated environment but it was still impactful.

Q – It is neat how you grow up in kind of a rural area, and then me like living in the city now it is weird, because you don’t have a garden, and you can’t like go outside and do all of these things, so it is kind of makes you want to be close to how you grew up I think anyways.

A – I totally agree, I honestly I wonder, I don’t know what I would be like if I had of grown up in a more of a city environment because we really had so much freedom, like we really did, like we just went anywhere we wanted to go, or you know as long as you said “hey we are going here” and if we weren’t back at a reasonable time, then someone would come looking for us. I mean we did not all have cell phones to keep in touch and the majority of the time it really just was my sisters and I, and we really didn’t need someone there all the time, like high school kids that were babysitters through the summer, and they did all those things with me. And I don’t know if my parents like if that was a requirement that they set out for the people who did look after us, but they all um, encouraged that. So we just were active and outside. I cannot, because I live in town now, and I at least live in a house, but I you know, I even feel bad for my dog that I have because I just think you have to be on a leash so much of the time, and I think Guelph is better than a lot of cities where you know in comparison to Barrie which is probably the city that I am next most familiar with. They have very few spots where you can go and be off leash if you were a dog but even just open spaces that you can go and walk and play in as a person who wants to get out there.

Q – Yeah I feel bad for my dog too

A – Yeah I know it’s terrible, and structure is my life now.

Q – So I guess the last kind of thing, I know you mentioned freedom, so do you think it gave you a lot of independence, or kind of maybe even confidence in yourself that you could do these things on your own?

A – Yeah, I think definitely because you never, what you wanted to go and do, or what you could create to think and do, you could do it. Like there wasn’t that “oh no you can’t do that” or the worry that you know well you can’t cross the road.
Like we could go to our grandmother’s house and not cross a road. We would cross a lot of fields but you know technically the way our house was and the way that the concessions were structured we didn’t have to cross a road so, there is like 100’s of acres that we had access to. That we did not have to cross a road, or we were kind of bordered by a highway and a railroad track and a few miles in between, and you know we weren’t ever going to go that far. And it really was, you were limited by your imagination, and I know one really odd memory that we have, is that because all of our like play equipment outside, like the tire, like we had an old tractor tire that was the sandbox, and we had an old tire that my uncle who moved in after us made a swing so that it was like a chair. And so it was all homemade
stuff, and like the teeter tauter was just some 2’x4’s that my dad put together but you know. With the sandbox there was a big weeping willow over it, I mean the sandbox was underneath it, and we would jump up to grab the branches, or we would grab the end that hung down and we would try to pull it down so it would be a more substantial piece of wood that we were holding onto. And we would literally have a countdown and go off to the moon. Like that was normal for us. And we would have blast off; we would have pulled this branch down as far as we possibly could and let it go. And that thing flung so high, like to us. Probably when we look at it now it wasn’t so high but, it seemed like it went so high in the air. And I mean we were on the moon, we just would create that so we, it was really only ourselves that limited us, so I do think that it just gave us a measureable opportunities. And very, very, few actually structured play toys that we had, like very few, so um, yeah it was really, I think liberating from that because you don’t have those restrictions, but it was always fairly safe. Playing with trees was reasonable enough, and I mean we did have certain rules, like if you went somewhere you had to say where you were going, um, just so, and you really from my parents view, you weren’t really to stray from that. You said you were going here so that’s what we would do. So if we need to find you, if we were in the barn, because I mean we would play up in the hay mounds often.

Q – Yeah we did that too.

A – You can look all afternoon for cats up there. But you know if you left the barn you had to go and say you were leaving the barn. If you left an area you had to like report back, and not that there were really any consequences when you didn’t but I mean we were still, there was a very loose framework which we had to work in. Yeah and you just thought, you can do it so why not. And I think it has really structured who I am. Talking too much might be one thing. [Ha ha]

Q – [Ha ha] No that is excellent! Some people don’t talk enough.

A – And I feel like when thinking about nature, and the environment I guess I have such, for me, those are, I think of the environment and I think we should be talking about like swamps and stuff, and bush and things like that but I guess it’s your general environment that you are in. That is something that, well if it is the environment, the nature is, but I don’t always have to be limited by that I guess.

Q – Well excellent, that is great, that is all the questions I have for you.

Interview #9

Q – Okay so just to start off, I am going to ask you to think about your memories of your childhood because that is really what this is all about. So kind of the places you played, what kind of surroundings there were. And just kind of, to, it can be your house, your neighbourhood and your town. It depends wherever you played. So the first question is about describing the places where you played. So ah, did you feel like say your backyard or the parks where you were, where they big or small, kind of quiet? Or just some kind of descriptive words to describe where you grew up?

