

Reclamation, participation and self-determination: Land-based learning and  
community gardening and farming in Garden Hill First Nation

by

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## **Abstract**

Indigenous young adults in northern Manitoba face social, economic and health barriers far beyond that experienced by non-Indigenous Canadian young adults. A food crisis in northern Manitoba also persists, as evidenced by high rates of food insecurity and diet-related disease. This community-based participatory research project considers how young adults working on a community farm participate in Indigenous food sovereignty through a photo elicitation project with Oji-Cree young adults employed on a 15-acre community farm and interviews with Elders and community food educators. The outcomes of this research tell a story of community gardening and farming in Garden Hill First Nation (Kistiganwacheeng) as traditional food practices that connect young adults to their culture and supports self-determination, cultural reclamation, and participation in an Oji-Cree food system. Research outcomes also describe an Indigenous food systems course for Oji-Cree young adults that focuses on land-based education.

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## **List of Tables**

Table 1: Principles of Community Based Participatory Research	9
Table 2: Research Objectives and Methods Summary	41
Table 3: Summary of Adult Semi-Structured Interviews	45
Table 4: Sample of Adult Semi-Structured Interview Questions	46
Table 5: Summary of Photovoice	48
Table 6: Sample of Photovoice Interview Questions	48
Table 7: Summary of Young Adult Semi-Structured Interviews	49
Table 8: Sample of Young Adult Semi-Structured Interview Questions	49
Table 9: Research Themes	61
Table 10: Recommendations for an Indigenous Food Systems Course for Young Adults in Garden Hill First Nation (Kistiganwacheeng)	118

## List of Figures

Figure 1: Kitikan (Garden) Farm Sign	55
Figure 2: Personal Garden on the Farm © 2017 by Canada	93
Figure 3: Greenhouse Tomato © 2017 by Meechim Farm	94
Figure 4: Apple Tree with Pole © 2017 by Chapman	100
Figure 5: Planted Pea Field © 2017 by Sam	101
Figure 6: Northern Apple Tree © 2017 by Canada	102
Figure 7: Land Centered Model of Indigenous Food Sovereignty in Garden Hill First Nation (Kistiganwacheeng)	115
Figure 8: Impact of Community Gardening and Farming in Garden Hill First Nation (Kistiganwacheeng)	117

## Table of Contents

Abstract	I
Acknowledgements	II
List of Tables	III
List of Figures	IV
<b>CHAPTER 1.0: INTRODUCTION</b>	1
1.1 Research Context	1
1.2 Research Purpose and Objectives	4
1.3 Study Area	5
1.4 Research Methodology	7
1.5 Research Significance	11
1.6 Thesis Organization	12
1.7 References	13
<b>CHAPTER 2.0: LITERATURE REVIEW</b>	17
2.1 Indigenous Food Systems	17
2.1.1 Indigenous Knowledge	18
2.1.2 Indigenous Agriculture	18
2.1.3 Colonization and Agriculture	20
2.1.4 Land-Based Education	21
2.2 Food Security, Food Sovereignty and Indigenous Food Sovereignty	22
2.2.1 Food Security	22
2.2.2 Food Sovereignty	23
2.2.3 Indigenous Food Sovereignty	24
2.3 Community Farming and Gardening	27
2.3.1 Young Adult Impact	29
2.3.2 Community Impact	30
2.4 References	32
<b>CHAPTER 3.0: RESEARCH METHODS</b>	39
3.1 Overview of Research Instruments & Outcomes	40
3.2 Participant Recruitment	42

3.3 Research Instruments	44
3.3.1 Adult Semi-Structured Interviews	44
3.3.2 Photovoice	48
3.3.3 Young Adult Semi-Structured Interviews	46
3.3.4 Limitations	49
3.4 Data Analysis	50
3.5 Validity and Verification	51
3.6 Dissemination	54
3.7 Ethical Considerations	55
3.8 References	57
<b>CHAPTER 4.0: RESULTS &amp; DISCUSSION: Understanding an Indigenous Food Systems Course in Garden Hill First Nation (Kistiganwacheeng): Land, Language, Wellbeing and Young Adults</b>	<b>60</b>
4.1 What the Land Can Offer: Learning About Traditional Food and Being Oji-Cree	61
4.1.1 Learn by Living	61
4.1.2 Physical and Cultural Survival	64
4.1.3 Improved Well Being	67
4.1.4 Language	70
4.2 Land Based Education: Barriers and Opportunities	73
4.2.1 Financial Cost	73
4.2.2 Technology	76
4.2.3 Engaging Young Women	78
4.3 Chapter Summary	80
4.4 References	81
<b>CHAPTER 5.0: RESULTS &amp; DISCUSSION: Community Farming and Gardening and in Garden Hill First Nation (Kistiganwacheeng)</b>	<b>84</b>
5.1 Reclaiming Culture: Past, Present and Future of Oji-Cree Community Farming and Gardening	84
5.1.1 History of Gardening	84
5.1.2 Cultural Reclamation	90
5.1.3 Balancing Two Worldviews	95
5.2 Community Farming and Gardening: Food that Supports Self-Determination	104

5.2.1. Increased Food Security	104
5.2.2 Supporting Traditional Economies	107
5.3 Chapter Summary	109
5.4 References	110
<b>CHAPTER 6.0: CONCLUSION</b>	<b>114</b>
6.1 Indigenous Food Sovereignty and Young Adults	114
Figure 7: Land Centered Model of Indigenous Food Sovereignty in Garden Hill First Nation (Kistiganwacheeng)	115
6.2 Farming, Gardening and Indigenous Food Sovereignty	116
Figure 8: Impact of Community Gardening and Farming in Garden Hill First Nation (Kistiganwacheeng)	117
6.3 Recommendations for an Indigenous Food Systems Course	118
6.4 Final Thoughts	120
6.5 References	121
<b>APPENDICES</b>	<b>122</b>
Appendix A: Community Research Dissemination Posters	122
Appendix B: Consent Forms	124
i. Adult Interview Consent Form	124
ii. Photovoice Consent Form	128
iii. Young Adult Interview Consent Form	133



## **CHAPTER 1.0: INTRODUCTION**

### **1.1 Research Context**

Indigenous food systems are vast and all encompassing, containing knowledge of the air, land, water, and soil and all the fungi, animals and plants within them (Indigenous Food Sovereignty Working Group, n.d). Indigenous food systems are also deeply connected to the cultural, economic, political, social and spiritual lives of Indigenous peoples. Food related knowledge was passed down through the generations as young people spent time on the land hunting, fishing, gathering and gardening with knowledgeable community members and Elders and participating in the processing and consumption of traditional food (Indigenous Food Sovereignty Working Group, n.d; Martin, 2012; Grey & Patel, 2014). While much diversity exists amongst Indigenous food systems across North America, Indigenous peoples are united in their intimate knowledge and respect for the land and value the immense wisdom the land offers (Martin, 2012; Cote, 2016; Kimmerer, 2013; Morrison, 2011; Four Arrows Regional Health Authority, 2018; Martens, 2018).

Although much Indigenous food-related knowledge remains, a lot has been lost over time. Indigenous food systems were largely intact in Canada up until the signing of the Numbered Treaties (Fieldhouse & Thompson, 2012). As Indigenous peoples were displaced from their territories under policies like the Dominion Lands Act of 1872, many Nations signed the Numbered Treaties, which ceded traditional territory to the government in exchange for reserve land and hunting and fishing rights. Nations insisted on proper farming equipment and livestock to supplement the foods they hunted and gathered. Domestic agriculture and a traditional hunting and gathering lifestyle allowed many communities to continue to meet their dietary needs while passing invaluable cultural and land-based knowledge through the generations (Daschuk, 2013; Allan & Smylie, 2015; Burnett, Hay & Chambers, 2016; Food

Secure Canada, n.d). Over time, government policies under the Indian Act, such as residential schools, became increasingly paternalistic, impacting Indigenous social, economic, political and cultural systems to the point of dysfunction. For example, residential schools separated children from their families with the intent of stripping Indigenous languages, culture, livelihoods and religion and replacing with languages, religion, livelihoods and culture appropriate to a Western society. MacDonald & Hudson (2012) have suggested the atrocities that occurred in residential schools constitute cultural genocide.

The physical, mental, emotional, social and cultural trauma experienced by Indigenous children, families and communities created by the residential school system, reserve system, and other policies of assimilation, have had an acute and long-term impact on Indigenous food systems. Loss of land, language, traditional knowledge and societal structures greatly impacted community ability to retain and participate in Indigenous food systems and sovereignty, including the intergenerational transfer of traditional food-related knowledge. Many Indigenous Nations came to depend on food rations provided by the government and other market-based means of acquiring food, resulting in vast hunger as rations were often rancid and nutritionally inadequate, and continued cultural losses as these foods competed with, and sometimes replaced, traditional foods (Daschuk, 2012; Allan & Smylie, 2015; Burnett, Hay & Chambers, 2016; Food Secure Canada, n.d). Today, dispossession of traditional knowledge, along with the costs of procuring traditional food, access to land, and availability of traditional foods due to a changing climate, settlement and contamination continue to impact the vitality of Indigenous food systems (Haman et al. 2010).

Revitalizing Indigenous food systems is a matter of Indigenous food sovereignty. Today, the oppressive legacy of colonization and racism, and a Canadian food system characterized by

large industrial farms, natural resource exploitation, multinational processing, packaging and processing chains, and a value for profit over health, has left many Indigenous communities without physical, cultural and economic access to good food (Holt Giménez & Shattuck, 2011; Power, 2008). Indigenous food sovereignty has been described as being a state in which “all nations, including Indigenous nations, have the right to define strategies and policies and develop food systems and practices that reflect their own cultural values around producing, consuming and distributing food” (Cote, 2016, p.8). This description recognizes the diversity in Indigenous food systems as well as supporting a place-based and community defined conceptualization of Indigenous food sovereignty. Significant impetus is also on the involvement of Indigenous young people in the process of reclaiming traditional food ways and knowledge as young people will ensure this knowledge is carried into the future (Four Arrows Regional Health Authority, 2018). Furthermore, the involvement of young people in the reestablishment of traditional food ways and systems is invaluable for the cultural, physical, emotional, spiritual and social development of young people (Seeds of Native Health, 2018; Trinidad, 2009; Fulford & Thompson, 2013).

Indigenous food sovereignty is also about respectful relationships between non-Indigenous and Indigenous peoples. The traumatic impacts of colonial policies and institutions on Indigenous peoples are becoming more widely recognized in Canada. In 2008, then Prime Minister Stephen Harper officially apologized to all residential school survivors on behalf of the Canadian government and all Canadians for the inter-generational impact of the residential school system. The Truth and Reconciliation Commission (TRC) was launched in 2008 as part

of the Indian Residential Schools Settlement Agreement,<sup>1</sup> with a mandate to share the truth about residential schools with all Canadians and move forward in reconciliation (Indigenous & Northern Affairs Canada, 2018; Truth and Reconciliation Commission of Canada, 2015).

According to the TRC (2015) reconciliation means “establishing and maintaining a mutually respectful relationship between Aboriginal and non-Aboriginal peoples in this country. In order for that to happen, there has to be awareness of the past, acknowledgement of the harm that has been inflicted, atonement for the causes, and action to change behaviour” (p.6). It is the intent of this thesis to contribute to the atmosphere of reconciliation and relationship building in Canada by acknowledging past and present harms and bringing attention to new paths forward.

## **1.2 Research Purpose and Objectives**

### **Purpose:**

Consider how young adults working on a community farm participate in Indigenous food sovereignty.

### **Objectives:**

- 1) Document community perspectives on Oji-Cree food and culture to inform the development of an Indigenous food systems course for young adults.
- 2) Describe how working on a community farm supports young adult participation in Indigenous food sovereignty.

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<sup>1</sup> The Indian Residential School Settlement Agreement is the largest class action settlement in Canadian history. Part of this settlement includes financial compensation for the estimated 150,000 residential school survivors, commemorative activities, measures to support Indigenous health and healing, and establishment of the TRC to begin to amend the legacy of residential schools.

### 1.3 Study Area

Garden Hill First Nation (Kistiganwacheeng) is located 600 km northeast of Winnipeg, Manitoba on Treaty 5 territory in the picturesque boreal forest. Surrounded by lakes, Garden Hill First Nation is one of four Oji-Cree communities in the area widely known as Island Lake. Oji-Cree communities are distinct to Manitoba and Ontario and were formed as Ojibwe people north of Lake Superior integrated with Lowland Cree (Lytwyn, 2002). With the coming together of different nations through intermarriage and movement north, the Oji-Cree people and language emerged.

The Oji-Cree people of Island Lake lived a nomadic lifestyle in synchronicity with the natural world. A traditional lifestyle included following the food supply by traveling in family or small groups by canoe in the summer and dog sled in the winter. Traditional foods were hunted and collected depending on the season, for example berries and gardening in the summer and moose and caribou hunting in the fall. Fishing of whitefish, sturgeon and northern pike occurred throughout the year and was an important source of nutrition (Lytwyn, 2002). Patterns of hunting, gathering and growing food brought people back to the same seasonal sites and routes that had sustained their ancestors for many generations (Keno & Day, personal communication, August 15, 2017; Lytwyn, 2002).

In 1909, the Oji-Cree people signed the Treaty 5 Adhesion and officially became known as the Island Lake Band (TREATY No. 5, 1969). In 1969, Island Lake Band split up into four distinct bands, Garden Hill First Nation, Wasagamack First Nation, St. Theresa Point First Nation and Red Sucker Lake First Nation. Today, Garden Hill First Nation, or Kistiganwacheeng in Oji-Cree, is home to about 3,500 people and is accessible by road only in the winter (Thompson et al., 2011). Up until about the 1970s, Garden Hill First Nation was relatively food

secure, relying on local foods, some trading for sugar, salt, lard, etc. and a limited cash economy. Diabetes was relatively unknown in the community. The combination of Residential School policies and the crash of the fur trade around this time, disrupted social, economic and political systems that led to increased reliance on the government and loss of traditional knowledge and teachings (Thompson & Harper, 2018). Today high household food insecurity, chronic disease, poverty and unemployment challenge the lives of community members (Thompson, et. al, 2011). The unemployment rate in Garden Hill is also extremely high at 25.2% compared to a population average of 6.2% in Manitoba (INAC, 2017a). According to data from the 2011 National Household Survey, government transfers on average make up 42% of all income received by community members in Garden Hill compared to 13% in Manitoba (INAC, 2017b).

In 2014, a 15-acre farm<sup>2</sup>, called Meechim Farm Inc., was established in Garden Hill First Nation through the partnership of Garden Hill First Nation community members, AKI Energy, Four Arrow Regional Health Authority, and the University of Manitoba (Loney, 2016). Meechim Farm Inc. was the outcome of decades of grassroots food initiatives in the community and the long-term vision of food leaders in Garden Hill First Nation, such as Alec Keno. Meechim Farm Inc. was developed as a social enterprise with a mission to train and provide employment for young adults and reduce food insecurity in the community. The farm provides training and employment for young adults, as well as affordable and quality fresh produce and chicken in the community. In Oji-Cree, “Meechim” means food.

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<sup>2</sup> When speaking about food production in Garden Hill First Nation, this thesis uses both the terms farming and gardening, as a community farm called Meechim Farm Inc., as well as many small home gardens exist in Garden Hill. When these two terms were differentiated by community members, farming included animal husbandry whereas gardening included only vegetable production. The word kitikan, or garden in Oji-Cree, was also used by community members, although less frequently, likely due to interviews being conducted in the English language.

A focus on empowering young adults in Garden Hill and on Meechim Farm Inc. is important due to the unique role young adults play in Indigenous societies, as well as due to the unjust barriers they face. Indigenous young adults are vital to the preservation and evolution of Indigenous culture as carriers of Indigenous knowledge, teachings and language into the future (Four Arrows Regional Health Authority, 2018). Further, the overall population in Garden Hill is young, with a median age of 20 years old (Statistics Canada, 2016). For barriers, research shows that Indigenous young adults in Canada face social, economic and health barriers far beyond that experienced by non-Indigenous young adults. Indigenous youth suffer suicide rates five to seven times higher than non-Indigenous youth, while having the least access to mental health and addiction services compared to other Indigenous and non-Indigenous age groups (Health Canada; 2016; Jones & Butler, 2017). Research in First Nations communities in northern Manitoba has also shown alarming rates of chronic conditions and disease among youth, and high rates of household food insecurity (Riediger, Lukianchuk & Bruce, 2015; Bruce, Riediger, Zacharias & Young, 2011; Thompson, Kamal & Wiebe, 2012). A 2015 report from the Government of Manitoba further shows that Indigenous children are being placed in out of home care at a much higher rate than non-Indigenous children. For example, Indigenous children in Manitoba make up 80% of the cases of children being placed in out of home care but make up only 29.5% of the total population of children in the province (Government of Manitoba, 2015). These social and health gaps are becoming recognized as a direct result of previous and current Canadian government policies, including residential schools (TRC, 2015).

## **1.4 Research Methodology**

### *Research Approach*

A research approach is the underlying philosophical ideal that frames the research

project, including how data is collected, analyzed and interpreted and is dictated by the nature of the problem being studied (Creswell, 2014; Wilson, 2008). I chose a transformative research approach to address my research goal and objectives as this approach focuses on how inequities are created and maintained in society because of race, income, ethnicity, indigeneity and gender, but also has calls for social action and focuses on relationship building. A transformative research approach stresses collaborative research and prioritizes giving a voice to structurally disadvantaged communities (Creswell, 2014; Kovach, 2009). This research is qualitative in nature, chosen to help center the complex meanings and experiences participants bring to the study and researcher role and reflexivity.

### *Strategy of Inquiry*

The strategy of inquiry I chose to take for my research is community-based participatory research (CBPR). Although there is some debate whether CBPR is a strategy of inquiry, a growing body of literature supports CBPR as a strategy of inquiry as it shapes specific research methods and procedures and is guided by a set of principles (see Table 1) (Creswell, 2014; Buchanan, Miller, & Wallerstein, 2007; Halseth, Markey, Ryser & Manson, 2016; Roche, 2008; Israel, Schulz, Parker & Becker, 2001). CBPR is “guided by the core principles of collaboration and partnership where research brings together community and academic expertise to explore and create opportunities for social action and social change” (Roche, 2008, p.2). Compared to community based-research, which stresses the community as a setting or place, CBPR involves the active participation and influence of community members throughout the research process (Israel et al., 2001).



**Table 1: Principles of Community Based Participatory Research**

- Recognizes community as a unit of identity;
- Builds on strengths and resources within the community;
- Facilitates collaborative, equitable involvement of all partners in all phases of the research;
- Integrates knowledge and action for mutual benefit of all partners;
- Promotes a co-learning and empowering process that attends to social inequalities;
- Involves a cyclical and iterative process;
- Addresses health from both positive and ecological perspectives;
- Disseminates findings and knowledge gained to all partners; and
- Involves a long-term commitment by all partners.

Based on: Israel, B., Schulz, A., Parker, E. & Becker, A. (2001). Community-based Participatory Research: Policy Recommendations for Promoting a Partnership Approach in Health Research. *Education for Health, 14* (2), 182- 197.

My research involved a First Nation's community and CBPR is seen as a best practice method for working with Indigenous communities (Halseth, 2016; Bharadwaj, 2014; Ferreira & Gendron, 2011; Holkup, Tripp-Reimer, Salois & Weinert, 2004). A CBPR approach helps to ensure that research undertaken in Indigenous communities does not take on a western, colonial perspective by inviting research participants to actively engage in the research process, co-create knowledge, and contribute in a meaningful and authentic manner (Cargo & Mercer, 2008; Halseth, 2016; Shea, Poudrier, Thomas, Jeffery, & Kiskotagan, 2013). As the community is involved in the research process, the research becomes more useful and relevant to the community and misunderstandings due to cultural differences are managed more easily (Bharadwaj, 2014; Flicker, Savan, Kolenda, & Mildemberger, 2008). By working closely with research participants in the creation of knowledge and solutions, CBPR can also help to develop culturally relevant theories and assist in decolonization (Castleden, Garvin, & First Nation, 2008; Shea, et al., 2013; Darroch & Giles, 2014). Indigenous scholars have recognized that although

Indigenous epistemologies and ontologies<sup>3</sup> cannot be fully captured in any western research paradigm including CBPR, CBPR most closely aligns with an Indigenous research paradigm as it stresses relationships, reciprocity, empowerment, respect, equity, and reflexivity (Blue Bird Jernigan, 2010; Wilson, 2008; Kovach, 2009).

### *Situating Myself*

Trained as a Registered Dietitian, I come from a background of studying food and nutrition from a positivistic approach where the value of food is largely reduced to the nutrients it contains to feed the physical body. In my work as a Registered Dietitian, I see this dominant discourse systematically reinforced through political, health and education systems as well as informally through the media and conversations between family and friends. This thesis, including the research participants, mentors and scholars that have inspired my writing, has challenged me to think of health, food and nutrition in an increasingly critical manner. Working cross-culturally and learning about food from an Indigenous worldview has highlighted the social, emotional, physical, cultural and spiritual harm caused to both people and the planet when health, food and nutrition are viewed and enacted upon (such as in industrial agriculture, mainstream health education, etc.) in a solely biomedical, positivistic fashion.<sup>4</sup>

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<sup>3</sup> Due to the limitations of the dominant research paradigms to adequately capture and honor Indigenous science, knowledge, stories and culture, Indigenous scholars are creating an approach to research based in Indigenous ontology and epistemology. See Wilson, 2008; Kovach, 2009 and Smith, 1999 for examples.

<sup>4</sup> In response to the limits of biomedical and positivist science to fully explain the social, emotional and cultural context of food and nutrition, an initiative called Critical Dietetics was formed by scholars and Registered Dietitians. Critical Dietetics aims to expand the paradigm in which health, nutrition and food are researched, educated and practiced in the profession of dietetics. For example, see Gringas, Asada, Fox, Coveney, Berenbaum & Aphramor, 2014.

Engaging with this research was also about understanding my own identity. My ancestors came to Canada from the Ukraine, Poland, and Belgium in the early 1900s and settled in Treaty 6 territory. They were given land to farm and kept and sold horses. I realize that I am a descendant of European settlers to Canada who benefited from the displacement of Indigenous peoples from their land. I continue to participate and benefit from the social, educational, and political systems set up by early white settlers and the Government of Canada that subsequently marginalized, and continue to devalue, Indigenous peoples and societies. This is a troubling and uncomfortable situation as a researcher, health professional and citizen of the country now known as Canada. This sense of unease pushed me to reflect on, and learn as much as I could, about the history of Indigenous peoples in Canada and the contemporary issues faced by different Nations. I entered my research as a non-expert on Indigenous issues and Oji-Cree culture and as an outsider to the community. I recognize I am a white, educated, and middle-class woman with the privilege and resources to collect and share the stories of community members who may not have the same opportunities as me due to racism, classism, and poverty other socially constructed barriers. My role as a researcher was to focus on community needs, construct and maintain meaningful and collaborative relationships with community members and share the stories I gathered with accuracy, integrity, and respect.

## **1.5 Research Significance**

Community farming and gardening have been studied widely for positive benefits to community and young adult development, but little research has been done with remote, Indigenous reserve communities. Even fewer studies have looked at community farming and its relationship to Indigenous young adults, culture and food sovereignty. This research contributes to scholarship examining how Indigenous food sovereignty is described and enacted upon in

diverse Indigenous cultures. This study also adds to the existing data on photovoice as a research and community engagement tool with young adults on a First Nation reserve.

### *Community Benefits*

Through this research, the community received feedback on how their farming and gardening is contributing to young adult and community development. Young adult participants had the opportunity to take photos of their experiences on the farm and contribute to the development of educational farm signs in Oji-Cree. This research also helped to bring a community voice to the development of an Indigenous Food Systems Course in Island Lake for young adults by summarizing and sharing recommendations from community members. Lastly, the information from this study helps to inform and assist other Indigenous communities in the development of land-based programs that have an emphasis on food and culture.

## **1.6 Thesis Organization**

This thesis is organized into six chapters. After the introduction chapter, the second chapter covers the necessary literature to provide context to the research study including topics such as Indigenous food sovereignty, Indigenous agriculture and the impact of community farming on young adults and communities. The third chapter details the research design, including research tools, participant recruitment and ethical considerations. Chapter four and five present the results of the research study, place the results within the context of applicable literature, and provide chapter summaries. Specifically, chapter four explores the first objective of the research, to document community perspectives on Oji-Cree food and culture to inform the development of an Indigenous food systems course for young adults. Chapter five explores the second objective of the research study, to describe how working on a community farm supports young adult participation in Indigenous food sovereignty. Lastly, chapter six provides overall

thesis conclusions and recommendations. Each chapter in this thesis is followed by references to allow the reader to easily locate the sources of information in each chapter.

## 1.7 References

- Allan, B. & Smylie, J. (2015). *First Peoples, second class treatment: The role of racism in the health and well-being of Indigenous peoples in Canada*. Toronto, ON: The Wellesley Institute.
- Bharadwaj, L. (2014). A framework for building research partnerships with first nations communities. *Environmental Health Insights*, 8, 15–25.  
<https://doi.org/10.4137/EHI.S10869>
- Blue Bird Jernigan, V. (2010). Community-Based Participatory Research With Native American Communities: The Chronic Disease Self-Management Program. *Health Promot Pract*, 11(6), 888–899.
- Bruce, S., Riediger, N., Zacharias, J., & Young, TK. (2011). Obesity and obesity-related comorbidities in a Canadian First Nation population. *Prev Chronic Dis*, 8(1).
- Buchanan, D. R., Miller, F. G., & Wallerstein, N. (2007). Ethical issues in community-based participatory research: balancing rigorous research with community participation in community intervention studies. *Prog Community Health Partnersh*, 1(2), 153–160.
- Burnett, K., Hay, T. & Chambers, L. (2016). Settler Colonialism, Indigenous Peoples and Food: Federal Indian policies and nutrition programs in the Canadian North since 1945. *Journal of Colonialism and Colonial History*, 17(2).
- Cargo, M., & Mercer, S. L. (2008). The value and challenges of participatory research: Strengthening its practice. *Annual Review of Public Health*, 29, 325–50.  
<https://doi.org/10.1146/annurev.publhealth.29.091307.083824>
- Castleden, H., Garvin, T., & First Nation, H. (2008). Modifying Photovoice for community-based participatory Indigenous research. *Social Science and Medicine*, 66(6), 1393–1405.  
<https://doi.org/10.1016/j.socscimed.2007.11.030>
- Creswell, J. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (Ed. 4). United States: SAGE Publications Ltd.
- Coté, C. (2016). “Indigenizing” Food Sovereignty. Revitalizing Indigenous Food Practices and Ecological Knowledges in Canada and the United States. *Humanities*, 5(3), 57.  
<https://doi.org/10.3390/h5030057>
- Darroch, F., & Giles, A. (2014). Decolonizing Health Research: Community-Based Participatory and Feminist Theory. *CJAR*, 15(3), 22–36.
- Daschuk, J. (2013). *Clearing the Plains: Disease, Politics of Starvation, and the Loss of Aboriginal Life*. Regina, SK: University of Regina Press.

