Coming to know through story: Exploring the social economy of blueberry foraging in Northwestern Ontario



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ABSTRACT

Foraging for wild blueberries is part of the identity of many Northern Ontario residents. As far back as many people can remember their families have completed the annual trek out to the blueberry patch to harvest blueberries throughout the month of August while they are ripe for the picking. In this research, I explore these practices by answering the following research questions: how do blueberry foraging initiatives in Northwestern Ontario demonstrate properties of the social economy?; how do these properties support the continuation of blueberry harvesting?; and what barriers hinder the foraging of blueberries as a social economy in the region? Using complexity theory, the social economy of foraging for wild blueberries is explored within the boreal forest ecosystem. Four case studies are examined through a participant observation approach that uses semi-structured interviews with blueberry pickers. Blueberry foraging, which exists within the complex adaptive system of the boreal forest, was found to be its own complex adaptive system that adapts to a constantly changing environment. Through blueberry foraging, interviewees were found to gain connections to the land and to each other. How these connections were expressed was impacted by the social and cultural values of individuals and communities. What appeared to remain consistent was the ability of the relational values associated with the social economy to support adaptation; thus, building resilience among blueberry foraging initiatives in Northern Ontario.

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CHAPTER 1

INTRODUCTION

The sun peeks over the horizon as I awaken with a feeling of excitement and quickly begin getting ready for my annual journey to the blueberry patch. Baskets and pails are packed to hold the multitude of berries I plan to pick. I leave the bug spray, opting to use my hoodie sweater as a cover of protection from black flies' attempts to feed upon my blood, a small price to pay in exchange for blue gold. I bring my sunscreen to avoid getting sunburn and I make sure not to forget a lunch and some water to keep me satiated. Ready for the long ride to the backcountry, I head to my vehicle and notice a thick layer of dew on the grass. Hoping it dries before I'm on my knees in the blueberry patch, I run back into the house and grab an extra pair of pants and my kneeling mat, just in case. I finally arrive to pick up my blueberry picking companion, excited to get to the patch for a full day of picking blueberries. We reminisce about previous outings along the way.

1.1 Introduction

For millennia Indigenous economies have expressed identity, culture, and values through subsistence activities by practicing an Indigenous worldview characterised by sharing, interdependence, and reciprocity towards all living beings and the land (Kuokkanen 2011). Foraged food has been part of the human diet for thousands of years but with the introduction of agricultural techniques that are capable of feeding people on a global scale, common knowledge of how to provide oneself with sustenance from the wild is becoming less common (Johnson and Earle 2000). Gone are the days when everyone produced or gathered their food. Nowadays most people buy food from grocery stores, participating in an unsustainable capitalist economic system. Chevrette (2011, 2) recognizes this: "the majority of food is purchased through the dominant structures (i.e. grocery stores) that encourage the unsustainable production and transportation of food around the world." A characteristic of capitalism includes private land ownership by individuals who invest resources to produce goods or services with the goal of creating a profit from selling their products or services in the marketplace (Kasser et al. 2007).

Food is rarely solely locally-sourced. Rather, the global industrialized food system concentrates ownership and control of food to giant multinational corporations (Heffernan and Hendrickson 2008; Koc and Dahlberg 1999; La Trobe and Acott 2000), largely reducing food to a commodity, decreasing individual and community control of food production (Chevrette 2011). Feagan (2007, 33) recognizes the unsustainable nature of the global food system has caused concern over "rural community disintegration as systems of local control, employment, and social bonds and relations wither, over the loss of 'foodways' and accompanying cultural traditions, soil and water degradation, and reduction of ecosystem, species and genetic diversity associated with industrial agricultural practices."

The community food security movement, which Pelletier et al. (1999, 401) define as "the ability of a community to ensure that all its members have adequate access to healthful and acceptable food through environmentally sustainable, economically viable, and socially desirable production, processing, and distribution systems" is based on the re-localization of food and is also known as the local food movement. The Canadian local food movement is supported by social movement organizations like Food Secure Canada and exists as part of a social economy (Levkoe 2014).

The social economy, which places 'people before profits' arose from a failure of contemporary political and economic policies to provide minimum acceptable levels of economic and social wellbeing to people (Restakis 2006) and is also referred to as community economic development (Canadian Social Economy Research Partnerships 2009). The failure of mainstream economic theory and practice to address these issues is a reason for the increased interest in new strategies and paradigms that are more just, equitable, and responsive to the needs of society, and not just a privileged minority (Restakis 2006). This switch in focus highlights the importance of reciprocity in the social economy:

The primary purpose of social economy organisations is the promotion of mutual collective benefit. The aim of reciprocity is human bonding or solidarity. In contrast to the private sector principle of capital control over labour, reciprocity places labour, citizens, or consumers in control over capital. (Lewis and Swinney (2007, 11)

In the past when people used to forage for their food they were participating in a subsistence economy, otherwise known as the traditional economy (Kuokkanen 2011). Many Indigenous communities still participate in a traditional economy to achieve food security and as part of their cultural identity (Leblanc 2014). The traditional economy treats consumption as a reciprocal exchange that benefits all parties, supporting healthy and resilient ecosystems (LeBlanc 2014; McPherson and Rabb 1993). Whether through

hunting, fishing, gathering, or farming, subsistence is based on a mutually beneficial relationship between the environment and the community (LeBlanc 2014). This worldview holds that the land, animals and people all share a common essence and are treated equally and respectfully (Simpson and Driben 2000). The capitalist economic system is very different from reciprocal, resource sharing, and mutually beneficial relationships that Indigenous cultures are built upon (LeBlanc 2014).

As part of colonization, a market-based economy has been imposed on the Indigenous Peoples of Canada (Driben 1985; Kuokkanen 2011), though many continue to harvest forest foods as part of a mixed economy, blending traditional and market-based economies to provide communities with monetary income and food (LeBlanc 2014). Forest foods, which include tree sap, mushrooms, nuts, whole plants, roots, and berries, are highly valued by Indigenous communities and other forest food harvesters as a source of income, food security, tradition, and as an alternative to timber extraction on Crown land (Milne 2013). Foraging for forest foods is an adaptable way to achieve food security in the boreal forest (Milne 2013), with a plethora of different foods and value-added products such as jam that can be stored for later use year-round.

The acidic soils of the boreal forest provide optimal conditions for blueberry growth since blueberries prefer a pH of approximately 4.5 to 5.5 (Martens and Westermann 1991). Wild lowbush blueberries (*Vaccinium angustifolium, nigrum var., and myrtillus*) are highly abundant in the boreal forest of Northern Ontario and have been available as a resource for food security since 9,000-10,000 years ago when Indigenous peoples are thought to have moved into the region (Dawson 1983). Recent archaeological excavations outside of Thunder Bay, Ontario have revealed evidence in the form of tools and campsites that Indigenous peoples have occupied the area for at least 9,000 years (Russel 2012).

In Northern Ontario, wild blueberries are highly nutritious fruits that are gathered by people as part of an annual seasonal cycle during the late summer and early fall. Foraging for blueberries and other forest foods occurs largely on Crown land (i.e. public land that is owned and controlled by the Government of Canada), and is perceived by some such as Milne (2013) as having the potential to compete economically with the dominant forestry industry, which focuses on extracting timber resources from public lands. Baldwin and Sims (1997) suggest that forest foods are a possible source of economic development and Milne (2013) further believes that blueberries throughout the boreal forest region present a viable economic development opportunity. Currently, local forest food entrepreneurs and Indigenous communities must compete with large-scale forestry companies to use the same Crown land, which severely constrains them since policies, market opportunities, and access to capital are designed to benefit large businesses (LePage and Jamieson 2011; McBain and Thompson 2008). It is important to recognize blueberry harvesting as a form of social economy because it is undervalued and potentially threatened by capitalist land use decision-making that favours extractive timber harvesting.

1.2 Research Objective

My research objective is to explore the importance of foraging for wild blueberries in relation to the social economy of Northwestern Ontario. The following questions guide the research:

- 1. How do blueberry foraging initiatives in Northwestern Ontario demonstrate properties of the social economy?
- 2. How have the properties of the social economy supported the persistence of blueberry foraging?
- 3. What barriers hinder the foraging of blueberries as a social economy in Northern Ontario?

Using a complexity science lens, this thesis explores how foraging is an emergent part of the social economy in Northwestern Ontario though an examination of four case studies: Aroland Youth Blueberry Initiative, Nipigon Blueberry Blast Festival, Algoma Highlands Wild Blueberry Farm and Winery, and Arthur Shupe Wild Foods. This research objective is achieved through:

1. A scoping literature review to identify relevant academic articles and grey literature related to foraging, blueberry harvesting, the social economy, regional context of sites, and land use policies;

2. Community-based interviews with blueberry initiative

developers/administrators/owners to collect history and background of the initiatives as well as stories on the social and economic value of blueberries and barriers to blueberry harvesting, including the relationship to current policies; 3. Interviews with blueberry picking participants to collect stories on the social and economic value of blueberries and barriers to blueberry harvesting, including the relationship to current policies.

1.3 Thesis Structure

At the beginning of each chapter I have included a short narrative detailing my blueberry picking experiences. Through the inclusion of my own personal account of blueberry picking I establish relational accountability in my research (Ray 2015; Wilson 2008). Various Indigenous scholars, such as Wilson (2008) and Ray (2015) discuss the notions that research ethics emerge through relationships and it is necessary to provide a relational context for the reader so that they may contextualize the research as well. Storytelling facilitates the dissemination of knowledge in a manner that diffuses power relations, allowing the reader the autonomy to draw their own meaning in relation to self (Ray 2015).

Chapter Two begins with literature that explains the social economy as it relates to the blueberry foraging case studies. Next, complexity theory is explained, demonstrating how foraging can be thought of as a complex adaptive system nested within the complex adaptive system that is the boreal forest ecosystem. Finally, the relationship between foraging blueberries and land use as well as the importance of foraging for wild blueberries are discussed, supported by related research.

In Chapter Three, the research objective and the methods utilized to achieve the research objective are presented along with an introduction to the four blueberry foraging

case studies. The interview and data analysis processes are stated, along with the importance of storytelling as a research method.

In Chapter Four, the findings from the interview process are presented and discussed through themes and sub-themes that emerge from the research.

The fifth and final chapter concludes the findings of the research, while providing recommendations of how future research regarding the topic of foraging for wild blueberries as part of the social economy may be pursued.

My findings demonstrate that although multiple barriers to blueberry foraging such as transportation, road access, and forestry exist, the social economy of blueberry picking in Northern Ontario persists. While the social economy is exhibited differently in each case study, as a whole the contributions of each add to a burgeoning resurgence of community control over their food systems. Foraging for food is an important part of the lives of many residents of Northern Ontario and has great economic, social, cultural, and environmental significance. People utilize local foods like wild blueberries as a source of nutrition and food security while building connections to land and a respect for nature. Blueberry foragers continue to perpetuate a Canadian identity which includes foraging for wild blueberries in the past, present and hopefully into the future.

CHAPTER 2

LITERATURE REVIEW

Driving down the winding road we see some bears in the ditch close to where we planned to stop. We continue on, leaving the bears to have that patch. Arriving at a large clearcut in the forest we pull over and look around. As I exit the vehicle my eyes scan the field for the telltale leaves of the blueberry plant and the twinkle of blue. The blueberry plants by the roadside have no berries and there are human tracks. Looks like we are not the first ones to the patch! As I scout the area my partner heads off down the hill, intent on finding an untouched blueberry patch. I head up the hill toward a south facing slope where I think there will be some berries. I step over deadfall and other debris leftover from logging operations long ago, following a rut left by a Scarifier machine; I pick the odd blueberry as I go. An hour later I can no longer see my partner but I do see blueberries everywhere. Large, ripe clusters as far as the eye can see. I have hit the mother lode! I call to my partner informing her of the bounty to be had and as she makes her way up the hill I go into picking mode.

2.1 Overview

This chapter begins with an overview of the social economy, followed by a description of complexity theory, focussing on how complex adaptive systems can be utilized to describe and study numerous phenomena within food systems. This chapter also looks at land use in Northwestern Ontario, as well as examining the benefits and perceptions of foraging, and the connection to land and nature. Finally, similar research to my project is discussed along with the relevance to this research project.

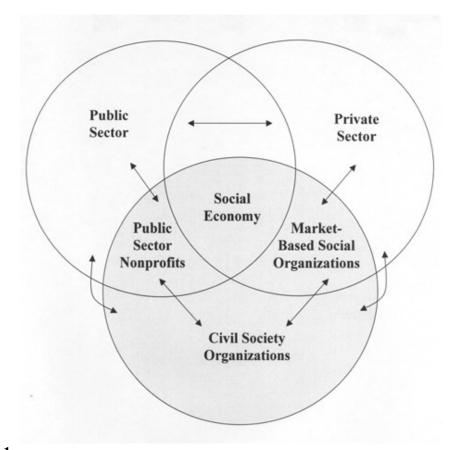
2.2 Social Economy

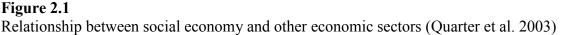
By the end of the 18th century co-operatives began and formed the organizations by which the term "social economy" was first used (Restakis 2006). Defining the social economy is no easy task (Restakis 2006). There exists no singularly agreed upon definition of the social economy amongst its various agents and practitioners (McMurtry 2009; Restakis 2006). Though lack of specificity may seem odd, there are benefits to being able to work within a wide range of possibilities as one can shape the definition to their current needs. The broad concept of placing people before profits is considered the most basic definition of the social economy. For this research, I will use the definition from McMurtry (2009, 4) who defines the social economy as "economic activity neither controlled directly by the state nor by the profit logic of the market, activity that prioritizes the social well-being of communities and marginalized individuals over partisan political directives or individual gain." The social economy can exist independent of the private and public sector, as well as at the intersection where public and private sectors work together with civil society organizations (see Figure 2.1). These social organizations are generally grouped into three categories: public-sector nonprofits, private sector market-based social organizations, and civil society organizations (Quarter et al. 2003). Social enterprises which are social organizations that sell a product or service are guided by the five principles and operating rules of a social economy enterprise which can be seen in Table 2.1. The five principles and operating rules of social economy enterprise are applied within this research to determine how case studies exemplify a social economy.

The five principles and operating rules of social economy enterprise described below are adapted from the 2013, Social Economy Reference Guide by the Chantier de L'economie Sociale. The first principle of social enterprises is that the primary aim is not to make a profit, but rather to serve its members or the community through a social mission. For example, Food Secure Canada has a social mission to reach the goal of zero hunger, healthy and safe food, and a sustainable food system (Food Secure Canada, 2017). Second, the operation is managed autonomous of government as decision-making is conducted through the board of directors or general meetings. For example, social enterprises such as Habitat for Humanity's ReStore are run by a board of directors or a board of governors who direct the decision-making process. Third, power is shared in a democratic decision-making process with the principle that one person is one vote. As in the previous example each member of a board of directors gets one vote. This differs from a shareholder private sector model in which the number of shares a shareholder possesses determines their voting power. Fourth, the distribution of profits is shared amongst members such as credit unions which share their profits with members in the

form of dividends. Lastly, its operation employs participatory management, empowerment and individual or collective responsibilities which can be exemplified by capacity building where training components are included.