A – Big, open, quiet.
Q – Yeah

A – I grew up in the country for the first like six years of my life.

Q – Yeah

A – Big wide open back yards, just kind of grass, and a pool fenced in. Mostly I would be there or I would walk down the street and do whatever. And then when I moved into town pretty much the same thing, still had a big open wide backyard, so

Q – Okay, did you feel that these places were to you as a child exciting or challenging at all? Or...

A – ...

Q – Were they boring or?

A – No, no, not boring, I was never bored. I wasn’t much of a playground type until I got older. Um so no they were just fun. Not necessarily exciting, but not boring

Q – Okay, so again kind of think of the place where you grew up and describe it in terms of what it offered you as a child. So what behaviours and experiences. So behaviours would be the activities you did like what kinds of play and then how they made you feel.

So um, it can be anything from, you know, building a fort, to playing hide-and-go-seek or house, or anything you did.

A – HMM Okay...

Q – [Ha ha]

A – Umm well way back I don’t really remember what I did, probably playing with my dog, or I know I used to try and catch frogs and stuff. Umm, and then yeah just playing house, and making forts really basically what you said.

Q – Yeah

A – Yeah with my friends, until I moved into town.

Q – So do you think you did more of the, kind of creative play where you were making up your own games...
A – Oh yeah

Q – Or...

A – Always

Q – Yeah?
A – Like if I had little dolls, all of them had like My Little Ponies and all that kind of stuff you know. Especially my sister and I would just kind of completely use imagination.

Q – Okay, Umm so do you remember mostly imaginative play, or did you play sports, or any kind of like free play, where you just... I don’t know like I said hide-and-go-seek or some other games?

A – Yeah, no, I wasn’t really into sports, um might throw a ball around, or play monkey-in-the-middle, but other than that not really.

Q – Yeah

A – Um, and then as far as free play goes, I guess like we’d do activities, um, like go on bike rides, go maybe rollerblading. That kind of activity. Um, not really playing, but.

Q – Okay, so the next part is kind of to think of, and describe your favourite, or most memorable outdoor play place. Where you remember as a kid

A – Um, most memorable, I would probably say my house. Um, that I lived in once I got into the town, um, I was there for a long time, but also like, I had friends there, I spent a long time there. There was a lot to do because like I could go to the back yard and do whatever I wanted. I could go outside and play with my friends. Or, we, it was kind of a small community area, so we could just like go down the street to the store, or the mall.

Q – Okay, um, so you kind of alluded to this, it offered you a lot in terms of what you could do. Kind of make it up as you go along. Do you remember having I don’t know, interaction with like trees, or kind of playing in the more forested areas, or...

A – Uh, yeah, I had a friend, my best friend when I was a kid. He lived actually in the complex I live in now in Milton. But we used to, it backed onto a ravine, so it wasn’t really forest, but we would go down there and try to catch crayfish and stuff. And the ravine and the stream, and there was trees we would climb, and play in the field. And then actually, also at my house there was, there, we backed onto, it wasn’t like a forest but it was just kind of a treed area behind a school. So we would go back there and bike ride and stuff.

Q – So do you think you were more drawn to those kinds of areas? That were more natural? Or, um, you said you were not big into playgrounds.

A – Yeah, yeah, no, I much preferred to do that kind of stuff, yeah I didn’t really go, we had a mini little park thing at the complex where he lived, but it had like nothing in it, we just usually kind of rode around on our bikes.

Q – Okay, umm, so do you think you spent the most of your memorable time indoors or outdoors?

A – Probably more outdoors. There are certain things that I remember indoors but I would say most of the time outdoors. Especially in the summer

Q – Yeah, definitely.
So um, do you recall learning about nature at all as a child? So you said you caught frogs and
crawfish and what not but, it can be kind of informal or formal. So going on field trips or
something at school, or maybe your parents took you outside and were kind of teaching you
about nature in some way?
Do you remember?

A – Definitely a lot of field trips and stuff in school, um, my parents didn’t really do much.
Um, I had a random period of time where I was very interested in tornadoes and natural
disasters, so I would rent books from the library, and read about those. But...

Q – So it was kind of more on the formal side from school. And if it wasn’t formal, it was just
you just kind of exploring?

A – Yeah

Q – Um do you think any of your, well I guess, we are talking majority here. Of your most
significant memories of childhood, do you think they include nature play? Or just play in
general?