- Ferreira, M. P., & Gendron, F. (2011). Community-based participatory research with traditional and indigenous communities of the Americas: Historical context and future directions. *International Journal of Critical Pedagogy*, 3(3), 153–168.
- Fieldhouse, P., & Thompson, S. (2012). Tackling food security issues in indigenous communities in Canada: The Manitoba experience. *Nutrition and Dietetics*, 69(3), 217–221. <https://doi.org/10.1111/j.1747-0080.2012.01619.x>
- Flicker, S., Savan, B., Kolenda, B., & Mildenerger, M. (2008). A snapshot of community-based research in Canada: Who? What? Why? How? *Health Education Research*, 23(1), 106–114. <https://doi.org/10.1093/her/cym007>
- Food Secure Canada. (n.d). *Discussion Paper 1: Indigenous Food Sovereignty*. Retrieved from: [www.foodsecurecanada.org](http://www.foodsecurecanada.org)
- Four Arrows Regional Health Authority. (2018). *Indigenous Food Sovereignty Summit 2018*. Retrieved from: <https://ifss2018.com/previous-summit/>
- Fulford, S., & Thompson, S. (2013). Youth community gardening programming as community development: The youth for EcoAction program in Winnipeg, Canada. *Association for Nonprofit and Social Economy Research*, 4(2), 56–75. <https://doi.org/http://dx.doi.org/10.1108/17506200710779521>
- Gingras, J., Asada, Y., Fox, A., Coveney, J., Berenbaum, S., & Aphramor, L. (2014). Critical dietetics: A discussion paper. *Journal of Critical Dietetics*, 2(1).
- Government of Manitoba. (2015). *Healthy Environments, Healthy People: 2015 Health Status of Manitobans Report*. Retrieved from: <https://www.gov.mb.ca/health/cppho/docs/hehp.pdf>
- Grey, S., & Patel, R. (2014). Food sovereignty as decolonization: some contributions from Indigenous movements to food system and development politics. *Agriculture and Human Values*, 431–444. <https://doi.org/10.1007/s10460-014-9548-9>
- Halseth, G., Markey, S., Ryser, L., & Manson, D. (2016). The Case for Community-Based Research. *Doing Community-Based Research: Perspectives from the Field* (pp.43-70). McGill-Queen's University Press.
- Haman, F., Fontaine-Bisson, B., Batal, M., Imbeault, P., Batal, M., & Robidoux, M. A. (2010). Obesity and type 2 diabetes in Northern Canada's remote First Nations communities: The dietary dilemma. *International Journal of Obesity*, 34(S2), S24–S31. <https://doi.org/10.1038/ijo.2010.236>
- Holkup, P., Tripp-Reimer, T., Salois, E. & Weinert, C. (2004). Community-based Participatory Research: An Approach to Intervention Research With a Native American Community. *ANS Adv Nurs Sci.*, 27(3): 162–175.
- Health Canada. (2016). *Suicide Prevention*. Retrieved from: <https://www.canada.ca/en/health-canada/services/first-nations-inuit-health/health-promotion/suicide-prevention.html>
- Holt Giménez, E., & Shattuck, A. (2011). Food crises, food regimes and food movements: rumblings of reform or tides of transformation? *The Journal of Peasant Studies*, 38(1), 109–44.

- Indigenous & Northern Affairs Canada (2018). *Indian Residential Schools*. Retrieved from: <https://www.aadnc-aandc.gc.ca/eng/1100100015576/1100100015577>
- Indigenous and Northern Affairs Canada. (2017a). *Workforce Characteristics*. Retrieved from: [http://fnp-ppn.aandc-aandc.gc.ca/fnp/Main/Search/FNWorkforce.aspx?BAND\\_NUMBER=297&lang=eng](http://fnp-ppn.aandc-aandc.gc.ca/fnp/Main/Search/FNWorkforce.aspx?BAND_NUMBER=297&lang=eng)
- Indigenous and Northern Affairs Canada. (2017b). *Income characteristics*. Retrieved from: [http://fnp-ppn.aandc-aandc.gc.ca/fnp/Main/Search/FNIncome.aspx?BAND\\_NUMBER=297&lang=eng](http://fnp-ppn.aandc-aandc.gc.ca/fnp/Main/Search/FNIncome.aspx?BAND_NUMBER=297&lang=eng)
- Indigenous Food Sovereignty Working Group. (n.d.). *Indigenous Food Systems Network*. Retrieved from: <https://www.indigenousfoodsystems.org/>
- Israel, B., Schulz, A., Parker, E. & Becker, A. (2001). Community-based Participatory Research: Policy Recommendations for Promoting a Partnership Approach in Health Research. *Education for Health*, 14 (2), 182- 197
- Jones, W. & Butler, A. (2017). *Toward Quality Mental Health Services in Canada: A Comparison of Performance Indicators across 5 Provinces*. Retrieved from Simon Fraser University, Centre for Applied Research in Mental Health & Addiction: [https://www.sfu.ca/content/dam/sfu/carmha/resources/2017-toward-quality-mh/prov\\_indic\\_technical\\_report\\_final.pdf](https://www.sfu.ca/content/dam/sfu/carmha/resources/2017-toward-quality-mh/prov_indic_technical_report_final.pdf)
- Kimmerer, W. R. (2013). *Braiding Sweetgrass*. Minneapolis: Milkweed Editions.
- Kovach, M. (2009). *Indigenous Methodologies: Characteristics, Conversations, and Contexts*. Toronto: University of Toronto Press.
- Loney, S. (2016). *An Army of Problem Solvers: Reconciliation and the Solutions Economy*. ISBN 978-0-9952685-0-0
- Lytwyn, V. (2002). *Muskegowuck Athinuwick: Original people of the Great Swampy Land*. Winnipeg: University of Manitoba Press.
- MacDonald, D. & Hudson, G. (2012). The Genocide Question and Indian Residential Schools in Canada. *Canadian Journal of Political Science*, 45(2), 427–449.
- Martens, T. R. (2018). Responsibilities and reflections: Indigenous food, culture, and relationships. *Canadian Food Studies / La Revue Canadienne Des Études Sur L'alimentation*, 5(2), 9–12. <https://doi.org/10.15353/cfs-rcea.v5i2.216>
- Martin, D. (2012). *Nutrition Transition and the Public-Health Crisis: Aboriginal Perspectives on Food and Eating*. In *Critical Perspectives in Food Studies*, ed. M. Koc, J. Sumner & A. Winson, 208-222. Don Mills, ON: Oxford University Press.
- Morrison, D. (2011). *Indigenous food sovereignty: a model for social learning*. In *Food sovereignty in Canada: Creating just and sustainable food systems*, ed. H. Wittman, A.A. Desmarais, and N. Wiebe, 97–113. Halifax: Fernwood Publishing.

- Power, E. M. (2008). Conceptualizing food security for aboriginal people in Canada. *Canadian Journal of Public Health*, 99(2), 95–97. <https://doi.org/10.1016/j.gloenvcha.2007.09.002>
- Riediger, N., Lukianchuk, V., & Bruce, S. (2015). Incident diabetes, hypertension and dyslipidemia in a Manitoba First Nation. *International Journal of Circumpolar Health*, 74.
- Roche, B. (2008). *New Directions in Community-Based Research*. Toronto, ON: The Wellesley Institute.
- Seeds of Native Health. (2018). *Seeds of Native Health: A Campaign for Indigenous Nutrition* Retrieved from: <https://seedsofnativehealth.org/>
- Shea, J. M., Poudrier, J., Thomas, R., Jeffery, B., & Kiskotagan, L. (2013). Reflections from a creative community-based participatory research project exploring health and body image with First Nations girls. *International Journal of Qualitative Methods*, 12(1), 272–293.
- Statistics Canada. (2016). *Census Profile, 2016 Census: Garden Hill First Nation*. Retrieved from: <https://www12.statcan.gc.ca/census-recensement/2016/>
- Thompson, S. & Harper, V. (2018). *Timeline: Island Lake Communities*. (unpublished).
- Thompson, S., Kamal, A. G., & Wiebe, J. (2012). Community Development to Feed the Family in Northern Manitoba Communities: Evaluating Food Activities Based on Their Food Sovereignty, Food Security, and Sustainable Livelihood Outcomes. *Canadian Journal of Nonprofit and Social Economy Research*, 3(2), 43–66.
- Thompson, S., Gulrukh, A., Ballard, M., Beardy, B., Islam, D., Lozeznik, V., & Wong, K. (2011). Is community economic development putting healthy food on the table? Food Sovereignty in Northern Manitoba's Aboriginal Communities. *Journal of Aboriginal Economic Development*, 14–39.
- TREATY No. 5. (1969). *Her Majesty the Queen- Saulteaux and Swampy Cree Tribes of Indians, July 29, 1909*. Ottawa: The Queen's Printer. Retrieved from: <http://www.trcm.ca/wp-content/uploads/PDFsTreaties/Treaty%205%20Text%20and%20Adhesions.pdf>
- Trinidad, A. M. O. (2009). Toward kuleana (responsibility): A case study of a contextually grounded intervention for Native Hawaiian youth and young adults. *Aggression and Violent Behavior*, 14(6), 488–498. <https://doi.org/10.1016/j.avb.2009.07.008>
- Truth and Reconciliation Commission of Canada (2015). *Honoring the Truth, Reconciling for the Future: Summary of the Final Report of the Truth and Reconciliation Commission of Canada*. Retrieved from: [http://www.myrobust.com/websites/trcinstitution/File/Reports/Executive\\_Summary\\_English\\_Web.pdf](http://www.myrobust.com/websites/trcinstitution/File/Reports/Executive_Summary_English_Web.pdf)
- Wilson, S. (2008). *Research is Ceremony: Indigenous Research Methods*. Halifax: Fernwood Publishing.



## **CHAPTER 2.0: LITERATURE REVIEW**

### **2.1 Indigenous Food Systems**

Indigenous peoples can be understood as “those peoples whose societies predated colonization, who exist in a complex relationship to the land, and who have been and continue to be primary targets of active colonialism” (Barker, 2009, p.328). Indigenous food systems are very diverse, including “all of the land, air, water, soil and culturally important plant, animal and fungi species that have sustained Indigenous peoples over thousands of years” (Indigenous Food Sovereignty Working Group, n.d.). Their food skills and practices are equally diverse and highly sophisticated, including hunting, fishing and gathering, but also “combing the beach, reaping the hive, shepherding the flock, harvesting on and in the water, and tending the forests as well as the field” (Grey & Patel, 2014, p. 439).

Today, traditional food systems are threatened. The removal of Indigenous peoples from their land, and subsequent enclosure on reserve lands, resulted in changes to Indigenous social networks, kin systems, expansive traditional territories, and trading routes that had provided food to communities for generations (Grey & Patel, 2014; Simpson, 2004). Colonial policies, including the apprehension of Indigenous children in residential schools and now by Canada’s child welfare system, undermine traditional food culture and values by taking children away from their families and communities. These systematic policies interrupted the intergenerational transmission of knowledge that affected, and continue to impact, the ability to procure and provide cultural foods that at one-time satisfied nutritional as well as social and cultural needs (Willows, 2005; Food Secure Canada, n.d). Today, dispossession of traditional knowledge, along with the costs of procuring traditional food, access to land, and availability of traditional foods

due to a changing climate and contamination exist as barriers to reviving traditional food systems (Haman et al. 2010).

### **2.1.1 Indigenous Knowledge**

Indigenous knowledge can be defined as, “all knowledge pertaining to a particular people and its territory, the nature or use of which has been transmitted generation to generation” (Battiste, 2002, p. 8). Indigenous knowledge is also termed as “folk knowledge, local knowledge or wisdom, non-formal knowledge, culture, indigenous technical knowledge, traditional ecological knowledge and traditional knowledge” (Battiste, 2002, p.7). According to the Assembly of First Nations (n.d.), traditional knowledge is shaped and shared in many ways including storytelling, ceremonies, dance, food gathering, hunting and trapping, spirituality, teachings and medicine. Indigenous knowledge, was and remains, essential in protecting and promoting Indigenous food systems (Food Secure Canada, n.d). As Indigenous food systems are complex and holistic, knowledge that supports and interacts with all aspects of life, including the physical, social, cultural, spiritual and mental, is needed to support Indigenous food systems (Kimmerer, 2002; Willows, 2005; Patel & Grey, 2014).

### **2.1.2 Indigenous Agriculture**

Indigenous agriculture, or growing food in a systematic and intentional way based on generations of experience and intimate knowledge of place, including local biology, ecology, and culture, (Center for International Earth Science Information Network, n.d) predates settler contact in Canada. Indigenous farmers domesticated many types of plants by sophisticated cross breeding techniques and seed saving for thousands of years (Scarry & Scarry, 2005; Food Secure Canada, n.d). Little is known about the history of Indigenous agriculture in Manitoba, but there is documentation of post contact maize growing before settlement on reserves and some

evidence of plant domestication in the southwest of Manitoba pre-contact (Flynn & Symms, 1996). Recent excavations during the building of the Canadian Human Rights Museum in Winnipeg unearthed over 40,000 artifacts over 500 years old, many related to Indigenous agriculture in the area (CBC, 2013). Women, with their background in gathering, were probably the first farmers, as they developed agricultural techniques through observation, for example, that seeds dropped in rich soil developed into healthier plants (Keoke & Porterfield, 2005). Indigenous women were also selective gatherers, which over generations shaped the availability of certain plants in the area for human and animal consumption (Cajete, 2000).

Indigenous agriculture differs greatly from the resource intensive and environmentally damaging industrial agriculture of modern times and most closely resembles modern organic agriculture or permaculture (Cajete, 2000; Food Secure Canada, n.d). The Indigenous belief system in North America is underpinned by the concept that plants and animals are equal partners to humans and recognizes and respects non-human life form for giving up its life to sustain humans (Turner, Ignace & Ignace, 2000; Kimmerer, 2013). This philosophy extends to Indigenous agriculture. Indigenous farmers did not attempt to manage and control the land through use of genetically modified seeds, pesticides and synthetic fertilizers as many industrial farmers do today but situated their cultivation practices in intimate knowledge passed down for generations based in careful experimentation and observation, or traditional ecological knowledge, that replenished and respected the land (Kimmerer, 2002).

Indigenous agricultural practices are as diverse and unique as the ecosystems in which they are situated. Farmers worked synergistically with local soils, climate, seasons, and seeds to develop agriculture practices as unique as the ecosystems in which they were situated. For example, Indigenous people near present day Lockport, Manitoba strategically and carefully

chose garden sites “on a strip of sandy soil where, due to the close proximity of a large body of water, the frost-free period is probably slightly longer than average” (Flynn & Simms, 1996, p. 7). Work was done by hand and relied on tools based in local materials, such as antlers for rakes (Flynn & Symms, 1996).

Agriculture was a social and cultural experience that was celebrated through ceremony and gathering and developed relations with other Indigenous communities through trade networks (Turner & Loewen, 1998). Younger generations learned the cultural, ecological, physical and spiritual knowledge that encompasses Indigenous agriculture through observation and hands on experience (Turner, Ignace & Ignace, 2000 & Cajete, 2000). Today many Indigenous communities across North America continue to garden and cultivate plants, often as a way for cultural revival and engaging youth (Cidro, Adekunle, Peters & Martens, 2015; Trinidad, 2009; Kamal, A. G., Linklater, R., Thompson, S., Dipple, J., & Ithinto Mechisowin Committee, 2015). Although trade and sale of produced food and goods did occur between Indigenous groups and settlers, the main motivation of Indigenous farmers was not economic pursuit (sometimes due to racist policies preventing this), but for human sustenance and often to avoid starvation (Cajete, 2000; Flynn & Symms, 1996; Daschuk, 2013).

### **2.1.3 Colonization and Agriculture**

Colonization in Canada dates to the 16th century, but Indigenous food ways have been most affected over the past 100 years or so with the increase of permanent settlement with the signing of the Numbered Treaties (Fieldhouse & Thompson, 2012). Signing of the Numbered Treaties, beginning in the 1870s, physically displaced Indigenous communities from traditional harvesting sites to marginal, reservation land that was largely infertile (Carter, 1990). The remaining land was divided up as government or private property, allowing white settlers to be

the main beneficiaries of the land's productivity (Magdoff, 2013). As western agriculture spread throughout the prairie provinces and with the extirpation of the bison, traditional foods and traditional harvesting practices were replaced with herd animals and colonial crops and cropping methods (Rudolph & McLachlan, 2013; Grey & Patel, 2014; Thompson et al., 2011; Daschuk, 2013). Western agriculture was the way of a civilized culture and “would teach an appreciation of private property and impart a will to own and master nature” (Carter, 1990, p. 18). Although many Indigenous peoples were skilled in agriculture and were very successful farmers, many barriers were put in place to prevent their success. For example, colonial policies were put in place to remove herd animals from Indigenous communities and prevent them from using agricultural equipment and/or selling their produce to settlers (Matties, 2016; LaDuke, 2008; Daschuk, 2013; Carter, 1990).

#### **2.1.4 Land-Based Education**

Spending time on the land, observing and engaging in hands on activities, such as hunting, gathering medicines, building shelters, and gardening, with knowledgeable elders, is important for youth to learn about their food, culture, language, and identity (Cajete, 2000). Land education can be transformational for young people as time spent on the land helps construct cultural identity and is part of traditional education for young people where they are able to develop spiritually, socially, emotionally, and cognitively (Wilson, 2002; Bang et al., 2016). The land is also considered a teacher as it tells humans consciously and subconsciously how the world is and how we fit within it. The learner benefits from direct interaction with the plants, water, spirits and animals (Cajete, 2000).

Land education for Indigenous young adults has been criticized as taking a Euro-centric approach. For example, Calderon (2016) argues that most land education does not go far enough

to question and teach about how place is linked to “the genocide of Indigenous peoples and continued settler colonialism” (p. 25). Teaching young people to be critically conscious of the role of colonization in their lives and how Indigenous knowledge has been disregarded and minimized through land education is critical for Indigenous young adults to understand Indigenous identity. Land education that is decolonizing recognizes Indigenous knowledge, traditions and cosmologies as the preferred method to achieve community goals. Decolonized land education includes the involvement of community Elders and an emphasis on Indigenous spirituality and teachings of respect (Calderon, 2016; Simpson, 2004). For example, one research study suggested the necessity of including spiritual leaders and Elders in western-based health promotion initiatives for Indigenous communities, such as gardening, to ensure Indigenous spiritual and cultural aspects are included (Mundel & Chapman, 2010). Decolonized land education also recognizes the place-based specificity of Indigenous language and cultures (Lowan, 2009).

## **2.2 Food Security, Food Sovereignty and Indigenous Food Sovereignty**

### **2.2.1 Food Security**

The Food and Agriculture Organization of the United Nations describes food security as “having at all times, physical, social and economic access to sufficient, safe and nutritious food that meets dietary needs and food preferences for an active and healthy life” (Food & Agriculture Organization, 2002). The definition of community food security by Hamm & Bellows (2003) further adds: “a sustainable food system that maximizes community self-reliance and social justice” (p.37). Community food security is reliant on economic, social and environmental viability and requires multiple stakeholders working on short, medium and long-term strategies (Dietitians of Canada, 2007). At a household level, lack of food security, or food insecurity, is

strongly related to insufficient income and both physical and mental health disorders among adults and children (PROOF, n.d).

Indigenous communities were traditionally food secure, but ongoing colonization in Canada has drastically changed the way of life for many Indigenous communities resulting in higher than average rates of food insecurity in Indigenous households and impacting community security (Power, 2008; Willows, Veugelers, Raine, Kuhle, 2011; Thompson et al., 2012; Beaumier & Ford, 2010). For Indigenous peoples in Canada, food was and continues to be used, as a tool of power and control rather than to improve food security. For example, extreme hunger found on reserves in the western Plains was treated with government food rations (that were often rancid) that could be collected through private companies such as the Hudson Bay Company (today the North West Company), which further hampered traditional lifestyles and created dependence on western foods and trading networks (Burnett Hay & Chambers, 2016). Additionally, food rations were used as leverage to ensure Indigenous children were sent to, and remained in, residential schools (Mosby, 2013). Racism that resulted in seeing Indigenous peoples as less than human was used to justify these inhumane actions against Indigenous nations. Unfortunately, racism and colonialism are ongoing today, affecting Indigenous people's access and ability to fully engage in the economic, social and political systems of society, contributing to high rates of food insecurity (Allan & Smylie, 2015).

### **2.2.2 Food Sovereignty**

Food sovereignty is defined as “the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems” (Food Secure Canada, 2017, para 1). Food sovereignty emerged in the late 1990s in discussion held between La Vía Campesina (an international

peasant's movement) and communities in the Global South who wanted increased decision-making about food and agriculture and to ensure the well-being of rural communities. According to Desmarais and Wittman (2014) food sovereignty was initially introduced in Canada through the work of the National Farmers Union (NFU) and the Union Paysanne, the two Canadian members of La Vía Campesina. Ultimately, these groups helped to launch the Canadian People's Food Policy Project in 2009, which aimed to develop food policy in Canada that centered on food sovereignty.

### **2.2.3 Indigenous Food Sovereignty**

While several Indigenous groups participated in the Canadian People's Food Policy Project, many found the concepts too focused on agriculture and the state and they opted to form a framework more focused on "decolonization, self-determination and the inclusion of fishing, hunting and gathering" (Desmarais & Wittman, 2014, p. 1155). Out of this came the concept of Indigenous food sovereignty by the British Columbia Food Systems Working Group that Morrison (2011) summarizes in four main tenets: 1) sacredness of food; 2) participation in the food system; 3) legislation and policy reform; and 4) self-determination. Indigenous food sovereignty is both anti-colonial and anti-neoliberal and is a necessity for food security in Indigenous communities (Cidro, et al., 2015; Desmarais & Wittman, 2014; Grey & Patel, 2014; Holt Giménez & Shattuck, 2011; Food Secure Canada, n.d; Rudolph & McLachlan, 2013; Thompson et al., 2012.).

Under the first tenet of Indigenous food sovereignty, food as sacred, food cannot be treated as a commodity. In Robin Wall Kimmerer's (2013) book *Braiding Sweetgrass*, detailing Indigenous agriculture, she describes the sacred responsibility people have to care for and give thanks to the land and in return, the land, plants and animals will care for people. When food is



exchanged on the free market with the goal of making a profit, or land and waterways are contaminated by industrial activities, it is in direct violation of the sacredness of food and the reciprocal relationship between humans and nature (Rudolph & McLachlan, 2013; Kimmerer, 2013). Caring for the land means using the land in respectful ways, such as not taking more than you need, giving thanks to the land through ceremony, and participating in traditional land-based practices (LaDuke, 2008; Kimmerer, 2013). As Kimmerer explains, traditional plants such as sweet grass and black ash evolved with Indigenous peoples and thus plants rely on Indigenous harvesting practices to keep plant populations healthy (2013). As much as Indigenous peoples need the land, the land needs its people (Grey & Patel, 2014).

An additional tenet of Indigenous food sovereignty is the need for food systems participation (Morrison, 2011). Participation in Indigenous food sovereignty can also occur at a community, regional or global level. For example, at a global level, after the genetic mapping of wild rice in 2001, a legal battle ensued between the USDA funded university laboratories and White Earth First Nation, along with many Minnesotans, to prevent the genetic engineering of wild rice. Genetic engineering, and the subsequent patenting of wild rice, risks not only the viability of traditional wild rice stands but also has repercussions for the patenting of other Indigenous foods and knowledge (LaDuke, 2007). At a community or local level, a study by The Urban Aboriginal Knowledge Network, (n.d) found that a process of cultural reclamation can occur through growing, harvesting, and preparing traditional foods in an urban, community-based food organization. Through traditional food activities, participants understood and celebrated the link between food and culture and learned the food skills necessary to support an Indigenous food system. The authors conclude that Indigenous food sovereignty can be operationalized within an urban, community-based organization.

Indigenous food sovereignty calls for legislation and policy reforms to “reconcile Indigenous food and cultural values with colonial laws, policies and mainstream economic activities” (Morrison, 2011, p.101). Laws and policies that affect Indigenous livelihoods, including social, cultural, economic, and ecological aspects, need to be recognized, reviewed and changed to bring healing and reconciliation to Indigenous people (Food Secure Canada, n.d). When Indigenous territories are flooded for hydropower, restrictions are placed on traditional food access and availability, or markets are inundated with southern foods which displace traditional foods, these policies and economic practices are preventing Indigenous food sovereignty while expanding the current economic-political system (Kamal, et. al., 2015; Rudolph & McLachlan, 2013). Reconciling colonial policies to support Indigenous food sovereignty requires addressing how power relations determine the production, distribution and management of natural resources and food (Wittman, Desmarais & Wiebe, 2010; Kamal, et.al, 2015).

Morrison (2011) explains the last tenet of Indigenous food sovereignty as self-determination, which means “freedom and ability to respond to our own needs for healthy, culturally-adapted indigenous foods. It represents the freedom and ability to make decisions over the amount and quality of food we hunt, fish, gather, grow and eat” (p.100). Freedom, in this sense, can also mean freedom from living in poverty and giving economic control to Indigenous communities that would enable them to define their own food systems. Food-related community economic development has been shown as a promising practice to contribute to food sovereignty through self-determination. For example, food insecurity rates in Nisichawayasihk Cree Nation are one of the lowest in northern Manitoba due to the Nelson House Country Foods Program. The program includes local employment and technical and mechanical equipment and tools

needed to ensure the success of the program. The program further strengthens culture through teaching traditional hunting and fishing techniques and providing country foods at community events like weddings and funerals. Most importantly, it is locally funded and controlled (Thompson et. al, 2011). Country food programs have not only been a successful solution for food insecurity in Indigenous communities around the world, but they help to restore identity and cultural integrity through a process of self-determination (Kuhnlein et al., 2006).

#### *Four Arrows Regional Health Authority*

According to Four Arrows Regional Health Authority (2018), a health organization with an aim to improve the health conditions and services in Island Lake First Nation (including Garden Hill First Nation), Indigenous food sovereignty is more than food security. Consultation with Elders, observation and experience with community-based food programming and participating in ceremony, led Four Arrows Regional Health Authority staff to develop six tenets of Indigenous Food Sovereignty as they relate to Island Lake First Nation: 1) Spirit & Celebration; 2) Language; 3) Women; 4) Youth; 5) Elders; and 6) Land. These teachings acknowledge the sacredness and spirit in food and understand food as beyond sustenance. Women, Elders and youth are celebrated for their key roles in contributing to Indigenous food sovereignty. Protecting the land for now and future generations is essential for food sovereignty and connecting to traditional language. Following these teachings helps guide communities on a path toward Indigenous food sovereignty (Four Arrows Regional Health Authority, 2018).

### **2.3 Community Farming and Gardening**

In academic and grey literature, the definition of community gardening and farming seems to depend on the context and the community. In my review of the literature, the terms gardening and farming were used interchangeably, as long as the scope was small scale and the

intention was to serve the local area. One study found that the term urban agriculture, including gardening and farming, meant something different to each of the 16 cities included in the study and was often narrowly focused to suit local needs and stakeholder interests (Goldstein et al., 2011; For other examples see: Pfeiffer, Silva, Colquhoun, 2014; Vitiello & Wolf-Powers, 2014). This study did broadly define community farming and gardening under the umbrella term of urban agriculture, or “growing and raising food crops and animals in an urban setting for the purpose of feeding local populations” (Goldstein et al., 2011, p. 4). In my research with Garden Hill First Nation, the term “farming” was sometimes used by community members to describe both vegetable production and animal husbandry in the community, including horse, goats, pigs, and chickens, whereas the term “gardening” was used to describe strictly vegetable production.

The underlying context of the terms gardening and farming is one of private property and land ownership (Matties, 2016; Blomley, 2007). For example, according to the Merriam-Webster dictionary, the etymology of the word English word “garden” has German and French roots meaning “enclosure, fence” (n.d). European settlers, namely from England, brought the notion of individual community garden plots and vacant lot gardening on municipally owned land to the Canadian Prairies in the early 1900s (Hansen, 2011). Likewise farming in the Canadian Prairies was based on the European notion of private property. The promise of land ownership was used to entice settlers to come to the Prairies in the late 1800s and early 1900s to produce food for an increasingly populated Canadian nation (Matties, 2016). Although many Indigenous Nations did grow and exchange food, they traditionally did not follow a private property notion of land as territories were held commonly among a Nation (Simpson, 2017). Today, many Indigenous Nations term the act of growing food in their communities as farming and/or gardening, but the meanings of these words are ever changing and embody community needs, values and belief

systems (For examples see: Dream of Wild Health, 2017; Canadian Feed the Children, 2018; White Earth Land Recovery Project, 2013).

### **2.3.1 Young Adult Impact**

Today farming and gardening has been increasingly used to provide training and employment for both non-Indigenous and Indigenous young people. Studying the impacts of community farming on young people is important as their experiences on a community farm have the potential to impact their future opportunities and decisions (Ober Allen, Alaimo, Elam & Perry, 2008; Krasny & Tidball, 2009; Draper & Freedman, 2010; Glover, Parry & Shinew, 2005; Vitiello & Wolf-Powers, 2014). As well, food system interventions focused on young people are important as young people represent the future of the food system (Kuhnlein, 2013).