The aforementioned definition of the social economy and its expression through organizations takes into account how western intellectual bodies of thought define the social economy. It is argued by Fontan and Shragge (2000, 3) that the social economy "has been with us as long as humans have worked communally and shared in the results of their labour." This concept is important when exploring Indigenous communities as Indigenous modes of economic and social organization akin to concepts of the social economy predate current articulations of the social economy (Wuttunee 2009). For





example, traditional economies which were interrupted as part of the European fur trade (Kuokkanen 2011) and more recently mixed economies that blend traditional and marketbased economies include values such as reciprocity and cooperation (Natcher 2009). Researchers such as Abele and Southcott (2007, 3) recognize that "much of the traditional economy of indigenous societies can be considered part of the social economy in that much of its pre-capitalist values still play an important role in the region and act in contradiction to the profit seeking values of contemporary society."

Table 2.1

The five principles and operating rules of social economy enterprise

Five Principles and Operating Rules of Social Economy Enterprise

- 1. The primary aim is not to generate profit or financial returns, but rather to serve its members or the community. In practical terms, this means that the social mission is a social economy enterprise's reason for being.
- 2. It is managed independently of government. Government and elected officials can support a social economy enterprise, but the enterprise must remain autonomous.
- 3. It uses a democratic decision-making process rooted in the basic principle of one person, one vote. In other words, power is not automatically in the hands of the richest individuals, or those who own the capital.
- 4. It upholds the primacy of people and work over capital in the distribution of profits and revenues. Making investors rich is not the goal. For example, if there is a surplus, it may be reinvested in the enterprise, or the community. It can also be kept in reserve for future expenses; for cooperatives, this is an obligation.
- 5. Its operation is based on the principles of participatory management, empowerment and individual and collective responsibility. This means that citizens can be collective actors for their own development.

Source: Adapted from the Social Economy Reference Guide by Chantier de L'economie Sociale (2013, 2)

Indigenous traditional economies are built upon trust, reciprocity, resource sharing, and mutually beneficial relationships (LeBlanc 2014). Barnhardt and Kawagley (2008) expand on this understanding, explaining that the holistic and interdependent nature of relationships central to Indigenous economies are complex systems that support sustainability. "Individuals and communities acquire special knowledge, skills, and a complex understanding of the local environment through their various subsistence activities" (Kuokkanen 2011, 220). Social capital which is comprised of the "networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit" is an important feature of social organizations (Putnam 1995, 66).

Overall we see that there is no agreed upon definition of the social economy. Also, how the social economy is expressed can be different based on the social, cultural, and political contexts in which the term is embedded. With that said, the commonality among all forms of the social economy is to positively impact communities to some degree.

2.3 Complexity Science Lens

Complexity is defined by Öztürk (2016, 167) as "a concept that explains the initial value of variables and their mutual interactions with each other and with the elements in the external environment (interdependence) and non-linear relationships." Piscitelli (2016) posits that unlike a linear system where the parts are equal to the sum of the whole and connections do not add value, a non-linear system places greater value on the parts of the whole and their connections, adding additional value and the possibility

of determining the structure and organization of the system. Further, Rammel et al. 2007, 10) consider complex adaptive systems (CASs) to be "characterised by self-organization and co-evolutionary dynamics, [and] they express large macroscopic patterns which emerge out of local, small-scale interactions."

This study builds upon research that has applied complex adaptive systems theory to complex social-ecological systems (Gunderson and Holling 2002; Holling 2001; Homer-Dixon 2006; McCarthy et al. 2011; Stroink and Nelson 2013; Walker and Salt 2006). Specifically this research focuses on how both food hubs and food systems are considered interacting CASs (Folk et al. 2010; McCarthy et al. 2011; Simmie and Martin 2010; Stroink and Nelson 2013). The local and industrial food systems are seen as selforganizing, dynamic and evolving as they interact to shape each other's evolution through local food hubs that are part of the larger food system (Stroink and Nelson 2013). A food system is defined by Ericksen (2008) as a range of activities consisting of food production, processing and packaging, distribution and retail, and consumption, with interconnected social, ecological, and economic policy objectives. A local food hub is defined for the purpose of this research as a community-based organization working to build sound food systems that connect producers with consumers (Blay-Palmer et al. 2013; Stroink and Nelson 2013). Through blueberry-centric local food hub case studies in Northwestern Ontario, blueberry harvesting is explored as a part of a local food system that has roots in the social economy.

2.4 Blueberry Foraging as a Complex Adaptive System

The boreal forest is in a constant state of disturbance and renewal which provides opportunity for native wild lowbush blueberries to establish since they are a pioneer species that colonize disturbed areas such as recently cut forestry operations and wildfire burned areas. Blueberry plants are part of the complex adaptive system that is the boreal forest (Messier and Puettmann 2011), and both experience change through an adaptive cycle. The adaptive cycle has four stages: reorganization, exploitation, conservation, and release (see Figure 2.2). The following paragraph explains how blueberry plants function within an adaptive cycle in the boreal forest of Northwestern Ontario.

After a disturbance such as fire or logging the ground is left barren and scarred from the destructive removal of trees and vegetation. The soil of the forest undergoes a 'reorganization phase' when nutrients become available for new plant species to grow, where a forest previously existed. The first plants to grow are known as pioneer species, plants that rapidly colonize an area and can withstand growing in open conditions. As part of the 'exploitation phase', these plants exploit nutrients to grow and spread throughout the disturbed area. Blueberries, along with other pioneer species, mature until they reach the 'conservation phase', where their populations in the area stabilize. During this stage, trees that colonized disturbed areas alongside the blueberry plants are still small, but the forest is not done growing, this is just the beginning. The next layer of vegetation growth begins to impede upon the pioneer species as grasses, shrubs and trees compete for the same space and nutrients. The 'release phase' occurs as trees take over, outcompeting the blueberries and leading to a decline in the size of the blueberry platch. Having grown higher than the existing pioneer vegetation, trees and shrubs now have full access to sunlight and nutrients within the soil as they reorganize into a burgeoning forest. While the trees mature into an old growth forest, the cycle for the blueberries is paused for a time. Until the next disturbance, blueberry seeds are stored in the soil, awaiting an opportunity for nutrients and sunlight to become available.

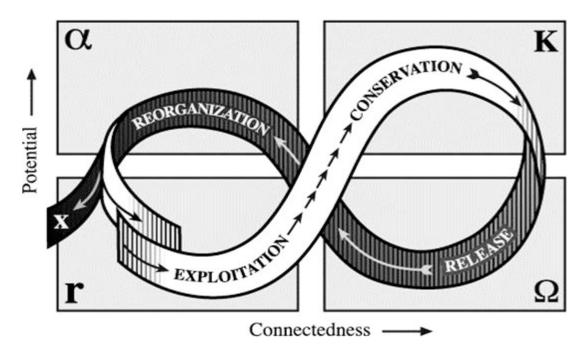


Figure 2.2 The adaptive cycle (Holling and Gunderson 2002, 34)

The boreal forest consists of multiple interacting CASs which can be nested in different cycles, like in the previous example where tree species do not reach the conservation phase until years after the blueberry plants have been stuck in a release phase. Rather than use the rigid term "hierarchies", the term "panarchies" is used to describe the nested set of adaptive cycles which can have connections between levels and phases (Holling et al. 2002, 74). These connections are termed "Revolt" and "Remember". The revolt connection sees fast and small events overwhelm slow and large levels in a panarchy and is exemplified by forest fires which can begin as a small ground fire, spreading larger and larger, engulfing an entire stand of trees. The remember connection is initiated by a catastrophe such as a forest fire and draws upon the potential stored in the system as renewal occurs and can be thought of as drawing on the accumulated resources of the forest. For example, blueberry seeds are stored in the soil, forgotten until the remember connection can occur.

In the boreal forest ecosystem, blueberry harvesters rely on the previously mentioned CASs within the forest, to facilitate the creation of the conditions necessary to produce blueberries. Foraging for blueberries is a CAS because there are diverse and autonomous agents (foragers) that are linked through many interconnections and behave as a collective, learning from experience and adjusting to changes in the environment. For example, during the summer of 2017 I was invited to pick blueberries with Connie Nelson at her favourite blueberry patch. Despite her considering the previous year an excellent harvest, we found that as foragers the patch had reached the release phase. Trees, shrubs, and grasses had managed to outcompete the blueberry plants, as the site slowly transformed back into a forest. Hence we needed to release from the patch – take our knowledge and resources and reorganize to find another blueberry patch in the conservation phase.

2.5 Land Use

Ontario's Crown land is managed by the Ontario Ministry of Natural Resources and Forestry (OMNRF) under the Public Lands Act (Government of Ontario 2015a). Since Crown land comprises 95% of Northern Ontario, land management under the OMNRF is especially significant in the north (Government of Ontario 2015a). The use of Crown land to forage for food is regulated under the OMNRF's Free Use Policy (2004, 3) which states "any person may freely travel about on public lands for transient activities such as... non-regulated resource harvesting (e.g. berries, mushrooms, spruce boughs and other non-timber forest resources that are not regulated under the Crown Forest Sustainability Act) as well as hunting and fishing..."

Many foragers harvest blueberries on Crown land that has been recently cut by forestry companies or been burned from lightning, controlled OMNRF burns or accidental human intervention. Easy access for foraging blueberries is available by way of bush roads to clear-cuts or burned over areas where adequate conditions exist for blueberries to thrive. Forestry companies conduct aerial spraying of herbicides in the boreal forest as an attempt to suppress broadleaf plants that compete with the regeneration of desired coniferous crop trees (Shepard et al. 2004). Herbicides such as glyphosate are applied to kill all non-coniferous plants, leaving the recently planted coniferous trees the forestry companies want to grow. Glyphosate, the most commonly used herbicide, is a broad-spectrum herbicide which is used in agriculture, forestry, and to control aquatic weeds (World Health Organization 2004).

Spraying of aerial herbicides is problematic as blueberry plants are also killed in the process, which impacts access of the public to foraging for blueberries. Throughout Northwestern Ontario there has been an outcry from the public to stop spraying glyphosate. In 2015, a petition was circulated throughout the Northwestern Ontario region and online to stop glyphosate spraying, which garnered more than 2300 signatures from concerned citizens who use the land for a variety of activities (Citizens United for a Sustainable Planet 2016). Until recently the most common objective of forestry operations in the northern hemisphere was timber production for lumber, pulp, and other wood products (Messier and Puettmann 2011; Milne 2013). Global changes have led to increased concern over maintaining biodiversity and ecosystem services, transforming the emphasis of forestry operations to encompass a wide range of economic, social, and ecological objectives (Messier and Puettmann 2011). Milne (2013, 57) notes that forest tenure modernization has led to a shift towards community or locally-based management approaches and "even though timber may still be the focal point of forest management, such a shift to community-based forest management promotes the integration of local interests into forest management planning and promotes emergence of wild blueberries as a social enterprise."

Under Ontario's current natural resource management regime, forest managers are required to consult with the public (through mechanisms such as local citizens committees) and First Nations regarding forest management plans for each forest management unit to identify local values that are to be protected by the forest managers, and yet forest foods are not specifically identified as a compulsory objective and therefore forest managers have no legal obligation to protect forest foods (Hamilton 2012).

Despite the shift towards community-based forest management, Milne (2013, 62) recognizes that in Ignace, Ontario wild blueberries were identified to the OMNRF as an important value by local residents and the local citizens committee which includes people with an interest in forest management such as trappers, hunters and tourism operators. Informal meetings occurred with the OMNRF that focused on "integrated management of

wild blueberries and timber in terms of policy, land tenure and forest management planning" and yet there was no integration of blueberries into the OMNRF's 2009-2019 *English River Forest Management Plan* as key components or indicators. Milne (2013) attributes this to the fact that the wild blueberry industry is unregulated and therefore the value of wild blueberries is underrepresented as the OMNRF does not have reference materials to support the development of wild blueberry policy. In addition, deviating from a known source of profit such as timber to undeveloped resources such as blueberries creates uncertainty which, for an already unstable forestry industry, likely does not suit the interest of the forest industry. As such, blueberries are not a priority for the forestry industry and there is no attempt to protect the rights of blueberry pickers (Milne 2013).

2.6 Benefits of Foraging

While blueberries are part of a local subsistence economy as a food source and means to foster communal values and relationships with the natural and social world, they are often undervalued and unrecognized as part of a formal economy (Norrgard 2009). Blueberries hold much more than just economic value, they also provide many benefits such as increased food security through access to a healthy, nutritious, locallysourced food (Ontario Nature 2014). Social benefits include bringing families together, increased connections to the land, fostering interconnectedness, and building intergenerational relationships through storytelling (Parlee et al. 2005).

The four case studies on foraging wild blueberries from Northwestern Ontario add depth to the literature about blueberry foraging and its role in foragers' relationship to the land. Indigenous cultural values in northern Canada are rooted in landscape and reinforced through the continuation of land use activities (Natcher 2009). Mental, spiritual, emotional, and physical benefits are imparted through the act of being out on the land and interacting with the sights, sounds, smells, touch, and feel of nature (Michell 2009). The procurement of wild foods is essential to not only individuals but also to the social vitality of communities which is exemplified through "food sharing and the norms of reciprocity that are associated with harvesting activities" (Natcher 2009, 88). Further, traditional food and preparation contribute to cultural heritage as they are holistically intertwined with culture, identity and health (Royal Commission on Aboriginal Peoples 1996). Food is known to have symbolic meaning and can aid in producing a certain collective identity (Ray 2008) such as amongst blueberry pickers.

2.7 Perceptions of Foraging

Foraging for food has acquired various negative connotations since foraged food is sometimes considered famine food, which is seen as too time-consuming, outdated, and unprofitable to harvest (Pardo-de-Santayana et al. 2007). Subsistence activities have been termed irregular, hidden, shadow, non-structured, non-observed, unofficial, unorganized, and informal economies (Natcher 2009). Many forest foods have not been commercialized for a variety of reasons such as low yields, short shelf life, long growth cycle, and complex symbiotic relationships between the plant and other forest flora (Forbes 2017). In other words, the effort required for harvesting forest foods and the inability to commercially market them makes it unappealing to those who don't recognize the intrinsic value of harvesting one's own food. Often forest food harvesters view the recreational, aesthetic, traditional, and cultural values of forest foods as more important than commercial values (Mitchell and Hobby 2010). As noted by Natcher (2009), through the use of negative connotations associated with foraging there has been an attempt to subvert subsistence economies by implementing modernization policies that seek to absorb subsistence economies into the global capitalist system. Natcher (2009, 85), further postulates that "despite the predictions of their eventual demise, subsistence economies continue to demonstrate considerable resilience and remain integral to the health and well-being of northern Aboriginal communities." Bharucha and Pretty (2010, 2922) contend that in communities where forest foods are traditionally utilized there exists a living link with the land as a keystone of culture. Therefore "the decline of traditional ways of life and decreased wild food use are interlinked."

Moreover, Thom (2005, 4) points out "tension exists between powerful mainstream western views of the land and those held by Aboriginal people (and others) who view the land through their experiences of dwelling in it." Western philosophical thought sees land as unobserved and not experienced by people: nature without culture (Casey 1996; 1997). As such Thom (2005, 5) recognizes that western philosophical thought has separated space from place which works to objectify empty "wilderness" as "empty lands" and has become part of the rationale to exploit the Indigenous people who live within them. Significantly, the practice of blueberry picking counters the notion of the idea of land without culture. As such, using the term 'wild' in reference to blueberries and food throughout this research is done solely to differentiate food sources found in nature from cultivated varieties.