A – Um, no I would say nature play. Because it just provides something more to do right?
Not just an area to be in, like climbing a tree or anything, more stuff to do. Like I would be
like catching fish and all that kind of stuff. And like we would you know, walk along the
stream just looking around. You know we could find something...

Q – Yeah, it seems you can like go out to the same place on two different occasions and have
two totally separate games...

A – Exactly!

Q – ...And activities that could come out.
Okay so basically what I am trying to do is figure out, if your nature experiences as a child
kind of shaped you now. Or maybe even directed your path in terms of school.

A – Right.

Q – So do you think, um, any of that shaped you at all?

A – I would say it is hard to tell because I have always been interested in animals and um
and nature, and I don’t know if it was being interested in that, that made me want to play
there? Or if it was playing there that made me interested in it? Kind of like a chicken versus
egg? I am not sure which one was really...
But I know my sister, she had, she didn’t grow up the way I did. She um, because she was
very young when we moved into town so she wouldn’t have remembered the country. And,
she just didn’t really participate in the same kind of activities I did, and she is very different
than me in that kind of term like she is a city girl. Very much so a city girl. Like she wants to
live in Toronto, and all that kind of stuff, so I would say she is very different than me, but
once again yeah. I am not really sure if that’s just because of who we are? Or, I have never
thought of it that way...
Q – Okay, umm that kind of ends the interview part of it, thank you very much for your time, and sharing your memories.

A – Oh no problem.

Interview #10

Q – So the first question is, like I said, to think of the place where you grew up. So for this question it can be your house, your backyard, your neighbourhood or even your town. Just kind of depending on where you played, and describe the size and the qualities of these places.

A – Okay

Q – So big or small, quiet, open, exciting challenging anything like that.

A – Right. Adjectives or the actual descriptions?

Q – Um, a little bit of both.

A – Okay

Um so in that period, well my entire childhood I grew up... um, in ah very forested or lake environment. So not in town: never lived in town. Um not in farmland really too much. Um and so that was a lot of lakes a lot of bush. No neighbours, nobody around or anything like that. And what kind of play was that?

Q – Ah, just describing the places.

A – Oh okay. Coniferous forests, lakes, um that kind of environment I guess.

Q – So definitely probably quiet, and...

A – Yeah, okay quiet in there was no humans around, or anything like that.

Q – Yeah, okay. So...

A – Animals, like pets and stuff.

Q – So, um the next part is in terms of what it offered you as a child. So I kind of want you to think of the behaviours: so what you did, so what activities. And then how they made you feel.

A – Okay, so how it made me feel then?

Q – Yes

A – Okay, so the kinds of things that we did, well we would do, I mean we would: it was all free play. So there was nothing that was ever structured, nothing like sports or anything like
that. Um, generally it was just family, and other like extended family that were our own age.
And so anything in the bush. So making forts, ah, looking for animals that were in the bush,
um looking for our horses which were in the bush. Um, playing like, well I was the only girl,
so playing a lot of boy games too. So a lot of like playing guns, and you know those types of
things. A lot of imaginative games, um, a lot of survival games.
And how does it make me feel?
Fun, I mean it made you feel like, I remember I had like a little fort that I would pretend I
lived in right, and so like I would, you know like have maybe one real piece of laundry and I
would do it in my fort. Or something like that. Um, you know making doors, so that you
could like live in there. You know those sorts of things. And how did it make me feel? I guess
it was well it made me feel like maybe you could survive by yourself.

Q – So you mentioned imaginative, so definitely creative play, or that it helps you express
your creativity.

A – Or a lot of, actually when there was more kids around it would be like team types of
things, but it would be again like imaginative play. Like you would have a team and you
would like try to find the other ones, or you would try to shoot the other ones with like little
toy sticks, or you know those kinds of things. Where it was usually against one another...

Q – So do you think that these kind of activities, do you think they kind of made you feel
kind of independent or, free or...

A – Yeah, for sure. Um, independent except for the team ones where you were working as a
team.

Q – Yeah

A – So, those obviously would be... so I mean you felt like you were a part of a team and that
was survival oriented. Or you felt very independent and I guess like I probably, I can’t
remember exactly how I felt, but I probably felt like, you know, like I was competent, yeah.

Q- Um, so I guess you already answered the next question. So free play, imaginative play, no
real sports or anything like that, which is organized. Um, so the next question I am going to
ask you is to describe your favourite or most memorable, whichever, outdoor play place
that you used to play. So it can either be like I said your favourite, or just one that sticks out.