Positive attributes have been found in Indigenous young adults who participate in gardening. For example, a recent study showed that a youth community farm program in Winnipeg, Manitoba nurtured all the tenets of the Circle of Courage model (Fulford & Thompson, 2013). The Circle of Courage model is an Indigenous model for positive youth development developed by Brendtro, Brokenleg & Bockern (2005), that fosters belonging, mastery, independence and generosity. These authors postulate that when these four aspects are present, young people are most likely to succeed. In the youth garden program, belonging was seen through “increased community pride,” mastery through “increased food system knowledge,” independence through increased “leadership development and communication skills” and generosity through “positive environmental behavior” (Fulford & Thompson, 2013, p.70). A study by Thompson, Gulrukh, Clahane & Nwankwo (2014) of an Indigenous youth gardening program in Leaf Rapids, Manitoba also found the Circle of Courage tenets to be encouraged through gardening as well as building human, social and natural assets within the

community as well as regionally. Trinidad (2009) found that working on a farm in Hawaii had positive benefits for Indigenous youth such as greater participation and leadership in the community, improved self-esteem and improved critical thinking.

Research looking at non-Indigenous young adults has found comparable results. Overall, community farming and gardening contributes to inter and intra development of youth, improves learning outcomes in school, contributes to overall health and wellbeing, and can teach skills that can be used in other employment positions such as cooking, nutrition, communication, leadership and business skills (Krasny & Tidball, 2009; Draper & Freedman, 2010; Glover et al., 2005; Ober Allen et al., 2008; Vitiello & Wolf-Powers, 2014). The success of garden programs is credited to the “restorative qualities” of growing food in that “cultivating, selling, and preparing food engages all the senses, which is a rare dynamic in workforce programmes” (Vitiello & Wolf-Powers, 2014, p. 516). Hands-on garden work has also been shown to increase environmental stewardship in youth (Cammack, Waliczek, & Zajicek, 2002).

### **2.3.2 Community Impact**

#### *Social and Cultural Capital*

Eating traditional foods, including harvesting, processing and distribution, is a social and cultural activity that strengthens community and cultural values like sharing, cooperation, mentoring and respect for nature (Cidro et al., 2015; Thompson et al., 2012; Willows, 2005). As communities participate in traditional food activities, culture is strengthened, leaving members with an “increased sense of community, social purpose and belonging” (Auger, 2016, p.10). An evaluation of an urban Indigenous garden project in Vancouver showed positive social and cultural outcomes as working at the garden supported relationship building between gardening members and those visiting the garden and cultural health teachings (Mundel & Chapman,

2010). In Peguis First Nation in northern Manitoba, gardening is re-connecting the community with the land and Indigenous history and culture. The vision of the garden project is “to regain and rebuild Peguis First Nations heritage around the culture of agriculture by creating a community garden, to promote healthy living by working cooperatively, sharing resources and increasing community economic development” (McCorrister, 2018, para 5).

Literature looking at non-Indigenous communities has also concluded that community farms and gardens increase social and cultural capital in communities (Draper & Freedman, 2010; Glover et al., 2005; Vitiello & Wolf-Powers, 2014; McIvor & Hale, 2015). Social capital can be explained as the assets and resources gained from relationships between people or groups that “can be used as capital to facilitate purposeful actions” (Glover et al., 2005, p.452). By nature, community farming attracts a broad population. The unique mix of people coming together to grow and raise food in a community can lead to both bonding (creation of meaningful relationships inside a community) and bridging (creation of opportunistic relationships outside of a community). Social capital benefits the community by the achievement of community goals that could not be addressed individually (Glover et al., 2005).

Increased social capital can lead to economic and health benefits for community members such as job opportunities, development of inclusive spaces for public participation and meaningful relationships and a positive outlook on life (Draper & Freedman, 2010; McIvor & Hale, 2015; Ober Allen et al., 2008; McClintock, 2014). Social capital can also be developed in individuals who do not participate in community activities. A study found that as participation in community gardening and attending neighborhood meetings increased in a community, the more likely people who did not participate perceived a sense of social capital in the neighborhood. In

this way, the creation of social capital through growing food in a community is said to have a “spillover effect” (Alaimo, Reischl, & Allen, 2010).

## 2.4 References

- Alaimo, K., Reischl, T. M. and Allen, J. O. (2010) Community gardening, neighborhood meetings, and social capital, *Journal of Community Psychology*, 38, 497–514.
- Allan, B. & Smylie, J. (2015). *First Peoples, second class treatment: The role of racism in the health and well-being of Indigenous peoples in Canada*. Toronto, ON: the Wellesley Institute.
- Assembly of First Nations. (n.d). *Traditional Knowledge*. Retrieved from: [www.afn.ca](http://www.afn.ca)
- Auger, M. D. (2016). Cultural Continuity as a Determinant of Indigenous Peoples’ Health: A Metasynthesis of Qualitative Research in Canada and the United States. *International Indigenous Policy Journal*, 7(4). <https://doi.org/10.18584/iipj.2016.7.4.3>
- Bang, M., Curley, L., Kessel, A., Marin, A., Suzukovich, E., & Strack, G. (2016). *Muskrat theories, tobacco in the streets, and living in Chicago as Indigenous land*. In Land Education: Rethinking pedagogies of place from Indigenous, postcolonial, and decolonizing perspectives, ed. K. McCoy, E. Tuck & M. McKenzie, 37-55. New York, NY: Routledge.
- Barker, A. (2009). The Contemporary Reality of Canadian Imperialism: Settler Colonialism and the Hybrid Colonial State. *American Indian Quarterly*, 33(3).
- Bargh, M., Douglas, S. L., & Te One, A. (2014). Fostering sustainable tribal economies in a time of climate change. *New Zealand Geographer*, 70(2), 103–115. <https://doi.org/10.1111/nzg.12042>
- Battiste, M. (2002). Indigenous knowledge and pedagogy in First Nations education. *Education*, 69.
- Beaumier, M. C., & Ford, J. D. (2010). Food insecurity among Inuit women exacerbated by socioeconomic stresses and climate change. *Canadian Journal of Public Health*, 101(3), 196–201. <https://doi.org/10.2307/41995440>
- Blomley, Nick. (2007). *Un-Real Estate: Proprietary Space And Public Gardening*. Nik Heynen et al. (Eds.), *Neoliberal Environments: False Promises And Unnatural Consequences* (177-189). New York: Routledge.
- Brendtro, L. K., Brokenleg, M., & Bockern, S. Van. (2005). The Circle of Courage and Positive Psychology. *Reclaiming Children and Youth*, 14, 130–136.
- Burnett, K., Hay, T. & Chambers, L. (2016). Settler Colonialism, Indigenous Peoples and Food: Federal Indian policies and nutrition programs in the Canadian North since 1945. *Journal of Colonialism and Colonial History*, 17(2).



- Cajete, G. (2000). *Native Science: Natural Laws of Interdependence*. Sante Fe, New Mexico: Clear Light Publishers.
- Calderon, D. (2016). *Speaking back to Manifest Destinies: a land education-based approach to critical curriculum inquiry*. In *Land Education: Rethinking pedagogies of place from Indigenous, postcolonial, and decolonizing perspectives*, ed. K. McCoy, E. Tuck & M. McKenzie, 24-36. New York, NY: Routledge.
- Cammack, C., Waliczek, T. M., & Zajicek, J. M. (2002). The Green Brigade: The educational effects of a community-based horticultural program on the horticultural knowledge and environmental attitude of juvenile offenders. *HortTechnology*, 12(1), 77–81.
- Canadian Feed the Children. (2018). *Growing in Garden Hill*. Retrieved from: <https://canadianfeedthechildren.ca/the-feed/growing-in-garden-hill/>
- Carter, 1990. *Lost Harvest: Prairie Indian Reserve Farmers and Government Policy*. McGill-Queen's University Press.
- CBC. (2013). *Ancient farming evidence found at Winnipeg museum site*. Retrieved from: <https://www.cbc.ca/news/canada/manitoba/ancient-farming-evidence-found-at-winnipeg-museum-site-1.1359171>
- Center for International Earth Science Information Network (n.d.) *Indigenous Agricultural and Environmental Knowledge Systems*. Retrieved from: <http://www.ciesin.org/TG/AG/iksys.html>
- Cidro, J., Adekunle, B., Peters, E., & Martens, T. (2015). Beyond food security: Understanding access to cultural food for urban indigenous people in Winnipeg as Indigenous food sovereignty. *Canadian Journal of Urban Research*, 24(1), 24–43.
- Daschuk, J. (2013). *Clearing the Plains: Disease, Politics of Starvation, and the Loss of Aboriginal Life*. Regina, SK: University of Regina Press.
- Desmarais, A., & Wittman, H. (2014). Farmers, foodies and First Nations: getting to food sovereignty in Canada. *The Journal of Peasant Studies*, 41(6), 1153–1173. <https://doi.org/10.1080/03066150.2013.876623>
- Dietitians of Canada. (2007). *Community food Security: Position of Dietitians of Canada*. Retrieved from: <https://www.dietitians.ca/Downloads/Public/cfs-position-paper.aspx>
- Draper, C., & Freedman, D. (2010). Review and Analysis of the Benefits, Purposes, and Motivations Associated with Community Gardening in the United States. *Journal of Community Practice*, 18(4), 458–492. <https://doi.org/10.1080/10705422.2010.519682>
- Dream of Wild Health. (2017). *Programs*. Retrieved from: <https://dreamofwildhealth.org/programs>
- Earle, L. (2011). *Traditional aboriginal diet and health*. Retrieved from <https://www.ccnsa-nccah.ca/docs/emerging/FS-TraditionalDietsHealth-Earle-EN.pdf>

- Fieldhouse, P., & Thompson, S. (2012). Tackling food security issues in indigenous communities in Canada: The Manitoba experience. *Nutrition and Dietetics*, 69(3), 217–221.  
<https://doi.org/10.1111/j.1747-0080.2012.01619.x>
- Flynn, C. & Syms, L. (1996). Manitoba's First Farmers. *Manitoba History*, 31. Retrieved from:  
[http://www.mhs.mb.ca/docs/mb\\_history/31/firstfarmers.shtml](http://www.mhs.mb.ca/docs/mb_history/31/firstfarmers.shtml)
- Food and Agriculture Organization. (2002). *Food Security Concepts and Measures*. Retrieved from: <http://www.fao.org/docrep/005/y4671e/y4671e06.ht>
- Food Secure Canada. (2017). *What is Food Sovereignty*. Retrieved from:  
<https://foodsecurecanada.org/who-we-are/what-food-sovereignty>
- Food Secure Canada. (n.d). *Discussion Paper 1: Indigenous Food Sovereignty*. Retrieved from: [foodsecurecanada.org](http://foodsecurecanada.org)
- Four Arrows Regional Health Authority. (2018). *Indigenous Food Sovereignty Summit 2018*. Retrieved from: <https://ifss2018.com/previous-summit/>
- Fulford, S., & Thompson, S. (2013). Youth community gardening programming as community development: The youth for EcoAction program in Winnipeg, Canada. *Association for Nonprofit and Social Economy Research*, 4(2), 56–75.  
<https://doi.org/http://dx.doi.org/10.1108/17506200710779521>
- Glover, T. D., Parry, D. C., & Shinew, K. J. (2005). Building relationships, accessing resources: Mobilizing social capital in community garden contexts. *Journal of Leisure Research*, 37(4), 450–474.
- Goldstein, M., Bellis, J., Morse, S., Myers, A., & Ura, E. (2011). *Urban Agriculture—A Sixteen City Survey of Urban Agriculture Practices Across the Country*. Retrieved from:  
<https://www.planning.org/knowledgebase/resource/9136133>
- Grey, S., & Patel, R. (2014). Food sovereignty as decolonization: some contributions from Indigenous movements to food system and development politics. *Agriculture and Human Values*, 431–444. <https://doi.org/10.1007/s10460-014-9548-9>
- Haman, F., Fontaine-Bisson, B., Batal, M., Imbeault, P., Batal, M., & Robidoux, M. A. (2010). Obesity and type 2 diabetes in Northern Canada's remote First Nations communities: The dietary dilemma. *International Journal of Obesity*, 34(S2), S24–S31.  
<https://doi.org/10.1038/ijo.2010.236>
- Hamm, M. W., & Bellows, A. C. (2003). Community food security and nutrition educators. *Journal of Nutrition Education and Behaviour*, 35(1), 37–43.  
[https://doi.org/10.1016/S1499-4046\(06\)60325-4](https://doi.org/10.1016/S1499-4046(06)60325-4)
- Hansen, Y. (2011). *Growing Community: Community Gardens as a Local Practice of Food Sovereignty*. In *Food sovereignty in Canada: Creating just and sustainable food systems*, ed. H. Wittman, A.A. Desmarais, and N. Wiebe, 97–113. Halifax: Fernwood Publishing.
- Holt Giménez, E., & Shattuck, A. (2011). Food crises, food regimes and food movements: rumblings of reform or tides of transformation? *The Journal of Peasant Studies*, 38(1), 109–44.

- Indigenous Food Sovereignty Working Group. (n.d.). *Indigenous Food Systems Network*. Retrieved from: <https://www.indigenousfoodsystems.org/>
- Kamal, A. G., Linklater, R., Thompson, S., Dipple, J., & Ithinto Mechisowin Committee (2015). A Recipe for Change: Reclamation of Indigenous Food Sovereignty in O-Pipon-Na-Piwin Cree Nation for Decolonization, Resource Sharing, and Cultural Restoration. *Globalizations*, 12(4), 559–575. <https://doi.org/10.1080/14747731.2015.1039761>
- Keoke, E. & Porterfield, K. (2005). *American Indian Contributions to the World: Food, Farming and Hunting*. New York, NY: Chelsea House.
- Kimmerer, R. W. (2013). *Braiding Sweetgrass*. Minneapolis: Milkweed Editions.
- Kimmerer, R. W. (2002). Weaving Traditional Ecological Knowledge into Biological Education: A Call to Action. *BioScience*, 52(5), 432. [https://doi.org/10.1641/0006-3568\(2002\)052\[0432:WTEKIB\]2.0.CO;2](https://doi.org/10.1641/0006-3568(2002)052[0432:WTEKIB]2.0.CO;2)
- Krasny, M. & Tidball, K. (2009). Community gardens as context for science, stewardship and advocacy learning. *Cities and the Environment*, 2(1).
- Kuhnlein, H., Erasmus, B., Creed-Kanashiro, H., Englberger, L., Okeke, C., Turner, N., ... Bhattacharjee, L. (2006). Indigenous peoples' food systems for health: finding interventions that work. *Public Health Nutrition*, 9, 1013–1019. <https://doi.org/10.1017/PHN2006987>
- Kuhnlein, H. (2013). *What food system intervention strategies and evaluation indicators are successful with Indigenous Peoples?* In *Indigenous Peoples' food systems and well-being: Interventions and policies for healthy communities*, ed. H. Kuhnlein, B. Erasmus, D. Spigelski., & B. Burlingame, 237-256. FAO.
- LaDuke, W. (2008). Protecting the Culture and Genetics of Wild Rice. In *Original Instructions: Indigenous Teachings for a Sustainable Future*, ed. M.Nelson, 208-214. Rochester: Bear & Company.
- LaDuke, W. (2007) *Ricekeepers: A struggle to protect biodiversity and a Native American way of life. The world as we know it*. Retrieved from: <https://orionmagazine.org/article/ricekeepers/>.
- Lowan, G. (2009). Exploring place from an Aboriginal perspective: considerations for outdoor and environmental education. *Canadian Journal of Environmental Education*, 14(2009), 42–58.
- Magdoff, F. (2013). Twenty-First-Century Land Grabs: Accumulation by Agricultural Dispossession. *Monthly Review*, 65(6).
- Martin, S., & Andr ee, P. (2014). From food security to food sovereignty in Canada: resistance and empowerment in the context of neoliberalism. *Globalization and Food Sovereignty: Global and Local Change in the New Politics of Food.*, 173–198.
- Matties, Z. (2016). Unsettling Settler Food Movements: Food Sovereignty and Decolonization in Canada. *The Journal of Canadian Food Cultures*, 7(2).
- McClintock, N. (2014). Radical, reformist, and garden-variety neoliberal: coming to terms with

- urban agriculture's contradictions. *Local Environment*, 19(2), 147–171.  
<https://doi.org/10.1080/13549839.2012.752797>
- McCorrister, C. (2016). *Northern Manitoba Community Food Security and Cultural Food Heritage*. Retrieved from: <https://mcconnellfoundation.ca/northern-manitoba-community-food-security-and-cultural-food-heritage/>
- McIvor, D. W., & Hale, J. (2015). Urban agriculture and the prospects for deep democracy. *Agriculture and Human Values*, 32(4), 727–741. <https://doi.org/10.1007/s10460-015-9588-9>
- Merriam-Webster (n.d.). *Definition of garden*. Retrieved from: <https://www.merriam-webster.com/dictionary/garden>
- Morrison, D. (2011). *Indigenous food sovereignty: a model for social learning*. In Food sovereignty in Canada: Creating just and sustainable food systems, ed. H. Wittman, A.A. Desmarais, and N. Wiebe, 97–113. Halifax: Fernwood Publishing.
- Mosby, I. (2013). Administering Colonial Science: Nutrition Research and Human Biomedical Experimentation in Aboriginal Communities and Residential Schools, 1942–1952. *Histoire sociale/Social History*, 46(1), 145–172. <https://doi.org/10.1353/his.2013.0015>
- Mundel, E., & Chapman, G. E. (2010). A decolonizing approach to health promotion in Canada: the case of the Urban Aboriginal Community Kitchen Garden Project, *Health Promot Int*, 25(2), 166–173. <https://doi.org/10.1093/heapro/daq016>
- Ober Allen, J., Alaimo, K., Elam, D., & Perry, E. (2008). Growing vegetables and values: benefits of neighborhood-based community gardens for youth development and nutrition. *Journal of Hunger & Environmental Nutrition*, 3(4), 418–439.  
<https://doi.org/10.1080/19320240802529169>
- Pfeiffer, A., Silva, E., & Colquhoun, J. (2014). Innovation in urban agricultural practices: Responding to diverse production environments. *Renewable Agriculture and Food Systems*, 30(1), 1–13. <https://doi.org/10.1017/S1742170513000537>
- Power, E. M. (2008). Conceptualizing food security for aboriginal people in Canada. *Canadian Journal of Public Health*, 99(2), 95–97. <https://doi.org/10.1016/j.gloenvcha.2007.09.002>
- PROOF. (n.d) *Fact Sheet: The Impact of Food Insecurity on Health*. Retrieved from: <http://proof.utoronto.ca/resources/fact-sheets/#health>
- Rudolph, K. R., & McLachlan, S. M. (2013). Seeking indigenous food sovereignty: origins of and responses to the food crisis in northern Manitoba, Canada. *Local Environment*, 18(9), 1079–1098. <https://doi.org/http://dx.doi.org/10.1080/13549839.2012.754741>
- Scarry, C. M., & Scarry, J. F. (2005). Native American “garden agriculture” in southeastern North America. *World Archaeology*, 37(2), 259–274.  
<https://doi.org/10.1080/00438243500095199>
- Simpson, L.R. (2017). *As We Have Always Done: Indigenous Freedom Through Radical Resistance*. Minneapolis: University of Minnesota Press.

- Simpson, L. R. (2004). Anticolonial strategies for the recovery and maintenance of Indigenous Knowledge. *American Indian Quarterly*, 28(3/4), 373–384. <https://doi.org/10.1353/aiq.2004.0107>
- Thompson, S., Galrukh, A., Clahane, T. & Nwankwo, U. (2014). Growing Gardens, Youth and Food Security in Canada's Boreal Forest. *Biodiversity Watch*, 4, 65-83.
- Thompson, S., Kamal, A. G., & Wiebe, J. (2012). Community Development to Feed the Family in Northern Manitoba Communities: Evaluating Food Activities Based on Their Food Sovereignty, Food Security, and Sustainable Livelihood Outcomes. *Canadian Journal of Nonprofit and Social Economy Research*, 3(2), 43–66.
- Thompson, S., Gulrukh, A., Ballard, M., Beardy, B., Islam, D., Lozeznik, V., & Wong, K. (2011). Is community economic development putting healthy food on the table? Food Sovereignty in Northern Manitoba's Aboriginal Communities, *Journal of Aboriginal Economic Development*, 14–39.
- Trinidad, A. M. O. (2009). Toward kuleana (responsibility): A case study of a contextually grounded intervention for Native Hawaiian youth and young adults. *Aggression and Violent Behavior*, 14(6), 488–498. <https://doi.org/10.1016/j.avb.2009.07.008>
- Turner, N. J., Ignace, M. B., & Ignace, R. (2000). Traditional ecological knowledge and wisdom of aboriginal peoples in British Columbia. *Ecological Society of America*, 10(5), 1275–1287. [https://doi.org/10.1890/1051-0761\(2000\)010\[1275:TEKAWO\]2.0.CO;2](https://doi.org/10.1890/1051-0761(2000)010[1275:TEKAWO]2.0.CO;2)
- Turner, N. J., & Loewen, D. C. (1998). The Original “Free Trade”: Exchange of Botanical Products and Associated Plant Knowledge in Northwestern North America. *Anthropologica*, 40(1), 49. <https://doi.org/10.2307/25605872>
- The Urban Aboriginal Knowledge Network. (n.d). *Traditional Food Upskilling as a Pathway to Urban Indigenous Food Sovereignty*. Retrieved from: <http://uakn.org/en/research-project/traditional-food-upskilling-as-a-pathway-to-urban-indigenous-food-sovereignty/>
- Vitiello, D., & Wolf-Powers, L. (2014). Growing food to grow cities?: The potential of agriculture for economic and community development in the urban United States. *Community Development Journal*, 49(4), 508–523. <https://doi.org/10.1093/cdj/bst087>
- White Earth Land Recovery Project. (2013). *16<sup>th</sup> Indigenous Farming Conference*. Retrieved from: <http://welrp.org/16th-indigenous-farming-conference>
- Willows, N., Veugelers, P., Raine, K., & Kuhle, S. (2011). Associations between household food insecurity and health outcomes in the Aboriginal population (excluding reserves). *Health Reports*, 22(82), 15–20. <https://doi.org/82-003-x>
- Willows, N. D. (2005). Determinants of healthy eating in Aboriginal peoples in Canada: the current state of knowledge and research gaps. *Canadian Journal of Public Health. Revue Canadienne de Sante Publique*, 96 (Suppl 3:S32-6), Jul Aug--6, S36—41.
- Wilson, K. (2003). Therapeutic landscapes and First Nations peoples: An exploration of culture, health and place. *Health and Place*, 9(2), 83–93. [https://doi.org/10.1016/S1353-8292\(02\)00016-3](https://doi.org/10.1016/S1353-8292(02)00016-3)

Wittman, H., Desmarais, A. A., & Wiebe, N. (2010). The origins and potential of food sovereignty. *Food Sovereignty: Reconnecting Food, Nature and Community*, 1–14.

## CHAPTER 3.0: RESEARCH METHODS

### *Research Approach*

A research approach is the underlying philosophical ideal that frames the research project, including how data is collected, analyzed and interpreted and is dictated by the nature of the problem being studied (Creswell, 2014; Wilson, 2008). I chose a transformative research approach to address my research question as this approach focuses on how inequities are created and maintained in society because of race, income, ethnicity, indigeneity and gender, but also calls for social action and focuses on relationship building. A transformative research approach stresses collaborative research and prioritizes giving a voice to structurally disadvantaged communities (Creswell, 2014; Kovach, 2009). This research is qualitative in nature, chosen to help center the complex meanings and unique experiences participants bring to the study and researcher role and reflexivity.

### *Strategy of Inquiry*

The strategy of inquiry I chose to take for my research is community-based participatory research (CBPR). Although there is some debate whether CBPR is a strategy of inquiry, a growing body of literature suggests that CBPR is a strategy of inquiry as it shapes specific research methods and procedures and is guided by a set of principles (see Table 1) (Creswell, 2014; Buchanan et al., 2007; Halseth, 2016; Israel et al., 2001; Roche, 2008; Ferreira & Gendron, 2011). According to Roche (2008) community based participatory research is “guided by the core principles of collaboration and partnership where research brings together community and academic expertise to explore and create opportunities for social action and social change” (Roche, 2008, p.2). Compared to community-based research, in which describes community as a location or setting, CBPR involves the community meaningfully in all aspects of

the research process (Israel et al., 2001).

My research involves a First Nations community and CBPR is seen as a best practice method for working with Indigenous communities (Halseth et al., 2016; Bharadwaj, 2014; Darroch & Giles, 2014). A CBPR approach helps to ensure that research undertaken in Indigenous communities does not take on a western, colonial perspective as it invites research participants to actively engage in the research process, co-create knowledge, and contribute in a meaningful and authentic manner (Halseth et al., 2016; Shea, Poudrier, Thomas, Jeffery, & Kiskotagan, 2013). As the community is involved in the research process, the research becomes more useful and relevant to the community and misunderstandings due to cultural differences are more easily managed (Bharadwaj, 2014; Flicker et al., 2008). By working closely with research participants in the creation of knowledge and solutions, CBPR can also help to develop culturally relevant theories and assist in decolonization (Castleden, et al., 2008; Shea, et al., 2013). Although still limited by western epistemology and ontology, compared to other western research approaches, a CBPR strategy most closely aligns with Indigenous research methodologies<sup>5</sup> and strategies as CBPR is centered in reflexivity, empowerment, equity, relationships, reciprocity, and respect (Blue Bird Jernigan, 2010; Wilson, 2008; Kovach, 2009).

### **3.1 Overview of Research Instruments & Outcomes**

The research instruments used in this study were chosen for community participation and include: 1) photovoice (which includes taking photos followed by an interview about the photos) with five young adults working on a community farm in Garden Hill First Nation, 2) four semi-

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<sup>5</sup> Due to the limitations of the dominant research paradigms to adequately capture and honor Indigenous science, knowledge, stories and culture, Indigenous scholars are creating an approach to research based in Indigenous ontology and epistemology. See Wilson, 2008; Kovach, 2009 and Smith, 1999 for examples.



structured interviews with young adults working on the community farm., and 3) twelve interviews with those knowledgeable about food education for young adults including Aboriginal Diabetes Initiative workers, Meechim Farm Inc. staff, Kistiganwacheeng Employment and Training Center staff, Youth Coordinators and Elders. The first objective, document community perspectives on Oji-Cree food and culture to inform the development of an Indigenous food systems course for young adults, was supported by interviews with food educators and Elders in Garden Hill First Nation. In addition to these interviews with food educators, the second objective, to describe how working on a community farm supports young adult participation in Indigenous food sovereignty, was also supported by photovoice data and semi-structured interviews with young adult farm workers.

**Table 2: Research Objectives and Methods Summary**

<b>Research Objective</b>	<b>Research Method</b>	<b>Outcome</b>
<ul style="list-style-type: none"> <li>• Document community perspectives on Oji-Cree food and culture to inform the development of an Indigenous food systems course for young adults.</li> </ul>	<ul style="list-style-type: none"> <li>• Semi-structured interviews with Elders and Garden Hill community members who educate about food and/or work with Indigenous young adults.</li> </ul>	<ul style="list-style-type: none"> <li>• 12 semi-structured interviews</li> </ul>

<ul style="list-style-type: none"> <li>• Describe how working on a community farm supports young adult participation in Indigenous food sovereignty.</li> </ul>	<ul style="list-style-type: none"> <li>• Photovoice and semi-structured interviews with Indigenous young adults (18-35 years) employed on a community farm in Garden Hill First Nation.</li> <li>• Semi-structured interviews with Garden Hill community members who educate about food and/or work with Indigenous young adults.</li> </ul>	<ul style="list-style-type: none"> <li>• Five photovoice interviews with young adults</li> <li>• Four semi-structured interviews with young adults</li> <li>• 12 semi-structured interviews with food and/or young adult educators</li> </ul>
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### 3.2 Participant Recruitment

#### *Recruitment for Photovoice & Young Adult Semi-Structured Interviews*

Young adults (18 -35 years)<sup>6</sup> working on a community farm in Garden Hill First Nation were asked to participate in a photovoice project and/or semi-structured interview. Farm workers were explained the consent form over their lunch break at work. Although participants had the opportunity to contact the researcher at a later date about their participation, all young adults farm workers chose to take part in the study the same day. Participants were made aware that

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<sup>6</sup> Kistiganwacheeng Employment and Training Center, which provides support and training for young adults in Garden Hill including on Meechim Farm Inc., defines young adults as 16-35 years of age. For the purpose of this research project, young adults were defined as between 18-35 years of age.

participation in the research project was additional to their work and not required for employment at Meechim Farm Inc. and their employment status would not be affected by their decision to participate in the study. To reduce participant burden, participants were given work time (1-2 hours) to partake in the study with the permission of the director and supervisor of their Employment Training program and had multiple options for participation. For example, those young adults who were not interested in taking photos had the option to participate in a separate semi-structured interview. Young adults were also given the option to be involved in the creation of an exhibit and/or posters with the research photos taken.