Natcher (2009, 87) recognizes there has been a considerable amount of effort placed in attempting to quantify the value of subsistence production based on the economic value of the forest food harvested but "the valuation of subsistence production does run the risk of misrepresenting and devaluing the cultural significance of subsistence activities." Subsistence activities "provide a fundamental basis for the social identity, cultural survival, and spiritual life of northern Aboriginal peoples." Additionally, exercise and healthy food procured from subsistence activities tend not to be factored into the valuation of subsistence production.

In addition, the fact that foraging manages to get people outside is important because nowadays there are children whose physical and emotional development is being negatively affected by obesity, depression, and attention disorders because they are too addicted to modern technology and they don't want to go outside (Louv 2008).

2.8 Similar Research

In Ontario there has been limited research conducted surrounding harvesting food from nature. To date in Ontario, research has been conducted in Fort Albany on the value of country foods, and Pikangikum First Nation has a land use strategy that was released in 2006 that discusses the importance of forest foods to the community. In 2011, Pengelly completed a Masters thesis on the development and commercialization of non-timber forest products in Pikangikum First Nation. Milne (2013) explored the potential of a cooperative structure for marketing wild blueberries in Ignace. LeBlanc (2014) researched the importance of forest foods to the community of Aroland for his doctoral thesis, focussing on decolonization of food and the traditional importance of forest foods. These studies have established a strong link between sense of place and well-being. Similar to this research, the aforementioned authors also privilege community voices through a participatory-based approach.

2.9 Relevance of the Research

This research analyses blueberry foraging as a social economy. Ontario Nature's 2014 *Beyond the Fields: the Value of Forest and Freshwater Foods in Northern Ontario* report explores the unrecognized importance of resilient forest and freshwater food systems. The report argues that accessing local food as an economic resource maintains ecological health and integrity which increases the long-term prosperity of the region. Ontario Nature (2014, 4) states that "forest and freshwater food systems bolster economic, human and ecological health, and are significant contributors to the resilience of communities." But "current knowledge about the extent of forest and freshwater food-related activities in Northern Ontario is somewhat limited" although Ontario Nature (2014, 4) recognizes they do hold considerable value and unrealized opportunities. These findings are important because they highlight the need to delve deeper into research regarding the role of foraging for forest foods in Northwestern Ontario. This research seeks to add to this understanding by exploring foraging of blueberries through four case studies.

The *Beyond the Fields* report recognizes that statistics on the region-wide extent of forest and freshwater food harvesting for personal consumption are lacking (Ontario Nature 2014). Research into the values and uses of forest and freshwater foods are required to inform community development and sustainable resource management in the region and furthermore, how forest and freshwater foods are integrated into the identities of communities has not been clearly established (Ontario Nature 2014).

As noted above, there are gaps in the literature surrounding foraging for wild blueberries in Northern Ontario. As Milne (2013) pointed out, government organizations such as the OMNRF do not focus research dollars on harvesting blueberries and since it is an unregulated market there are no requirements to collect data. A research gap identified by Ontario Nature (2014) includes the need to assess the cultural and social benefits of forest foods which this research does through exploring the social economy of blueberry foraging. The social, environmental and cultural values of blueberry picking discussed in this research cannot be quantified as easily as economic value, but nonetheless are valuable in their own right as Natcher (2009) articulated earlier in this chapter.

In recent years, discourse on this topic has been promoted through graduate student research at Lakehead University through research by Leblanc (2014) which discussed the decolonization of food within Aroland First Nation and the importance of the traditional economy; as well as Milne (2013) who looked at the viability of a blueberry harvesting co-op in the Ignace area and discussed the current forest management system at length.

To conclude, my research adds to the current state of knowledge on the understudied social economy of Northern Ontario. This was accomplished by contrasting four different blueberry-related initiatives from the region using the five principles of social enterprises. My research further examined the understudied process of foraging for wild blueberries through sharing the stories of blueberry pickers from the region.

CHAPTER 3

METHODOLOGY AND INTRODUCTION TO CASE STUDIES

I plan my route and decide that the best method for picking blueberries on this hill is to walk along the same elevation across the entire hill. This method allows me to bend over less since a steep slope brings the berries close to waist height. My back thanks me as I begin to use the fingers of my right hand to fondle berries gently enough that they drop into my outstretched palm. Picking skills rusty, not all the berries drop into my hand but rather many flit through my fingers and hit the ground below. I begin filling the basket in my left hand one small handful at a time. Fearing to place my basket down and have it fall over on the steep hill, I continue to hold the basket. Despite my best attempts, the odd leaf and twig make their way into the basket as well. The familiarity of picking returns and I quicken my pace as less berries fall to the ground and my basket grows fuller. My method successful, I continue harvesting blueberries with ease. Every few minutes my head pops up to scan the tree line for bears and instinctively I watch for moose as my thoughts turn to the upcoming hunting season.

3.1 Introduction

This chapter outlines the methodology and methods I used to conduct this research. The importance of storytelling is emphasized and my personal story is included

to place myself within the research. I discuss the selection of participants and case study sites to build context. Ethical considerations that were followed during my research are listed, as well as the financial contributions that assisted me in carrying out this research. Lastly, how my research has and will be disseminated is offered.

3.2 Storytelling

Stories provide a framework to reinforce interconnectedness (Ray 2015). "Storytelling has the potential to gain access to the complexity of both individual and shared realities in a way other methods struggle to achieve" (Little and Froggett 2009, 469). There is an ongoing connection between stories and land; many places have place names that evoke story (Basso 1996). For example, Keith Basso was an anthropologist who worked with the Apache. He found that to support certain behaviours elders would tell stories of events associated with specific places. These stories and the places they referenced were synonymous with the lessons that they held. Because of this, if someone in the community conducted themselves in a way that was contrary to community norms, a community elder would tell a story that contained the necessary life lesson. Even though the elder would not speak directly to the individual whose behaviour needed to be corrected, because community members possessed a shared meaning of the story, the individual would know the story was meant for them to correct their behaviour. Moreover, because the story was synonymous with a particular place, every time the individual saw that landmark they would be reminded of the lesson.

There are many personal and cultural stories from Northern Ontario such as the woman who married a beaver, Kakabeka Falls, the Sleeping Giant, and creation stories. Like Basso describes, these stories are also situated in land and include cultural values and lessons (Ray, 2015). In my research, stories were also situated in place. I asked participants to share stories about specific blueberry patches they had visited in the past, and in some instances even accompanied participants to pick blueberries. Being out in the blueberry patch or recalling past blueberry picking experiences helped individuals to recall stories which generally contained some sort of reminder about an environmental ethos.

The importance of basic background information on the history, culture, people, and context in which research is to take place is recognized by Michell (2009) as a valuable way of knowing. Through stories, trust and respect can be built as rapport forms. Contextual and background information begin to emerge as life experiences are shared and a relationship is formed. When we understand our relationships this deepens our understanding of accountability and interconnectedness (Johnston 1976). In Western positivist research, a pre-existing relationship with the research topic or participants can be seen as bias (Creswell 1998). Placing oneself in the research has been frowned upon in the past, but an Indigenous perspective does not recognize personal relationships as a point of weakness, instead a strength that supports validity (Ray 2015; Wilson 2008). As an Indigenous person, I believe it necessary to tell my story and place myself within the research as part of this journey. As part of telling my story, I have included a short story at the beginning of each chapter, which when read together, describes a day of blueberry picking through my experiences. Furthermore, in the next section I situate myself in the research. Doing so contextualizes my research for the reader and allows them to make

their own decision on the validity of my work. I aim to be true to and present the perspectives of respondents even if they do not align with my perspectives.

3.3 My Story

Research was conducted by me, a self-proclaimed forest food forager with a passion for forest foods. I previously worked at Ontario Nature as the Forest and Freshwater Food Project Coordinator. In this position, I rekindled awareness of forest foods in Northern Ontario through guided forest food walks and entrepreneurial workshops surrounding the creation and promotion of forest and freshwater food businesses. Through my experiences, I met hundreds of amateur foragers of all ages whose passion for forest foods were inspirational and motivated me to continue in the field of foraging. I embarked on this research as part of a more detailed, academic inspection of the forest food economy of Northern Ontario.

I consider myself an environmental activist who is opposed to the commercialization of our natural resources. I have co-organized an anticommercialization of food think tank, attended anti-aerial herbicide spraying rallies and assisted in garnering signatures on a petition to stop spraying in our forests.

I believe in having a connection to one's food and I practice this year-round through hunting, fishing, foraging, and gardening. As an Indigenous person and a student of environmental management, I grew to believe wholeheartedly in the importance of concepts such as interdependence, holism, and sustainability. A strong connection to land is fundamental in embracing the social economy and to escape the strong grasp of capitalism and the commercialization of our planet. We are stewards of the environment and should respect the resources the Creator provides to us. Only in the last five years have I begun harvesting wild blueberries again. Like many Northwestern Ontarians, I picked berries as a child, but life became busy and blueberry picking was ignored for years. Now that I have once again connected to the land and journeyed out into the blueberry patches, I have found a renewed sense of self. Through blueberry picking and by extension this research, I have learned the importance of reciprocity and as such I desire to give back to the people and communities that were instrumental in this research. During the upcoming 2018 blueberry harvesting season, I plan to journey to Aroland First Nation and provide the Aroland Youth Blueberry Initiative with insights gained from interviewing their blueberry pickers. I also plan to offer to lead a forest food walk for members of the community. Additionally, during the harvest of blueberries I will share in the bounty by delivering blueberries to elders I have built relationships with in thanks for their time and knowledge which I truly enjoyed and felt honored to receive. I instantly felt accepted by the community of Aroland and can't resist the urge to journey back up north. Chi-Miigwetch.

3.4 Research Objective

My research objective is to explore the importance of foraging for wild blueberries in relation to the social economy of Northwestern Ontario. The following questions guide the research:

1. How do blueberry foraging initiatives in Northwestern Ontario demonstrate properties of the social economy?

- 2. How have the properties of the social economy supported the persistence of blueberry foraging?
- 3. What barriers hinder the foraging of blueberries as a social economy in Northern Ontario?

3.5 Methods

A qualitative research methodology was utilized, in which I interacted with participants, with the goal of studying human ideas and relationships (Creswell 1994). A comparative case study approach was employed as the strategy of inquiry. This approach is generally utilized to examine an activity, experience, or process in depth (Stake 1995). Cases are limited by time and activity, and researchers are able to collect detailed information over a period of time using multiple data collection procedures (Stake 1995). While conducting interviews at case study sites I participated in and observed others foraging for wild blueberries. I used a participatory action research approach in which research questions were guided by the communities (Walter 2009) as a result of responses provided during scoping interviews with community representatives. Scoping interviews assisted in directing research toward blueberry-related issues communities were interested in pursuing such as the spraying of glyphosate and the changes that are occurring as a result of climate change.

Due to difficulties obtaining interviews with blueberry pickers at Algoma Highlands Wild Blueberry Farm and Winery and at Arthur Shupe Wild Foods, the second phase of interviews with blueberry pickers focussed on the Nipigon Blueberry Blast Festival and Aroland Youth Blueberry Initiative. Fieldwork was conducted in the vicinity of Nipigon and Aroland in late August because wild blueberry harvesting is at its peak during the month of August.

Interviews were primarily conducted in the field because literature regarding the benefits of interviewing people outside in 'walk and talk' interviews suggest that the best way to learn is to 'get out there and do it' while exploring people's relationship with space and place (Jones et al. 2008). A reciprocal approach that emphasized the product and the process was attempted to help build a reciprocal, co-learning relationship (Diver 2014) in which I gathered berries with interview participants while reducing power issues that exist between interviewer and interviewee (Jones et al. 2008). Jones et al. (2008) recognize that a participant travelling to an interview is an assertion of power by the researcher, which is part of why I travelled to the blueberry patch to conduct interviews. Additionally, working together to harvest blueberries built relationships and rapport which facilitated open dialogue versus one-way communication.

Therefore, the preferred method of interviewing participants was out in the blueberry patch, but due to logistical difficulties and participants' choice to participate in an interview at any location they felt comfortable, some interviews were not conducted while blueberry picking. I attempted to pick blueberries with participants but I quickly discovered it was difficult to follow the participant, juggle the recording device, and read the interview questions. I did manage to pick some berries for participants, but the quantity was minimal (a few handfuls) and more often than not, I caught myself eating the berries. In addition to the berry patch, interviews were also conducted at local coffee shops, restaurants, community centres, participants' homes, vehicles, the Nipigon Blueberry Blast Festival, and through telephone conversations.

This research examines the social economy of blueberry foraging in Northwestern Ontario through four social enterprises. Audio-recorded, semi-structured interviews were the primary method of data collection. Initially, an interview guide (Appendix A) was created which focused on the social, economic, and environmental importance of blueberry picking. Since each site was different, the guide was altered to reflect each location (i.e. changing words such as festival, initiative, or business).

Semi-structured interviews were selected because they can be adapted to probe respondents for additional information, which helps to clarify responses (Hutchinson and Skodol-Wilson 1992) including inconsistencies within participants' accounts (Smith 1992). Probing ensures that information collected is reliable since a valuable and more complete picture of the information emerges (Austin 1981; Bailey 1987; Barriball and While 1994; Gordon 1975). Other advantages of using semi-structured interviews are their effectiveness in exploring attitudes, values, beliefs, motives (Smith 1975), and semistructured interviews are shown to have a higher response rate than if I had used a more structured survey approach (Austin 1981). Additionally, as Treece and Treece (1986) recognize, the ability to change vocabulary for each respondent is vital to conveying meaning which was relevant in this study since some respondents were unfamiliar with certain terms used in the interview guide.

Data collection occurred in two phases. Initially, scoping interviews were conducted with stakeholders from four blueberry initiatives as part of a larger systems level approach. Included was Norma Fawcett, Co-founder of the Nipigon Blueberry Blast Festival; Sheldon Atlookan, Aroland Youth Blueberry Initiative (AYBI) Representative/Aroland Band Councillor; Arthur Shupe, Owner/Operator Arthur Shupe Wild Foods; Trevor Laing, Owner/Operator Algoma Highlands Wild blueberry Farm and Winery¹. Interviews occurred over the autumn and winter of 2017. Once the four blueberry initiatives were profiled the next phase was to conduct in-depth, semistructured interviews with blueberry pickers at each of the four case studies (see Figure 3.1). In total there were 34 interviews conducted for this research project which can be seen broken down by site and type in Table 3.1. Types of interviews include scoping interviews which directed research, field interviews conducted in the blueberry patch, and other interviews. The 'other' category included interviews that were conducted at different locations besides the blueberry patch such as by telephone, at an interviewee's residence, or public settings.

3.6 Site Selection

Case studies were selected based on two main criteria: diversity and geographical scope. Including a blueberry festival, community-based blueberry harvesting initiative, sole-proprietorship business, and a blueberry farm demonstrated a wide diversity of blueberry harvesting operations. These operations participate in the market-based economy and social economy at varying levels, which provided a more complete picture of the blueberry economy within the region. Since Northwestern Ontario is a large

¹ As part of my study, a majority of respondents preferred to be named versus remaining anonymous.

geographic region, in order to acquire regional representation, sites from across the region were selected. The majority of road accessible human settlements in Northwestern

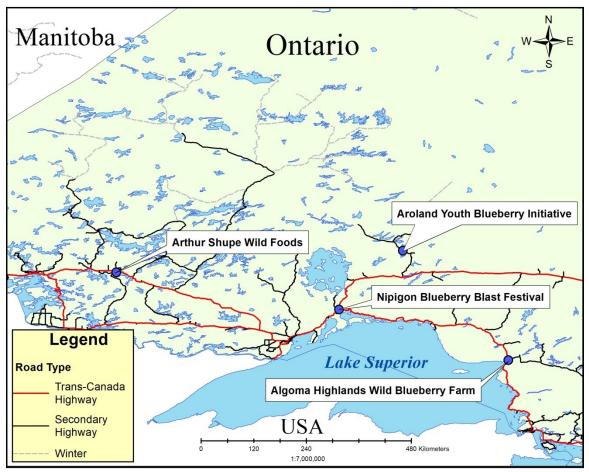


Figure 3.1

Research locations of four Northwestern Ontario-based blueberry initiative case studies (Created using ArcGIS software by Esri)

Ontario are located in the southern portion of the region and so research was conducted within the southern half of the region. Sites were spread far and wide across the southern half of Northwestern Ontario, covering the western, central, northern, and eastern portions.