A – Um, I guess because the place was, continuous and non-ending. It was not like there was
one place versus another. Although I would have to say because my dad is a commercial
fisherman as well, and a logger and a trapper, we did have to play in the boat sometimes
and that wasn’t the fun[est] place to play. I mean it was not un-fun to play but it was just
like obviously you are in a boat as big as this room, so obviously it was limited play. Um, so I
can’t say that there would be one place over another. I mean, so yeah it is hard to say what
my place was.

Q – Okay so probably like outside in the bush kind of like area but it is not exactly, there is
no real boundary of place.

A – No there was no boundary, of course it would be more fun to play around areas that you
knew a little bit right? So closer to like... We had old out buildings and, um, kind of old trails
and stuff. So there might be like an old car that had been abandoned or things that offered more complexity in those senses. You would gravitate towards them because there is just more to do around them right.

Q – Okay so do you think you spent the majority of your memorable play time outdoors?

A – Yes, outdoors.

Q – Definitely outdoors?

A – Yeah we were not even supposed to read inside during the day.

Q – No?

A – [Ha ha] No, we couldn’t be indoors.

Q – I guess that is why you think this was, so you were encouraged to be outside?

A – I think it depends though, in part. If you were at their house then you weren’t allowed to go inside, you had to stay outside, and my grandpa was like you cannot open books in the daytime. So that really limited, obviously you had to be outside right.

Q – Okay, alright. So do you recall learning about nature as a child? So this can be formal.

A – No...

Oh, sorry

Q – It can be informal, so like you just exploring yourself, or your parents teaching you, or being outside. Or it can be formal in the sense, like school trips or something.

A – I said no because I don’t remember learning about it. I think it would have been extremely passive learning. All passive learning. Although I have to say that, um, my, everybody would teach us things. So what to do in situations, what to do if we were trapping or something, like always go along the side of something, or that kind of stuff. So I don’t know...

Q – Its okay, it can be learning about animals, or trees, or anything like that.

A – A lot of it would be passive, um, but I guess there was, they did teach us stuff too for sure. But nothing, ah what was the second part of that?

Q – Or formal, so from school or field trips, or anything like that.

A – Not at all.

Q – No?

A – Nope.
Q – I remember going on lots of field trips, that is why that is added. We went to this mountain, that is like a hill compared to other mountains, but...

A – I think which is different in that I grew up in, along Fort Francis, and when I was going to school at those times I think just because everybody has such intimate connections to outside that we didn’t do field trips that involved nature. We did field trips that probably involved something more cultural. So I don’t even remember a school trip that had to do with outside.

Q – Maybe they just figured that you had that interaction. Okay, um, so do you think that some of the most significant memories you have of your childhood include play? Or nature play more specifically?

A – Like would play be one of my most memorable?
Um, no, no, um, I you know I do remember playing but I don’t think it was as significant as the other things that also involved nature. Just so much of what my family did was always outside, that there was many different… play is not something that would make the top of the list anyways.

Q – Okay

A – There were other things that were really memorable for me at those times.

Q – But which also involved nature

A – Yeah, so, yeah probably things that involved nature, but things that weren’t play.

Q – Um, so do you think that these nature experiences, or nature play experiences shaped you at all. Or did direct your path?

A – Yeah, because one thing, whether or not it was play, or learning about how to do things, functional things, is that it had to do with nature, it was all practical. It was all problem solving, everything was problem solving. So, in that sense I feel like that would be a skill I have, that has made me successful in all parts of my life.

Q – So do you think it, I guess peaked your interest in these areas? Or I interviewed some people that it totally changed their mind. Growing up so outside, that now they want to go the total opposite direction. Or some that are just like I could never live in the city because this is where I grew up, and...

A – I think I have seen a lot of things, having to do with nature, that I didn’t know the answer to when I was younger, so now in research and wanting to know what those things are, or wanting to know more about things, that it made me more curious. I found that I have a much more heightened ability to observe things in nature that other people don’t. And just in general. Which I think had to do from being outside all the time and having to observe things. So I don’t think; I still work with animals and so in that sense I guess maybe, but I live in the city. I don’t live out in the bush anymore.

Q – Like I miss having, I was home at my parents this weekend, and it was like “oh I can be outside, and do stuff” but here it is like, “I could sit on my patio”
A – that is exactly it. I have a nice backyard but it doesn’t feel natural, even though I love it, and it’s still outside, and it’s green [well not right now, but] you know it doesn’t feel na- I shouldn’t use that word... it doesn’t feel as I guess wild or separate from humans as I remember my childhood.