#### *Recruitment for Adult Semi-Structured Interviews*

Through purposive sampling, adult Garden Hill community members who had experience working with food projects and young adults in the community, including Aboriginal Diabetes Initiative workers, Meechim Farm staff, Kistiganwacheeng Employment and Training Center staff, Youth Coordinators and Elders, were identified as key informants. Previous work with Garden Hill community members in food related projects by the principal researcher and thesis adviser informed the selection of these interviews. These community members were contacted in person, by phone and/or email and were told about the research project and the estimated time commitment (30-60 minutes). They were told interviews would be done in private and in a location according to their preference.

#### *Limitations*

As noted, participant recruitment for interviews was done through purposive sampling. Adult interview participants were identified by previous work with Garden Hill community members in food related projects by the principal researcher and thesis adviser. The outcome of this sampling technique resulted in more male interview participants (n=9), compared to female

participants (n=3), therefore underrepresenting a female perspective in this study. This finding suggests that those involved in food-related work in recognized positions of authority in Garden Hill First Nation (recognition coming from both inside and outside of the community), are namely male. This finding may also speak to a wider trend in the community, and indeed across mainstream society, that men are more often in positions of power and authority. A similar finding was not as obvious among the young adult farm workers (number of female participants=2 and number of male participants=4), although perhaps due to the smaller sample size.<sup>7</sup>

### **3.3 Research Instruments**

#### **3.3.1 Adult Semi-Structured Interviews**

Semi-structured interviews were completed between June 2017 and March 2018 (see Table 3 for interview method summary). The purpose of these interviews was to explore the food skills and knowledge young adults in Garden Hill community needed to know to inform the development of a traditional food systems course as well as any barriers or opportunities to passing this food-related knowledge down to young adults (see Table 4 for sample of interview questions). Semi-structured interviews were chosen to provide some guidance and structure to the interviews, but to allow flexibility and for the conversations to flow more naturally (Edwards & Holland, 2013; Alshengeeti, 2014). This flexibility in interviews was important to help build rapport and relationships with interviewees and to deconstruct power relations between interviewer and interviewee. For example, during the interviews, not all planned questions were asked of each participant nor did the interview always follow a specific order. Semi-structured interviews also allowed more freedom to probe and expand on responses compared to closed

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<sup>7</sup> Gender identity was observed and noted by the principal researcher and was not self-identified by participants.

interviews, which helped to ensure research participants were being fully understood (Hay, 2005). Often these interviews occurred over sharing meals, helping to establish a comfortable and relaxed environment. Elders who participated in interviews were offered tobacco to show respect and reciprocity for the wisdom they were sharing.

On average, interviews with adult community members lasted about 60 minutes. Most of these interviews occurred in the community, either at their place at work or home, but due to participant preference and availability, some adult interviews occurred in Winnipeg, Manitoba. Consent forms were explained, and written consent was received from all participants before the commencement of the interview. Participants were given the option of being audio or video recorded to help assist with transcription and portray their words with increased accuracy. Permission was received to take notes during the interviews for enhanced understanding. All but two interviewees opted to be video or audio recorded. For participants who chose not to be audio or video recorded, notes were taken during the interview to quote, as well as summarize, the words of the participants. Quotes that were elicited from participants were verified by the participants during the interview for accuracy. Names were not attributed to the quotes to protect participant identity. In total, 12 semi-structured interviews were done with adult community members from Garden Hill First Nation.

**Table 3: Summary of Adult Semi-Structured Interviews**

<b>Interview type</b>	<b>Average Length</b>	<b>Total # of Interviews</b>
Semi-structured	60 minutes	12 interviews

**Table 4: Sample of Semi-Structured Interview Questions**

<ul style="list-style-type: none"> <li>- How do young adults currently learn about food in your community?</li> <li>- What is needed in your community to teach young adults about traditional food and/or First Nations culture?</li> <li>- What strategies work best to teach young adults about traditional food?</li> <li>- What impacts do you expect of a traditional food training program for young adults to have in the short, mid and long term?</li> <li>- What role does farming and or/other land-based practices have in community food security? Teaching young adults about food skills?</li> <li>- What role does western knowledge have in teaching young adults food skills?</li> </ul>
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### **3.3.2 Photovoice**

Young adults were asked to participate in a photovoice project over the course of a week in June 2017 to gather information on how young adults view food and farming in the community, especially as it relates to Oji-Cree culture (see Table 5 for method summary). Photovoice is a research technique where participants are given a camera to capture images to represent themselves, or their community, and are subsequently interviewed about the photos (Wang, Yi, Tao & Carovano, 1998). This technique has been shown to help overcome linguistic and cultural barriers as synergy between words and photos helps to translate meaning (Schäfer, 2012; Catalani & Minkler, 2010; Hergenrather, Rhodes, Cowan, Bardhoshi & Pula, 2009; Lardea, Hweale & Ford, 2011). Clarity and comfort in the interview process is particularly important when capturing the voices of youth or young adults as they typically have more trouble articulating their thoughts compared to adults (Pain, 2012). True to CBPR, photovoice also encourages collaboration and engagement with participants.

After receiving written consent, including the use of participant photos in research dissemination, and instructions on how to use the provided research cameras, participants were asked to take up to 10 pictures based on the question, “How can your community eat well?” in the context of community farming. Five young adults working on the farm participated in photovoice. Participants were encouraged to reflect on the question and plan the photos they would like to take before beginning. Participants were invited to take photos on the farm or in other places in the community that helped them to answer the question. Participants were instructed not to take photos of animals on the farm. On average, young adults spent 30 minutes taking pictures and took five photos each. Participants did not give consent to have their own photos taken. All photos were taken on the community farm.

Participants were asked to describe their photos and the meaning behind them, in addition to broader questions about eating well in the community (see Table 6 for sample questions). Interviews were on average 20 minutes each. Participants were given the choice of being audio or video recorded. One participant chose not to be audio or video recorded. At the end of the interview, the participants were asked which photos were most representative of their experience on the farm, which they would like to share in the community and how they would like their photos shared. Participants were given the option to have their own name, or a pseudo-name, be used in the dissemination of the research to allow credit for the photos to be given and help celebrate their work in the community.

**Table 5: Summary of Photovoice**

<b>Interview Type</b>	<b>Participant Description</b>	<b>Average Length of Photovoice Interview</b>	<b>Average # of Photos Taken per Participant</b>	<b>Total # of Photovoice Participants</b>
Photovoice	Young adult farm workers (18-35 years)	20 minutes	Five	Five

**Table 6: Sample of Photovoice Interview Questions**

<ul style="list-style-type: none"> <li>- Tell me about your picture? / What is happening in your picture?</li> <li>- How does this picture represent “eating well” in your community?</li> <li>- Are there any photos that are more important to you? Which ones and why?</li> <li>- What does eating well mean to you?</li> <li>- Does your community eat well? What things are needed / and are present in your community to help people to eat well?</li> </ul>
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### **3.3.3 Young Adult Semi-Structured Interviews**

Semi-structured interviews with young adults (see Table 7 for interview method summary) were designed in lieu of, or in addition to, participation in photovoice. For young adults who were not interested in taking photos, they had the choice to participate in an interview to discuss what skills and knowledge they were learning from working on a community farm (see Table 8 for a sample of interview questions). Semi-structured interviews were chosen to allow flexibility and increase the comfort of the young adults being interviewed. For example, during the interviews, not all planned questions were asked of each participant nor did the interview follow a specific order to keep the interview more conversational. Consent forms were explained to participants and written consent was received before starting the interview.



Participants had the choice of being audio or video. All participants chose to be audio or video recorded. Three of the four semi-structured interview participants also chose to participate in the photovoice project and their interviews occurred following the photovoice interviews. Interviews occurred on the farm during work time and lasted on average for twenty minutes.

**Table 7: Summary of Young Adult Semi-Structured Interviews**

Interview type	Average Length	Total # of Interviews
Semi-structured	20 minutes	Four interviews

**Table 8: Sample of Young Adult Semi-Structured Interview Questions**

<ul style="list-style-type: none"> <li>- What skills or knowledge have you learned from working on the farm? Are these skills important to have?</li> <li>- Has your idea of what eating well means changed since working on Meechim Farm or have you changed the types of food you eat?</li> <li>- Do you feel like your job benefits the community/ is important to the community?</li> <li>- Do you feel more involved in the community since working on Meechim farm?</li> <li>- Do you think it is important to grow food in a way that cares for the land? For example, taking care of the water and soil. Did working on a farm influence this idea?</li> <li>- Is it important for you to provide food for your community?</li> <li>- Does farming support First Nations' culture? If so, how do you think it does?</li> </ul>
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### **3.3.4 Limitations**

#### *Talking Circle*

A talking circle was planned with the young adults to have them share their photos with each other in order to contribute to shared learning and elicit any further meaning from the photos. A talking circle did not happen as many of the young adults had flexible work schedules, resulting in individuals working varying hours and days of the week. This resulted in my

inability to coordinate the participants as a group within the time frame available. Due to these circumstances, I did not continue to pursue a talking circle.

### **3.4 Data Analysis**

Data analysis was undertaken to achieve thematic analysis. Thematic analysis is a data reduction technique that looks for and synthesizes patterns in qualitative data (Braun & Clarke, 2013). My data analysis was based on Tesch's Eight Steps in the Coding Process. Briefly the steps are as follows: 1) Read the entire transcripts; 2) In each transcript, ask "What is this about" and make a list of topics; 3) Cluster similar topics together; 4) Abbreviate the topics as codes; 5) Group codes to create categories; 6) Finalize codes and categories; 7) Perform a preliminary analysis and; 8) Recode as necessary (Tesch, 1990 as cited in Creswell, 2014).

Analysis began with transcribing the interviews. As the interviews were transcribed, my impressions were noted in the interviews. After transcription, the interviews were printed and read through. Thematic coding informed my initial coding process. I began a preliminary coding through an inductive process, assigning codes informed by the literature review (primarily tenets of Indigenous food sovereignty including self-determination, participation and sacredness and the Circle of Courage Model), my work as a Registered Dietitian in food security and public health, and past experiences farming and gardening with young adults. Transcripts were uploaded onto a data management software program NVivo and these preliminary codes were assigned to relevant sections of the transcripts. These steps completed the first round of coding.

The second round of coding occurred two months after the first round, giving me an opportunity to reflect on the data. I acquainted myself with the data again by reading through the transcripts. This time I read through the transcripts, I asked myself what the underlying meanings or messages were in the whole story told by the participant and jotted them down on the

transcript. According to Creswell (2014) this process is an essential step to understand the latent messages in the data. The list of topics was clustered based on similarity and turned into codes. Any previous codes that did not seem to fit the data were dropped at this point and codes more representative of the data, including in-vivo codes, were used. In-vivo codes use the words of the participants as codes, which helps to represent the data from the perspective of the participant (Saldaña,2009; Bazeley, 2013). A codebook was used to help keep consistency in the data analysis process. The data was subsequently analyzed using this codebook.

A final round of coding occurred one month later to further refine and classify sub codes. In total, three rounds of coding occurred, with each round recognizing a deeper meaning of the data. Overall, codes were formed through both a deductive and inductive process, as some codes were ascribed to the data based on literature and other codes resulted from reflecting on the data and the meanings provided by the participants. Codes were then grouped into categories by identifying interrelationships. Themes to present the research results were derived from these categories. Four main themes and twelve subthemes emerged that will be presented in chapters four and five.

### **3.5 Validity and Verification**

Knowledge in qualitative research is co-created as participants share knowledge and experiences with the researcher and the researcher interprets, organizes and synthesizes this knowledge (Alshengeeti, 2014). To ensure the proper interpretation and analysis of information between myself and the participants, various steps were taken, including member checking, triangulation, field notes and immersion in the field (Creswell, 2014).

Triangulation helps to find convergence of data using multiple methods to gather research data. A visual method of photo elicitation was used to supplement the interviews with young

adults to better understand the experiences of young adults working on a community farm. Conducting interviews from the perspective of young adults and adult community members was also useful to compare their understandings of Oji-Cree food and culture.

Member checking was done in the field by repeating a summary of the interview to the participants immediately after the interview to ensure correct interpretation by the researcher. Participants either received their full transcripts in person or by mail or email and were asked to review the transcripts to ensure their accuracy and that they were comfortable with what they said, including the option to add or remove any information. Two participants chose to add or delete information. Lastly, interpretation of the results was verified and revised with key research participants. The member checking process was invaluable to confirm findings and identify any misunderstandings to ensure the information was representative of the community.

A field journal was kept to reflect on interviews and my experiences in the community. This process helped to increase the comprehension and context of the research and how my positionality (social status and identity) affected the production of knowledge (Edwards & Holland, 2013). Keeping a field journal, and reflecting on it, helped me to notice personal biases and judgments that were previously hidden and helped me to separate them from my interpretation of the data.

Immersion in the field occurred for 10 days in June 2017 and 18 days in August 2017, for a total of four weeks in Garden Hill First Nation. Spending time in the community was critical to establish rapport and better understand the day-to-day lives of the participants. These periods of time allowed me to participate in community cultural activities such as sweat lodges, cultural festivals, canoe trips and Treaty Days as well as sharing many meals with community members. Places I visited in the community included the local grocery store, gas station, trappers' cabins,

band office, nursing station, garbage dump, beach and neighboring reserve communities. Significant time was also spent with community members outside of the community in training courses, conferences and planning community educational events that further helped to build rapport and situate my research. For example, I took a two-week intensive permaculture training course, worked with Elders to develop a website (currently under development) and interactive story map for a traditional canoe route (see <http://bit.ly/2fB8MTs>), and helped organize and participated in an Indigenous Food Sovereignty Summit with Island lake community members ([www.ifss2018.com](http://www.ifss2018.com)), including Garden Hill.

Spending time in the community also gave me a deeper understanding of the political, social, cultural, and economic context in which the participants in my research were living. For example, for my own research, I prepared by reading about traditional foods, contemporary land issues, Indigenous history in Canada, attending conferences and hearing Elders speak about Indigenous food, farming and nutrition. I now understand that “classroom” learning was not enough to fully comprehend what learning about the land and traditional food meant until being taken on a canoe trip during my field work to travel an ancestral route between two Island Lake communities with Elders. An excerpt from my personal journal after three days on the trip reveals how I felt:

I am in the woods in the middle of nowhere, between Red Sucker Lake and Garden Hill. I don't really know what I am doing. I don't understand much about the route/traplines/nomadic lifestyles. They talk about these things but I am not sure I completely understand. I think I will learn a lot on this journey and I hope I can give back as much as I learn (Personal Journal, August 11, 2017).

Ten days into the trip I felt I was beginning to understand more deeply what life on the land meant through observation and interacting with both humans and nature:

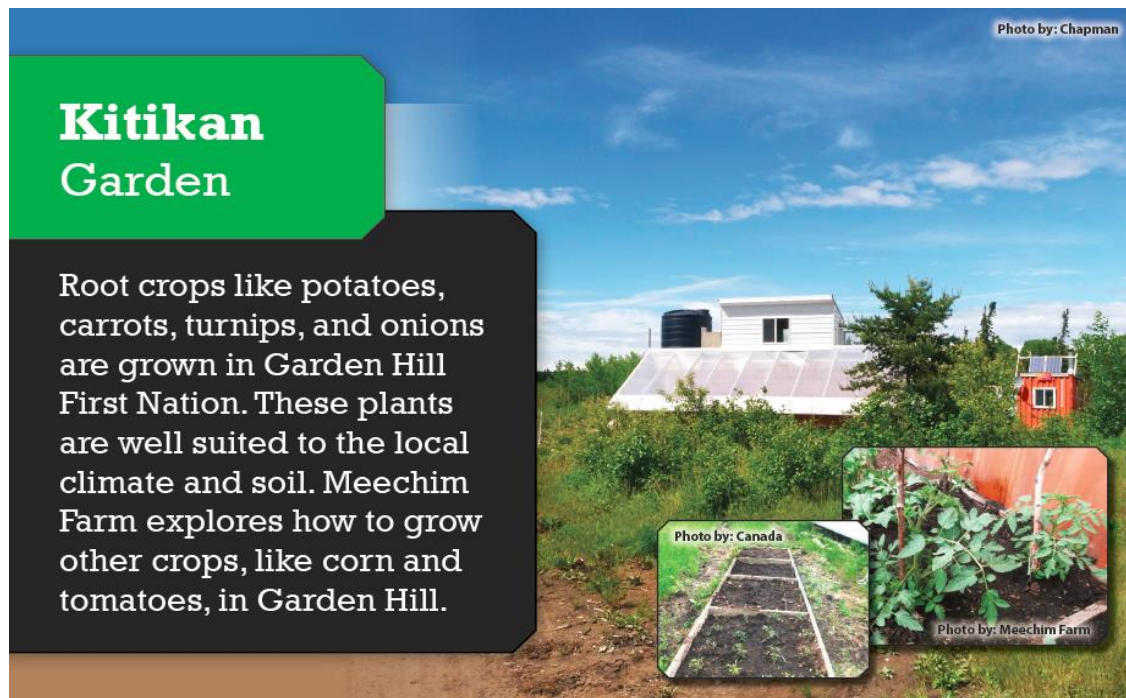
They [the Elders] are so connected to the land and the spirits on the land as if they were people, it is a historic and lived reality. This is a spirit world with sacred items, medicines, plants and ancestors. This culture has lived and experienced it for thousands of years, yet it seems so surreal to me. [...] I am only beginning to understand the significance of what it means to be connected to the land, know the plants, animals and water intimately like it is your own backyard, because for them, it is. This is only something that can be felt and understood by being here (Personal Journal, August 17, 2018).

Although I am still learning what it means to be Oji-Cree and to experience a deep, culturally meaningful relationship with the land, I learned more about traditional food from spending two weeks on the land with Elders than I did from reading about traditional food for an entire year. Spending time in the community was critical to situate my research in the lived realities of the community members as well as self-reflect on my own cultural biases and assumptions.

### **3.6 Dissemination**

Dissemination of the research was completed at the academic and community level. A two-page research report (Appendix A) was submitted to community partners including the Kistiganwacheeng Employment and Training Center. As well, educational farm signs were developed with community members, including young adult farm workers, using the photos from the photovoice project. These signs were subsequently placed at the community farm to celebrate the work of the young adults and educate community members visiting the farm on growing food, raising chickens and the Oji-Cree language (see Figure 1 for an example). Research findings were also disseminated at appropriate conferences.

**Figure 1: Kitikan (Garden) Farm Sign**



### 3.7 Ethical Considerations

A discussion of the preliminary research design occurred at an annual meeting of the Island Lake Tribal Council in December 2016. Subsequently, consent to work in the community was obtained from the Garden Hill Band Manager. A letter supporting the research was also received by the Executive Director of the Kistiganwacheeng Employment and Training Center in Garden Hill. Approval was also received by the University of Manitoba Human Research Ethics Board. During data collection, informed consent was received in written form from the research participants (see Appendix B). Participants were provided a summary of their interview directly following the interview to ensure the full meaning of the interview was captured. Within one month following the interview, participants were emailed or mailed their transcripts for review. Participants were asked to review the transcripts for any errors and were given the opportunity to

provide any additional information or remove any information they were no longer comfortable with sharing. Participants could respond to the principal researcher by email or phone regarding this request. Participants were told their names would not be used in the study (except in the case of photovoice participants). Participants were asked if they wanted to be quoted in the study and were advised on the risks of doing so, including being identified by their words.

This research also followed the Ownership, Control, Access and Possession (OCAP) protocol in research with Indigenous communities. Research participants had access to their data and had the ability to remove or change their data up until the date of publication. Young adults were emailed and provided hard copies of the photos they took. Members from the community were consulted during research design and were involved in forming and piloting many of the research questions in May 2017. Research participants were also involved in the dissemination of the research results such as they helped to develop and disseminate educational farm signs in Oji-Cree.

The process of photovoice contributed greatly to maintaining the principles of collaboration and respect as the participants became active members in data collection as well as helped to shape the analysis of the data. My perception is that photovoice greatly enhanced the ability for the voices of the young adults to be heard and to reduce power dynamics in the interviewee/interviewer relationship. As the process of taking photos based on a question requires reflection and critical thinking, I felt that young adults were more prepared for the interview. This preparation helped to decrease any participant discomfort as well as increasing the validity of the interviews.

The principle of reciprocity and relational accountability was also maintained in this research project (Smith, 1999; Wilson, 2008). The community imparted much generosity and



knowledge to me during my time working with them. They let someone quite unknown to them live and undertake a research project with them in the community. To show my gratitude, I involved myself in extra community projects such as mapping and video graphing a traditional canoe route, planning and implementing a community garden at a youth center, and helping to organize an Indigenous food sovereignty summit. A lot of time was spent not in a role as a researcher, but as a friend, colleague and someone wanting to understand a different culture to help move towards reconciliation in Canada.

### 3.8 References

- Alshenqeeti, H. (2014). Interviewing as a Data Collection Method: A Critical Review. *English Linguistics Research*, 3(1), 39–45. <https://doi.org/10.5430/elr.v3n1p39>
- Bazeley, P. (2013). *Qualitative Data Analysis: Practical Strategies*. SAGE Publications Ltd.
- Bharadwaj, L. (2014). A framework for building research partnerships with first nations communities. *Environmental Health Insights*, 8, 15–25. <https://doi.org/10.4137/EHI.S10869>
- Blue Bird Jernigan, V. (2010). Community-Based Participatory Research With Native American Communities: The Chronic Disease Self-Management Program. *Health Promot Pract*, 11(6), 888–899.
- Braun, V. & Clarke, V. (2013). *Successful Qualitative Research: A Practical Guide for Beginners* (Ed 1). SAGE Publications Ltd.
- Buchanan, D. R., Miller, F. G., & Wallerstein, N. (2007). Ethical issues in community-based participatory research: balancing rigorous research with community participation in community intervention studies. *Prog Community Health Partnersh*, 1(2), 153–160.
- Castleden, H., Garvin, T., & First Nation, H. (2008). Modifying Photovoice for community-based participatory Indigenous research. *Social Science and Medicine*, 66(6), 1393–1405. <https://doi.org/10.1016/j.socscimed.2007.11.030>
- Catalani, C., & Minkler, M. (2010). Photovoice: a review of the literature in health and public health. *Health Education & Behavior: The Official Publication of the Society for Public Health Education*, 37(3), 424–51. <https://doi.org/10.1177/1090198109342084>
- Creswell, J. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (Ed. 4). United States: SAGE Publications Ltd.
- Darroch, F., & Giles, A. (2014). Decolonizing Health Research: Community-Based Participatory and Feminist Theory. *CJAR*, 15(3), 22–36.

- Edwards, R., & Holland, J. (2013). What is Qualitative Interviewing? “What is?” *Research Methods Series*, 7.
- Flicker, S., Savan, B., Kolenda, B., & Mildenerger, M. (2008). A snapshot of community-based research in Canada: Who? What? Why? How? *Health Education Research*, 23(1), 106–114. <https://doi.org/10.1093/her/cym007>
- Halseth, G., Markey, S., Ryser, L., & Manson, D. (2016). The Case for Community-Based Research. In *Doing Community-Based Research: Perspectives from the Field* (pp.43-70). McGill-Queen’s University Press.
- Hay, I. (2005). *Qualitative Research Methods in Human Geography* (Ed. 2). Oxford University Press.
- Hergenrather, K. C., Rhodes, S. D., Cowan, C. A., Bardhoshi, G., & Pula, S. (2009). Photovoice as community-based participatory research: a qualitative review. *Am J Health Behav*, 33(6), 686–698. <https://doi.org/10.5993/AJHB.33.6.6>
- Israel, B., Schulz, A., Parker, E. & Becker, A. (2001). Community-based Participatory Research: Policy Recommendations for Promoting a Partnership Approach in Health Research. *Education for Health*, 14 (2), 182- 197.
- Ferreira, M. P., & Gendron, F. (2011). Community-based participatory research with traditional and indigenous communities of the Americas: Historical context and future directions. *International Journal of Critical Pedagogy*, 3(3), 153–168.
- Kovach, M. (2009). *Indigenous Methodologies: Characteristics, Conversations, and Contexts*. Toronto: University of Toronto Press.
- Lardea, M. P., Heale, G., & Ford, J. (2011). The use of photovoice to document and characterize the food security of users of community food programs in Iqaluit, Nunavut. *Rural and Remote Health*, 11(2), 1–17. <https://doi.org/1680>
- Pain, H. (2012). A Literature Review to Evaluate the Choice and Use of Visual Methods. *International Journal of Qualitative Methods*, 11(4), 303–319. <https://doi.org/10.1177/160940691201100401>
- Roche, B. (2008). *New Directions in Community-Based Research*. Toronto, ON: The Wellesley Institute.
- Saldaña, J. (2009). *The coding manual for qualitative researchers*. Sage Publishing.
- Schäfer, N. (2012). Finding ways to do research on, with and for children and young people. *Geography*, 97(3), 147–154.
- Shea, J. M., Poudrier, J., Thomas, R., Jeffery, B., & Kiskotagan, L. (2013). Reflections from a creative community-based participatory research project exploring health and body image with First Nations girls. *International Journal of Qualitative Methods*, 12(1), 272–293.
- Smith, L. (1999). *Decolonizing Methodologies: Research and Indigenous Peoples*. London & New York: Zen Books Ltd.

Wang, C. C., Yi, W. K., Tao, Z. W., & Carovano, K. (1998). Photovoice as a participatory health promotion strategy. *Health Promotion International*, *13*(1), 75–86.  
<https://doi.org/10.1093/heapro/13.1.75>

Wilson, S. (2008). *Research is Ceremony: Indigenous Research Methods*. Halifax: Fernwood Publishing.

## **CHAPTER 4.0: RESULTS & DISCUSSION:**

### **Understanding an Indigenous Food Systems Course in Garden Hill First Nation (Kistiganwacheeng): Land, Language, Wellbeing and Young Adults**

Through data analysis, four primary themes and twelve subthemes emerged. The first theme describes what the land teaches about traditional food and what it means to be Oji-Cree. The second theme focuses on barriers and opportunities to land-based activities and engaging young adults in traditional food activities. The third theme explores the process of cultural reclamation and revitalization through gardening and farming. The fourth and final theme explores how gardening and farming contributes to increased self-determination over food. The first two themes are explored in chapter four as they mainly speak to the first objective of the study. The last two themes will be explored in chapter five as they mainly relate to the second objective of the study. Each chapter hosts a discussion of the literature and a chapter summary. Although done for presenting the research results in a clear manner, separation of the study objectives into two discrete chapters presents a challenge as much of the knowledge shared by participants is interrelated and together creates a holistic picture. An overall conclusion in chapter six serves to integrate the ideas discussed in chapters four and five to relay a larger understanding of how young adults working on a community farm participate in Indigenous food sovereignty.