There are a limited number of blueberry initiatives in Northwestern Ontario from which to select case studies. The only other blueberry initiative I considered was the Sioux Lookout Blueberry Festival. Since interviewing in the blueberry patch was the preferred interview method and the festival didn't have a blueberry foraging component, it was excluded as a case study site. There is other privately run small-scale blueberry harvesting businesses in the region. Specifically, these are pop-up roadside vendors that sell blueberries from the back of their vehicle and information is scant and elusive because they operate sporadically.

3.7 Participant Selection

The main criterion in selecting interviewees was that they had participated in foraging for wild blueberries at some point in their lifetime. During the Nipigon Blueberry Blast Festival, participants were approached in the blueberry patch and asked if they would participate in an interview. The closest blueberry pickers to where I parked were approached first. Afterwards, I setup a booth at the festival in Nipigon and asked festival participants if they would participate in the research through an interview. They had the option to provide written responses through a condensed interview guide after

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Case Study Interviews						
	Scoping	Field	Other	Total		
Aroland Youth Blueberry Initiative	1	6	8	15		
Nipigon Blueberry Blast Festival	1	6	10	17		
Arthur Shupe Wild Foods	1	0	0	1		
Algoma Highlands Wild Blueberry Farm	1	0	0	1		
Total	4	12	18	34		

Participant interviews by case study and type

reading and signing the consent form or leaving their contact information for a more indepth interview at a later date.

In Aroland the goal was to interview blueberry pickers who harvest as part of the AYBI. Blueberries are bought by the AYBI at the community centre which doubles as a storage space for blueberries. I was present at the warehouse during the entire time that blueberries were being purchased for the first two days I was in the community. During this time I attempted to recruit interviewees and conducted multiple interviews at the warehouse. I also met other blueberry pickers who agreed to be interviewed in the blueberry patch. The back roads around the community are numerous and there was difficulty finding the interviewees as I was unfamiliar with the area. I did get lost multiple times but stopped to ask anyone who was seen picking blueberries if they would participate in an interview. Using this method, I ran into a local blueberry picker from Nakina who was out harvesting blueberries for personal consumption and not as part of the Aroland Youth Blueberry Initiative.

3.8 Project Study Sites

The boreal forest region (see Figure 3.2) dominates the forest landscape in Ontario. It contains two-thirds of Ontario's forests and encompasses 50% of the total area of Ontario (Government of Ontario 2015b). The boreal forest consists of coniferous and mixed-wood forests. The main conifer (softwood) species are black and white spruce, jack pine, balsam fir, tamarack and eastern white cedar. The main deciduous (hardwood) species are poplar and white birch (Government of Ontario 2015b). Boreal forests are accustomed to natural disturbance in the form of fire. Boreal species such as jack pine and black spruce require fire to regenerate and are known to grow into an even-aged, single species forest (Government of Ontario 2015b). Research sites were primarily located in sandy areas with abundant jack pine trees and some kind of large disturbance such as a clear cut from forestry operation because of the propensity of blueberries to grow under such conditions.

Of Ontario's 107,636,418 hectares (ha), 77% consists of Crown land, an area of approximately 83.5 million ha (Government of Ontario 2016). In Northern Ontario the percentage of Crown land is much higher with 95% of the land base consisting of Crown land (Government of Ontario 2015a). According to Statistics Canada (2017a), Northwestern Ontario encompasses a large geographic area of 526,478 square kilometres and the population of Northwestern Ontario in 2016, was 231,691 residents. With such a low population density and large distances between communities, travel throughout the region is difficult. In many communities throughout Northwestern Ontario it is common to experience boom and bust cycles that cause unemployment and economic instability because these communities rely on industrial resource extraction and external market forces that they do not control (Ontario Nature 2014).





The first case study site explores Aroland Youth Blueberry Initiative, where community members harvest and sell blueberries to support programs for youth in the community. Second, the Nipigon Blueberry Blast Festival provides opportunities for individuals to pick their own blueberries and participate in a variety of other activities. Third, Arthur Shupe Wild Foods is a commercial operation, which sells blueberries through the regional Cloverbelt Local Food Co-op. Finally, Algoma Highlands Wild Blueberry Farm and Winery is the first and only privately owned commercial wild blueberry farm in Northern Ontario. Algoma Highlands has emerged as an important opportunity for food social entrepreneurship in the north, where over 90% of the land is Crown land and extremely difficult to access for local food initiatives that require a land base. Selling wild blueberries is unregulated and therefore there are no formal requirements to report harvesting activities. Blueberry harvesting in Northwestern Ontario also occurs to provide households with sustenance, but there is limited data on how important of a food source it is for households and the importance of social relationships that are formed because of berry picking are seldom documented.

3.8.1 Aroland Youth Blueberry Initiative

Aroland First Nation is located in Northwestern Ontario, approximately 90 km north of Geraldton and 25 km west of Nakina (see Figure 3.3). According to Matawa First Nations Management (2014), the community gained reserve status under the Indian Act in 1985, with reserve lands totalling 19,599 hectares, an off-reserve population of approximately 400 people and an on-reserve population of approximately 366 people. The community occupies 3.21 square kilometres of reserve land (Statistics Canada 2017a). The residents of Aroland are on average a younger population with 35.6% under the age of 15, 61.6% between the ages of 15 to 64, and only 4.1% aged 65 or older (Statistics Canada 2017a).

Aroland First Nation is a part of Treaty 9 (1905), which protects the community's right to practice traditional activities throughout Crown land within their traditional territory (Matawa First Nation Management 2014). The community is located along the Canadian National Railway line and was named after the Arrow Land and Logging Company settlement that was previously located on the land which the Aroland First Nation reserve currently occupies. The Aroland First Nation traditional territory is a highly productive source of blueberries, providing a secure and accessible supply that exists under the community's authority (S. Atlookan personal interview November 16, 2016).

In Aroland, berry picking is a way of life that can be traced back many generations. Gathering blueberries was part of a larger nomadic subsistence lifestyle where migration with the seasons occurred as they followed the available resources (LeBlanc 2014). Berries were an important part of this process because they provided nutrition through the winter and were gathered on fishing or hunting trips, as part of the traditional lifestyle. Elders from the community remember that in recent history berries have been sold to rail workers, train passengers, neighbouring Ojibwe and Cree communities, and even to Minnesota as a dye for blue jeans (LeBlanc 2014).

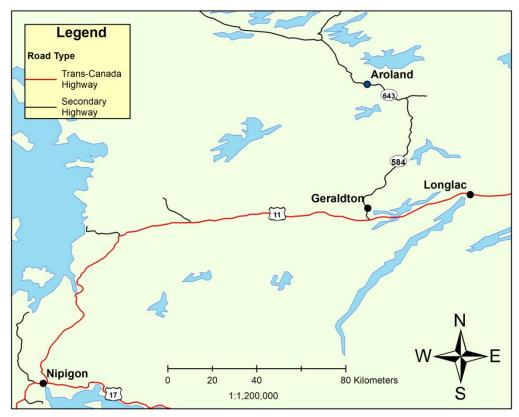


Figure 3.3

Map of Aroland First Nation on the highway network of Ontario. (Created using ArcGIS software by Esri)

Between approximately late July and early September, blueberries are picked by

the community for use as part of a reciprocal network, which includes family members,

the elders they care for, and the AYBI. Some pick for themselves and the AYBI at the same time. Picking for the ABYI occurs on a voluntary basis, but the pickers are compensated monetarily for their efforts, at below market prices. This enables the community to benefit from the AYBI on multiple levels. Berry pickers make a few dollars that can help cover the costs of transportation to the berry patch, while the AYBI acquires berries that are sold in many locations throughout the region, helping to raise money for the youth of Aroland.

The Aroland Youth Blueberry Initiative began in 2008 as a social enterprise when community members tried to sell their surplus berries as a fundraising activity to help their youth (The NAN Advocate 2012). The community formed a non-profit depot where people could sell their berries to the AYBI. Blueberries are brought back to the community warehouse where they are inspected and purchased daily by AYBI volunteers from within the community. All the blueberry pickers who harvested berries on a given day arrive at the community centre when the AYBI representative is present to buy blueberries. The time fluctuates day to day and is communicated throughout the community by social media and telephone. As many blueberries as possible are purchased then transported to other communities in an air-conditioned van which keeps the berries cool during transportation. Berries are sold to buyers in Thunder Bay, such as private grocery stores, restaurants, the Thunder Bay Country Market, and the Thunder Bay Regional Health Sciences Centre Food Market. Other First Nations such as the Red Rock Indian Band (RRIB) assist the AYBI by selling berries for no additional charge at Pelletier's Gas Bar which is owned and operated by RRIB community members.

Currently, the ABYI sells berries in the region through local food markets, roadside stands and at other First Nation communities located closer to the Trans-Canada Highway in order to fund youth programming in the community of Aroland First Nation. The youth initiative buys equipment for the community, such as baseball gloves, bats, balls, safety equipment, and floor hockey sticks. Purchasing equipment helps those who could not afford it otherwise and provides an opportunity for the youth to become motivated and participate in recreational activities. This social, cultural, and ecological initiative appears to have emerged through self-organization within the community. The AYBI is community-based and community-driven, with community knowledge, a traditional lifestyle, and health and well-being as central themes.

3.8.1.1 Interviews

As part of the scoping interviews Sheldon Atlookan was interviewed twice between autumn 2016 and winter 2017. The second phase of interviews was conducted mainly in the blueberry fields surrounding the community between August 28th and August 30th, 2017. Participants were approached in the field for an interview and everyone who was approached agreed to an interview. In total, six people were interviewed in the blueberry patch, although one person was not part of the AYBI. Eight more interviews occurred in various locations around the community. In total there were fifteen interviews conducted for the AYBI case study.

3.8.2 Nipigon Blueberry Blast Festival

The Township of Nipigon is located along highway 11/17, at the top of Lake Superior, beside the Nipigon River. Crossing the Nipigon River Bridge is the only way to travel across Canada through Ontario because there are no other roads that traverse the Nipigon River. The town has a population of approximately 1,600 residents and an area of 109 square kilometres (Statistics Canada 2017b). The Red Rock Indian Band and Lake Helen reserve is located a kilometre northeast of Nipigon, along Highway 11.

Norma Fawcett, an Elder from the Lake Helen Reserve, where the headquarters for the Red Rock Indian Band is located, had a vision of establishing a blueberry festival. Her purpose was to celebrate and honour the blueberry plant. The Nipigon Blueberry Blast formed when Norma Fawcett approached the Nipigon Chamber of Commerce asking for the creation of a blueberry festival. To bring awareness of the traditional practice of berry picking to everyone, the Blueberry Blast formed in 2002 under the auspices of the Land of the Nipigon Chamber of Commerce. In 2007, the Blueberry Blast was turned over to an independent committee of volunteers, which only lasted one year. However, a year later, the committee switched to a sub-committee of the Township of Nipigon recreation committee (Township of Nipigon 2016) to support access to additional funding (N. Fawcett, personal interview January 05, 2017).

The main objective for the festival remains; yet over time, the festival objectives have been expanded and include (Nipigon Blueberry Blast 2016):

- Honouring the blueberry and encouraging awareness of a locally available food source, while respecting the environment
- Making Nipigon a destination during the event and attracting tourists to Nipigon while encouraging repeat visits, creating a positive impact on existing local businesses
- Positively impacting community spirit by involving both interest groups and businesses
- Providing a morale booster through entertainment, activities, food, fun, music and dance
- Encouraging participation and interaction of all age groups

In the past, Blueberry Blast participants have paid an entrance fee to participate in the festival and are provided with an opportunity to pick blueberries at a nearby berry patch with a large group of people. For the 2016 and 2017 festivals, the format changed to a free admission street fair in the downtown core. Community members and visitors have an opportunity to have fun, get to know one another, and harvest nutritious berries. Providing access to blueberries is an important function of the Blueberry Blast.

The Blueberry Blast Festival activities were previously held at the Nipigon Marina, with picking activities still occurring east of Nipigon, off Highway 17, in locations that have been previously logged. One location commonly used is Camp 81 Road. There are numerous logging roads in the area and the location contains a mix of sand, soil, organic matter, and exposed bedrock. The terrain varies from hills with scarce amounts of trees to swampy low areas. The Blueberry Blast Festival was embraced by the Township of Nipigon as a tourism event that provides a variety of activities for both local residents and visitors to the community. Past activities have included pancake dinners, children's games, talent shows, a dog show, as well as vendor booths with blueberry pies and other products or information. The festival forges a collective community identity around a natural local food resource.

3.8.2.1 Interviews

In January 2017, Norma Fawcett was interviewed as part of the scoping interviews. The second phase of interviews occurred mainly during the Nipigon Blueberry Blast Festival between the 19th and 20th of August, 2017. Additional participants were found through the snowball method where an interviewee would recommend another berry picker to interview. I also rented a booth for \$40 at the Nipigon Blueberry Blast Festival where an interview signup was sheet available, as well as a hard copy of the condensed interview guide for respondents to complete at the booth, only after they had read and signed a consent form. One in-person interview was also conducted at the booth during which people gathered around listening to the stories of an elderly man who is a well-known berry picker in the area. Festival-goers who indicated interest in an interview were contacted after the festival to arrange interviews. In total, ten people participated in audio-recorded interviews and seven more participated at the Nipigon Blueberry Blast Festival by answering a condensed interview guide. Two of the audio-recorded interviews were conducted in the area's blueberry patches with people that have never been to the Nipigon Blueberry Blast Festival. In total there were seventeen interviews conducted for the Nipigon Blueberry Blast Festival case study.

3.8.3 Algoma Highlands Wild Blueberry Farm & Winery

In 2006, Algoma Highlands Wild Blueberry Farm & Winery formed when Trevor and Tracy Laing bought 640 acres of land just outside of Wawa that is situated in 100 percent pure sand from the ancient shores of Lake Superior. Wawa is located near the eastern shore of Lake Superior, along highway 17 and has a population of approximately 3000 people.

By 2011, they began to sell fresh and frozen blueberries and have since then branched out into value-added products such as blueberry preserves, barbecue sauces, and syrups. They own the first and only commercially operated wild blueberry farm in Northern Ontario that has emerged from tending naturally occurring blueberries rather than importing non-native blueberry varieties. Already they employ approximately 35 seasonal blueberry pickers on their farm, who are paid by the hour and per basket. Some of the pickers are tree planters who rotate to the farm after the tree planting season is finished in June. This arrangement allows for an extended time frame for seasonal workers. The pickers use berry rakes and a few mechanical berry picking machines.

In addition to blueberries, the farm also includes raspberries, six acres of strawberries where customers pick their own baskets of berries, and there are plans to add rhubarb soon.

3.8.3.1 Interview

As part of scoping interviews Trevor Laing was interviewed in February 2017. In total there was one interview conducted for the Algoma Highlands Wild Blueberry Farm and Winery case study.