Q – Wild, yes!
That was all pretty much the structured questions; I was just trying to get some basically adjectives on why kids gravitate towards play outside. Or why they like these imaginative places, and a lot of the words that come out, is like there is so much variety and you can go to one place, and play one game, and then the next day you can have a totally different game in the same place. Or its exciting or challenging to kids.
Do you think...

A – I don’t know that kids gravitate towards playing outside.

Q – Yeah?

A – Like I don’t have kids but I would find that there is a trend for kids not to gravitate towards imaginative play outside because it is always easier to do something structured. You know if you play a board game or you play a sport, thats structured. It is always easier to do that. It is not so easy to use your imagination, and I don’t find that I have like an amazing imagination, but you know. I guess it depends on how structured your entire life is.

Q – I don’t know I find that its different now than it was when I was a kid. I mean my sister and I are six years apart and we are so different in that sense...

A – I think you need a more unstructured, because it does take time to imagine things, and it almost requires having a little bit more unstructured like time in your day, that we don’t tend to have that as much anymore I think. And so maybe that is more difficult, because if you have something to do it is like “okay I have one hour to imagine” you know?

Q – Yes it doesn’t work like that.

A – No, and you know so.

Q – Alright, so thank you very much for helping me out.

Interview #11

Q – Okay so before we begin the interview I want you to think about your childhood memories and for the purposes of this interview I want you to think about the ages from 3 to 8.

Q – So the first question is that I would like you to think about your childhood memories and I would like you to describe the place where you grew up so this can be your house, yard, or town.
So was it big small, open, closed etc.
A – I grew up in my yard and yards of friends and family.

Q – Okay can you give me a bit more perspective?

A – I lived in Uxbridge and it is a valley. Every direction is up hill. It was farm country.

It is a whole township so it is big enough, but it is slowly turning into New Market. So it is getting to be around the same size as Cambridge. It was really small when I lived there though. So if you were downtown and doing something, your parents would know about it before you even got home because everyone knew everyone.

Q – Excellent, okay so describe your yard in a bit more detail for me, and describe the surroundings.

A – It was a back yard, it was fairly large, there were a few fields that we used to play in. Climbing trees, playing tag, and all kinds of sports. Some yards were bigger than others and we made what we had work for us.

Q – Anything else?

A – It was an oddly shaped backyard though it came to a point in the corner. There was this tree that we always used to climb. It is still there, and the fence that we put up.

Q – Excellent, so these were the main places you remember from your childhood then in terms of play?

A – Yes

Q – So the next part is I would like you to tell me what these places offered you as a child. So what things did you do, and how did these activities make you feel?

A – Tag football, baseball, some soccer... stuff like that... and it made me feel like a kid. Like all happy and what not

Q – So you remember mostly sports and those types of play? Or did you partake in any free play, or imaginative play?

A – We used to play a lot of practical jokes on people, we were fairly destructive children, but I do remember climbing trees and building tree forts. Most of the play was free, and we would just do whatever we decided to do at that time.

Q – [Ha ha] yeah

A – We liked to try and make jumps for our bikes and see who could do the biggest jump without chickening out.

Q – Okay so can you describe your favourite or most memorable place to play as a child?

It can be anything from one specific tree to your whole yard or whatever you like...
A – They were all good places to play but if I have to pick one I would have to say GT-ing at the arena hill, because it was the biggest and we could go faster there.

Q – So you felt more challenged as a result of the hill being bigger?

A – [Ha ha]

Yes we used to play in a lot of different place though, and most of the time we didn't have any boundaries. It was just like “I want to do this”... so then we did.

Q – Yes...

A – There were many challenges because we tried to find the most difficult types of play. [Ha ha]

Q – [Ha ha] sounds fun

Q – I know it is hard to think of how these things made you feel but that is good.

A – [Ha ha] Yea, I remember climbing a tree so high that I couldn’t get back down. My neighbour had to come rescue me with the extension ladder. The lady that lived across the street always used to watch us to make sure we were okay because she could see us above the house.

Q – [Ha ha] okay so I was curious whether or not you think that the majority of your memorable play time was spent outdoors or indoors?

A – A mix of both I don’t know which was more memorable than the other but I think I would have to say playing outside was always more challenging and physically exerting.

Q – So you think that you liked being more active that is why you enjoyed being outside more so than inside?

A – Sure

Q – Or did it offer you more freedom to do whatever you wanted as well?

A – Yea and I was always kicked outside so I didn’t break anything. And we did have more freedom outside because mom wasn’t out there with us.

Q - Alright so the next portion of the interview is about whether you remember learning about nature at all as a kid. So this can be formal through school or Scouts... or it can be informal like from your parents.