**Table 9: Research Themes**

Primary Theme	Sub-Theme
1) What the Land Can Offer: Learning About Traditional Food and Being Oji-Cree	<ul style="list-style-type: none"> <li>• Learn by Living</li> <li>• Physical and Cultural Survival</li> <li>• Improved Well-Being</li> <li>• Language</li> </ul>
2) Land Based Education: Barriers and Opportunities	<ul style="list-style-type: none"> <li>• Financial Cost</li> <li>• Technology</li> <li>• Engaging Young Women</li> </ul>
3) Reclaiming Culture: Past, Present and Future of Oji-Cree Community Farming and Gardening	<ul style="list-style-type: none"> <li>• History of Gardening</li> <li>• Cultural Reclamation</li> <li>• Balancing Two Worldviews</li> </ul>
4) Community Farming and Gardening: Food that Supports Self-Determination	<ul style="list-style-type: none"> <li>• Increased Food Security</li> <li>• Supporting Traditional Economies</li> </ul>

## **4.1 What the Land Can Offer: Learning About Traditional Food and Being Oji-Cree**

### **4.1.1 Learn by Living**

For participants, learning about traditional foods means spending time on the land living and experiencing what the land has to offer. The “land” participants refer to is not any land, but the land of one’s ancestors, in which traditional knowledge, culture, language and identity is intertwined. Land encompasses water, air, and subterranean Earth (Wilson, 2005; Lowan, 2009). One Elder explains how land and traditional food are interwoven:

Actually [young adults] need to learn about the land and how it is and that way they can pick up how to learn about traditional food. [...] Because there are a lot of different ways,

like for us, we are woodland people and we eat foods from the bush. We are bush people. And we eat food from the bush and we have to be out there to learn, to actually learn what it is to be a bush person. You can't really learn anything unless you actually live it. It's like when you learn what something is called, how can you know it unless you actually see it. That's how we learn things, by living it.

– Garden Hill community Elder

As this quote demonstrates, the Elder acknowledges that the best way for young adults to learn is through lived, land-based experience in their own community. Not only does this Elder believe that land-based learning is the most effective tool for teaching young adults but spending time on the land learning about “bush foods” is also culturally reinforcing as it teaches young people about their traditional way of life. Another participant agrees that young adults learn by putting skills and knowledge into practice through hands-on, lived experience:

Learning stuff, learning skills in classrooms don't do an individual any good unless they actually use their hands on it. An individual can be taught a lot of stuff in the classroom but for them to start to use it out in the field, to get that hands-on experience, that's what is going to be needed mostly. It's like how can they use the knowledge out in the field. It's got to be focused on how to use it mostly.

– Garden Hill community member

In this quote, this community member compares practical, hands on learning on the land with classroom learning. This participant makes the point that classroom learning is not enough to teach traditional food skills to young adults.

Another community member describes how young adults learn about traditional food at a cultural festival called Wapi-see in Island Lake. Wapi-see is a large community camp out in the late summer to recognize and continue the tradition of community camp outs. For generations, the people of Island Lake would gather in the location where Wapi-see is today to camp, sing, share traveling and hunting stories, and food. Today, these traditions continue at the annual

cultural festival Wapi-see, but as the participant notes, with an emphasis on engaging young adults and youth:

We talked about what we can do to try to make this [Wapi-see], more interesting to teach kids so they will remember it for a long time, instead of teaching through books and classroom. [...] we try to set this up as a big classroom, a big outdoor classroom, because here we can teach [young adults] different things, even little ants, their way of life is different than ours. Even little birds, animals, they have their own way of life.

– Garden Hill community member

This participant comments that teaching young adults through land-based activities is more effective than teaching them in a classroom as land-based education offers opportunities that cannot be recreated in the classroom like observing and understanding insects in their natural environment.

Spending time on the land is critical for Oji-Cree young adults to not only learn about food, but also about Oji-Cree worldviews, history, and values. Traditionally, Indigenous people primarily learn through lived experience, including observation, listening, traditions, songs, storytelling, and ceremonies (Cajete, 2000; Simpson, 2004; Battiste, 2002). According to Battiste (2002), Indigenous people view learning as:

A life-long responsibility that people assume to understand the world around them and to animate their own personal abilities. Knowledge teaches people how to be responsible for their own lives, develop their sense of relationship to others, and helps them model competent and respectful behavior. [...] [Knowledge] is inherent in and deeply connected to all of nature, to its creatures, and to human existence (p.14).

Indigenous learning involves both self-learning and teachings given by others. The outcomes of Indigenous education are an increased sense of relationship to others, the land and self to live a better life. It is the land in which all traditional knowledge originates from and is the

foremost way to share cultural values, skills and spirituality (Battiste, 2002; Cajete, 1994; Settee, 2013). A Euro-centric style of learning, in contrast, focuses on top-down, structured education with little regard for self-directed and social learning styles. A Eurocentric style of learning is focused in the classroom, removing Indigenous peoples from the land (Simpson, 2017). To effectively educate young adults about traditional food requires a hands-on, experiential approach that situates the learner within the social, environmental, linguistic and cultural context and values of his or her community. This not only allows the learner to develop intellectually, but also emotionally, physically, mentally and spiritually (Lowan, 2009; Cajete, 1994; Streit & Mason, 2017).

#### **4.1.2 Physical and Cultural Survival**

For community members of Garden Hill First Nation, learning survival skills and traditional food skills go hand in hand. Participants strongly supported the importance of learning survival skills based in local ecological knowledge as an important outcome of, and requirement for, spending time on the land participating in food-based activities. A Garden Hill community Elder explains:

Like I said [young adults] don't know where the reefs are, where the rocks are in the water, they will hit them and have a broken motor and be stranded there. If there is a rock you have to go around it. They have to learn these things. If the wind is too high, you don't go out on the boat when it's windy. They need to know these things. Learn [what] to take when they go camping, a lot of people don't know. [...] Some people, they just go and take nothing. If you run out of gas or your motor is not working you're going to be stranded and you're going to be angry. There are times when it might take a couple days time to find you, we don't know where you are. Sometimes we have to take a plane to find people.

– Garden Hill community Elder



To be safe on the land procuring food, this Elder knows that young adults need to understand the lay of the land, the weather patterns, and have the necessary survival equipment. Garden Hill is in a remote, isolated location and not having the necessary survival knowledge and equipment can mean injury or death for hunters, fishers and gatherers. As noted by most participants, the location of Garden Hill First Nation, surrounded by lakes, makes water-based knowledge very important for young adults to learn in order to participate in traditional food activities.

A Garden Hill community member explains that traditional food knowledge and skills are as much about culture as they are about physical survival: “Now, survival skills [hunting, fishing and gardening] are different [than traditional activities]. They are part of tradition, but they are a form of survival. This is how they/we survived. We hunted, we gathered.” This participant brings up the point that aspects of Indigenous culture, such as food skills, arose out of the need for survival and became part of tradition as they were passed down through generations.

Another participant supports the view that traditional food skills are really survival skills. He explains that knowing what can be used as food, especially in different seasons, and how to properly prepare the food, are essential survival skills:

How do you put the fish on? What kind of wood do you use to cook your fish? [...] How long does a fish cook on open fire? What do you look for? So, these are the things we are trying to teach young people so if they get stuck, even in the winter time. If you go hungry what do you look for when you have no food? Everything is food.

– Garden Hill community member

These two quotes illustrate that traditional food skills and knowledge are part of culture and tradition but are also a matter of physical survival of individuals and communities. Before modern day stores, Indigenous peoples collected everything they needed to survive from the

flora and fauna in their local area for necessities such as food, fiber, medicine and everyday tools (Keoke & Porterfield, 2005). These place-based survival skills, as a form of traditional knowledge, were passed through the generations and adapted over time to allow Indigenous communities to succeed in harsh climates (Spring, Carter & Blay-Palmer, 2018). Today however, the role of survival skills in the community, including food skills, no longer comes from a position of necessity. A participant questions the need for survival skills in the present day:

There is no teaching [for young adults] [...] It was, in order for you to survive, you had to have those skills. If you didn't have those skills, you would either, not [be] able to survive in the harsh conditions as before. [...] Some of those teachings, survival skills that we had, we don't need them now. That's why there is a lot of chronic illness in the community, because everything is provided through social services.

– Garden Hill community member

This participant talks about how traditional lifestyles have changed and survival skills are no longer needed, which is not seen as a necessarily beneficial thing by this participant. As the need for survival has diminished, the imperative and opportunity for passing on traditional food skills and knowledge has also diminished. This quote also points to provision from the government for basic needs as being a cause of disease and cultural disruption in the community. One explanation could be that spending time on the land acquiring necessities, like food and shelter, requires much physical energy, cultural knowledge, social organization and spiritual connection, factors that are protective against disease (Auger, 2016).

Although skills to live in “the bush” are arguably not needed for physical survival in a modern world where shelter, food and clothing can be acquired through financial means, they are needed for the survival of traditional food activities and culture in Garden Hill First Nation. A

young adult, or any other community member for that matter, cannot be out on the land, hunting, fishing, or trapping without having the necessary knowledge and skills to be safe and fed.

Survival skills have been cited elsewhere as a component for teaching young adults about traditional food (Food Matters Manitoba, 2013). For example, survival skills such as portaging rapids, gun safety, and clothes to wear in cold and wet climates were cited as important aspects of a land-based program designed to improve food autonomy in an Oji-Cree community in northwestern Ontario (Robidoux, 2017).

Further, not any location for outdoor safety or survival skill training will do. Often is the case that Indigenous young adults are forced to leave their rural or remote communities for a large urban center for further education (Urban Aboriginal Peoples Study, 2010), but for survival skill training, or a traditional food program to be culturally reinforcing, they must take place on the land the community identifies with (Lowan, 2009).

#### **4.1.3 Improved Well Being**

Participants believe that spending time on the land participating in traditional food activities, including procuring, consuming and sharing food, is beneficial for young adults as it is intertwined with social, cultural, physical, and emotional development:

Like I said when you go out there and you provide food for yourself, and you prepare it, you have that pride. I actually did this! My own self. I took this food from the land and I took care of it and it sustained me and I shared it with other people. You have that pride that you did it yourself and you didn't buy it from the store. You actually got it yourself.

– Garden Hill community Elder

This Elder describes how young adults will feel a sense of pride and self-esteem from sharing and providing food for others, a benefit not felt when buying food from the store. This

idea is echoed by another participant as he talks about the value and learning that occurs from getting young people on the land:

For example, if I went hunting and brought some ducks, goose and beavers and I go give it to the elder, the elder will show so much gratitude and thankfulness because that's the food they grew up with. [...] We are losing that, everybody is using money now-a-days. 'Hey you know what, I'm going to go get my mother something, I'm going to go get her maybe two loaves of bread, a case of eggs.' You know, it's still good, you earned that money for it. But the fact of the matter is you have to move your body, your soul, your heart, so that when you take something from the land and give it to the elder, it has a meaning. That's what I am talking about here.

– Garden Hill community member

In this quote, the participant contrasts the process of obtaining store bought food from traditional food. Store bought food comes from a market-based system where the median of exchange is money and is outside of cultural and spiritual systems. Traditional food on the other hand comes from the land and requires the physical, social, emotional and spiritual body in exchange for food, giving it cultural significance.

A community Elder further illustrates the difference between store bought and traditional food by explaining the health impacts from the transition to what he calls “white man’s food” in the community:

Yep, that's when people start getting sick, when they are eating the junk food. Before we weren't that bad. We had wild meats and everything from the land. What the creator gave us to survive from. That's our how our great grandfathers survived. From the land, there was no store or anything. [...] We have to learn. We have to use what was given to us to live on the land. What was created on the land.

– Garden Hill community Elder

This Elder mentions that eating “junk food” is what is making his community sick. He believes consumption of foods from the store, over foods from the land, is contributing to negative health impacts in his community. To return to foods from the land would conversely improve health. The Elder refers to what scholars term the “nutrition transition,” where globally, traditional diets rich in hunting, trapping, fishing and gathering are being replaced by a globalized, industrial food system. These new foods have been linked to chronic conditions and diseases due to their highly processed nature and lack of micronutrients (Earle, 2011; Damman, Eide & Kuhnlein, 2008). Diabetes, for example, was an unknown disease in Garden Hill before the 1950s. It was after the 1950s that the food system in Garden Hill became largely market-based and processed foods high in salt, sugar and fat replaced nutrient dense traditional foods (Thompson and Harper, 2018).

Another participant agrees that food from the land has restorative health qualities and can heal health ailments:

Especially whitefish, whitefish can heal diabetes. It prevents and it can heal. One of my friends did it. He had diabetes and now he’s got no more diabetes because he was eating whitefish and was drinking a cup of broth once or twice a week.

– Garden Hill community member

This community member believes that the consumption of traditional food, like whitefish, is important in the prevention and treatment of chronic disease. For many Indigenous communities, both animals and plants are considered medicine and the binary distinction between food and medicine found in mainstream discourse does not exist (Cajete, 2000; Black Elk, 2017). One Garden Hill Elder, Dwight Keno (2018), at the Indigenous Food Sovereignty Summit explained that animals are medicine “because they eat medicine all day long.”

These participants support the idea that eating traditional foods is supportive of

Indigenous health whereas western foods are harmful for health. The participants believe that young adults who spend time on the land engaged in food activities will have an increased sense of pride, connection to culture and community and reduction in disease. Underlying this notion is that traditional foods elicit more than physical health benefits, but also spiritual, social and cultural value (Willows, Veugelers, Raine & Kuhle, 2011). The health benefits of food, according to these participants, is about being able to eat foods that are culturally appropriate in a culturally appropriate way, such as being harvested from the land and shared in community.

Culture in this sense means the:

Values, beliefs, attitudes, and practices accepted by members of a group or community. It determines in part, what foods are acceptable and preferably, the amount and combinations of food to eat, when and how to eat, and the foods considered ideal or improper (Kittler & Sucher, 2004 as cited in Willows, 2005, p.33).

Power (2008) argues that along with access, availability, supply and utilization, culture is an essential pillar of food security in Indigenous communities and should be considered in any community health intervention.

#### **4.1.4 Language**

To learn and understand the Oji-Cree language is to also understand traditional foods and the relationship Oji-Cree people have with the land. During interviews, participants focused on language as a way for young adults in the community to understand traditional food and what it means to be Oji-Cree. One participant describes how following the food supply across the land helped to develop the Oji-Cree language:

We had a nomadic life. We had to follow the food [...]. And when our family migrated back and forth with the food, with the seasons, we came across some of these Indians from Quebec, or the southern part of Ontario. Our language, the Island Lake dialect, is

different from the rest of Manitoba because we had migrated [...] prior to the white man. Because we followed the animals.

– Garden Hill community member

According to this community member, understanding the Oji-Cree language and its origins, gives insight into the history of the people in the area and their relationship to food and land. This community member talks about how the Oji-Cree people were nomadic, following the food supply. Out of this movement on the land interacting with other tribes, the Oji-Cree language evolved.

A Garden Hill community Elder talks directly about how land, food and language are intertwined and the impact on young adults: “It is important [for young adults to spend time on the land] because young people are losing their culture and their language. If they don’t go out for traditional food, they will lose their language.” This Elder is further concerned that young people do not know their language anymore. He comments: “Some Elders only speak Oji-Cree and they cannot communicate with their grandchildren because they don’t speak Oji-Cree.”

This Elder describes how the procurement of traditional foods from the land reinforces language learning. Land, language and traditional knowledge are inextricably intertwined. According to Simpson (2004), Indigenous knowledge comes from a relationship with nature. This knowledge is contained within the language. She argues that for Indigenous languages to maintain their rigor and worldview, they must be transmitted in the context in which they were created – on the land.

One participant explains that the lack of words in a language are also telling of culture and traditional food:

With the introduction of the English language, you can tell what is sovereign and what is not in relation to food. For example, [...] the five W’s that were introduced to our people.

That's what is killing us, the sugar, the salt, lard, milk and what's the fifth 5th one, wheat. Flour. That's what was introduced to our people and that is what is killing us, the diabetes, the heart disease, you name it. We never had that. And do you know those five words don't have words in our language [...]. Bannock is not in our language, it doesn't have its own meaning as you would berries, strawberries. The strawberry has its own word, Otehimin, which is the heart berry. It's in the language itself.

– Garden Hill community member

As demonstrated in this quote, having an Oji-Cree name for a food is significant as it transmits culture and an Indigenous worldview. Words in Oji-Cree do more than describe or name a food, as is the case with the English language, but they describe a relationship with the food, land and Mother Earth. The participant points out that the five W's (standing for white, the color of salt, sugar, lard, milk, and flour) are White man's food and do not have cultural significance in Oji-Cree, as evidenced in the language. The relationship between language and an Indigenous worldview on food is also supported by Elder Geordie Walker (2018). In his workshop on language and food at the Indigenous Food Sovereignty Summit 2018, he commented that "How we [Indigenous people] are to live is in our language." Like the participant, Geordie goes on to describe Otehimin, or strawberries, as an example: "Strawberries are shaped like a heart, so there is some medicine there for the heart. The roots that you pick up and throw in a pot of water, it will clean your veins. That's the way our people see the land and everything that grows there." Using the Oji-Cree language teaches not only knowledge about traditional food, but also about culture, and how to situate oneself within the world.

Learning the Oji-Cree language connects young people to their ancestors and tells a story about the history of food in their community. As Indigenous languages were developed through a relationship with the land, spending time on the land is important for maintaining language (Simpson, 2004; Settee, 2009). Cultural meanings, stories and teachings about food and how to



live are embedded within the language. Some participants fear that the language is being lost among young people and spending more time on the land will help retain the Oji-Cree language. Language, according to Four Arrows Regional Health Authority website (2018) is what “[...] connects us to our ancestors and to our territories and is in all of us, but we have to bring it out.” Indeed, up to 90% of the world’s languages are predicted to diminish by the end of the century and need to be revitalized, with one of the main reasons being lack of intergenerational transmission to young people. Globally, loss of Indigenous languages not only represents a loss of cultural and linguistic diversity, but also in biological diversity due to the environmental knowledge contained within the language (United Nations Permanent Forum on Indigenous Issues, 2008). A focus on the protection and promotion of language is essential to the protection and promotion of traditional food.

## **4.2 Land Based Education: Barriers and Opportunities**

### **4.2.1 Financial Cost**

Although all adult participants in this study agree that spending time on the land is important to help young people learn about traditional foods, the financial cost of doing so is discussed as beyond the means of many families and organizations in the community. One participant describes how cost is a barrier to taking younger generations out on the land:

Especially the kids in high school and elementary [school] a lot of them don’t have that luxury to get out to the trap line with family. For one thing, it’s really expensive to fly out. Especially if you have a large family, you have to make multiple trips on the float plane and they charge an arm and a leg. 1400 bucks my uncle had to pay, for four people, for one load and that’s just one way. And [community members] have to wait for their next income at the end of the month to come back and that’s expensive and people can’t afford it. Especially if you want to take your grandchildren out on the land, show them where you grew up on the traditional hunting grounds. It’s so hard. I think that’s where

we need to bring it into the community. Bring wild game into the classrooms, give hands on training. I know the youth will say “eww this is gross” as they are gutting the moose or the beaver.

– Garden Hill community member

This participant acknowledges that young adults want to spend time on family traplines, but the cost is unaffordable, especially for large families, as the floatplane charges per person. To overcome this barrier, the participant suggests that traditional foods can be brought into the classroom where students, at the very least, can encounter country foods through its processing, preparation and eating. A community Elder elaborates on how cost prevents young adults from learning about traditional food:

People are still interested in trapping but because they have no money they don't bother. Instead they stay home and collect welfare. Both young people and Elders. Young people are interested in going too, but they have no one to take them because people can't afford to go. It all boils down to cost. The foods are still there, they are just too expensive.

– Garden Hill community Elder

This Elder stresses that knowledge and desire exist to obtain traditional food from the land, and that traditional foods are still abundant in the area, but the economic barrier is too great. The average income in Garden Hill First Nation is \$12,957, three times lower than the average income for Manitoba as a whole (Puzyreva, 2018). A recent report by Puzyreva for the Canadian Center for Policy Alternative in Manitoba (2018) concluded “due to the strained financial conditions of people in Garden Hill First Nation who predominantly live on welfare, it is extremely hard to balance expenses for basic needs” (p. 12). In addition to income, research focusing on traditional foods access and abundance in Indigenous communities has shown factors such as a changing climate, settlement, and/or contamination from natural resource extraction prevents harvesting of Indigenous foods (Power, 2008; Kamal et al, 2015; Earle, 2011;

Ballard & Thompson, 2013; Haman et al. 2010). Increased financial capital, such as through community economic development, could help improve traditional food access in Garden Hill First Nation.

Another participant agrees that the cost of accessing traditional foods is too great, but adds that at one time, accessing traditional foods did not rely on costly modern-day equipment and fuel as transportation was by dog sled: “Yeah these are the barriers, cost. The high cost of flying, gas, you need a boat motor for fishing. We don’t have any dog teams anymore, so we rely on the ski-doo.”

This participant discusses how the nature of traditional food procurement has changed. For example, people no longer rely on traditional transportation methods like dog sled and canoes to access traditional territories but instead use boats, snowmobiles and planes even though the cost of doing so is prohibitive. To return to traditional means of transportation that is less reliant on financial capital (although requires other resources) is a challenge. Indigenous peoples who work full time in the wage economy struggle to have the time to take long hunting trips by canoe or dog sled and rely on quicker methods, like a snowmobile or boat. Those peoples without jobs may have the time, but not the money to hunt, trap, fish and gather. Underlying these factors is the traditional skills and knowledge needed to traverse the land by canoe or dogsled in the first place (Nadasdy, 2003).

The cost of accessing the land and traditional territories for food by plane, boat or ski-doo is a barrier for community members of Garden Hill to take young adults out on the land as the cost of transportation, including fuel and money to buy and maintain equipment, is beyond the economic means of many families. It is no longer practical to access these traditional territories by traditional transportation methods that require a significant amount of time, knowledge, skill

and physical ability. Along with cost, knowledge remains a significant barrier to reviving traditional food systems and will be discussed in more detail in the following chapter using gardening as an example.

#### 4.2.2 Technology

Participants focused on how technology distracts young people from engaging with traditional food practices and spending time on the land:

A lot of the families here try really hard to keep the teachings from their ancestors. And there aren't that many families that are still going to their traditional trap lines. It's sort of, from what I have seen anyways, has dwindled because of technology. I know for one thing I was guilty for passing up offers for going up the trap line with family members because I didn't want to leave technology, my phone, my computer and miss out on the world type of thing. I think that causes our tradition to be lost. Technology.

– Garden Hill community member

This participant acknowledges that while many families are committed to living a traditional lifestyle, value is also placed on having access to modern day technologies like cell phones and computers. Another participant agrees that technologies are competing for time on the land:

No disrespect to anyone because today we have modern ways. I could even go fishing on my phone if I wanted to. That's how modern we are. That's what makes me think. With kids today, like hey, you guys want to go fishing? [and they answer about the games on their phone] *No I'm already fishing, you know I got a big one.* Like come on, that's not fishing. So, yeah. There is technology. Technology is taking away a lot of our time out on the land.

– Garden Hill community member

These participants believe that young adults, and other community members, would not sacrifice access to technology to spend time on the land. Another participant believes that

technology is altering the behavior of young adults, so that they no longer have the listening skills or patience to engage with land-based activities and learning traditional knowledge:

We have the TV, phone, internet, social media, alcohol, drugs, cigarettes, those sorts of things hey. They [Young adults] want instant gratification. [...] [Before technology young people] were taught to listen. We don't do that no more. We had really good oral storytellers. Especially, there are some that have that talent. Or we use to. It was like watching the TV when you were listening to your grandmother tell these stories, we have to capture their imagination.

– Garden Hill community member

This participant discusses how learning behaviors of young adults are changing because of technology. Young people now demand instant communication and no longer have the patience to listen to the storytelling techniques of Elders and knowledge keepers. This is a cultural loss as not only did oral storytelling teach young adults to be good listeners, but story telling was, and continues to be, a transformative process as it creates a dynamic space for the storyteller and audience to interact and create shared meanings. In contrast, communication items like televisions, cell phones and computers are unidirectional and cannot recreate the collective and cultural context of traditional communication styles like storytelling (Simpson, 2011).

Other participants see technology, especially social media, as an important part of engaging and educating young adults about Oji-Cree culture. A community member explains how the local television station is used to educate about traditional food:

I know some families, some adults, they won't touch fish. They won't touch the slime. Then they teach their kids the "yuck." That kind of language. That has to change. I usually talk about this on our local TV about our traditional foods and how we are connected with animals.

– Garden Hill community member

Another Garden Hill community member agrees that technology can be used effectively to educate young adults about culture: “The thing with a lot of our youth today is that social media, that’s how they get their teaching. We should go that route.”

Some participants view technology as having a negative impact on the willingness for young people to engage in land-based activities and receive oral teachings. Other participants see technology, like television and social media, as a helpful method to pass on cultural teachings. Although technology has been studied for its impacts on declining health and happiness of young people (UNICEF, 2017; Mainella, Agate & Clark, 2011) benefits of technology have also been studied, particularly for cultural promotion and preservation. For example, text messaging, emails, digital storytelling, video conferencing and software, and audio recordings, have contributed to Indigenous language documentation, revitalization and maintenance, promotion of cultural identity, and furthered the education of young Indigenous people (Galla, 2016; Kral, 2010; Iseke & Moore, 2011). Still, further research in Garden Hill is warranted to understand how the use of technology interacts with culture, language and education of young people and takes into consideration the unique “linguistic and cultural, social, technological, environmental, and economic factors” of the community (Galla, 2016, p.1140).

#### **4.2.3 Engaging Young Women**

Participants caution that young females may be more difficult to engage in land-based food activities on the land compared to young males. One participant spoke about how community hunting camps and farming largely target male participants and females are less likely to be included. Fishing seems to be the exception:

[The Family Enhancement program] takes the young people out moose hunting where they are taught safety with a gun. At the same time, they are taught to recognize the signs,

like I said scouting, scouting a moose or whatever. [...] Even with the girls [should be included], it's not just men or boys. I think I was telling my husband, nobody ever brings a moose hide. And I think I can make the moose hide like the way I used to help my grandmothers. But it's a lot of work. But I think I can still do it. But nobody ever brings the moose hide. [...] The men don't bring it in because I think it's mainly because it's so heavy. You would need an extra load. And it's starting to cost a lot to go to the bush. I think the minimum is 370 dollars for one week. [...] All young people are involved with the fish, but not with the big game. [All young people] make the fish, then fry it then feed their kids. Then, I don't know about farming. I think it's mainly the boys that are doing that.

– Garden Hill community member

This participant mentions the gendered nature of food activities and how gender roles change over time. For example, due to the cost of bringing home a moose hide or other big game from the bush, women are not able to create goods from the moose hide. She mentions that the focus of traditional food programming today in Garden Hill, like moose hunting and farming, have mostly focused on male participation, although all both men and women are involved in fishing.

Another participant suggests that there are systematic barriers in including young women in traditional food practices in the community:

Especially our young women. There are some young men that know [traditional food skills] because they like to be out there. Because their parents like to be out there you know. It's mostly our young women who stay at home. Like I said it's a man's world. The young women stay in the community.

– Garden Hill community Elder

This Elder suggests western patriarchy as a social norm that supports male presence on the land, whereas the female role is at home. This Elder mentions that a male dominated world is preventing the full inclusion of females in not only traditional food programming, but in society

more generally. According to scholars Settee (2016) and Simpson (2017), many land-based Indigenous societies were both non-patriarchal and non-hierarchical. Colonization and racism has led to the confinement of “Indigenous women to heteropatriarchal marriage and the home,” contributing to both subjugation of Indigenous women and cultural genocide (Simpson, 2017, p. 111).

The gender divide explained by these participants was an unexpected finding in this study. Although, not thoroughly addressed in this research, the findings here warrant further research into gendered traditional food roles and how gender intersects with the evolving economic, social and cultural context of the community to influence young adult participation in traditional food activities.

### **4.3 Chapter Summary**

This chapter explored the food-related knowledge and skills that young adults need to know to learn about traditional food and Oji-Cree culture. Specifically, participants spoke about spending time on the land participating in cultural activities and observing Elders and other cultural teachers as the best way to teach young people about traditional food. Spending time on the land allows the Oji-Cree language to emerge, critical in understanding an Oji-Cree worldview and culture. An approach to teaching young people about traditional food also requires young people to understand specific place-based knowledge to traverse and survive on the land. Lastly, traditional food elicits wellbeing as its harvesting, processing, preparation and consumption requires the physical, social, emotional and spiritual body. Barriers to spending time on the land exist including cost, technology and engaging and creating opportunities for the participation of young women. Opportunities such as bringing traditional foods into the



classroom and using social media were mentioned by participants as ways to engage young adults in traditional food activities.