3.8.4 Arthur Shupe Wild Foods

Arthur Shupe took over wild low bush blueberry picking from his parents in 1995, and now employs seasonal berry harvesters near Dryden, Ontario. Dryden is the secondlargest city in the Kenora District with a population of 7,599 in 2016 and a land area of 65.84 km² (City of Dryden 2017). The average age of Dryden residents is 45 and the ratio of men and women is almost equal with 52% women and 48% men (City of Dryden 2017). Dryden is located in Treaty Three territory.

He has been selling wild low bush blueberries to Thunder Bay through Belluz Farms for over twenty years, and recently began selling through the regional Cloverbelt Local Food Co-op and to contacts in Winnipeg, Manitoba. He also picks conifer cones, chanterelles, and morel mushrooms. Arthur Shupe prides himself on a reputation for having very clean berries: "Customers have told me they can take my berries and pour them right out of the basket into the pie shell" (A. Shupe personal interview February 27, 2017). Having clean berries is so important to him that he has designed a unique berrycleaning device that he keeps secret from the public.

Shupe usually employs an average of eight to ten blueberry pickers who pick by hand and travel to blueberry patches surrounding the town of Dryden. These berry camps can be up to 300 kilometres away from town. He inspects the berries the pickers bring him, and will not buy wet or slap-picked berries because wet berries are bruised, and bruised berries do not keep for long periods. Slap-picking involves slapping the tops of the blueberry plants to knock the berries into a container, which causes bruising and then the clusters of berries near the ground are usually stepped on. Shupe has developed his own effective method for berry picking that he shares with his pickers as a trade secret. Shupe processes the berries and transports them to different businesses where he sells them in bulk. He also sells any surplus berries on the roadside at different locations throughout Thunder Bay. He hires pickers of all ages and has been known to offer hitchhikers that are passing through temporary work. Arthur Shupe does have competition from other berry pickers but they know each other and they split the available resources through a mutual agreement, generally staying away from each other's camps.

3.8.4.1 Interview

As part of scoping interviews Arthur Shupe was interviewed in February 2017. In total there was one interview conducted for the Arthur Shupe Wild Foods case study.

3.9 Data Analysis

Upon creation, the interview guide was categorized into seven overarching a priori themes: foraging, blueberry initiative-focussed, social, economy, environment, climate change, and future questions. As interviews were transcribed and analysed an inductive approach was utilized to organize specific quotes from interviews into the following themes: relationship to land and nature; social relationships; food security; barriers to foraging; community development; land use; reciprocity; sharing; volunteerism; and adaptability. In chapter Four, these themes and sub-themes are explored.

Interviews were transcribed into Microsoft Word documents as soon as possible in an attempt to record the information while it was still fresh. Ryan and Bernard (2003) identified the following scrutiny techniques that were helpful in this research: repetitions; similarities and differences; transitions; indigenous typologies or categories; and theoryrelated material. Processing techniques included printing interviews and highlighting text with different colour markers for each theme. Cutting and sorting was used when the digital version of text was then copied into theme documents that held all possibly relevant text for each individual theme, at which time sub-themes began to emerge.

While conducting interviews it was apparent saturation was reached when no new themes were found in comparison to previous interviews. Guest and colleagues (2006) found that 94% of commonly expressed themes can be identified within the first six interviews and 97% of themes were identified after twelve interviews. With more than twelve interviews for each case study it is likely that saturation was reached as no new categories or themes emerged.

A summary of relevant interview responses to questions regarding a variety of issues such as the enjoyment and operation of the blueberry initiatives profiled will be provided to the Nipigon Blueberry Blast Committee and to Aroland First Nation Band Council informing them of their communities' opinions of their initiatives. No additional interviews beyond the scoping interviews were held in two of the case studies – Algoma Highlands Wild Blueberry Farm and Winery and Arthur Shupe Wild Foods. However, some valuable insights were learned from the scoping interviews and are shared in Chapter Four.

3.10 Ethical Considerations

In accordance with the Tri-Council Policy Statement 2 (TCPS2) on ethical conduct for research involving humans, a cover letter and consent form (Appendix B and C) were provided to participants asking if they wished to remain anonymous or whether interviews could be made public. Multiple participants felt the need to remain anonymous and so their right to privacy was respected. Efforts were made to reduce unintended harm during research by attempting to ensure questions would not create grief or intense feelings and quotes from anonymous participants would not reveal their identity. Interviewees were explicitly reminded before the interview that they were not obligated to answer any question they did not feel comfortable answering and they had the option to stop the interview at any time. Interviewees were reassured whenever they didn't know an answer or didn't respond that it was perfectly fine to skip questions. As such, there was one interviewee who only wanted to share a story about a bear encounter while blueberry picking and therefore their interview only consisted of a singular story, respecting their right to participate on their own terms.

Interview transcription occurred at my residence where there was no risk of disseminating private information. Audio files and transcripts were kept on a password protected personal computer that remained at my residence, securely locked inside whenever the residence was unoccupied. Interview printouts and all other project documents were stored in a locked filing cabinet at my residence.

When conducting research with Aroland First Nation the concept of free, informed, prior consent was practised. I ensured that the community approved of the research before interviewing blueberry pickers. Sheldon Atlookan was the community representative that I worked with during the research process. Since he is both an Aroland First Nation Band Councillor and the Aroland Youth Blueberry Youth Initiative Organizer, I sought his advice and approval of the research. Right away he saw the value of the research and agreed to consult the Chief and Council to ask their approval. At first, I had discussed creating a document to be signed by Chief and Council to approve the research, but Sheldon assured me a formal letter wasn't required. Sheldon could see I was really worried about ensuring the community was on board and in response he happily commented that "we are working with blue gold, not real gold" (S. Atlookan personal communication, August 2017). I was shortly thereafter invited to the community to conduct interviews.

Before I conducted interviews at the Nipigon Blueberry Blast I approached the Blueberry Blast Committee and discussed my intent to interview festival participants. The committee agreed that the research is valuable and approved of conducting interviews at the festival and by extension the blueberry patches on Crown land that festival participants convoy to as part of the festivities.

3.11 Financing and Disseminating the Research

Scoping interviews were supported by the Social Science and Humanities Research Council of Canada funded project Social Economy of Food: Informal, Underrecognized Contributions to Community Prosperity and Resilience, held by Dr. Alison Blay-Palmer with co-investigators Drs. Connie Nelson and Charles Levkoe of Lakehead University (my co-supervisors). The research was also shared as part of a webinar series called *Subversions from the Informal and Social Economy* and a case study document called *Blueberry Foraging as a Social Economy in Northern Ontario: A Case Study of Aroland First Nation, Arthur Shupe Wild Foods, Nipigon Blueberry Blast Festival, and the Algoma Highlands Wild Blueberry Farm and Winery* was disseminated on the *Nourishing Communities Sustainable Local Food Systems Group* website nourishingontario.ca/.

To give back to the communities, a report summarizing relevant interview responses regarding a variety of issues such as the enjoyment and operation of the blueberry initiatives profiled will be provided to the Nipigon Blueberry Blast Committee and to Aroland First Nation Band Council. I am hopeful this data will be a valuable source of information that can be used to direct the blueberry initiatives forward.

Partially based on this research, a peer-reviewed article called *The Social Economy of Food: A Perspective from Northern Ontario* is to be submitted to the journal Canadian Food Studies for publication as part of the Social Economy of Food: Informal, Under-recognized Contributions to Community Prosperity and Resilience Project. Lastly, as part of that same project, a short film is to be created highlighting Northern Ontario social economy case studies.

CHAPTER 4

FINDINGS

The feeling of sunlight warms my face; next a slight breeze cools me down, the expression of joy as I come upon a gigantic patch of monster blueberries. The exhilarating rush from hearing the sound of large blueberries plunking into the bottom of my pail, I begin to pick almost frantically. I notice other plants in the area when I get close to Mother Earth, smelling the fragrances of the forest as I listen to the sounds of birds chirping and leaves rustling in the wind. As I wipe the sweat from my brow my thoughts wander to the delicious blueberry pie I will soon eat. I drift back from my deep thoughts, awakened by a groan as my companion spills their blueberries from being startled by a bear at the edge of the field. I smile a quick grin as the bear meanders away and I go back to the task at hand knowing I'm surely outpicking my companion now. Maybe I will have to share my berries... If only the blueberry patches could talk, the tales they could tell.

4.1 Introduction

Story telling occurs at every stage as blueberry pickers reminisce throughout the year, remembering the enjoyment blueberry picking brings and the lessons learned that informs their picking methods. This chapter first begins with a detailed look at how the social economy is exhibited for each case study by determining how each fits into the

five principles of social economy enterprises. Next, descriptions of the various stages of blueberry foraging are explored. These stages include scoping or scouting for blueberries, harvesting blueberries, post-harvest activities as such cleaning and sharing berries, and lastly consuming the blueberries.

As a result of the interview process, a variety of themes arose from the research which includes relationships with the land and people, sustainability, bears, and food security. Following the introduction of themes, barriers such as the current land use system on Crown land of which forestry is a main part are explored. How these barriers impact blueberry foraging and the social economy are discussed.

4.2 Blueberry Social Economy of Northwestern Ontario

As demonstrated above, the four blueberry case studies within this research displayed the wide breadth of variety that exists within the blueberry social economy of Northwestern Ontario. There are additional blueberry-related pickers, businesses, and social initiatives that exist beyond the scope of this research that likely hold valuable information. The scope of this research project adds to our existing understanding, but only scratches the surface of blueberry foraging as a social economy in Northwestern Ontario. This leaves plenty of opportunity for additional research to be conducted. The following paragraphs summarize the findings of this participatory observation research as to how the case studies display properties of the social economy (see Table 4.1).

Table 4.1

Case Study Comparison							
	Social	Autonomous from		People before	Participatory		
	Mission	Government ^a	Democratic	Profits	Management		
Aroland Youth Blueberry Initiative	Strong	Strong ^b	Strong	Strong	Strong		
Nipigon Blueberry Blast Festival	Strong	Moderate ^c	Strong	Strong	Strong		
Algoma Highlands Wild Blueberry Farm	Moderate	Strong ^d	Weak	Weak	Weak		
Arthur Shupe Wild Foods	Moderate	Strong ^e	Weak	Moderate	Weak		

Comparison of case studies on selected principles of social enterprises expressed through a continuum of weak, moderate, and strong.

a. To clarify, case studies still work within government regulations and policies to differing degrees and may receive funding from government sources, but 'autonomous' in the context of the social enterprise principles refers to the direct decision-making process of how operations are conducted cannot be controlled by government, rather by the board of directors, or other non-partisan members (Chantier de l'economie sociale 2013).

- *b.* The community of Aroland conducts decision-making through the Chief and Band Council and through band member input. More broadly autonomy is gained by minimizing regulations by not operating as a business or selling berries at large supermarkets that require additional food labelling regulations to be followed.
- *c.* The festival is operated under a branch of the Township of Nipigon but the decision-making is done by volunteers on the Blueberry Blast Committee. Additional funding opportunities are available through the township which is why the festival switched back from an independent committee.
- *d.* Algoma Highlands operates as a farm and therefore needs to follow stringent agricultural regulations. For example, their blueberries are inspected by government officials for crop pests, labour laws are adhered to, and since their products are sold in stores food labeling regulations are followed.
- *e.* Since Arthur Shupe buys blueberries from pickers he is not technically their employer, rather he thinks of them as sub-contractors. More broadly, there are a number of regulations that indirectly impact his decision making processes. An example of a regulation he follows is when transporting large quantities of propane for heating and cooking, there are additional dangerous goods regulations to follow, so it is best to only transport small quantities of propane at any given time.

4.2.1 Aroland Youth Blueberry Initiative

Aroland exemplifies all five principles of social economy enterprises which were previously described in Table 2.1. The AYBI is a social enterprise which exists to help the community and is controlled by the community. Community members participate in decision-making and guide the development of the initiative through the Band Council. Lastly, profits are secondary to the primary goal of helping the community.

Aroland Youth Blueberry Initiative operates as a social enterprise with roots in the traditional economy. The blueberry pickers operate on the traditional territory of the Aroland First Nation. The community carries on the traditional activity of harvesting wild blueberries that they have done as long as they can remember. There are pickers of all ages from kids to adults. Most of the people I saw picking were couples. During the interviews parents discussed how children who asked for expensive items like cell phones or other goods were told to pick blueberries to make the money needed to buy what they want. The parents used picking as an opportunity to teach their children how to work to make money and if the children didn't want to work then they didn't get a new phone or other items.

Discussing the benefits of the AYBI, Leblanc (2014, 133) states:

We have observed its positive contributions to the local community as it has expanded to become a resilient and effective community food hub. This initiative created a sustainable social enterprise that enables the exchange of social, environmental, and financial capital within our community. This social enterprise is unique to us in many respects—it is voluntarily managed, sustainably self-funded, and connected to Ojibwe culture and traditions. The AYBI is structured to operate with minimal infrastructure, supporting a convenient environment for the community to sell berries. The current format only requires berry pickers, baskets, and a vehicle to transport the berries to other communities. The initiative only purchases handpicked, wild lowbush blueberries from blueberry pickers. While the annual productive capacity of local blueberries available to the community is greater than what is currently picked, many community members feel that growing into a social entrepreneurship might result in increased government rules and regulations, which is not desired. For example, registering a business requires a business licence, while selling berries in a grocery store requires adherence to additional health permits, health inspections, packaging, and labelling regulations. The current process does not require pickers to follow occupational health and safety regulations; there are no age limits, no sign-up sheets, no supervisors, and no hours of operation. This format supports First Nation autonomy and Indigenous food sovereignty, allowing Aroland First Nation to decolonize their food system through a decreased dependence on the industrial food system, bringing back a traditional way of life that is at the heart of what it is to be Indigenous.

4.2.2 Nipigon Blueberry Blast Festival

The Nipigon Blueberry Blast Festival is a social enterprise which fundraises through various products and events to sustain the festival into the future. This case study aligns with the five principles of social enterprise. The festival is organized by community members who are part of a volunteer committee to oversee operations and control the format of the festival through participatory management. Though profits are generated, they go back into the running the festival and keeping morale high within the community, which is part of their social mission. The committee is supported by the Township of Nipigon, but the festival still exists independent of government.

The Nipigon Blueberry Blast Committee members each work independently and interdependently, each member organizing their own events within the festival. As such they display properties of CASs as each event within the festival comes together to create an amazing festival experience, greater than any individual part.

The Blueberry Blast Festival is embraced by the Township of Nipigon as a tourism event that provides a variety of activities for both local residents and visitors to the community. Past activities have included pancake dinners, children's games, talent shows, a dog show, as well as vendor booths with blueberry pies and other products or information. The festival forges a collective community identity around wild blueberries, a natural local food resource.

Volunteerism is a main aspect of the Nipigon Blueberry Blast Festival. One time a person in a canoe arrived as Norma Fawcett and her life partner Bill were packing up equipment at the Blueberry Blast. The canoeist was a volunteer heading to the Red Rock Folk Festival and he came just at the right moment when they needed his help to pack away heavy items. As Norma (personal interview January 05, 2017) put it "People just sort of came out of nowhere to help. It was beautiful." J. Lanteigne (personal interview August 19, 2017) goes to the Nipigon Blueberry Blast Festival to volunteer and support the local community. He is a member of the Blueberry Blast Committee and oversees the festival's Facebook page. He recognizes the festival as a chance to enjoy the benefit of

blueberry picking, as he puts it, you "get outdoors, physically active, fresh food, and a chance to socialize."