A – I learned about the wilderness through Scouts and school, and being out in it camping. I have been camping since I was a newborn. Camping is awesome.

Q – Great, do you remember anything specific?
A – I got lost in the woods trying to get back to the Scout camp once because I thought I knew the way... I had to do all the dishes that night because we were in so much trouble.

Q – So do you remember what exactly you learned?

A – I remember going to this game reserve with rivers and cabins, they took us here on school trips and sent us into the forest. We were taught how to make shelters, and we learned about owl droppings and about animals and plants.

Q – Great so who were you with?

A – When I was camping I was mostly with my parents and grandparents. But the most we learned was how to cook over the fire. In terms of learning I mainly think this came from Scouts and school stuff.

Q – That’s good. So you think that a lot of your memories do include nature play? I know you answered that already [ha ha]...

A – Yeah [ha ha]

Q – Okay so the last question is whether you think that interacting with nature or playing outside shaped you at all as a person?

A – I don’t really know...

Q – By this I mean your interests? Or beliefs?

A – I still really enjoy being outside, and camping and all that stuff.

Q – But you are not that concerned about environmental issues? Or how you impact it?

A – Not really, I mean I don’t litter and I try to be respectful in that way. But I am not totally concerned with how I affect the environment...

Q – Okay, excellent well thank you so much for your help.

A – No problem.

Interview #12

Q – Okay, so, like I said I am going to be asking you about your childhood memories. So you saw on the questionnaire that I am kind of trying to use the ages from three to eight, but if you can’t really remember that, then just general memories is good enough.

So I want you to think of where you grew up, so this can include your house, your neighbourhood or your town. Parks or whatever that you played in. So describe like the size
and the qualities of these places. So I am trying to get a feel for whether you had a lot of open free space, or quiet, or whether it was...

A – So, I grew up in Toronto suburbs so there wasn’t a whole lot of open space.

Q – Yeah,

A – Our yard was fairly big though, so in the front we had these two giant pine trees, and there was this little fort underneath, because, you know, tree canopies. Um and then the back yard we had two apple trees, and a garden. So like there were trees to climb, and enough room for like baseball, and like romping around and playing, and stuff like that.

There were not really any parks close to our house, at least none that I remember going to. Maybe we just ignored them. But my school yard in particular for grades one and two [I moved schools a bunch of times] um, yeah. It was a school yard of course it is all relative because you are a kid but there was this back section that was all pine trees, and all the pine needles on the ground and stuff. So we would always go through the trees and stuff.

This was before they had to chop them off so all of the lower trees were gone. So we could actually climb the trees, and just like check out plants and do cool stuff... and dig in the dirt or whatever. Um so that was CH West, and then, so that was junior kindergarten and senior kindergarten, and the first half of grade one. So the second half of grade one and grade two I was at Avendale, and that one had a pretty big yard, and there were trees towards the back as well and very open. Um yeah we would always like hang out in trees and like cut holes in the ground, where the dirt was loose enough, and like lay a trap for someone to trip in... [Ha ha]

Q – [Ha ha]

A – So it was pretty outdoorsy

Q – Yeah, okay, so again kind of think of these places and describe what it offered you in terms of a child. So behaviours that you did and how it made you feel. So it can be free play, imaginative, sports, umm, just what kind of activities.

A – A lot of it was nature based, from what I remember. So at Avendale, they, you know they cut the lawn and they leave all the like little blobs of grass that have been cut off. So we would grab the grass and put it in the chain link fence on one side of the thing, and trying to make a fort by making it into a wall. Umm or balancing along these wooden things. So whatever the wooden things are called that in the playground contains all of the pebbles, walking on those. I mean a lot of it was on the playground equipment, but I would say that maybe half the time we were doing something with the trees in the back, and running around playing tag and using the trees as like the safe places. The other half on the play equipment. So in terms of my free time at home; most of it wasn’t too organized. Just kind of wandering around. But if my friends were over of course we would kind of arrange a game. But it wasn’t, yeah as much just hanging around.

I don’t know if that answers your question enough.
Q – Yes, Um, so you did mention that there was some structure but you kind of take your imagination and make something different about what is there. So how did this make you feel. Did you feel challenged? Or Creative?

A – Um definitely creative. Especially when you are working with your friends. It is like oh here is that idea, and then like hey let’s try this. Especially in the winter time when it is like we can build a fort like this, or have this giant snow ball. We had a really giant snow ball and we tried to move it, so we were going to get one of the big kids to move it, but then he had to like break it apart and make it smaller. We were like no don’t break it! Then we tried to like hack away at the bottom.
I mean it is weird to go from an adult perspective, to a kid’s perspective, like well I guess it made me feel relaxed and free, and like a kid. But I mean at the time...
Um I felt engaged, and like the world was, like it didn’t really matter because everything was possible kind of thing, because you could do whatever you wanted. Within limits. I mean I know you couldn’t go strangle someone beneath a tree or something. But just to have that freedom to roam was really nice. And I would say fulfilling, but I can’t imagine my seven year old self saying that.