#### 4.4 References

- Auger, M. D. (2016). Cultural Continuity as a Determinant of Indigenous Peoples' Health: A Metasynthesis of Qualitative Research in Canada and the United States. *International Indigenous Policy Journal*, 7(4). <https://doi.org/10.18584/iipj.2016.7.4.3>
- Battiste, M. (2002). Indigenous knowledge and pedagogy in First Nations education. *Education*, 69.
- Ballard, M., & Thompson, S. (2013). Flooding Hope and Livelihoods: Lake St. Martin First Nation. *Canadian Journal of Nonprofit and Social Economy Research*, 4(1), 43–65.
- Black Elk, L. (2017, September). *Food is Medicine: My Favorite Medicinal Foods*. Presentation at the 2017 Native Nutrition Conference, Prior Lake, MN.
- Cajete, G. (2000). *Native Science: Natural Laws of Interdependence*. Sante Fe, New Mexico: Clear Light Publishers
- Cajete, G., (1994). *Look to the Mountain: An Ecology of Indigenous Education*. J. Carlton Publishing.
- Damman, S., Eide, W. B., & Kuhnlein, H. V. (2008). Indigenous peoples' nutrition transition in a right to food perspective. *Food Policy*, 33(2), 135–155. <https://doi.org/10.1016/j.foodpol.2007.08.002>
- Earle, L. (2011). *Traditional aboriginal diet and health*. Retrieved from <https://www.ccnsa-nccah.ca/docs/emerging/FS-TraditionalDietsHealth-Earle-EN.pdf>
- Food Matters Manitoba. (2013). *Manitoba Traditional Foods Initiative Planning and Resource Development Project*. Retrieved from: [https://www.foodmattersmanitoba.ca/wp-content/uploads/2014/05/OFOHOC\\_Trad-Foods\\_report-2013-online.pdf](https://www.foodmattersmanitoba.ca/wp-content/uploads/2014/05/OFOHOC_Trad-Foods_report-2013-online.pdf)
- Four Arrows Regional Health Authority. (2018). *Indigenous Food Sovereignty Summit 2018*. Retrieved from: <https://ifss2018.com/previous-summit/>
- Galla, C. K. (2016). Indigenous language revitalization, promotion, and education: function of digital technology. *Computer Assisted Language Learning*, 29(7), 1137–1151. <https://doi.org/10.1080/09588221.2016.1166137>
- Haman, F., Fontaine-Bisson, B., Batal, M., Imbeault, P., Batal, M., & Robidoux, M. A. (2010). Obesity and type 2 diabetes in Northern Canada's remote First Nations communities: The dietary dilemma. *International Journal of Obesity*, 34(S2), S24–S31. <https://doi.org/10.1038/ijo.2010.236>
- Iseke, J., & Moore, S. (2011). Community-based indigenous digital storytelling with elders and youth. *American Indian Culture and Research Journal*, 35(4), 19–38. <https://doi.org/10.17953/aicr.35.4.4588445552858866>

- Kamal, A. G., Linklater, R., Thompson, S., & Dipple, J. (2015). A Recipe for Change: Reclamation of Indigenous Food Sovereignty in O-Pipon-Na-Piwin Cree Nation for Decolonization, Resource Sharing, and Cultural Restoration. *Globalizations*, 12(4), 559–575. <https://doi.org/10.1080/14747731.2015.1039761>
- Keno, D. (2018, July). *Learn by Living: A Healing Journey by Canoe*. Presentation at the Indigenous Food Sovereignty Summit, Winnipeg, MB.
- Keoke, E. & Porterfield, K. (2005). *American Indian Contributions to the World: Food, Farming and Hunting*. New York, NY: Chelsea House.
- Kral, I. (2010). Generational Change, Learning and Remote Australian Indigenous Youth, *Center for Aboriginal Economic Policy Research Working Paper* (68).
- Kuhnlein, H., Erasmus, B., Creed-Kanashiro, H., Englberger, L., Okeke, C., Turner, N., Bhattacharjee, L. (2006). Indigenous peoples' food systems for health: finding interventions that work. *Public Health Nutrition*, 9, 1013–1019. <https://doi.org/10.1017/PHN2006987>
- Lowan, G. (2009). Exploring place from an Aboriginal perspective: considerations for outdoor and environmental education. *Canadian Journal of Environmental Education*, 14, 42–58.
- Mainella, F., Agate, J. & Clark, B. (2011). Outdoor-based play and reconnection to nature: A neglected pathway to positive youth development. *New Directions for Youth Development*, 130. DOI: 10.1002/yd
- Nadasdy, P. (2003). *Hunters and Bureaucrats: Power, Knowledge, and Aboriginal- State Relations in the Southwest Yukon*. Canada, UBC Press.
- Power, E. M. (2008). Conceptualizing food security for aboriginal people in Canada. *Canadian Journal of Public Health*, 99(2), 95–97. <https://doi.org/10.1016/j.gloenvcha.2007.09.002>
- Puzyreva, M. (2018). *Harnessing the Potential of Social Enterprise in Garden Hill First Nation*. Retrieved from: <https://www.policyalternatives.ca/publications/reports/harnessing-potential-social-enterprise-garden-hill-first-nation>
- Robidoux, M. (2017). *Collaborative Responses to Rebuilding Local Food Autonomy in Three Indigenous Communities in Northwestern Ontario*. In *A Land Not Forgotten: Indigenous Food Security & Land-Based Practices in Northern Ontario*, ed. M. Robidoux & C. Mason, Winnipeg, MB: University of Manitoba Press, 85-123.
- Settee, P. (2016). Indigenous Women Charting Local and Global Pathways Forward. *English Journal*, 106(1), 45–50.
- Settee, P. (2013). *Pimatisiwin: The Good Life, Global Indigenous Knowledge Systems*. Vernon: JCharlton Publishing Ltd.
- Settee, P. (2009). Education, Native Languages, and Supporting Indigenous Knowledge. *Our School /Our Selves*, 19(1), 87–93.
- Simpson, L.R. (2017). *As We Have Always Done: Indigenous Freedom Through Radical Resistance*. Minneapolis: University of Minnesota Press.

- Simpson, L.R. (2011). *Dancing on Our Turtle's Back*. Winnipeg: Arbeiter Ring Publishing.
- Simpson, L. R. (2004). Anticolonial strategies for the recovery and maintenance of Indigenous Knowledge. *American Indian Quarterly*, 28(3/4), 373–384.  
<https://doi.org/10.1353/aiq.2004.0107>
- Spring, A., Carter, B. & Blay-Palmer, A. (2018). Climate change, community capitals, and food security: Building a more sustainable food system in a northern Canadian boreal community. *Canadian Food Studies / La Revue Canadienne Des Études Sur L'alimentation*, 5(2).
- Streit, D. & Mason, C. (2017). *Traversing the Terrain of Indigenous Land-Based Education: Connecting Theory to Program Implementation*. In *A Land Not Forgotten: Indigenous Food Security & Land-Based Practices in Northern Ontario*, ed. M. Robidoux & C. Mason, Winnipeg, MB: University of Manitoba Press, 85-123.
- Thompson, S. & Harper, V. (2018). *Timeline: Island Lake Communities*. (Unpublished).
- UNICEF. (2017). *The state of the world's children 2017: Children in a digital world*. UNICEF Publications. Retrieved from  
[https://www.unicef.org/publications/files/SOWC\\_2017\\_ENG\\_WEB.pdf](https://www.unicef.org/publications/files/SOWC_2017_ENG_WEB.pdf)
- United Nations Permanent Forum on Indigenous Issues. (2008). *Fact Sheet: Indigenous Languages*. Retrieved from:  
[http://www.un.org/esa/socdev/unpfii/documents/Factsheet\\_languages\\_FINAL.pdf](http://www.un.org/esa/socdev/unpfii/documents/Factsheet_languages_FINAL.pdf)
- Urban Aboriginal Peoples Study. (2010). *Background and Summary of Main Findings*. Retrieved from: [https://www.uaps.ca/wp-content/uploads/2010/02/UAPS\\_Summary\\_Final.pdf](https://www.uaps.ca/wp-content/uploads/2010/02/UAPS_Summary_Final.pdf)
- Walker, G. (2018, June). *Language and Identity*. Presentation at the Indigenous Food Sovereignty Summit, Winnipeg, MB.
- Willows, N., Veugelers, P., Raine, K., & Kuhle, S. (2011). Associations between household food insecurity and health outcomes in the Aboriginal population (excluding reserves). *Health Reports*, 22(82), 15–20.
- Willows, N. D. (2005). Determinants of healthy eating in Aboriginal peoples in Canada: the current state of knowledge and research gaps. *Canadian Journal of Public Health, Revue Canadienne de Sante Publique*, 96 Suppl 3, S32-6. Retrieved from  
<http://www.ncbi.nlm.nih.gov/pubmed/16042162>
- Wilson, K. (2003). Therapeutic landscapes and First Nations peoples: An exploration of culture, health and place. *Health and Place*, 9(2), 83–93. [https://doi.org/10.1016/S1353-8292\(02\)00016-3](https://doi.org/10.1016/S1353-8292(02)00016-3)

## **CHAPTER 5.0: RESULTS & DISCUSSION:**

### **Community Farming and Gardening in Garden Hill First Nation (Kistiganwacheeng)**

This chapter explores the two last themes of the study, community gardening and farming as a process of cultural reclamation and increased self-determination over food. This discussion of farming and gardening as part of Oji-Cree food culture includes the impacts of residential schools, and how through gardening and farming, community members and young adult farm workers in Garden Hill connect to their ancestors, community, and land. This chapter also discusses how gardening and farming support community and young adult participation in traditional food systems, encourage respect and reciprocity, and increased access to culturally appropriate foods. Yet at the same time, struggles to reclaim traditional teachings and knowledge in a community divided by a dominating western society, are also discussed. Like the previous chapter, a discussion of the literature is integrated with the results and a summary of the chapter is presented.

### **5.1 Reclaiming Culture: Past, Present and Future of Oji-Cree Community Farming and Gardening**

#### **5.1.1 History of Gardening**

The history of gardening is an important aspect of what research participants believe young people need to know about traditional food in their community. Gardening is considered a traditional food practice in Garden Hill, although participants had varying temporal reference points in which they understood gardening as a traditional practice. Speaking about gardening as a traditional practice elicited stories of its history in the community, including stories of grandparents, ancestors and trading between Nations and missionaries. One community member,

after speaking to multiple Elders in Island Lake, believes that gardening was introduced in Garden Hill with the missionaries in the early 1900s:

Majority of the gardening came from the introduction by the missionaries. That's where gardening came from. [...] Yes there were farms. I've heard there were horse, goats, pigs, chickens, and farms. Majority of these farms were held in missionaries [...] and the outposts. The Hudson Bay Company, these posts, had these gardens. [...] I interviewed another elder in Red Sucker Lake, she's deceased now, asking specifically the question about gardening. She said, 'nope, we were harvesters in the region. It wasn't until the missionaries came that gardening started.'

– Garden Hill community member

This community member explains that gardening was introduced by the missionaries but clarifies that gardening is still traditional to Garden Hill as it was perfected by the previous generations and community members continue to identify with gardening:

Gardening would be considered [traditional] because yes it was introduced, but now it's considered part of Garden Hill. [...] My grandfather used to be a gardener, you could see his garden as far as you could see. So, they were champions, they knew what they were doing, they knew how to do it.

– Garden Hill community member

Other participants believe that gardening occurred in Island Lake before the arrival of missionaries, supported by vast Indigenous trading networks. In discussing gardening as a traditional food practice, one community member relays the following story:

I go to one island and the land is completely different, the soil is different. It makes me wonder. And I asked my dad. And my dad said to me: 'There was a lot of planting here back in the early centuries'. Based on what he said to me, I think we were actually trading our vegetables with the different tribes you know, we had a trading system. [...] That is our history, that is what our people did. [...] This is why our community is called Kistiganwacheeng. We were known as planters and gatherers.

– Garden Hill community member

This participant expresses pride in his community's ability to garden and explains how gardening is his community's namesake. Another community member supports the opinion that gardening was initiated by Indigenous peoples of the area and seeds spread to Garden Hill via Indigenous trading networks:

So [people of Garden Hill] got potatoes from people in the south. The seeds. They bartered with what they had there. But they were given these things [...]. Yeah, they had their own roads, like dog teams. It goes faster. They would travel long distances to exchange food for this and that. It wasn't the white man that brought potatoes. Potatoes were already here. But the white man tends to take credit for it.

– Garden Hill community member

This community member reminds us that a lot of credit for methods of growing food, raising animals and plant cultivars was taken from Indigenous peoples and allocated to white settlers (Daschuk, 2013; Carter, 1990). In fact, many Indigenous peoples were very good gardeners and farmers, with many species of plants that we eat today, including corn, potatoes, squash and beans, owed to Indigenous agriculture (Keoke & Porterfield, 2005; Food Secure Canada, n.d). Large trading networks throughout North America supported trading and bartering of multiple crop species, meat and other goods (Turner & Loewen, 1998; Daschuk, 2013).

Another community member emphasizes that gardening was at its peak of popularity after reserve settlement in the 1960s. People of the area were less active in following animal migration patterns for food and began to use root cellars as storage. An interview with a Garden Hill community member reveals:

When his grandfather was young, they were hunters, but they still kept a garden in the summertime. They couldn't save much of what they grew into the fall as they were moving all the time. They started to save more produce when they settled in the communities after signing of the Treaties.

– Garden Hill community member

Many participants also relate gardening to their grandparents or Elders in the community.

One participant fondly describes the garden at her parents' and grandparents' houses growing up:

Oh, I used to hate getting potatoes, and carrots and rhubarbs and what do you call them, turnips. My grandfather had a big patch. They had potatoes here, all of them. Of course us kids had to work. Then we had rhubarb. Because they put a fence here because we were always stealing that sweet rhubarb. Then they had turnips, and then the carrots. And on this side, they had peas. We were next door.

– Garden Hill Community Member

This participant understands gardening as a tradition passed down by family members and there is excitement and liveliness in her voice when she remembers the gardening practices of her grandfather. A young adult who works on the community farm also describes how gardening has a history in his family:

This is my second year working [at the farm], first time I didn't know what to do. [The farm supervisor] taught me. He is proud of me for learning fast. He would ask me, 'how did you learn to do this so fast?' My grandfather taught me how to plant; he planted potatoes, onions and carrots. There is a history of gardening in my family and I am able to be a fast learner.

– Young adult farm worker

The young adult farm worker recognizes that by gardening, he is carrying on his community and family traditions. He displays pride in his ability to garden and in the connection to his grandfather that gardening brings.

Regardless of how far back in time, whether a few generations or pre-contact, participants view gardening as a traditional food activity because it connects people to their families and ancestors. Another study of Indigenous peoples in Canada found comparable results in that participants related to traditional food as "food that they or their families had eaten for a long time", including foods like potatoes, rice and bologna, even though these foods were not

original to Canada (Luppens & Power, 2018, p.158). The authors of this study, as well as other scholars and international organizations, problematize the assumption by Indigenous and non-Indigenous peoples that traditional means “in the past” or pre-contact; this notion keeps Indigenous peoples and their rights in the past and does not recognize culture as evolving (Luppens & Power, 2018; United Nations, 2008; Battiste, 2002). What might be most important, is that the term traditional, like Indigenous food sovereignty, is developed and acted upon by a community and not placed upon them by outsiders.

### *Residential Schools and Gardening*

Participants recount the popularity of gardening, but also recall its decline with residential schools. An interview with a Garden Hill community Elder relates: “Everyone had a garden when he was growing up. When he left for residential schools in the 1950s for a decade, by the time he returned, there were no more gardens.”

Another Elder had a similar experience. She remembers her grandfather having a garden before she went to residential schools, but on her return, gardening was no longer being done by community members, but rather by the Catholic Church:

I remember the priests and the nuns had this really huge garden, everywhere. [...] They would take people from community and get them to harvest all the gardens they have. For a while I was confused. As a little girl I grew up and saw my grandfather doing all these things. Then there is a big chunk of my life that I don't remember [during residential school]. Then I remember this part where the Catholic Church was doing all the gardening. It was like what happened? It's like they controlled stuff on the reserve.

– Garden Hill community Elder

Another community member describes how forced labor and trauma at residential schools impacted the intergenerational transmission of knowledge:



There is a lot of reasons why those teachings weren't passed on. The traditional lifestyle, the hunting, the gardening was never passed on. There were all the reasons why. Because of illnesses in the community. Or residential school and those that went that never came back. Most of those, from what I heard, when they got there, that's all they did, forced labor [including gardening]. And they didn't want to do anything with gardening. Yep, that's knowledge from my late uncle. That's why they didn't want to do anything with gardening.

– Garden Hill community member

Participants describe how the practice of gardening, as well as many other practices, teachings, and ceremonies, were systematically dispossessed by residential schools. Starting in the 1940s, children were taken from their homes in Island Lake and forced to attend residential schools (Thompson & Harper, 2018). In these schools, children suffered starvation, experimentation, forced labor and other abuses. Children were taught that their traditional languages, knowledge, teachings and ceremonies were wrong and punishable (TRC, 2015a). Indigenous children, mainly boys, were taught farming skills in residential schools not as an act of benevolence, but to promote assimilation and European- style agriculture over a traditional economic lifestyle (TRC, 2015a). Those community members of Garden Hill who attended residential schools, as well as those who were left behind, were emotionally, intellectually, physically, socially and mentally unable to fully carry on their cultural traditions, such as gardening, due to the trauma lingering from residential schools (Battiste, 2002; TRC, 2015a). As one participant mentions, the Catholic Church took over gardening from the community.

Although gardening is a pleasurable memory for some, for others it can be an emotional trigger reminding them of the trauma experienced at residential schools. As Canada moves towards reconciliation, care must be taken that all Canadians come to terms with the truth of Canada's colonial history before trusting and respectful relationships between Indigenous and

non-Indigenous peoples can be established (TRC, 2015a; McCallum, 2017). For Indigenous young adults, an understanding of the history of colonization, including the residential school system and its ongoing impacts, is needed for young adults to “understand and take pride in their Indigenous roots” and understand Indigenous food systems (TRC, 2015b, p. 21).

### **5.1.2 Cultural Reclamation**

Following the decline brought on by residential schools, gardening resurged in popularity in about the year 2000 in Garden Hill. According to one community member, this increase was due to a grassroot effort and “a result of years of work by food champions in the community, especially Alec Keno.” This resurgence sparked an increase in the sharing of gardening knowledge from Elders. As community members became more interested in gardening, questions began to arise about how Elders gardened in the past and what are the best gardening methods to move forward with. A participant explains:

Even now when we started the gardening program in the early 2000s, even me, I didn’t have any knowledge of gardening besides putting a seed in and watching it grow. [...] And now we are starting to learn, bring back those old techniques that we lost, that we are using. How to fertilize our ground without the chemicals that we normally depend on when we started the gardening. Now we are strictly doing it with fish as a fertilizer. [...] We did consult with Elders and most of those people that gardened have died off, but some of the teachings [...] are passed on for teaching to the community.

– Garden Hill community member

As this community member recalls, the re-initiation of gardening in the community in the early 2000s was mostly based in western ways of growing food. With consultation from Elders, community members were able to bring back traditional knowledge of growing food, including the knowledge to work with the local growing conditions, like the use of fish fertilizer, an abundant, local ingredient that vastly enriches the soil (Okorosobo, 2017). As a Garden Hill

community Elder shares, when you start participating in gardening or farming, “it’s only natural that you would seek advice, that’s where the mentorship comes in.” The importance of seeking out Elders is paramount to Indigenous communities looking to revive traditional teachings (Wilson, 2003; Tobias & Richmond, 2013; Anderson, 2011). Traditional knowledge is held by Elders, it only needs to be brought to the surface, shared and enacted upon by curious community members.

The startup of a 15-acre community farm called Meechim Farm Inc. in 2014 has also propelled interest in gardening within and outside Garden Hill. Participants describe how physically having a farm that is open for visitors, encourages community members to grow food, keep household chickens and/or start farms of similar scale in their own reserve community:

I think Meechim Farm definitely is a place that shows it can be done, you can see it with your eyes, [people in the community] don’t believe anything until [they] see it, but when you go to Meechim Farm you will see chickens and things growing. You see, it’s that proof that we can do this on our land.

– Garden Hill community member

This participant mentions that having a local initiative that people can relate to and see for their own eyes is important for building awareness and agency. When people see gardening being done in the community, they are inspired and believe they can do it themselves. Meechim Farm Inc. may also be inspiring other Indigenous communities to garden or start a farm of similar scale as another participant explains:

We had individuals, First Nations individuals from Ontario come see [Meechim Farm]. And they were really inspired, asking how this is done. So, they, from what I interpreted from it, they saw that it has been done in an isolated, remote community [...] and [they] want to have it in their community.

– Garden Hill community member

This participant also describes how growing food on the Farm has inspired community members by the rejuvenation and sharing of knowledge:

We are talking about decades of gaps, of knowledge that was lost, that we are trying to get back and rejuvenate it. That is what we are trying to do right now [on Meechim Farm]. [Gardening knowledge] is key for this project, for the farm, for the Meechim Farm and for the individuals who want to grow their own food at their own place.

– Garden Hill community member

Many of the young adult workers on Meechim Farm Inc. note the attention the Farm is getting from people within and outside the community:

They [community members] are pretty interested in that, the whole thing that is here. They have that desire to have a garden and chickens with them. I had a friend, she's from St. Therese. 'Can I take one chicken?' she says. They are pretty interested."

– Young adult farm worker

Another young adult worker agrees that the Farm creates community interest and curiosity: "They [community members] always come here and check out the chickens, I guess this is the first time where they have seen animals here."

Children are especially interested in the farm, noted by another young adult farm worker: "It's a very good thing for people to come here to see how [the plants] grow. Especially small kids, they like to come see the really small chickens. They come every day." The farm is an attraction in the community, drawing community members to the Farm where they interact with the young adult workers and plants and animals.

### *Community Farming and the Impact on Young Adult Farm Workers*

Young adult workers are also taking initiative to help spread gardening in the community, demonstrating both an ability to take on new challenges and willingness to care for

and help others. When talking about the role of community farming in the community, one young adult noted: “It [gardening] is not that hard, it’s learning how to plant and we have to teach them [the community].”

Other young adult workers describe a desire to teach their family members how to garden now that they have the skills. One young adult worker took a picture of his own garden plot on the farm, that he had specifically asked the farm supervisor for that year, where he planted tomatoes, carrots, turnips, peas, corn, and potatoes. He explains after three years of working on the farm, he can now teach his younger brothers and sisters at home to garden. In explaining his photo, this young adult farm worker mentions: “Yeah this is my first time with my own garden. [...] [I can teach] other people, like my brothers and sisters.”

**Figure 2: Personal Garden on the Farm © 2017 by Canada**



Another worker expressed a mix of enthusiasm and frustration in explaining the photo he took of a tomato plant. This worker really enjoys gardening and wants to see more community members planting gardens:

They [community members] say ‘is this really growing?’ ‘Yeah, look at it [the tomato plant]. That’s what we planted.’ They are always so amazed when they see plants over here. Nobody ever plants around here on the reserve.

–Young adult farm worker

**Figure 3: Greenhouse Tomato © 2017 by Meechim Farm**



The willingness to teach others, especially coming from new gardeners, is very impressive. It is evidence of the excitement and sense of pride that learning gardening skills is cultivating in the young adults as well as the kindness they express in helping others.

Overall, gardening is being reclaimed in the community since about the year 2000, following a decline from the residential school in the 1940s. Gardening is a resource intensive activity, particularly in a harsh climate like in northern Manitoba, and having local examples like Meechim Farm Inc. and discussion about gardening is encouraging community members to partake in gardening, while helping to maintain and revitalize traditional knowledge systems. As the receivers of traditional knowledge in Indigenous societies, the involvement of young adults in gardening is critical to maintain and support the ongoing evolution of traditional knowledge and culture (Battiste, 2002 Trinidad, 2009; Fulford & Thompson, 2013; Dream of Wild Health, 2017). Further, the values and actions the young adults are displaying, such as leadership, kinship, pride, and care, resemble the components of the Circle of Courage model that proposes when belonging, mastery, generosity and independence are encouraged in social programming and systems, young adult are most likely to succeed (Brendtro, Brokenleg & Bockern , 2005).

Participating in gardening, and other land-based activities, may also be contributing to a process of Indigenous self-determination (Simpson, 2004; Kuhnlein, 2014). Corntassel & Bryce (2012) propose that Indigenous self-determination is not something that can be granted by a colonial government, but comes from within Indigenous communities, such as through active participation in land based cultural activities. Indeed, Indigenous communities around the globe have been using land-based knowledge and its application for natural resource management as a space for asserting self-determination and control over Indigenous territories and knowledge in the face of insatiable western economic development (Simpson, 2004).

### **5.1.3 Balancing Two Worldviews**

Although traditional teachings associated with gardening may be resurfacing in Garden Hill, participants describe the complexities of rekindling traditional teachings, ceremonies and

knowledge in face of a dominant western society and a community strongly influenced by Christianity. A Garden Hill community Elder explains the dangers of western knowledge and how it continues to impact Indigenous families and young adults:

Yeah, but you have to be careful that the western culture doesn't outweigh your traditional culture because that's what the residential schools wanted. No traditional knowledge or anything, which is why they said they would beat the Indian out of the child. And you have to be careful that you don't lose your culture[...] Young adults today, I don't know if they know anything. I think they are influenced by western culture. Their parents are teaching them what they learned from school, and that's why we are losing our culture. The western community has so much influenced our generation that we tend to teach our kids that way instead of the traditional way.

– Garden Hill community Elder

This Elder is skeptical of the integration of western and traditional knowledge. She comments that still today traditional knowledge is not valued as equal to that of western-based knowledge and people who promote traditional knowledge are not well received in Garden Hill. Her perception is that in the community, the teachings of residential schools are ongoing and community members continue to reject traditional knowledge. In her view, residential school teachings continue as parents teach their children the same values and beliefs that they learned in residential school.

Another participant believes it is the role of parents to teach cultural knowledge, but due to residential schools, this knowledge transmission was disrupted:

Parents [are responsible], but there is a big gap there from the residential school. So remember when I was telling the story there about how my dad didn't let me go to residential school, I was sad, because I didn't go. [...] Now I'm very happy. He taught me all this traditional stuff, hunting, fishing. I feel I am one of the lucky ones because I didn't go.

– Garden Hill community member



The participant believes because he didn't go to residential schools, he was able to learn traditional food skills. He further explains his role in teaching traditional knowledge in the community but mentions: "There is me, and a few of us, and then there is a big resistance, the colonized the very Christian ones, calling it the devil's teachings." This participant brings up the point that even though traditional knowledge might be present in the community, the ongoing impacts of residential school teachings in the community make promoting traditional knowledge widely very difficult in the community.<sup>8</sup>

One participant comments that teachings of respect for the land are not being shared in the community today and young people could benefit from learning this traditional teaching as he believes they are "more destructive":

When I was growing up, I learned from my late grandfather about respecting the land and to preserve anything that you see in your surroundings. Not only for you, but for the future of your community. [...] [Young adults] for some reason, they are more destructive. That I see. So, we need to pass that teaching.

– Garden Hill community member

This participant believes young adults need more teachings that connect them to Oji-Cree values, including respect. Another community member thinks that traditional teachings, like respect and reciprocity for the Earth, need to be incorporated into farming practices for young adults. He fears that farming and growing food is mainly following a western worldview, including treaty food as a commodity:

We [community members] are doing this to sustain ourselves, but we can't forget who's doing that for us. We have to remember the Creator, our Mother Earth [...] Nurturing

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<sup>8</sup> For example, I attended a sweat lodge in the backyard of a community member's home. This sweat lodge, for the most part, was done in secrecy with caution from those attending the sweat lodge that sweat lodges, as a traditional ceremony, are not widely accepted in Garden Hill.

your garden, nurturing that life that is coming out of the garden, that piece is being forgotten. That is the traditional piece that I am talking about that is food sovereignty. Your identity of who you are and where you came from, what practices were done in relation to respect Mother Earth, to respect creation, to respect land, water, everything. That piece. That's the piece that gets forgotten quite a bit versus commercialism.