4.2.3 Algoma Highlands Wild Blueberry Farm and Winery

Algoma Highlands Wild Blueberry Farm and Winery is a medium-sized social entrepreneurship that operates primarily as a business, but they do have a social mission to participate in the local food movement through their focus on marketing nutritious local blueberries in the region. They operate autonomously of government, but this case study doesn't exhibit the other three principles of a social enterprise. The farm is a proprietorship meaning citizens and blueberry pickers do not get to partake in participatory management and the decision-making process lies solely with the owners. Lastly, the primary reason for the farm is to generate profits. Despite not exhibiting all of the five principles of social enterprise this case study is still an important part of the social economy of Northern Ontario. Their products sustain other social economies who sell their products such as Willow Springs Creative Centre and Cloverbelt Local Food Co-op. Algoma Highlands' products bear the Foodland Ontario label and are sold in a variety of stores throughout Northern Ontario. They also ship products as far away as Winnipeg and Toronto with a refrigerated truck they own. Their blueberries sell to the public for \$30 to \$35 dollars a 3-litre basket and in a year, they can harvest up to 100,000 pounds, with the potential to grow half a million pounds. Additionally, they have scaled up to include a for-profit company, One Cloud North, which operates a winery. Algoma

Highlands started a winery and it is in the initial stages, as they have hired a winemaker to produce their first batch of blueberry wine.

They provide multiple benefits to the community such as hiring local workers as harvesters, land preparation staff, crop management staff and distribution staff, buying local goods and services, and paying taxes to the municipality. Algoma Highlands is emerging as the leader in wild blueberry production, processing and marketing in Ontario. These attributes work to build social benefit for the community. In addition, they have embraced tourism as a part of their farm and are looking at doing tours in the future. Scenic High Falls is a popular tourist destination located on the property, and every year numerous tour buses bring tourists to see the falls. A small retail store is in the works; and they expect to have local artisans display their works at the store bringing additional social benefits to the community.

Distance to market is their biggest issue. With no existing distribution system, they have to grow, harvest, market, and sell their blueberries—they do it all. However, they find it is getting easier now that they know where to market and sell their berries. Sales outlets include social enterprises such as Cloverbelt Local Food Co-op and Willow Springs Creative Centre's seasonal market. Moreover, they are increasing their valueadded products because they find them easier to move because of a longer shelf life, which allows for more year-round sales. To address the need for blueberry harvesters, they innovatively employ seasonal tree-planters who rotate to blueberry picking after the tree planting season has ended. This is a perfect match because tree planters operate in May and June and berry picking harvest during July and August which extends the length of seasonal employment. As they expand, finding additional harvesters to pick blueberries remains an ongoing challenge for Algoma Highlands Wild Blueberry Farm and Winery. Because of these challenges in hiring local workers, they are looking at bringing in foreign workers for the 2018 season to help supplement their workforce and to ensure maximum production.

4.2.4 Arthur Shupe Wild Foods

Arthur Shupe Wild Foods is a small-scale social entrepreneurship that has a social mission to provide wild blueberries that have been harvested in an environmentallyconscious manner and at an affordable price so that everyone can enjoy wild blueberries. Although Arthur Shupe has a social mission to provide blueberries at an accessible price to his customers, while following an environmentally friendly ethos, his business doesn't meet all the principles of a social economy enterprise. The business is autonomous of government, but there is no democratic decision-making or participatory management as it is a sole-proprietorship business. Profits go to Arthur Shupe to sustain him as he makes ends meet but he isn't looking to get rich from his social entrepreneurship. His business does sell blueberries through the Cloverbelt Local Food Co-op which is a social economy enterprise.

Recently the demand for blueberries has become so great that he has barely been able to fill his buyer's bulk orders, leaving fewer berries for the public to purchase. He sells his berries at a retail price of \$35 for a four-litre basket, even though other pickers have told him that his prices are too low. Arthur Shupe provides his blueberries to the public at the lowest price he can because he believes that regardless of income people deserve the chance to provide their families with highly nutritious, reasonably priced blueberries. For the last five or so years Shupe says he has barely been making any profit from selling his blueberries. This has not deterred him from providing blueberries to the public in an ethical and environmentally friendly manner.

Finding a reliable berry picking crew remains the biggest challenge that he has encountered. At first, he had a single family that would faithfully pick for him each year, but circumstances happened where they stopped picking for him. Nowadays, in hopes of reaching a wider audience he has begun to use different websites such as the Dryden Cloverbelt Local Food Co-op website, as well as Kijiji to recruit berry pickers.

During the 2017 blueberry season there was one potential blueberry picker that had expressed interest through the Kijiji job advertisement. The potential blueberry picker was all set to work for Arthur Shupe on the condition that Arthur Shupe helped pay for gasoline in order for the person to bring their Winnebago to the blueberry patch. He gave the person money for gasoline but was "swindled" out of \$160 dollars because the person never showed up to work. Arthur Shupe wanted this incident included to show people the difficulties he has experienced in trying to hire blueberry pickers.

The case studies all displayed differing properties of the social economy. The first two, Aroland Youth Blueberry Initiative and the Nipigon Blueberry Blast Festival are considered social enterprises, while Algoma Highlands Wild Blueberry Farm and Arthur Shupe Wild Foods are both social entrepreneurships. Within the case studies the properties of the social economy were expressed differently within the context of each site as each location creates its own unique food hub.

Next, the stages of blueberry foraging are examined. First, the variety of ways people find blueberries through scouting or scoping blueberry patches is discussed,

followed by how the blueberries are harvested. Finally, the social connections and enjoyment people experience through sharing and eating blueberries is scrutinized.

4.3 Blueberry Foraging

Foraging is a complex process that requires foragers to adapt to the changing forest ecosystem, weather, and context. This complex process is experienced by all who pick blueberries including those who are involved in the blueberry initiative case studies or as an individual. In Northern Ontario, each wild blueberry patch only exists because of a disturbance such as a forest fire or logging operations. After the forest is changed, conditions are available for blueberries to access the sunlight and nutrients needed to grow. A blueberry patch only lasts for approximately six to ten years before being outcompeted by other vegetation. The blueberry plants disappear as trees and other shrubs continue to grow into a mature forest.

4.3.1 Finding Blueberries

In the spring, blossoms begin to bloom on the blueberry plants, signalling how bountiful the berries might be in the upcoming harvest, although at this point in their growth cycle there are still many problems that can befall the plants and possibly reduce production. Not everyone scouts the condition of the berries at this stage. Only those who are outdoors often and desire to visit the blueberry seem to go out to check the blossoms. T. and C. Ritch (personal interview August 30, 2017) from Aroland, drive around in the spring scoping blueberry patches. T. Ritch brings up that "we usually drive around and look around the side of the road and we see flowers we know there are going to be a lot of berries." C. Ritch adds "If there is no frost in May" to which T. Rich responds "We usually worry about frost because there will be no blueberries this summer if there is frost." Community knowledge of blueberry conditions is shared before the blueberry picking season even begins as those who scout the berries share their knowledge with others in the community.

Others like P. McGuire (personal interview August 20, 2017) starts scoping blueberry patches in early summer "I usually run around all these roads here in the early summer when they are coming just green so that I know where they are when it's time to pick." As the guide for the Nipigon Blueberry Blast Festival he has multiple spots scouted to bring the pickers in case there are problems with a site. This was especially relevant for the 2017 season because there was a forest fire further up Camp 81 Road which could have required the Nipigon Blueberry Blast Festival blueberry picking location to change had the fire switched direction.

This stage looks very different for Algoma Highlands Wild Blueberry Farm because they have private land on which they grow their blueberries in the same location each year. T. Laing (personal interview February 28, 2017) maintains his blueberry patches and as part of scouting will fertilize because "every time you take a ton of berries off you're taking off ten pounds of nitrogen so you have to put nitrogen back and you should put back other elements.... We put copper down and nitrogen to date."

Some blueberry pickers like C. Nelson watch weather conditions year-round for possible effects on blueberry plants. In the autumn, she takes note of the amount of rain

as blueberry buds set for the next season in the autumn. In the winter she pays particular attention to snow cover as it can affect when berry blossoms emerge. Next, she watches the frost cycle in the spring and summer, hoping that there is not a late spring frost which can kill blueberry blossoms. Then she watches the weather to see how dry the summer is because if it is too dry the blueberries can shrivel up. Finally, she reaches the blueberry patch in the late summer ready to harvest what remains of the blueberries after the complex set of weather conditions from the previous year have coalesced to form the climate for that year.

4.3.2 Foraging for Blueberries

When foraging it is possible to get lost in the wilderness and because of that possibility it can be important to use landmarks on the landscape as markers in order to help find a way back. In previous years the Nipigon Blueberry Blast has had pickers wander off from the group and become temporarily lost but foragers rarely venture out alone, usually bringing friends or family along with them.

Interviewees had differing relationships with the land depending on how they were raised in relation to blueberry picking. For example, each family has different blueberry picking styles or traditions such as recipes that are passed down through the generations to family members who are willing to learn, while within a community, a culture of blueberry picking is expressed. Some people begin picking blueberries later in life and may be self-taught. Many get advice from pickers they meet throughout the course of their lifetime, developing a unique style which is constantly changing as an optimal foraging pattern is acquired.

The majority of blueberry pickers interviewed began blueberry picking as children when they were brought out by their parents, grandparents, or other family members. Some went to help their parents while others felt forced to pick berries. Yet others like P. McGuire (personal interview August 20, 2017) and his sibling had a quota that needed to be picked before they could go play. "Yeah we had a quota which is good because we would compete to see who could fill their basket quickest so we would get a lot of blueberries real fast." Some children thoroughly enjoyed harvesting blueberries as an anonymous interviewee says:

...I loved it, I'd be out there and the other kids didn't care to pick much and I'd be out there and I would pick and pick all day and I never even ate any until I got home because I was just storing them up like a chipmunk.

Other blueberry pickers started mid-life for a variety of reasons. One example from an anonymous interviewee is that they moved to the region in their 20s from out west where they had harvested other types of berries growing up. Since they didn't have any family here they began picking wild blueberries with friends and neighbours.

For T. Borg (personal interview October 30, 2017) "it was a way of life for us, it was a very enjoyable part of our life living with the land and harvesting, it was good, it was all good." Those like T.O. (personal interview August 19, 2017) enjoy "being with family, sharing time with others, eating some of the berries, I'm part Ojibwe so I like to carry on traditions." For those who have been eating wild blueberries their whole lives like T. Ritch (personal interview August 30, 2017) "everybody goes picking every

summer, it's a thing, it's a ritual I would say." While G. Sutton (personal interview August 19, 2017) believes that blueberry pickers symbolize a collective identity: "I think about it like Ukrainians that make the perogies, the Babas there and you see them less and less now because the young people don't do it anymore." Just like with blueberry picking, Sutton worries that there may be less young people continuing the tradition of blueberry picking, which will be further discussed later in the barriers section of this chapter.

Foraging strategies widely varied among participants. Some participants were constantly searching for the biggest berries in a large patch while others were content to sit or kneel amongst a mediocre patch and pick berries until they were all harvested. Yet others buzzed around like bees, rapidly picking a few berries from one plant then zigzagging through the patch going back and forth between plants. There was even one bear-like harvester who would lie down in the patch and pick the entire area clean, slowly moving through the patch.

The most common story about blueberries centred on the spilling of blueberries out of their container onto the ground. The event is depressing and comical at the same time as pickers realize it is too difficult to pick the berries up and they need to start accumulating blueberries all over again. These memories stay with people for their entire lives and they retell the story over for many years, remembering the fun times they had out blueberry picking. Such as T. Borg (personal interview October 30, 2017): "I always think about the old times and we always talk and have tea around the fire at night and we always bring up the past and stories. Storytelling is what it is, it's excellent." Blueberry foraging is a complex adaptive system C. Nelson (personal interview August 23, 2017) recognizes that:

Foraging is a context-based behaviour so as we can see out here today it doesn't take many years until the bush has totally grown up. It follows a complex adaptive system model. It will reach a stage where the berries will no longer be because the other species will shadow them out. It also is healthy because of the diversity and it self-organizes itself in the bush. We have got all kinds of sphagnum mosses and blueberry species and the snow berries and it emerges in a self-organizing way. So if you are a forager you are living and breathing complexity. These emerge as part of the evolving cycle and they only exist because of forest fire, so before there were humans there were forest fires from lightning.

When picking blueberries there are different methods, some people use a berry picking rake which can remove leaves and other debris from the plants. This is considered dirty picking. Some people pick by hand but still end up with debris in their pail which is also considered dirty. Picking clean means blueberries are ready to eat without cleaning them again. D. Shabogamik (personal interview August 29, 2017) considers himself a clean picker:

I pick clean but some people pick dirty and they use those little red trays they use to shake around. I like to pick clean because it seems like more work for me. But actually I clean them after I'm done even though I pick clean. I go through them one more time to make sure that whoever gets them has nice berries.

The variety of ways that people begin foraging for wild blueberries starts to show how it is a complex process; everyone has a different relationship with blueberry picking. This carries on throughout their entire blueberry picking experience as each person learns little nuances that help them to harvest blueberries. Information is shared while out in the blueberry patch. People learn from doing and by word of mouth, while others are naturals as G. Sutton (personal interview August 19, 2017) points out "it seems like a lot of people have this in their genes."

4.3.3 Sharing Blueberries

Sharing wild blueberries is a large part of the blueberry social economy in NWO. Like T. Ritch (personal interview August 30, 2017) shares the berries "mostly to the kids, my nieces and nephews, they're the ones that will come and ask me and of course I'll have to get them out. I share them because I love my grandkids." In addition to sharing with family members, there are some who share with their Elders. As C. Nodin (personal interview August 29, 2017) explains, sharing "with the Elders, that's good because they can't get out, they can't go anywhere so usually I help them." It is more than just sharing to many First Nation people in the region like T. Borg (personal interview October 30, 2017) who says "we've always shared not just berries growing up... It was a way of life, sharing was always a way of life."

Sharing also occurs once blueberries have been further processed into baking, preserves or other dishes. Many interviewees mentioned that they will share their blueberries when friends or family come over and some even garner a reputation for their blueberry jams or pies. For example, C. Nelson (personal interview August 23, 2017) mentioned "I am known for bringing blueberry pies to social gatherings." Sharing blueberries looks different for individuals who share with family and friends versus the social enterprises or entrepreneurships. A reciprocal network exists for individuals who share their berries as they show respect for their Elders by providing them with sustenance that may otherwise be unobtainable if they cannot forage for their own berries. There were also networks identified where some people might trade other resources like fish for blueberries. In contrast, the social enterprises and entrepreneurships involve financial transactions. The social enterprise of AYBI shares their berries with the public through monetary exchange in face-to-face transactions and the money goes back into the community. Arthur Shupe Wild Foods also sells his berries to the public through in-person transactions. Whereas Algoma Highlands Wild Blueberry Farm sell their blueberries not only fresh, but in value-added products in niche markets where they can charge higher prices to increase their profits. They distribute their products to vendors who sell their goods at other locations.

4.3.4 Eating Blueberries

Blueberries are consumed in many ways; some berries do not even get the chance to make it out of the patch. Fresh, frozen, preserved, baked and drank, the options are endless and everyone has a favourite way to consume wild blueberries. When asked what benefits there are to eating wild blueberries, answers varied, but one key theme was constant, they are healthy for you.