Q – [Ha ha]

A – But I think you get the idea.

Q – Yes, [ha ha] that is good.
Okay, so I want you to pick one of your favourite places, or it can be most memorable instead. And describe that place for me.

A – Okay

Q – And why you liked it basically.

A – Alright I am going to go with the like tree fort we had in the front yard. So that was set, Oh geese, I don’t even remember looking at it from the street... But maybe like six feet from the curb edge? Because we didn’t have sidewalks on our suburb street. Um so two giant, actually it was spruce trees, so one was a blue green spruce and the other one was green. So you would duck under the branch, and there was a space underneath, because trees grow together and then branches die... you know how it works... And my dad moved these giant concrete blocks, so they were maybe two feet by two feet squared, so that we had a good whatever, non muddy area to work on and stuff.

Q – Yeah

A – It felt safe, and comforting, I think the noises of the trees and stuff like that. So that you could see out, but other people couldn’t see you. It was sweet. Also my sister and I played in it a lot because we were friends when I was younger [unlike now]. So um part of that is just the fun that was had in there because we’d I don’t know make sling shots out of certain branches, and just do whatever in there. Hide, and have picnics and stuff. It was like safety, but available to anything.

Q – That is great!
Okay, um, so I kind of alluded to this with the “whether or not you were involved in organized activities or not” but do you think the majority of your memorable play time was spent outdoors? Or indoors?

A – It is easier for me to remember the organized activities, um, I don’t know if that is because the lights were brighter in the skating rink or not, but...
Hmm I would say it was pretty tied to be honest. I would like to say it was the outdoors because I have fond memories of the particular games kids would do. And I look back more fondly upon the nature activities, but I think it is easier to remember the swimming lessons. And like oh my gosh, the first time you put your face underwater, and stuff like that.

Q – Okay, so you think it is kind of...

A – Kind of both of them, for different reasons.

Q – Okay, so I want to next get a feel of whether you remember learning about nature at all. So any experimentation or anything. It can be formal, like through school or field trips; or it can be a parent, or if you were in any groups or activities, like a garden club, or something like that. Just anything where you remember kind of learning about nature.

A – Okay, so I definitely remember, I think grade two, the water cycle diagram, and then colouring in the little drips versus scribbling the whole thing in blue. Um so there is the formalized thing of the water cycle, and the how plants grow, and kind of photosynthesis but not really.

Q – And grow like little bean plants...

A – Actually yeah we did do that!

Q – Yeah I did that.

A – But also in addition to that we did the sawdust but with grass seeds on the top, so it is like a Mr. Potato Head, or like a Chia plant but with panty-hose. Um, except when I put the grass seeds in, I put the grass seed in and then the saw dust, and shook it. Which we weren’t supposed to, so I had grass growing all up through the face. Everyone was like no! But I was like whatever.
Um, so that was our way of learning how things grow, that they need roots and stuff like that. So that was school, and one time in particular that somehow really stuck in my head was coming back inside from recesses one of the parent volunteers that supervised recesses or whatever. Those little plants that have the yellow flowers, she said was something that they make tea out of. Which didn’t really make sense to me until I was like 16 or something, and I was like OH Chamomile! They are related or whatever. Because I was like smelling them, and matching up the smells. And I was like wow!
Also I forget exactly what it was, my sister was telling me about plants... I don't know we played with dragon snaps. So I learned the name of those, because you are always playing with them and making the little mouths move. And my parents told me a bit about what certain flowers are because I was always like: “what is the one with all the ants in it?” And I kept calling they were like it is actually called this name.
I think it is a peony or something...
Q – Yes it is

A – Um, yeah so... does that answer that? There are some examples of it but I don’t know if you want like a more qualitative of where did I learn more of it...

Q – Um no. No that is good.
So do you think that the most prominent was at school? Or...

A – Define prominent?

Q – Like you learned the most. Or do you think you learned the most by just exploring and...

A – I think I learned more by exploring, and by like offhand comments from more knowledgeable people, like adults, and my sister. Um, I mean like of course I learned a bunch during school, like the water cycle: kind of a big deal!

Q – Oh yes.