– Garden Hill community member

This participant argues that spiritual beliefs and teachings are an integral part of teaching young adults about food. He believes that gardening and farming is being viewed by community members from largely a food production lens and traditional teachings are not necessarily being shared with young people.<sup>9</sup> He discusses that self-determination and food sovereignty is an understanding of self and your relationship to Mother Earth. For many Indigenous peoples, the process of growing and nurturing your own food is “connected to a larger understanding of the relationship between the environment, spirituality and people” (Cidro, et al., 2015, p 34). This is in direct opposition to the view on food in a dominant industrial food system that characterizes food as a commodity (Holt Giménez & Shattuck, 2011).

One participant agrees that there are struggles to balancing western and traditional knowledge but differs slightly from the opinion of the other participants, acknowledging that there are young adults and community members who were taught to embrace their indigeneity:

Some of the youth that come to our program [at Meechim Farm Inc.] have vast knowledge and true teachings and knowledge passed down. A lot of the families here [in Garden Hill] try really hard to keep the teachings from their ancestors. [...] Like I said our ancestors, our Elders have done this [gardened] before, at some point we just kind of misplaced that knowledge. We didn't lose it, we just kind of misplaced it or put it on the backburner because of the new technology that came into the community. They were

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<sup>9</sup> For example, an Elder and I observed young adult farm workers learning to butcher chickens. The Elder expressed concern to me afterwards that no teachings were shared with the young adults, or prayer or ceremony done, before butchering the chickens.

ooled and awed by an easier way of living, it put our ancestors' teachings on the back burner. [...] They [old and new teachings] should have fit together to make it work better for us in the community.

– Garden Hill community member

This participant brings up that while western culture dominated, traditional teachings were never lost, and some young people and families still maintain elements of their traditional culture. She believes that the integration of western and traditional knowledge could have been beneficial for the community if the primary purpose of the integration was to serve the community. Unfortunately, according to Wolfe (2006), for settlers to “settle among,” Indigenous societies, Indigenous societies had to be displaced, leaving little room for integration, only assimilation. Control by settlers was exerted not only through dispossession of Indigenous peoples from their land, but also from their social, cultural, and intellectual capital, that settlers procured (and continue to do so) to construct their own society (Barker, 2009). When Indigenous knowledge is recognized by western society, often it is not used for the benefit of Indigenous peoples (Simpson, 2004).

Although many of the adult participants believe that young adults are not receiving teachings of respect and reciprocity, this study also shows that young adults working on Meechim Farm Inc. demonstrate care and regard for the food they are growing and people in their community. One young adult farm worker took a picture of an apple tree with a pole beside it. His explanation for taking the photo was to recognize the importance of the apple tree: “This is important, apple trees are important. The pole, protects the apple tree. When people are ski-dooing in the winter time, they know to avoid the area and the apple tree is protected.”

**Figure 4: Apple Tree with Pole © 2017 by Chapman**



A relationship with plants was also demonstrated among the young adult workers. One young adult farm worker took a picture of a plant because she said it made her happy: “The peas, because I love peas and I was happy taking a picture of it”

**Figure 5: Planted Pea Field © 2017 by Sam**



Another young adult farm worker took a picture of apple trees because of the relationship he had built with the trees over the past three years working on the farm: “I took a picture because it looks nice over there, there are apples there too, a long time ago I planted those apple trees, when I started.”

**Figure 6: Northern Apple Tree © 2017 by Canada**



Participants who work on Meechim Farm Inc. demonstrate feelings of generosity for both human and non-human life, even in the absence of community wide acceptance of traditional teaching like respect for the land. One Garden Hill community Elder explains how spending time on the land growing food promotes a respectful relationship with Mother Earth:

When you are growing things you made it possible and you will start having this knowledge to treat them like living things because you grew it and you started it, you planted that seed that is growing into food and you will have that accomplishment.

– Garden Hill community Elder

Although some participants questioned if young adults are receiving teachings of respect and reciprocity from mentors in the community, this Elder explains that the

land is also a teacher and can have a positive impact on young adult development.

Indigenous communities are growing food as a tool of healing and cultural reconnection and reclamation in their communities (LaDuke, 2008), but the question of how western culture, the very thing that continues to discredit and demean Indigenous worldviews, philosophy and culture, can be wielded to empower Indigenous communities instead of suppressing them, is no easy task (Smith, 1999; Nadasdy, 2003; Martin, 2012). As adult participants discuss, Oji-Cree teachings and knowledge, and the spirituality behind it, are not prominent in the education of Oji-Cree young people. Some participants argue that although gardening may be occurring in the community, the intention behind it is more representative of a western versus an Oji-Cree worldview. Scholar Alfred Taikka (2005) explains that 500 years of “socioeconomic and psychospiritual domination” of Indigenous life by white settlers has created a “colonial culture of fear” – an internalized oppression among Indigenous peoples that has resulted in continued suppression of Indigenous values and worldviews and division among Indigenous communities as to what kind of life to live and teach younger generations (p.120). Indeed, the colonial strategy of “divide and rule” is still working in Indigenous communities today (Smith, 1999). Further, when Indigenous knowledge is integrated into mainstream culture, it is often separated into discrete categories and selectively used based on serving the interests of white settlers. For example, the spiritual foundations are often dismissed as they oppose western values and worldviews (Nadasdy, 2003).

Although some adult participants describe a bleak picture of what young adults are learning from community members, the land is also a teacher. As the young adult workers spend time learning and growing food, their care and respect for the Earth also grows. Young people who spend time on the land may be creating their own physical and psychological spaces of resistance against a western society ingrained in the separation of human and nature (Alfred &

Corntassel, 2005). Scholar Waziyatawin (2012) explains that to heal the disconnect from the land brought on by colonial forces, Indigenous people must spend time on the land reconnecting to its sacredness. In this way, a feedback loop occurs where “the more [Indigenous people] learn to restore local food practices, the more likely we are to defend those practices, and the stronger our cultural ties to our homeland become” (p. 74). The very act of spending time in nature caring for and learning from plants and animals has the ability to create pro-environmental feelings, generosity, care for Mother Earth and prepare the next generations of food leaders by connecting them with their culture (Krasny & Tidball, 2009; Fulford & Thompson, 2013).

## **5.2 Community Farming and Gardening: Food that Supports Self-Determination**

### **5.2.1. Increased Food Security**

Gardening is viewed by participants in this study as a way to increase food security, including economic and geographic access to food. One participant explains how gardening helps community members access food for a cheaper price, compared to purchasing food from the local store in Garden Hill, and supports locally grown food:

We [Garden Hill] have too many foods that can be locally grown, flown in. Because everything is flown in, it adds to the financial cost. The financial cost for the food, to fly it in, will affect their monthly income. Because not too many people are employed. Most people are on social assistance [...] [gardening can] help them save money, providing that there are not too many expenses of maintaining the garden.

– Garden Hill community member

This participant sees gardening and raising your own food as contributing to self and community socio-economic independence in a community largely unemployed and reliant on social assistance, although he admits that gardening has costs associated with it as well. Another



participant also believes gardening helps to save money and lessens her trips to grocery store for food. She contrasts the cost of produce at the Northern Store Inc. with produce from the garden:

[Gardening] does make you aware of the cost you are paying to go to the store. Paying double or even more in vegetables, compared to what you are growing in your yard. It makes you compare paying to go across and come back. I know that's why I had a garden for a couple of years in our yard because I wanted to compare what the benefits there was to grow your own food and going across and spending 10\$ a bag on potatoes.

– Garden Hill community member

This participant believes there is a cost advantage of gardening given the high cost of fresh food as well as the extra fees to get to the store to buy food. When she mentions “going across” to get food, she is referring to the boat taxi fee to get to the Northern Store Inc., the main supplier of fresh produce in the community, located on an island in the community. According to a report from the Canadian Center for Policy Alternatives, community members in Garden Hill spend between \$10.00-50.00 for round trip transportation to the grocery store (Puzyreva, 2018). Considering the most common vegetables bought from the store are “potatoes, turnips, carrots and onions” according to one participant, and are easily grown in Garden Hill, gardening may offer the ability to save some money on food as well as lessen the expense of traveling to the store.

Young adult farm workers at Meechim Farm Inc. also believe that growing and raising food in the community is more cost effective than buying fresh food from the Northern Store Inc. One young adult farm worker explains how Meechim Farm Inc. can help the community by providing a variety of fresh fruits and vegetables: “[Fruit and vegetables] are crazy expensive. This [Meechim Farm] could help with the gardening, fruits, for this community.”

Although a market-based system is an important part of food security (Power, 2008), healthy fresh foods are largely unavailable in Garden Hill due to food cost, access, and quality as

well as poverty in the community (Wendimu, Desmarais & Martens, 2018). Research by Thompson et al. (2011) documented household food insecurity rates at 88% in Garden Hill and follow up research in 2015 has suggested that food insecurity rates continue to increase, particularly among those reporting mild or moderate food insecurity (Das, 2017). To consume a healthy diet according to the Revised Northern Food Basket (a costing of 67 standard healthy food items by Nutrition North Canada to monitor the cost of food in northern communities), as of March 2017, a family of four in Garden Hill would have to spend 397.46\$/week (Nutrition North Canada, 2018). In a community where the sole income for most families is \$2000.00 per month from social assistance, food alone is accounting for about 80% of their total income (Puzyreva, 2018). In comparison, the most recent food costing report for Winnipeg calculated the price of eating healthy for a family of four to be 186.67\$/week, or half the price of a food basket in Garden Hill (Community Health Through Food Security Group, 2011).

Although participants in this research suggest gardening saves them money, it is unclear what impact gardening is having on food insecurity rates in Garden Hill First Nation. Research from Huisken, Orr & Tarasuck (2016) has suggested that while gardening has many benefits including social, cultural and physical, it plays no role in improving household food insecurity. Food insecurity is defined as the lack of food due to inadequate financial resources and is most effectively resolved by systematic policies to increase income (PROOF, n.d). While the research presented by Huisken, Orr & Tarasuck (2016) is very important for informing policies to decrease food insecurity at a population level, the conclusions are generated from data (Canadian Community Health Survey) which excludes reserve populations. More research into how gardening interacts with food insecurity on reserve communities, particularly isolated and remote communities where the cost of food is much higher than urban centers, is needed.

### 5.2.2 Supporting Traditional Economies

Gardening was also viewed by participants as a way to acquire and distribute food in a culturally appropriate manner as it promotes sharing of food and decreases reliance on a market-based system for food. One participant refers to gardening as a traditional way of feeding the community versus using money from the government to buy food in the store:

The missing part [in the food system] was how to sustain yourself. How to sustain the family so that the next food was coming from [somewhere] other than the high percentage of our people being on the social welfare system and waiting for the social welfare check. There needed to be another way. The original way of our people, like I said, they needed to get back to producing and harvesting their own food at that time.

– Garden Hill community member

This participant talks about how gardening can help families become more self-reliant and connect with the traditional food ways of the previous generations: producing and harvesting food. In his view, growing and raising food in the community is also more dignified and preferable than using money from social welfare to buy food. Another participant further explains how community members, including young adults, come to rely on the money provided by social welfare for food and a cycle of dependency is created:

They [Young adults] are relying on stores. They are relying on getting these processed foods. They are going there to rely on canned foods. It's because that's just the way we've been programmed to be, we have been programmed to fail. [...] Even with the federal government, INAC, they are basically giving us money for social assistance to stay at home. So what they are doing is basically telling our youth, depend on us.

– Garden Hill community member

This participant recognizes the need for change in the community so that young people feel successful and empowered through food. He goes on to suggest that farming can support a

traditional economy of bartering and trading with the outcome of less reliance on a market-based system for food imposed by outsiders and increased ability to meet the needs of the community:

So, if you look at that component where we are farming, stuff like that, that economic component could play a part of that. We could raise food, we could barter, we could exchange within the communities. We don't have to rely so much on the money from social assistance that we get. It revolves around the community. [...]The sovereignty part is about the First Nations being able to have their own foods, having their own needs.

– Garden Hill community member

This participant believes that growing your own food in the community is a step towards socio-economic independence and creates an opportunity for community members to determine how food should be distributed and exchanged. He mentions that producing food in the community is part of being sovereign as a nation.

Community farming is also encouraging sharing of food in the community. A young adult farm worker stresses the importance of sharing food with community members to inspire others to grow food: “We always give them [tomatoes] away when they are ready, I always give them away, like to people. Everything that we plant, so that way they can want to plant too.”

Another young adult worker mentions how sharing food in the community is a way to help community members manage disease:

“It's a good thing we are planting food, veggies over here, because a lot of people that live here have diabetes and all of that. It's interesting that we are planting veggies over here so that we can just give it to them.”

– Young adult farm worker

Young adult workers recognize the cost barrier community members have to purchasing fresh food and express generosity in sharing food with community members.

They see giving away the food grown at Meechim Farm Inc. as a way to help community

members eat well and contribute to well-being.

These community members speak about how gardening can be used to restore traditional economies by giving community control over how food is distributed and exchanged. While sharing, instead of selling food may impact profit, bartering, trading and sharing have cultural and social benefits as these practices are rooted in the teaching of reciprocity (Cirido, et al., 2015). Many Indigenous communities around the world have turned to models of community economic development, such as social enterprises, cooperatives and development corporations, to ensure cultural and social values are valued equally to economic goals (Hernandez, 2013). For example, Meechim Farm Inc. is a social enterprise that cares about social as well as financial outputs.

Sharing food also appears to contribute to food security in First Nations communities. One study by Islam & Berkes (2016) documented exceptionally high rates of food security in Norway House Cree Nation in Manitoba compared to neighboring First Nations communities in part due to extensive community food sharing networks evident during commercial fishing season. In this research study, participants related growing and raising food and sharing to increased access to fresh foods and as a key part of being sovereign as a nation. As prominent elder Dave Courchene Jr. (2018) at the Indigenous Food Sovereignty Summit asked: “How can a nation be sovereign if they cannot even feed their children?”

### **5.3 Chapter Summary**

This chapter described how gardening and farming is viewed by community members in the past, present and future. Regardless of the origin of gardening, gardening is part of Oji-Cree culture in Garden Hill and is a cultural and traditional practice that inspires both pride and hard

memories. During residential schools, the practice of gardening was disrupted in Garden Hill and the teachings were no longer shared in the community. Community members have worked tirelessly to reclaim the tradition of gardening in Garden Hill, with an increase of home gardens and the start of a community farm that employs young adults. Teachings from Elders about how they used to garden are resurfacing and young adults working on the farm are excited to share the knowledge of farming and gardening with other community members. Some community members question whether traditional teachings of respect and reciprocity are being emphasized when teaching gardening to young adults and if gardening today is being dominated by production and commercialism, rather than an intent to care for, and nurture, the land. Lastly, due to the high cost of food in the community, community members view gardening as a way to provide an alternative, culturally appropriate way to access fresh fruits and vegetables in the community. Gardening and farming also represent a way for community members to take economic control over their food systems by promoting community-led ways of producing, distributing and exchanging food.

#### 5.4 References

- Alfred, T., & Corntassel, J. (2005). Being indigenous: Resurgences against contemporary colonialism. *Government and Opposition*, 40(4), 597–614. <https://doi.org/10.1111/j.1477-7053.2005.00166.x>
- Alfred, T. (2005). *Wasase: Indigenous pathways of action and freedom*. Canada: Broadview Press.
- Anderson, K. (2011). *Life Stage and Native Women: Memory, Teachings and Story Medicine*. Winnipeg, MB: University of Manitoba Press.
- Barker, A. (2009). The Contemporary Reality of Canadian Imperialism: Settler Colonialism and the Hybrid Colonial State. *American Indian Quarterly*, 33(3).
- Battiste, M. (2002). Indigenous knowledge and pedagogy in First Nations education. *Education*, 69.
- Brendtro, L. K., Brokenleg, M., & Bockern, S. Van. (2005). The Circle of Courage and Positive Psychology. *Reclaiming Children and Youth*, 14, 130–136.

- Carter, 1990. *Lost Harvest: Prairie Indian Reserve Farmers and Government Policy*. McGill-Queen's University Press.
- Cidro, J., Adekunle, B., Peters, E., & Martens, T. (2015). Beyond food security: Understanding access to cultural food for urban indigenous people in Winnipeg as Indigenous food sovereignty. *Canadian Journal of Urban Research*, 24(1), 24–43.
- Community Health Through Food Security Group. (2011). *The Cost of Eating According to the Nutritious Food Basket*. Retrieved from: [http://www.wrha.mb.ca/extranet/nutrition/files/Professionals\\_Reports\\_FoodBasketReport.pdf](http://www.wrha.mb.ca/extranet/nutrition/files/Professionals_Reports_FoodBasketReport.pdf)
- Cornthassel, J., & Bryce, C. (2012). Practicing Sustainable Indigenous Approaches to Cultural Self-Determination. *Brown Journal of World Affairs*, 18(2), 151–162. <https://doi.org/10.2307/24590870>
- Courchene, D. Jr. (2018, June). *Connecting Food and Language*. Presentation at the Indigenous Food Sovereignty Summit, Winnipeg, MB.
- Das, M. (2017). *Rebuilding food security in Garden Hill First Nation Community: Local food production in a northern remote community*. Winnipeg, Manitoba: University of Manitoba.
- Daschuk, J. (2013). *Clearing the Plains: Disease, Politics of Starvation, and the Loss of Aboriginal Life*. Regina, SK: University of Regina Press.
- Dream of Wild Health. (2017). *Youth Programs*. Retrieved from: <https://dreamofwildhealth.org/programs/youth-programs>
- Food Secure Canada. (n.d.). *Discussion Paper 1: Indigenous Food Sovereignty*. Retrieved from: [foodsecurecanada.org](http://foodsecurecanada.org)
- Four Arrows Regional Health Authority. (2018). *Indigenous Food Sovereignty Summit 2018*. Retrieved from: <https://ifss2018.com/previous-summit/>
- Fulford, S., & Thompson, S. (2013). Youth community gardening programming as community development: The youth for EcoAction program in Winnipeg, Canada. *Association for Nonprofit and Social Economy Research*, 4(2), 56–75. <https://doi.org/http://dx.doi.org/10.1108/17506200710779521>
- Hernandez, G. (2013). Indigenous Perspectives on Community Economic Development: A North-South Conversation, *Canadian Journal of Nonprofit and Social Economy Research* 4(1), 6–24.
- Holt Giménez, E., & Shattuck, A. (2011). Food crises, food regimes and food movements: rumblings of reform or tides of transformation? *The Journal of Peasant Studies*, 38(1).
- Huisken, A., Orr, S. K., & Tarasuk, V. (2016). Adults' food skills and use of gardens are not associated with household food insecurity in Canada, *Can J Public Health*, 107(6):<https://doi.org/10.17269/CJPH.107.569244>.
- Islam, D., & Berkes, F. (2016). Can small-scale commercial and subsistence fisheries co-exist? Lessons from an indigenous community in northern Manitoba, Canada. *Maritime Studies*,

15(1), 1. <https://doi.org/10.1186/s40152-016-0040-6>

- Keoke, E. & Porterfield, K. (2005). *American Indian Contributions to the World: Food, Farming and Hunting*. New York, NY: Chelsea House.
- Kuhnlein, H. V. (2014). How Ethnobiology Can Contribute to Food Security. *Journal of Ethnobiology*, 34(1), 12–27. <https://doi.org/10.2993/0278-0771-34.1.12>
- Krasny, M. & Tidball, K. 2009. Community gardens as context for science, stewardship and advocacy learning. *Cities and the Environment*, 2(1).
- LaDuke, W. (2008). Protecting the Culture and Genetics of Wild Rice. In *Original Instructions: Indigenous Teachings for a Sustainable Future*, ed. M.Nelson, 208-214. Rochester: Bear & Company.
- Luppens, L. & Power, E. (2018). “Aboriginal isn’t just about what was before, it’s what’s happening now”: Perspectives of Indigenous peoples on the foods in their contemporary diets. *CFS*, 5(2).
- Martin, D. (2012). Two-eyed seeing: a framework for understanding indigenous and non-indigenous approaches to indigenous health research. *Canadian Journal of Nursing Res*, 44(2), 20–42.
- McCallum, M. J. L. (2017). Starvation, Experimentation, Segregation, and Trauma: Words for Reading Indigenous Health History. *Canadian Historical Review*, 98(1), 96–113. <https://doi.org/10.3138/chr.98.1.McCallum>
- Nadasdy, P. (2003). *Hunters and Bureaucrats: Power, Knowledge, and Aboriginal- State Relations in the Southwest Yukon*. Canada, UBC Press.
- Nutrition North Canada. (2017). *Cost of the Revised Northern Food Basket in 2016-2017*. Retrieved from: <https://www.nutritionnorthcanada.gc.ca/eng/1519997966920/1519998026166#chp0>
- Okorosobo, T. (2017). *Building Livelihood and Food Security through Social Enterprise: A Case Study of Garden Hill First Nation Community in Manitoba, Canada*. Winnipeg, Manitoba: University of Manitoba,
- PROOF. (n.d). *Food Insecurity Policy Research*. Retrieved from: <http://proof.utoronto.ca/>
- Power, E. M. (2008). Conceptualizing food security for aboriginal people in Canada. *Canadian Journal of Public Health*, 99(2), 95–97. <https://doi.org/10.1016/j.gloenvcha.2007.09.002>
- Puzyreva, M. (2018). *Harnessing the Potential of Social Enterprise in Garden Hill First Nation*. Retrieved from: <https://www.policyalternatives.ca/publications/reports/harnessing-potential-social-enterprise-garden-hill-first-nation>
- Simpson, L. R. (2004). Anticolonial strategies for the recovery and maintenance of Indigenous Knowledge. *American Indian Quarterly*, 28(3/4), 373–384. <https://doi.org/10.1353/aiq.2004.0107>
- Smith, L. (1999). *Decolonizing Methodologies: Research and Indigenous Peoples*. London & New York: Zen Books Ltd.



- Thompson, S. & Harper, V. (2018). *Timeline: Island Lake Communities*. (Unpublished).
- Thompson, S., Gulrukh, A., Ballard, M., Beardy, B., Islam, D., Lozeznik, V., & Wong, K. (2011). Is community economic development putting healthy food on the table? Food Sovereignty in Northern Manitoba 's Aboriginal Communities, *Journal of Aboriginal Economic Development*, 14–39.
- Tobias, J. K., & Richmond, C. A. M. (2014). “That land means everything to us as Anishinaabe”: Environmental dispossession and resilience on the North Shore of Lake Superior. *Health and Place*, 29, 26–33. <https://doi.org/10.1016/j.healthplace.2014.05.008>
- Trinidad, A. M. O. (2009). Toward kuleana (responsibility): A case study of a contextually grounded intervention for Native Hawaiian youth and young adults. *Aggression and Violent Behavior*, 14(6), 488–498. <https://doi.org/10.1016/j.avb.2009.07.008>
- Truth and Reconciliation Commission of Canada. (2015a). 5. *Canada's residential schools: The history, part 2 - 1939 to 2000* (Vol. 1). Retrieved from <http://www.trc.ca/websites/trcinstitution/index.php?p=890>
- Truth and Reconciliation Commission of Canada. (2015b). *Canada's Residential Schools: Reconciliation* (Vol. 6). Retrieved from [http://www.myrobust.com/websites/trcinstitution/File/Reports/Volume\\_6\\_Reconciliation\\_English\\_Web.pdf%0Ahttp://nctr.ca/reports.php](http://www.myrobust.com/websites/trcinstitution/File/Reports/Volume_6_Reconciliation_English_Web.pdf%0Ahttp://nctr.ca/reports.php)
- Turner, N. J., & Loewen, D. C. (1998). The Original “Free Trade”: Exchange of Botanical Products and Associated Plant Knowledge in Northwestern North America. *Anthropologica*, 40(1), 49. <https://doi.org/10.2307/25605872>
- United Nations. (2008). United Nations Declaration on the Rights of Indigenous Peoples. *United Nations General Assembly*, (Resolution 61/295), 10. <https://doi.org/10.1093/iclqaj/24.3.577>
- Waziyatawin. (2012). The paradox of Indigenous resurgence at the end of empire. *Decolonization: Indigeneity, Education & Society*, 1(1), 68–85.
- Wendimu, M., Desmarais, A. & Martens T.R. (2018) Access and affordability of “healthy” foods in northern Manitoba? The need for Indigenous food sovereignty. *CFS*, 5 (2).
- Wilson, K. (2003). Therapeutic landscapes and First Nations peoples: An exploration of culture, health and place. *Health and Place*, 9(2), 83–93. [https://doi.org/10.1016/S1353-8292\(02\)00016-3](https://doi.org/10.1016/S1353-8292(02)00016-3)
- Wolfe, P. (2006). Settler colonialism and the elimination of the native. *Journal of Genocide Research*, 8(4), 387–409. <https://doi.org/10.1080/14623520601056240>

## **CHAPTER 6.0: CONCLUSION**

### **6.1 Indigenous Food Sovereignty and Young Adults**

Cidro, Martens, Zahayjko & Lawrence (2018) state “Indigenous food sovereignty is a concept to be considered, described, and supported, but caution must be used in ascribing this term to a people or place. In the end, a community must define its own food practices and priorities” (p. 38). Although not an entire analysis of what Indigenous food sovereignty means to the community of Garden Hill First Nation, this research is a snapshot into how some members of Garden Hill First Nation speak, feel and act towards the land, relationships, and Oji-Cree food culture, or Indigenous food sovereignty, at a point in time. This research is an attempt to localize Indigenous food sovereignty by giving an abstract, conceptual term grounding in the voices of Indigenous people living Indigenous food sovereignty every day.

Much of what is shared in this thesis is the hopes of community members for young adults in their community. These hopes include the teachings and knowledge community members want to pass on to young adults so that the Oji-Cree way of life, a life that places food in an interdependent web of land, family, community, language and wellbeing, is honored and continues to evolve for, the past, present and future generations. Most prominently, forming a respectful and reciprocal relationship with the land was focused on as a way for young adults to learn about food. Learning about the land is bound up not only in food, but also in identity, wellbeing, and community as Indigenous languages, traditions, customs, roles, values and livelihoods are based in the land. It is a relationship with, and a responsibility to, the land that is the basis of Oji-Cree culture and is needed for Indigenous food sovereignty in the community.

Although the research purpose and objectives focus on young adults, a young adult, or any community member for that matter, cannot be viewed in isolation or separated from the

environmental, social and cultural context in which they live. A web of supportive kinship ties allows individuals to prosper within a community, including knowledge keepers and Elders to communicate teachings to young adults, a supportive family to reinforce teachings at home, and a healthy natural environment that supports the life of all beings. Young people have a role in Indigenous food sovereignty as receivers of traditional knowledge, but Indigenous food sovereignty also requires looking at young people as part of a larger social and cultural system. Supporting the involvement of young people in traditional food activities and Indigenous food sovereignty means supporting the cultural, social, physical, emotional and spiritual health of the entire community (including both human and non-human life).

**Figure 7: Land Centered Model of Indigenous Food Sovereignty in Garden Hill First Nation (Kistiganwacheeng)**



## **6.2 Farming, Gardening and Indigenous Food Sovereignty**

This thesis also discussed what gardening and farming means to community members of Garden Hill First Nation and the experiences of young adults working on a community farm, including their contributions to Oji-Cree food culture and food sovereignty. Young people working on the community farm, and all other community members involved in gardening, are helping to promote Oji-Cree culture and identity through gardening. Gardening is connecting young people and community members to their ancestors, as well as helping to reclaim traditional knowledge and teachings that were impacted by the residential school system and other assimilation policies.

Looking through the Indigenous food sovereignty framework published by Morrison (2011), gardening and farming support community self-determination, participation in Indigenous food systems, and respect and reciprocity for the land. Young adults working on the farm are also helping to expand participation in gardening at the individual, community and regional level. The farm attracts people from within and outside of the community and young adult farm workers have taken up the task to encourage and model gardening for the wellbeing of others. Young peoples are also demonstrating leadership and skill development in showing others how to garden. Growing and raising food increases access to culturally appropriate foods while decreasing dependence on a market-based system for food. Opportunities to reclaim traditional economies of sharing, bartering and trading also exist as communities produce their own food. Stories from young people working on the community farm reveal respect, care, pride and generosity for the land and other people in the community, critical values and actions to maintain and promote Indigenous food ways and worldviews. Still, community members in this study believe that more can be done to ensure young people are receiving traditional land-based

teachings and learn to respect the land in the face of a dominating western culture.