The health benefits of wild blueberries are numerous, and research continues to find additional benefits. For example wild blueberries contain the flavonoid anthocyanin, and hold one of the highest concentrations of antioxidants of any fresh fruit or vegetable (Wild Blueberries of North America 2017). Scientific studies have found that consuming blueberries can slow the effects of age-related neuronal and cognitive function from common disorders such as Alzheimer disease (Shukitt-Hale 2012; Youdim et al. 2000).

A. Shupe acknowledges that blueberries are nature's health food because they reduce medical expenses, help to detoxify the body, and are under-recognized since new medicinal benefits are continually discovered. Further T. Borg (personal interview October 30, 2017) mentions that blueberries:

...Help especially with your digestive system, it's excellent and it cleans out your body we feel of a lot of germs and things that can give you trouble or poor health, it's a medicine for us is what it is, it's a very important food.

A. Shupe (personal interview February 27, 2017) recognizes blueberry picking gets people outside where they can breathe clean, fresh air while they are camped out in the berry patch. "It's relaxing because you're away from the hustle and bustle and stress of town; you've got clean air". G. Sutton (personal interview August 19, 2017) further adds "...I love being out in the fresh air and you know what it's just like an anti-stress you just forget about everything and enjoy the fresh air and the bush and just pray the bugs aren't bad."

4.4 Relationship with Land: The Value of Connecting with Nature

Many of the social, cultural, and ecological values provided by berry picking are not recognized as having value in today's market-based economy (LeBlanc 2014), yet berry picking provides a mechanism for individuals to connect with nature on a holistic level, and assume a stewardship role.

4.4.1 Respect for the Land and Sustainability

In an interview with Norma Fawcett on January 05, 2017, she spoke about people not showing plants proper respect. Some people trample the berries, but as part of an Indigenous worldview she explains that people should respect all living things, and that someone's negative actions can affect others, so we should be kind and watch our language.

G. Sutton (personal interview August 19, 2017), who recognizes the respect harvesting blueberries by hand adds: "I experience a love for the blueberries; you get to appreciate them more when you pick them and everything you make with them with love because they are handpicked." She also picks sustainably by:

Not breaking the branches and not using a berry picker. I do have a berry picker my brother bought at Finnport and a lot of people have commented if I've been in the bush with them that it damages the bushes and I haven't used it again.

Arthur Shupe's business also practices sustainability, which is why he requires his berries be handpicked, because he has seen the effects of using berry picking rakes firsthand. He has found that using the berry picking rakes pulls the plants up out of the earth and breaks their hair and main roots, which sets the plants growth back and can kill the berry plants if used too many years in a row. Another sustainable activity conducted by A. Shupe (personal interview February 27, 2017) is leaving the area cleaner than when he started picking:

Anything that can be recycled is recycled. The garbage goes into the landfill so it is like I say; respect for the land is a major issue with me... at the end of the season I always take a garbage bag around the berry patch picking up litter. Some of it's been there for two, three, four, five years...I still go out and try and leave the place cleaner than what it was when I showed up.

Shupe and his berry pickers attempt to be as environmentally friendly as possible, treating the plants and the environment with respect, cleaning up the campsites, and recycling all recyclable items. In the past, Shupe has employed tree-planters who work seasonally on the land, rotating from planting to picking blueberries as part of an environmentally conscious lifestyle. Others like D. Shabogamik in Aroland (personal interview August 29, 2017) echo Shupe's sentiments:

I respect the land and what it is giving me so I try not to litter, pick up garbage if I see it when I'm out here. The other day I filled up a whole garbage bag. They [forestry workers] leave those grease tubes. I don't know if they chuck them or if they just left them.

Sustainability isn't practiced by everyone. Tom Borg (personal interview October 30, 2017) has seen people disrespect our natural resources. He has seen people cut down entire groves of birch trees to harvest chaga and he has seen wild rice harvesting done by commercial operators who've ruined rice plants. He has also seen commercial blueberry harvesters damage blueberry plants from using berry picking rakes by harvesting the "…lazy man's way." He attributes the lack of respect of natural resources to people trying to profit from the land. "When they see a benefit to make money they grab it, like

fishing, hunting, outfitting camps, and bear hunting, all to make money, and that was provided for us to utilize to sustain ourselves and not to commercialize the way it's gone." He also points out that the Nipigon Blueberry Blast Festival is slowly becoming more commercialized and profits should not be a concern for the Township of Nipigon as a result of the festival:

When they commercialize any of our hereditary teachings and harvesting what we have [land and culture] and we share too much, that is what is going to happen with the rest of it [land and culture], going to end up marginalizing it and we are going to lose it. It's going to happen.

4.4.2 Bears

Blueberries are important to wildlife as a food source (Usui 1994). Bears have a deep connection with blueberries. Throughout the summer black bears can be seen eating blueberries in the fields. In Aroland, S. Atlookan (personal interview November 16, 2016) mentions a respectful coexistence:

The bears pick with us, we don't bother them and they don't bother us. Have respect for each other and we know our bounds, not to be close and the bear will know not to be close as well so we never had a human and bear fight yet.

That is not to say that bears haven't stolen blueberries. A story that was echoed throughout the community of Aroland is the time a bear got into a vehicle that had the window open. The bear proceeded to eat two baskets of blueberries and some pop and chips that were in the vehicle. For a time the owner had thought that somebody drove by and messed with their stuff, but it was a bear. Not only are blueberries important to the bears, but the bears are important for the propagation of blueberries. As C. Nelson (personal interview August 23, 2017) recognizes "bears propagate the kinds of berries they like to pick through their scat." This conversation arose when we stumbled upon a sizeable portion of bear scat that was stained purple from blueberries (see Figure 4.1).

4.4.3 Food Security

The quantity of blueberries harvested among pickers varied greatly. Some only go out once or twice a year and gather berries for a few hours while others go out many times over the two month season. Therefore views on how foraging for wild blueberries can increase food security also varied. Some people believe that the effect is minimal while others recognize that wild blueberries are expensive to buy and they save plenty of money if they pick the berries themselves. As T. Ritch (personal interview August 30, 2017) notices "Everybody seems to stock up for the winter." Blueberries are a significant source of nutritious fruit which helps people through the winter and sometimes longer, as a few people identified their frozen blueberries last them until the next blueberry season.



Figure 4.1 Bear scat full of blueberries near Nipigon, Ontario

By selling wild blueberries to the AYBI some members of the community use the money they gain from selling berries to buy groceries. As C. Nodin (personal interview August 29, 2017) says the money "just helps a little bit... [with] Groceries too." And T. Ritch (personal interview August 30, 2017) says "we sell the berries and then we will buy groceries with them, lunch for the next blueberry picking."

Now that the themes that arose during research have been presented, barriers which inhibit blueberry foraging and the social economy are introduced.

4.5 Barriers

During the interview process there were many barriers that arose which were found to prevent people from blueberry foraging. Time constraints or physical limitations can prevent people from venturing out. Not having a connection to the land can also prevent blueberry foraging since potential harvesters may not know where to go or they could be scared of the wilderness. If harvesters have transportation and get as far as making it into the wilderness, the next barriers they can face are access to the blueberry patch or competition from other land use activities such as forestry operations which spray aerial herbicides in foraging areas. Lastly, with the availability of low-priced cultivated blueberries at the grocery store, some may decide it isn't worth the effort to go pick wild blueberries when they can buy cultivated blueberries that are larger and cheaper when they go out shopping for groceries.

4.5.1 Lack of Interest or Time

The topic of younger people not wanting to participate in harvesting wild blueberries was broached during a handful of interviews. During the Nipigon Blueberry Blast Festival while G. Sutton (personal interview August 19, 2017) was being interviewed she noticed some teenagers saying "can we go home now?" She recognized that "you don't see a whole lot of young people. Like they will bring their little kids out here.... You would hope this will continue and I think it will." Others like T. Ritch (personal interview August 30, 2017) noticed a similar thing in Aroland "They don't want to learn nothing about it...Well some of them don't want to pick." D. Shabogamik (personal interview August 29, 2017) attributes it to his children being too young:

...They are just too young to pick, like my kids I try to get them to pick and they sit and talk and do nothing. Oh they pick for a while and after they just get tired of it picking berries. They are too busy with their games and all that [on phones] I try to tell them to keep picking but... They don't want to pick, pick, pick.

Some like G. Clearwater (personal interview August 19, 2017) choose to buy wild blueberries from others, supporting them instead of taking the time to harvest blueberries herself "I end up buying to support students selling them. Look at cost of travel to find a good spot and it's cheaper to buy them." An anonymous interviewee also mentioned that finding a babysitter and having to work can act as a barrier, preventing her from going blueberry picking.

4.5.2 Physical Limitations

Many people identified that they will continue to pick blueberries until their bodies will no longer allow them the mobility to physically access blueberry patches. In the Nipigon area blueberry pickers were interviewed who are in their late eighties. One picker in Nipigon who wishes to remain anonymous mentioned that they get sore and tired now, but they don't complain because "you got to bend down and you get sore." They also said that "when it rains and it's too wet I don't want to go out." They have also had some friends lose legs from amputations and when asked what their participation in the Nipigon Blueberry Blast Festival will look like in 5-10 years it was mentioned that "probably people will have to bring me some [blueberries]."

Basically everyone who was interviewed recognized that injury could prevent them from harvesting blueberries. Younger participants more so recognized that an accident could stop them from picking while the elderly participants recognized that their bodies would eventually not allow them to get out in the field. But participants like P. McGuire (Personal interview August 20, 2017) say that:

If you start having back or knee problems that type of thing, then you will have to stop picking. I don't plan on doing that; I've got another hundred years to go yet! As long as I can pick I'll be out picking because I like it.

In Aroland, despite physical limitations that require Theresa Ritch to use a walker to get around, she still goes out berry picking. T. Ritch (personal interview August 30, 2017) recognizes "It's good exercise for both of us because I can't hardly do anything right now and I get exercise from it... same with him, he can barely walk and he makes it up and down that hill to bring berries to me." Since she cannot physically go into the field, her partner Christopher brings the blueberry plants to her. He fills up a box with blueberry plant cuttings and gives them to Theresa so she can pick the blueberries off the plants. It is well known around the community that this occurs and nobody mentioned an issue with sustainability because the blueberry places are enormous. When asked if he ever worried about too many blueberries being picked, Sheldon Atlookan said "There is never a problem for that because there is just too much [blueberries] within our area." Since blueberry harvesting happens in the summer sometimes it is really hot out which can make blueberry picking unbearable. D. Shabogamik (personal interview August 29, 2017) continues to pick in the heat, even while wearing a sweater because:

Some days it's too hot and I don't feel like picking at all but I just do it because at the end of the day it pays off. It's extra hot when I wear a sweater but if not I start getting a real bad suntan, even get heat rash being in the sun. But I kind of get used to it when I wear a sweater too. Try not to think about the heat and if it is too hot I'll sit down at the truck, drink water.

4.5.3 Transportation

Transportation is a barrier for the blueberry initiatives that sell blueberries due to the vast distances berries need to travel to reach markets and for blueberry pickers who have to travel long distances to reach the blueberry patches.

Transportation is the largest barrier for the AYBI, because the distance between communities in the region is so great and the vehicle transporting the blueberries travels back and forth between Thunder Bay and Aroland at least twice a week—which is very time consuming when a return trip takes over eight hours (see Figure 3.1).

Transportation is a major barrier to selling blueberries for Arthur Shupe Wild Foods. Since his blueberry harvesting camp is up to 300 kilometres away from the town of Dryden, the price of gasoline adds additional expense, and the time it takes to travel adds another dimension to the fragility of the blueberries during transport. For example, Shupe mentioned that blueberries could not be flown reliably because the air pressure may bruise the berries. He also knows a person who transported berries from Northern Ontario to Toronto and had an entire shipment bruised from improper handling, as one large bump in the road can be enough to damage the blueberries, rendering them unsellable for regular consumption. However, there are still options for bruised blueberries; they can be turned into jam or wine.

Transportation is a barrier that the Nipigon Blueberry Blast Festival has tried to address by including transportation as part of the festival for those who do not have a vehicle and cannot access blueberries without participating in the festival. But for the past two years the festival no longer provided a bus to transport blueberry pickers to the patch. Instead participants are expected to carpool in a convoy of vehicles out to the patch.

Some individuals do not own a vehicle and therefore rely on others to provide transportation to the blueberry patch. This was evidenced at all locations. In Aroland W. Boucher is sometimes dropped off in a patch until his ride comes back. At the Nipigon Blueberry Blast Festival I provided transportation for a participant to the blueberry patch on both days because they could only get a ride to the meeting place for berry pickers.

4.5.4 Road Access

Old forestry roads are the most common method to access blueberry patches because logged areas provide the disturbance conditions needed for blueberries to grow and these roads are the only access to old forest fire sites. During this research every interview in the field was conducted in an area that had recently been harvested for timber and accessed by a logging road. In Nipigon it was noted by P. McGuire (personal interview August, 20, 2017) that the forestry company operating in the area had "took one bridge out to block a road off that had access to another patch." He was unsure of the reasoning for removing the bridge but had mentioned there was a good patch beyond where the bridge was located. During the Nipigon Blueberry Blast Festival some of the pickers driving back home, myself included, encountered a semi-trailer truck hauling a large piece of logging equipment and we all had to back up the road until we found a place to let the semi-trailer truck past.

In Aroland, just like many old forestry operations, some of the roads have started growing in with trees and once that happens it makes it difficult, if not impossible to drive a vehicle down the road. This is less of a concern because usually the blueberries are no longer in areas where trees have taken over, but it does limit access. Like C. Nelson (personal interview August 23, 2017) notes:

Like the place we went to today we are in the 10th year I think, but in this case MNR has obviously decided not to maintain that road and they don't see it as viable to maintain that road for logging. I think we are going to lose it [access to the blueberry patch], maybe if we are lucky we will get back there one more time or maybe two more times. But that means we will have to drive over alder and willow trees unless we voluntarily go back there with a bush whacker.

4.5.5 Bears

Although there is a general sense of respect for bears, some people are afraid of bears even though they have never encountered one. As mentioned in Nipigon by K. Jarvela (personal interview August 19, 2017), one barrier to blueberry picking is "some people if they see a bear on the road they'll make sure they go a long ways past before they stop." If the bear is near a good patch then blueberry pickers will not get the opportunity to harvest the patch. Although this is a barrier it is also showing respect for nature by allowing the bears to go about their lives without harassing them. This sentiment was shared by other pickers like T. Ritch (personal interview August 30, 2017) "if there is a bear in that area we don't go because we don't want to chase them all out."

C. Nelson (personal interview August 23, 2017) mentioned that she and a friend believe bears are getting more aggressive and they wonder if maybe the chemicals that are sprayed in the forest are having an effect on the bears because they seem less frightened and more aggressive now.

4.5.6 Land Use

Crown land in Northwestern Ontario is shared by many different activities ranging from recreational to industrial land uses. Blueberry pickers have had clashes with other users such as hunters. As of the 2017 OMNRF *Ontario Hunting Regulations Summary*, bear hunting starts on August 15th in many locations throughout NWO and goes until the end of October. As such all the interviews conducted for this research project occurred during open bear hunting season and there was always a chance of encountering bear hunters who are allowed to set out their bear 'honey' baiting traps a week before August 15. One such encounter happened outside of Nipigon to an interviewee who wishes to remain anonymous. Around the 2015 season they encountered a vehicle coming out from where they were going to go blueberry picking. The occupants stopped and let them know they had just set up a bear baiting station. As a result, they decided not to pick blueberries in their favourite patch that year since there was a higher chance of running into bears in that area.