A – But at the same time my parents also taught me that. I mean I didn’t know the word for transpiration until I did the stupid little cycle. But um, I learned more from outside, and more that I retained from outside.

Q – Yeah

A – Because I don’t remember all stages of the water cycle right now. Or whatever about properties that grow a stupid little plant in a cup. But I mean I remember that little chamomile like little plant and flowers my parents taught me about, so...

Q – So did your parents garden or anything like that?

A – Yeah

Q – Is that how they gave you the knowledge?

A – Yes, and now that you mention it: potato plants, at Sk they had us doing this thing with growing potato plants. They would take a potato and stick it in water and then it grows the potato plants... So we were always doing that.

Q – Yeah,

A – Um so I learned about all the different like processes, and the fact that they grow in the ground! And then you like take them out of the ground and stuff, and the bush or whatever...

Q – Okay

A – I don’t know if I am answering these or not?

Q – No, you are!
Um so you said that a lot of your more like fond memories are of nature or of nature play? Do you think like when you look back on your childhood: you said a lot of lessons where,
you can remember those better? Almost? Do you think that a lot of your significant memories include nature play? Or do you remember more of like, being at school?

A – The more significant memories are definitely of nature and outside stuff. So they are like more important and stuff in my mind. But some of the ones about skating and stuff are clearer? Like a snapshot of like my friend coming to skate with me, except it was after three weeks of my ignoring her because I thought she was annoying, she was like hanging around me. My mom was like you should try hanging around her, and I did and then she was my friend. Um yeah, weird thought. And like tennis lessons and whatever. So, or skating around and being like, Oh it is almost time for the Susan’s to be on, but I went skating instead. Or something like that, like I remember those things, but they don’t matter as much as the cool things I did outside.

Q – Okay, so the last question is, I want to kind of get a feel whether you think any of these nature play experiences shaped who you are today. So that can mean, like you really enjoyed the contact you had with nature so now you will like go back to a park or read outside. Or something like that, or just try to figure out if you think it had an effect on your personality or anything like that.

A – I think it did have an effect on my personality, and upbringing and who I am and stuff, definitely. Cause in part the just being outside in the dirt and the mud and more rough and ready rather than “oh my hands need to be clean all the time” whatever. Probably also has something to do with my willingness and propensity to go barefoot. Because not that I was barefoot that much as a kid but, I mean you are barefoot when you are a kid. It just happens.

A – I definitely agree with that.
Q – Yeah? Like um, if you don’t have that connection, maybe you are not as inclined to care about the loss of green space, but like, that is the point of view for like the big picture I am trying to get to. Is like to see if you will be more apt to like, um that is what the questionnaire. The New Environmental Paradigm is about. So just trying to see if you will be more inclined to fight for environmental issues. So I don’t know if that kind of had an effect...

A – Yeah I mean so, I was a pretty nature(ie) kid, um not so much, as to like “oh that child is always attached to the tree, come and peel her off so we can go for dinner or whatever”. But um my environmentalism kicked in at 16, in high school, when I realized that… I had to do this project in English class and so I decided to compare recycled paper and products like that versus making things out of wood and metal. Which one is like better for the environment, you know. Um and then I realized that tree paper can only be recycled three to four times because of the length of the fibres. Whereas hemp paper can be recycled up to eight times because the fibres are longer. And at that I was like “what the hell, why does DuPont do this thing with the trees, and why are they using trees instead, its such an available resource that is actually harder lingam… I still don’t know how to pronounce that word. Okay five minutes later… But yeah so, because I was really kind of always been involved with trees, from that childhood connection, then, to realize that they are being chopped down, like, hurts. So you know, I don’t know if you have seen that image that is like yay more toilet paper, and half the forest is chopped down or whatever, but that, it kind of tears me up inside a little bit. That is because of my childhood nature(ie)(ness). And I mean right now seeing trees as lungs, even just in the like branches. Uh I do feel connected to the earth and I honestly can’t say for sure whether that is from my childhood or because of something that happened or whatever. But I mean it had to of played a role.

Q – Yes

A – So but I mean otherwise the fight for the environment thing might just be my rebellious personality...

Q – [Ha ha] Yeah.
Like I know I grew up on basically a farm, like all the things that I did, I would think I would want my kids to have those kind of experiences. So like, I used to, we had this row of cedar trees, and I would make like each tree a different room of the house or something. So this tree is the kitchen, and like stuff like that, and it just allows you so much more so that is basically why I am trying to figure this out. But that was my last question. It is not a very long interview, but I just wanted to get a feel of your childhood memories and where you played.

A – Do you want clarification on anything?

Q – No, I think you did a good job.