**Figure 8: Impact of Community Gardening and Farming in Garden Hill First Nation (Kistiganwacheeng)**



### 6.3 Recommendations for an Indigenous Food Systems Course

Through this inquiry into Oji-Cree food culture and the involvement of young adults, recommendations for an Indigenous food systems course in Island Lake First Nation that supports both young adult cultural development as well as Indigenous food sovereignty in the community, can be made to policy makers, researchers and community members:

**Table 10: Recommendations for an Indigenous Food Systems Course for Young Adults in Garden Hill First Nation (Kistiganwacheeng)**

<p><b>COURSE LEARNING PRINCIPLES</b></p>	<ul style="list-style-type: none"> <li>✓ A shared focus on nutrition and food sciences, lived experience, reflexivity and traditional knowledge as legitimate ways of understanding food and nutrition.</li> <li>✓ Uses a combination of traditional learning styles (ex. hands on activities, observation, stories, songs and legends) along with western style learning techniques (ex. labs, textbooks, and workshops).</li> <li>✓ Integrates critical reflection techniques like journaling and self-assessments to identify personal relationships and understanding about food and land.</li> <li>✓ Prioritizes engagement in land-based activities.</li> </ul>
<p><b>COURSE CONTENT</b></p>	<ul style="list-style-type: none"> <li>✓ History of colonization and racism, including residential schools, and the ongoing impacts on Indigenous food systems and well-being.</li> <li>✓ Oji-Cree language lessons on the land.</li> <li>✓ Outdoor safety and survival lessons in Island Lake.</li> <li>✓ Traditional and alternative food economies.</li> <li>✓ The meaning of traditional food in the community.</li> </ul>

	<ul style="list-style-type: none"> <li>✓ Traditional food procurement, preparation, and distribution knowledge and skills.</li> <li>✓ Skills related to an industrial food system such as food safety and label reading.</li> <li>✓ Concepts of holistic health and well-being.</li> <li>✓ Nutrient properties of market based and traditional foods.</li> <li>✓ Growing and raising food including Indigenous agriculture, permaculture, and organic agriculture.</li> </ul>
<p><b>PROGRAM DESIGN CONSIDERATIONS</b></p>	<ul style="list-style-type: none"> <li>✓ Runs all year round to capture seasonal differences in traditional food activities and stories.</li> <li>✓ Careful consultation with Elders and knowledge keepers to develop a program that is culturally appropriate as well as meets the needs of a modern food society.</li> <li>✓ Uses social media, video and other technologies to engage young people while maintaining balance with, and respecting, oral traditions. Further research into the impact of using technology in the course to educate young adults considering the community's unique cultural, linguistic, social and economic context is recommended.</li> <li>✓ Hiring and training community members including local hunters, trappers, fishers and gathers, Elders and knowledge keepers.</li> <li>✓ Engages and reaches out to all family members, not just young people, to create a supportive environment for young people and encourages the intergenerational transmission of knowledge.</li> <li>✓ Uses and develops local resources and education materials.</li> <li>✓ Program evaluation takes into consideration the social, environmental, economic and cultural impacts of the program.</li> </ul>

	<ul style="list-style-type: none"> <li>✓ Gender inclusiveness. This includes an examination of traditional gender roles of community members in an Oji-Cree food system and how they have evolved today.</li> <li>✓ Program funding and sustainability, particularly due to the high costs of gasoline, transportation and food. Integrating food related community economic development models in the course model may help with financial sustainability and should be further explored.</li> <li>✓ Due to the remoteness of the community, access to high speed internet.</li> </ul>
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## 6.4 Final Thoughts

*“In principle, Aboriginal peoples, governments, and the courts agree that reconciliation is needed. In practice, it has been difficult to create the conditions for reconciliation to flourish” (TRC, 2015, p. 23).*

This thesis has shown the power of food as a tool of reconciliation in Canada. Indigenous food sovereignty as an anti-colonial and anti-neoliberal movement questions the systems in place under which our society functions (or dysfunctions), including the food system. Many Indigenous communities, including Garden Hill First Nation, are working towards Indigenous food sovereignty, whether they term it that or not, in their day to day actions to maintain and reclaim their culture and right to Indigenous foods and land. They know what they are doing and what they need to do. Within Indigenous food sovereignty is a call to action for settler society to create respectful and balanced relations with Indigenous peoples, food, and land. The values that dominate a western food system, such as commodification, individualism, and patriarchy, are not well suited to a food system that serves social and environmental justice and reconciliation.

Much of the work to change the food system begins with a personal journey to critically understand our own identities and how we relate to others, food and land. This understanding is



the beginning of a larger process to restore balance and relations between non-Indigenous and Indigenous peoples and land. Settlers who want to “help” Indigenous peoples can provide the support that is directed by Indigenous communities, but at the same time, settlers must re-evaluate settler ways of knowing, being and relating in the world, including the institutions, policies, and practises that maintain food and land injustice in society. It is in this manner, critical reflexivity and the creation of respectful and balanced relationships, that will create additional space for Indigenous food sovereignty to flourish and result in a more meaningful, just and beautiful world for everyone.

## 6.5 References

- Cidro, J., Martens, T.R., Zahayko, L. & Lawrence, H. (2018). First foods as Indigenous food sovereignty: Country foods and breastfeeding practices in a Manitoban First Nations community. *CFS*, 5(2).
- Morrison, D. (2011). Indigenous food sovereignty: a model for social learning. In *Food sovereignty in Canada: Creating just and sustainable food systems*, ed. H. Wittman, A.A. Desmarais, and N. Wiebe, 97–113. Halifax: Fernwood Publishing.
- TRC (2015). *Canada's Residential Schools: Reconciliation: The Final Report of the Truth and Reconciliation Commission of Canada*. Retrieved from: [http://www.myrobust.com/websites/trcinstitution/File/Reports/Volume\\_6\\_Reconciliation\\_English\\_Web.pdf](http://www.myrobust.com/websites/trcinstitution/File/Reports/Volume_6_Reconciliation_English_Web.pdf)

## Appendix A: Community Research Dissemination Posters

# An Indigenous Food Systems Course for Young Adults: Garden Hill First Nation (Kistiganwacheeng)

Submitted by: Kaylee Michnik, Master of Natural Resources Management, University of Manitoba  
Thesis Adviser: Dr. Shirley Thompson, Associate Professor, Natural Resources Institute, University of Manitoba

**Participants:** 12 community food and young adult educators and Elders

**What was heard:**

- Land-based education is the heart of an Oji-Cree Indigenous Food Systems Course.
- Learning about the land teaches not only about traditional food, but also Oji-Cree language, well-being, survival, and identity.

Indigenous Food Systems Course

LAND

FOOD    IDENTITY    ELDER    SURVIVAL    WELL-BEING    LANGUAGE

YOUNG ADULTS    COMMUNITY

*“When you go out there and you provide food for yourself, and you prepare it, you have pride.”*

*“You know language is the base of our culture, [...] If we lose our language, that’s it, we are done.”*

*“But the fact of the matter is you have to move your body, your soul, your heart, so that when you take something from the land and give it to the Elder, it has a meaning.”*

*“We are bush people. And we eat food from the bush and we have to be out there to learn, to actually learn what it is to be a bush person.”*

*“If there is a rock you have to go around it. [...] If the wind is too high, you don’t go out on the boat when it’s windy. What to take to go camping, a lot of people don’t know.”*

Summary of Recommendations for an Oji-Cree Food Systems Course:

- Runs all year round to capture seasonal differences in traditional food practices.
- Consults with Elders and knowledge keepers to develop a program that is culturally appropriate as well as meets the needs of a modern food society.
- Uses social media, video and other technologies to engage young people while maintaining balance with, and respecting, oral traditions.
- Uses locally-made resources and educational materials.
- Engages all young people in the community, with a focus on young women.

# Gardening in Garden Hill First Nation (Kistiganwacheeng)

*Submitted by: Kaylee Michnik, Master of Natural Resources Management, University of Manitoba*  
*Thesis Adviser: Dr. Shirley Thompson, Associate Professor, Natural Resources Institute, University of Manitoba*

**Participants:** Five young adult Meechim Farm workers and 12 community members and Elders

**What was heard:**

- Gardening is the original way of the Oji-Cree people.
- Elders in the community have vast traditional knowledge about how to garden that needs to be reclaimed and used in the community.
- Gardening promotes fresh food and sharing in the community.
- Gardening can teach young people respect and reciprocity.

**"We are talking about decades of gaps, of knowledge that was lost, that we are trying to rejuvenate."**

**"We [community members] are [gardening] to sustain ourselves, but we can't forget who's doing that for us. We have to remember the Creator, our Mother Earth."**

## Voices of Young Adult Farm Workers

*Every summer, Meechim Farm Inc., a 15 acre community farm in Garden Hill First Nation, hires young people from the community. Young adults learn how to garden and raise chickens, sell fresh food, and pass this gardening knowledge to others in the community.*

**"It's a good thing we are planting food, veggies over here [on Meechim Farm], because a lot of people that live here have diabetes"**

**"It's a very good thing for people to come here to see how [the plants] grow. Especially small kids, they like to come see the really small chickens."**

### Kitikan Garden

Photo by: Chapman

Photo by: Canada

Photo by: Meechim Farm

Root crops like potatoes, carrots, turnips, and onions are grown in Garden Hill First Nation. These plants are well suited to the local climate and soil. Meechim Farm explores how to grow other crops, like corn and tomatoes, in Garden Hill.

**"My grandfather taught me how to plant; he planted potatoes, onions and carrots. There is a history of gardening in my family and I am able to be a fast learner."**

**"It [gardening] is not that hard, it's learning how to plant and we have to teach them [the community]."**

## Appendix B: Consent Forms

### i. Adult Interview Consent Form



UNIVERSITY  
OF MANITOBA

#### Natural Resources Institute

70 Dysart Rd,  
Winnipeg, Manitoba  
Canada R3T 2N2

[http://www.umanitoba.ca/academic/institutes/natural\\_resources](http://www.umanitoba.ca/academic/institutes/natural_resources)

### Participant Consent Form

#### *Interview*

**Research Project Title:** How do Young Adults Working on a Community Farm Participate in Indigenous Food Sovereignty

**Principal Investigator:** Kaylee Michnik, Masters of Natural Resource Management Candidate

**Research/Thesis Supervisor:** Dr. Shirley Thompson

**Sponsor:** Social Science and Humanities Research Council (SSHRC)

---

This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

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**BACKGROUND:** The student is conducting this research as part of her master's program in the Natural Resource Institute at the University of Manitoba. Funding for this project is through the Social Sciences and Humanities Research Council (SSHRC).

**INTRODUCTION:** You are being asked to take part in a research project looking at what young adults working on a community farm know, and need to know, about farming and food in their communities, especially as it relates to Indigenous culture. Research has shown that young adults involved in community farming have benefited in many ways. Some of these benefits include feeling part of the community, learning about the environment, making money, and learning new skills such as how to grow, market and sell food. Community farming and other food education opportunities can also reinforce and teach traditional food skills. This research aims to build on these findings.

**RESEARCH PURPOSE:** To explore how young adults working on a community farm participate in Indigenous food sovereignty. Indigenous food sovereignty, for example, means acknowledging that food is a gift from the Creator, traditional food practises are important for culture, and

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Indigenous people have the right to make decisions over the amount and quality of food they hunt, gather, grow and eat.

**STUDY PROCEDURES:** If you choose to take part in this study, you will be asked to take part in a 30 - 60 minute interview depending on how much you want to share. The purpose of the interview is to explore what food skills, education and knowledge young adults in your community need to know. The information will be used to write a master's thesis, and in academic journal articles and conference presentations. It will also be used to inform a traditional food skills training program in your community.

**BENEFITS:** Through participation in this study, you will contribute to the development of a young adult food skills training program in your community. Your responses will help ensure that the program will result in maximum benefits to community members.

**CONFIDENTIALITY:** Interviews will be done in private to maintain confidentiality. Your name will not be used in the research report. Any identifiers will be removed from your information and your information will be coded to protect your identity (i.e. given a fake name or numbered I.D.). The key to the code will be kept separate from the data in an electronic file that is password protected. Only the principal researcher (Kaylee) and her research adviser (Dr. Thompson) will have access to the real names of interviewees and access to the information file. As the community is small, if you choose to allow being quoted in the research, someone may identify you by your words.

**RISKS:** The risks from taking part in this study are minimal. Although the researcher will keep your information and identity protected, due to the small size of the community where the research is taking place, there is a risk that your words could be recognized by others. If you feel uncomfortable at any time during the interview, you can choose to skip questions or stop the interview altogether.

**RESEARCH DISSEMINATION:** This research will be shared in community photo exhibits and community presentations, master's thesis, academic journal articles, and in conference presentations.

**VOLUNTARY PARTICIPATION/WITHDRAWAL:** Your participation in this research study is strictly voluntary. At any time you can leave the study and have any information you have contributed to the research returned back to you, up until the research is published (expected to be December 2018). If you choose to withdraw, please inform the principal researcher, Kaylee Michnik in person or by email or phone (contact information listed at the top of the page).

**FEEDBACK:** A summary of the interview will be provided to you for verification within one to two weeks. You will have the opportunity to review information that has been shared and remove any information you may no longer feel comfortable with. To receive a full transcription, please leave your contact information at the end of this form. Preliminary results from this study will be shared in a community photo exhibit in August 2017. A summary of the final study results is expected to be shared with you and the community in spring 2018. Data held by the researcher will be destroyed one year after the research project has ended (09/2019).

**WHO TO CONTACT:** If you have any questions about this study, contact Dr. Shirley Thompson (Thesis Advisor) In addition, if you have any questions as to your rights as a research participant, please contact the Human Ethics Coordinator at [humanethics@umanitoba.ca](mailto:humanethics@umanitoba.ca) at the University of Manitoba.

**CONSENT TO PARTICIPATE:** I know that my participation in this study is voluntary and that I have the right to refuse to participate or stop participation at any time. I know this research will be used to write a master's thesis, academic journal articles, and in conference presentations. This information will also be presented in the community.

#### *Participation Options*

**Please choose one:**

- You can use my words (i.e. quotes from me) when sharing information from this interview
- You **cannot use my words** (i.e. quotes from me) when sharing information from this interview

**Please choose one:**

- I agree to be audio or video recorded during my interview
- I **do not agree** to be audio or video recorded during my interview

**CONSENT:** I have read all of the pages of this consent form and have been given an opportunity to ask questions about this study. Answers to such questions (if any) were satisfactory. I am eighteen years of age or older and freely and without reservation give my consent to serve as a participant in this study.

**Participant's Name:** \_\_\_\_\_

**Participant's Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Participant's Contact Information:**

*I would like to receive final research results and my full transcription by:*

Email: \_\_\_\_\_

**OR**

Mail (please provide full mailing address):

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Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the researchers, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from the study at any time, and /or refrain from answering any questions you prefer to omit, without prejudice or consequence. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation. The University of Manitoba may look at your research records to see that the research is being done in a safe and proper way.

## ii. Photovoice Consent Form



UNIVERSITY  
OF MANITOBA

### **Natural Resources Institute**

70 Dysart Rd,  
Winnipeg, Manitoba  
Canada R3T 2N2

[http://www.umanitoba.ca/academic/institutes/natural\\_resources](http://www.umanitoba.ca/academic/institutes/natural_resources)

## **Participant Consent Form**

### ***Photovoice***

**Research Project Title:** How do Young Adults Working on a Community Farm Participate in Indigenous Food Sovereignty

**Principal Investigator:** Kaylee Michnik, Masters of Natural Resource Management Candidate

**Research/Thesis Supervisor:** Dr. Shirley Thompson

**Sponsor:** Social Science and Humanities Research Council (SSHRC)

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This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

---

**BACKGROUND:** The student is conducting this research as part of her master's program in the Natural Resource Institute at the University of Manitoba. Funding for this project is through the Social Sciences and Humanities Research Council (SSHRC).

**INTRODUCTION:** You are being asked to take part in a research project looking at what young adults working on a community farm know, and need to know, about farming and food in their communities, especially as it relates to Oji-Cree culture. Research has shown that young adults involved in community farming have benefited in many ways. Some of these benefits include feeling part of the community, learning about the environment, making money, and learning new skills such as how to grow, market and sell food. Community farming can also reinforce and teach traditional food skills and knowledge. This research aims to build on these findings.

**RESEARCH PURPOSE:** To explore how young adults working on a community farm participate in Indigenous food sovereignty. Indigenous food sovereignty, for example, means acknowledging that food is a gift from the Creator, traditional food practises are important for culture, and



Indigenous people have the right to make decisions over the amount and quality of food they hunt, gather, grow and eat.

**STUDY PROCEDURES:** If you choose to take part in this study, you will be asked to join in a research method called Photovoice. Photovoice gathers research data by asking participants to take photos and tell the researcher about their importance through an interview. The study will be done during work time in which you will continue to be paid. Research activities will happen when you are not too busy at work so you do not miss important work duties. Participation in this research is not required for you to work at Meechim Farm. It is additional, optional activity that you can choose not to participate in. In more detail, you will be asked to do the following:

- Take a minimum of 10 photos in an hour at work. You will be asked to take photos guided by the question: “How can your community eat well? Or “What is your changing food story?” Cameras will be provided to you. When you are done taking photos, you will then be asked to participate in a 30 minute private interview with the principal researcher (Kaylee) to review your photos. You will be asked to explain to the researcher why you took the photos and why they are important.
- Participate in a talking circle lasting about 1 hour with the other participants to explain your photos and learn from others.
- Show your photos at a community photo event. The community photo exhibit will be an evening event lasting about 1 hour outside of work. No research will happen at this event, it is simply to share your photos with the community. You can choose whether you would like to help plan or attend the event but it is not required to do so. The amount of time you contribute to helping with this event will be up to you.

Data collected in this research, including photos, will be shared with the community through a community photo exhibit and in a master’s thesis, academic journal articles and conference presentations. You have the option to use a fake name if you do not want anyone to know that you took the photos. You will also have the opportunity to review and remove any photos or information you no longer wish to share up until the research is published (expected December 2018).

**BENEFITS:** Through participation in this study, you will learn about food and culture in your community. You will also have the chance to learn about photography and how to express yourself through art. You will create photos that can be shared and remain in the community. Lastly, participating in the planning of a community photo exhibit can teach you professional skills such as project planning and management.

**CONFIDENTIALITY:** If you choose, your identity can remain unknown by assigning a code to

protect your identity (i.e. given a fake name). The key to the code will be kept separate from the data on the researcher's computer in a file that is password protected. Only the principal researcher (Kaylee) and her thesis adviser (Dr. Thompson) will have access to the real names of participants and access to the information file. If you choose to use your own name, others will know which photos you took and what you have said about them. As the community is small, if you choose to allow being quoted in the research, someone may identify you by your words, including your employer. If you agree to have your photo taken during the research project, others outside of the research project may identify you. Photo interviews will be done in private to maintain your confidentiality. **By agreeing to take part in this research, you are also agreeing to keep the identity and information of the other participants unknown.**

**RISKS:** The risks from taking part in this study are small. Although participants have been asked not to, there is a chance that others participating in the research will reveal your identity or talk about what you have said. As some of this research is done in a group setting, you should only share what you feel comfortable making public. As well, since we are asking you to take photos that have importance and meaning to you, there is a chance negative emotions could come up. If this does happen, you can withdraw or take a break from the research and you can talk with an elder if needed.

**RESEARCH DISSEMINATION:** This research will be shared in community photo exhibits and community presentations, master's thesis, academic journal articles, and in conference presentations.

**VOLUNTARY PARTICIPATION/ WITHDRAWAL:** Your participation in this research study is strictly voluntary. You may refuse to participate or may choose to participate only in certain activities. At any time you can leave the study and have any material you have given to the research returned back to you up until the research is published (expected December 2018). If you choose to leave the study or have changed your mind about participating in any activity, please inform the researcher, Kaylee Michnik in person or by email or phone (information listed at the top of the page). Your decision to leave the research project will in no way impact your employment on Meechim farm.

**FEEDBACK:** Interviews summaries will be provided to you within one to two weeks. This way you can let the researcher know if you want to change anything you have said. A summary of the talking circle will also be provided to you within one to two weeks to verify what you and the group have said is correct. **A full transcription will also be provided to you by providing your email or other contact information below.** To help provide a summary, the talking circle will be audio or video recorded. **By signing this form, you agree to be audio or video recorded**

**during the talking circle.** The researcher will ask you before your interview if you want to be audio or video recorded or not. Preliminary study results will be shared in the community photo exhibit in August 2017. Final study results will be shared with all participants in a presentation in the community in spring 2018. Data held by the researcher will be destroyed one year after the research project has ended (09/2019).

**WHO TO CONTACT:** If you have any questions about this study, contact Dr. Shirley Thompson (Thesis Advisor). In addition, if you have any questions as to your rights as a research participant, please contact the Human Ethics Coordinator at [humanethics@umanitoba.ca](mailto:humanethics@umanitoba.ca) or at the University of Manitoba.

**CONSENT TO PARTICIPATE:** I know that my participation in this study is voluntary and that I have the right to refuse to participate or stop participation at any time. By choosing to participate in this study I agree to maintain the confidentiality of the other research participants. I know this research, including my photos and words, will be used to write a master's thesis, academic journal articles, and conference presentations as well as be presented in the community. **By choosing to participate, I also agree to be audio or video recorded during the talking circle.**

#### *Participation Options*

**Please choose one:**

- You can use my photos, words (i.e. quote me) and my name when sharing this research
- You can use my words (i.e. quote me) and photos, **but not my name**, when sharing this research. Instead I would like to use the name:  
\_\_\_\_\_
- You **cannot use my photos, words or my name** when sharing this research

**Please choose one:**

- I agree to be audio or video recorded during my interview
- I **do not agree** to be audio or video recorded during my interview

**Please choose one:**

- I agree to have my photo taken by others

I **do not** agree to have my photo taken by others

**CONSENT:** I have read all of the pages of this consent form and have been given an opportunity to ask questions about this study. Answers to such questions (if any) were satisfactory. I am eighteen years of age or older and freely and without reservation give my consent to serve as a participant in this study.

**Participant's Name:** \_\_\_\_\_

**Participant's Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Participant's Contact Information:**

*I would like to receive final research results and my full transcription by:*

Email: \_\_\_\_\_

**OR**

Mail (please provide full mailing address)

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Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the researchers, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from the study at any time, and /or refrain from answering any questions you prefer to omit, without prejudice or consequence. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation. The University of Manitoba may look at your research records to see that the research is being done in a safe and proper way.

### iii. Young Adult Interview Consent Form



#### **Natural Resources Institute**

70 Dysart Rd,  
Winnipeg, Manitoba  
Canada R3T 2N2

[http://www.umanitoba.ca/academic/institutes/natural\\_resources](http://www.umanitoba.ca/academic/institutes/natural_resources)

## **Participant Consent Form** ***Young Adult Interview***

**Research Project Title:** How do Young Adults Working on a Community Farm Participate in Indigenous Food Sovereignty

**Principal Investigator:** Kaylee Michnik, Masters of Natural Resource Management Candidate

**Research/Thesis Supervisor:** Dr. Shirley Thompson

**Sponsor:** Social Science and Humanities Research Council (SSHRC)

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---

**BACKGROUND:** The student is conducting this research as part of her master's program in the Natural Resource Institute at the University of Manitoba. Funding for this project is through the Social Sciences and Humanities Research Council (SSHRC).

**INTRODUCTION:** You are being asked to take part in a research project looking at what young adults working on a community farm know, and need to know, about farming and food in their communities, especially as it relates to Indigenous culture. Research has shown that young adults involved in community farming have benefited in many ways. Some of these benefits include feeling part of the community, learning about the environment, making money, and learning new skills such as how to grow, market and sell food. Community farming and other food education opportunities can also reinforce and teach traditional food skills. This research aims to build on these findings.

**RESEARCH PURPOSE:** To explore how young adults working on a community farm participate in Indigenous food sovereignty. Indigenous food sovereignty, for example, means acknowledging that food is a gift from the Creator, traditional food practises are important for culture, and

Indigenous people have the right to make decisions over the amount and quality of food they hunt, gather, grow and eat.

**STUDY PROCEDURES:** If you choose to take part in this study, you will be asked to participate in a 1 hour private interview looking at what skills and knowledge you have learned from working on Meechim Farm. The study will be done during work time in which you will continue to be paid. Research activities will happen when you are not too busy at work so you do not miss important work duties. Participation in this research is not required for you to work at Meechim Farm. It is an additional, optional activity that you can choose not to participate in.

**BENEFITS:** Through participation in this focus group, you are helping to inform the training provided to young adults at Meechim farm. You are also helping to promote community food based programs in your community and in northern Manitoba.

**CONFIDENTIALITY:** Interviews will be done in private to maintain confidentiality. Your name will not be used in the presentation of the research results. Any identifiers will be removed from your information and your information will be coded to protect your identity (i.e. given a fake name or numbered I.D.). The key to the code will be kept separate from the data on the researcher's computer in a file that is password protected. Only the principal researcher (Kaylee) and her thesis adviser (Dr. Thompson) will have access to the real names of participants and to the original information file.

**RISKS:** The risks from taking part in this study are small. Although the researcher will keep your identity private, due to the small size of the community where the research is taking place, there is a risk that your words could be recognized by others, including your employer. You can choose not to be quoted in the research results to lessen this risk.

**RESEARCH DISSEMINATION:** This research will be shared in community photo exhibits and community presentations, master's thesis, academic journal articles, and in conference presentations.

**VOLUNTARY PARTICIPATION/ WITHDRAWAL:** Your participation in this research study is strictly voluntary. At any time you can leave the study and have any information you have contributed to the research returned back to you, up until the research is published (expected to be December 2018). If you choose to withdraw, please inform the principal researcher, Kaylee Michnik in person or by email or phone (contact information listed at the top of the page).

**FEEDBACK:** A summary of the interview will be provided to you within one to two weeks for you to have the opportunity to review information to make sure it is correct. You will have the

chance to remove anything you have said that you no longer feel comfortable sharing. You can receive the full interview transcript by providing your contact information at the end of this form. Preliminary research results will be shared in the community at a photo exhibit in August 2017. A summary of the final study results is expected to be shared with you and the community in spring 2018. Data held by the researcher will be destroyed one year after the research project has ended (09/2019).

**WHO TO CONTACT:** If you have any questions about this study, contact Dr. Shirley Thompson (Thesis Advisor). In addition, if you have any questions as to your rights as a research participant, please contact the Human Ethics Coordinator at [humanethics@umanitoba.ca](mailto:humanethics@umanitoba.ca) or at the University of Manitoba.

**CONSENT TO PARTICIPATE:** I know that my participation in this study is voluntary and that I have the right to refuse to participate or stop participation at any time. I know this research will be used to write a master's thesis, academic journal articles, and in conference presentations. This information will also be presented in the community.

*Participation Options*

**Please choose one:**

- You can use my words (i.e. quote me) when sharing this research
- You **cannot use my words (i.e. quote me)** when sharing this research

**Please choose one:**

- I agree to be audio or video recorded during my interview
- I **do not agree** to be audio or video recorded during my interview

**CONSENT:** I have read all of the pages of this consent form and have been given an opportunity to ask questions about this study. Answers to such questions (if any) were satisfactory. I am eighteen years of age or older and freely and without reservation give my consent to serve as a participant in this study.

**Participant's Name:** \_\_\_\_\_

**Participant's Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Participant's Contact Information:**

*I would like to receive final research results and my full transcription by:*

Email: \_\_\_\_\_

**OR**

Mail (please provide full mailing address):

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Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the researchers, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from the study at any time, and /or refrain from answering any questions you prefer to omit, without prejudice or consequence. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation. The University of Manitoba may look at your research records to see that the research is being done in a safe and proper way.