4.5.6.1 Forestry

When there are active forestry operations J. Matheson (personal interview August 19, 2017) remind us: "you have to watch out for the trucks and whatever they've got going in." This is an important point because it shows that active logging roads can be dangerous for blueberry pickers. The danger of running into large vehicles on logging roads makes things like dust important, as C. Nelson (personal interview August 23, 2017) describes "Dusty roads mean you can see the trucks... Dust is important. It can save you. It's fairly dangerous going down these roads." Before logging trucks reach the main roads their loads are not securely tied down, increasing the risk of danger because logs can fall off the truck. This practice is used on the back roads so that the logs are allowed to settle before they go through load aligners. Then either load or chain clamps are used to tie down the load of logs before traveling on major roads.

While conducting interviews in the Aroland area I experienced the dangers firsthand when driving near active forestry operations. I encountered semi-trailer trucks barreling around corners, dust flying. While traversing the roads near Aroland I came upon a semi-trailer truck that had tipped over (see Figure 4.2), presumably from high speeds in the soft, sandy road, since there is evidence that the tires dug a deep rut when the truck tipped over.



Figure 4.2 Multiple views of logging semi-trailer truck rollover near Aroland

Another connection between forestry operations and blueberries is newly harvested pine stands where blueberries have a propensity to grow in the acidic soils provided by the pine trees. A. Shupe (personal interview February 27, 2017) notices:

However, it is getting tougher and tougher to find new blueberry patches because they are just running out of stands of pure pine. Like it's just that simple, the best wood has been taken by the mills for the most part so you're constantly getting further and further from the market to do the collection of the blueberries which is beneficial in one way because the amount of pollution in the ground is reducing.

It is this relationship between newly harvested forestry operations and berry picking that has caused Shupe to begin travelling up to 300 kilometres away from Dryden to find productive blueberry patches.

Although forestry can be seen as competing for land use with blueberry pickers, many interviewees recognize that with the suppression of forest fires nowadays, the only source of disturbance to create blueberry patches is forestry operations. C. Ritch (personal interview August 30, 2017) explains "they usually have berries here where they cut. Four years after, they start growing and then after that then the trees are there so we don't go there after."

The main contention between forestry operations and blueberry pickers is not timber harvesting because berries emerge in disturbance either by logging or fire. However, 4-6 years after new trees are planted; the predominant forest industry's regeneration method in Ontario is glyphosate spraying on the blueberry patches to kill deciduous competitors for new tree saplings such as pin cherry and raspberries. This spray kills the blueberries making the area hazardous for foraging as well as browsing by moose.

4.5.6.1.1 Aerial Glyphosate Spraying

Spraying chemicals as part of forestry operations has a large impact on the blueberry harvest and has become a controversial topic in Northwestern Ontario. Members of Aroland First Nation, Arthur Shupe, and participants from the Nipigon Blueberry Blast Festival have begun to push back against the current forest management system through different means such as petitions and negotiations with the forestry companies responsible for spraying the herbicides, with the goal of reducing the impact herbicides are having on the forest and food supply.

Spraying of blueberry patches by forestry companies is of great concern. In 2015, an Ontario Nature petition was circulated at the Nipigon Blueberry Blast Festival by a coalition of concerned citizens and non-profit organizations, and was signed by most people in attendance. The Blueberry Blast Committee is in contact with the OMNRF to ensure that spraying has not occurred in Blueberry Blast picking areas.

In the Nipigon area T. Borg (personal interview October 30 2017) has experienced people picking in areas that had recently been sprayed with aerial herbicide:

One experience I did have was in August a few years back and I met a couple, I think they were from Thunder Bay. They were an older couple and they were picking and they stopped me on the road and asked... "Did you have a heavy frost here last night?" I said no there is no frost here "come look at my berries" and they were all shriveled. Well I said they just finished spraying here two days ago, well he said there is no signs, well I said they took the signs down. So I think he went to the ministry and reported that all and the company got a fine for taking down the signs. That's how bad it's getting eh? They don't want to pay for the cost for purchasing new signs so what they'll do is go into an area, they've got so much time to do it, time is money to those guys, they go in and spray it with these little crop dusting helicopters, they're in and out and then they go around picking up signs when they leave and nobody knows the difference. It's not good.

Not only has T. Borg experienced people picking in sprayed areas but he has seen firsthand the reaction wildlife have to spraying while tending his trapline:

Everything leaves; there is nothing there for seven to eight years. I think the spray what it does is all the small critters, insects and everything else is gone so all the furbearers they move with the food so they leave also. It stands to reason I ain't going to get anything and I know for a fact the areas I've tried for seven years and never got anything and it was just due to the commercial spraying of herbicide.

In addition, T. Borg doesn't believe that applying herbicides is safe "... A chemical is a chemical there's no way of getting around it, they're saying they've tried a different chemical, a more user-friendly chemical, there is no such thing, a chemical is a chemical." He believes the areas are contaminated after the application of herbicide.

Aroland is attempting to reduce aerial glyphosate herbicide spraying within their traditional territory by informing the OMNRF of where they will be picking berries and for how long. They have asked the OMNRF to not spray these areas until after the blueberry season has ended because it is "...devastating for the blueberries and for the pickers of Aroland and others around the area" (S. Atlookan personal interview November 16, 2016). Aroland has been successful at reducing the spraying in the area and they are working to eliminate spraying in the future.

Spraying of herbicides has also affected Arthur Shupe Wild Foods as A. Shupe (personal interview February 27, 2017) has seen entire patches of berries wiped out by spraying. "I hate the fact that the mills spray defoliant because once the defoliant is sprayed there isn't a blueberry plant in that patch." Although there are tensions between forestry companies and blueberry pickers, Shupe did approach Resolute Forest Products and asked them to stop spraying a 300-acre patch of land that had the perfect conditions for blueberry growth. The forestry company obliged him and for five years, they held off spraying the area. Despite tensions that exist around herbicide spraying, in this specific case in regards to Arthur Shupe Wild Foods, it seems there is a voluntary willingness on behalf of both parties to cooperate in sharing forest resources.

4.5.7 Industrial Food System

The industrial food system makes buying low cost cultivated blueberries convenient. There are sales on blueberries all the time. At the time this was written, the Superstore's website had imported, cultivated blueberries from the United States of America for \$4.99 a pint (Real Canadian Superstore 2018). Buying cultivated blueberries is easy since they can be found in any grocery store produce section, year-round. The competition between wild and cultivated blueberries has many different factors involved. For those who do not have easily accessible sources of wild blueberries like in major urban areas, they may have never tried a wild blueberry before. For others in NWO who have tried wild blueberries, they realize they may have to supplement with cultivated blueberries in the late winter or early spring. Like an anonymous interviewee said "I get them from the store for the winter for my baby because she likes them." And T. Borg (personal interview October 30, 2017) says "sometimes we have ran out where we have to go out and buy the commercial ones from the store but they aren't the same, the taste is not there, it's not the same as the wild." Others like T. Ritch (personal interview August 30, 2017) in Aroland say "I never bought the ones at the store I don't like them, they are not the same." Her husband C. Ritch (personal interview August 30, 2017) agrees "They don't taste like the ones you get in the bush."

Cultivated blueberries are much larger than wild blueberries which lead some to believe they are better or contain greater nutritional value. This is untrue as wild blueberries have double the antioxidant properties of cultivated blueberries (USDA 2010). Further to the fact, there are some people like C. Nelson (personal interview August 23, 2017) who recognize that: One of the reasons I don't mind picking the smaller blueberries is because the nutritional value of blueberries is in the skin so obviously if you've got little blueberries you've got higher nutrient content than the big ones [due to the surface to volume ratio]. So those commercial rabbiteye blueberries are far less nutritious according to analysis.

4.5.8 Climate Change

Climate change was mentioned often as a barrier to finding blueberries as well as to the amount of time available for foraging but there is no consensus in participant's perspectives from the data. Some interviewees believe the weather naturally fluctuates while others such as G. Sutton (personal interview August 19, 2017) believe the seasons are changing "global warming I think has affected us, it's changing everywhere, like our summers seem to be shorter and our falls seem to be nicer."

Climate change is on Arthur Shupe's radar, as he recognizes that global warming could affect the wild lowbush blueberries at some point because hotter temperatures and drier conditions may cause the plants to die from drought. Late frosts have occurred recently and have become a serious issue in the last few years because the frost causes the blueberries to get frostbite, which lowers productivity.

According to Algoma Highland owners, fluctuating climatic conditions have caused large variations in annual blueberry production. For example, in 2012, they did not get a blueberry crop and luckily, they were still in the development phase and therefore their losses were minimal. Already they have seen the annual harvest period fluctuate from as few as 15 days to as many as 30 days. To manage climate change they have been looking at the possibility of an irrigation system to keep the blueberry plants watered. Because they are a commercial farm, the federal government tests for crop pests such as blueberry maggot. Though blueberry maggot is only found in Southern Ontario because the winters in Northern Ontario are too cold for them to survive, the warming climate might allow the pest to reach further north.

4.6 Conclusion

In this chapter, each case study was placed within the social economy of Northwestern Ontario, followed by a detailed look at the stages of foraging. Next the themes that arose from the research were explored, including barriers which prevent people from participating in foraging for blueberries. A strong relationship with land and people were identified as main themes and many barriers were found. In the following chapter, the meaning of this research on foraging for blueberries is discussed.

CHAPTER 5

DISCUSSION AND CONCLUSION

After picking blueberries most of the day, evening approaches and it's time to go home. As we make our way back to the vehicle the breeze dissipates and the bugs swarm. I swat my neck and see blood smeared on my hand. The witching hour approaches as the sun lowers on the horizon. We hurry to avoid the bugs. Leaving the patch we drive out the winding logging roads. I notice some dust up ahead as I round a corner and before I can slow down a semi-tractor trailer full of logs is barreling down the road towards us. I pull over as far as I can go and we just avoid an accident. Phew, a breath of relief I continue driving toward the highway. Dropping off my elderly friend, I share some blueberries because they were not as successful and it's hard for them to pick these days. Finally arriving home, I notice my sunburnt face in the mirror. I forgot to apply sunscreen again! Shaking my head in disappointment I get to work cleaning the leaves and other debris from my berries. No matter how hard I try to pick clean I still have to check my berries. Halfway through cleaning the berries I find a stink bug and quickly remove it before the smell permeates the berries. Next, most of the berries are put into freezer bags and frozen for the winter. The berries in the fridge wait to be made into a delicious blueberry pie tomorrow as I head to bed. I lay down with an aching back and fall into a deep, rewarding sleep, still thinking about berry picking in my dreams.

5.1 Introduction

The questions that guided this research asked how blueberry foraging initiatives in Northwestern Ontario demonstrate properties of the social economy and if these properties were present, how they supported the persistence of blueberry harvesting in the face of a rising industrial food system. The barriers that hinder the social economy of food in Northern Ontario were also explored.

Within this chapter main themes, including relationships to people, relationships to land and barriers to participating in the foraging cycle are further explored. The various contexts in which they reside- social, cultural, economical and geographical, and the tensions within these contexts are discussed and offered up as an explanation for these differences. Lastly, concluding remarks and recommendations for future research are presented.

5.2 Relationships with People and Land

In the four initiatives profiled above, there is a clear pattern of placing people and the land before profits. For example, the AYBI focuses on fundraising for the youth of their community through gathering berries. Emphasis is placed on the traditional activity of harvesting berries and the pickers are paid a small monetary compensation for the berries they sell to the AYBI. This assists community members who may not be currently employed, and it provides an opportunity for berry pickers to better afford the costs associated with berry picking such as transportation. Though the blueberry pickers are making some money, the majority of profit goes back into youth programs and equipment for the community. AYBI enables the community to practice traditional subsistence activities through a mixed economy. Through blueberry picking, the AYBI incorporates values for the youth around identity and connection to the land. They are taught traditional knowledge that is passed down from generation to generation around how to harvest and care for the berries in a good way.

Blueberry picking is part of the identity of many people in Northern Ontario as they connect with the land, and many have lifelong memories of picking berries as a child. An increased social network of trust is built between oneself, nature, and other community members. Through this social network, blueberry picking becomes the norm, a part of the annual cycle that mutually benefits the community as food security is increased and relationships with each other and the land are strengthened.

As previously discussed, different authors such as Kuokkanen (2011); Natcher (2009); Ray (2008); and the Royal Commission on Aboriginal Peoples (1996) have made the link between identity and land. There are mental, spiritual, emotional, and physical benefits that are gained through experiencing the land and interacting with the sights, sounds, smells, touch, and feel of nature (Michell 2009). As such, the act of blueberry picking creates an identity around a traditional food and contributes to a cultural heritage that is holistically intertwined with culture, identity and health (Royal Commission on Aboriginal Peoples 1996). Where an individual was culturally, socially and geographically situated helped to shape their identity. For example in Aroland, many linked blueberry picking to an Indigenous identity, while in other non-Indigenous communities such as Nipigon there was recognition of a connection to Indigenous

culture, but a broader identity was described which considered blueberry picking part of a Canadian identity.

5.2.1 Social Capital

Putnam (1995, 66) describes social capital as "features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit." Connections are built while out on the land foraging. It is a way for people to build intergenerational relationships: having fun, sharing stories, talking, and meeting new people are all a part of the picking experience that helps to create and strengthen social networks. This leads to an increased sense of well-being.

The AYBI displays trust and cooperation. The buyers in their network trust they will be able to buy fresh, clean berries from the AYBI on a consistent basis. The community cooperates to gather berries on a large enough scale to provide their customers with berries. There is even cooperation with other First Nations such as the Red Rock Indian Band, which sells AYBI blueberries at no charge on their reserve because members of the community want to help other First Nation communities.

The Nipigon Blueberry Blast Festival offers participants the opportunity to connect with nature and others by picking blueberries out in the wilderness. This coordinated event brings together people of all ages to enjoy the bounty that nature provides. Participants trust that they will be transported to a location that is teeming with ripe blueberries that can be picked and eaten in the following months. As a form of reciprocity, the Blueberry Blast Committee trusts that the pickers will treat the land with respect.

The AYBI adapts to the yearly cycle of berries and adjusts community consumption depending on the quantity of berries available. Some years there are fewer berries to go around and some have to make do with little to no berries. However, the First Nations in the region have built a network in which they communicate with each other the environmental conditions in their areas. Communities with inadequate berry resources have an opportunity to get berries from communities that are having a good berry season through sharing, trade, or sale of the berries. This network enhances the opportunities that everyone who wants berries can access them, even if late frosts or a dry growing season reduced berry production in their specific picking locations. This can be viewed as a continuation of a long tradition associated within Indigenous subsistence economies as Kuokkanen (2011) notes, social networks are maintained and reinforced through subsistence activities which express identity, culture, and values.

5.2.2 Social Innovation, Entrepreneurship, and Economic Diversification

During the Nipigon Blueberry Blast, demonstrating the importance of the blueberry to the community and tourists provides an opportunity for the diversification of food security strategies as well as economic development opportunities that differ from the predominant resource extraction industry in the region. The Nipigon Blueberry Blast Festival supports the tourism industry within the Nipigon area and the Blueberry Blast Committee members have generated innovative ideas that continue to attract people to the region annually. Any committee member is able to add any activities they can plan to the festival, allowing social innovation to flourish. The Blueberry Blast Festival also provides a venue for entrepreneurs to highlight their business through selling products at their booth, promoting a diversification of the economy.

Arthur Shupe Wild Foods and Algoma Highlands Wild Blueberry Farm and Winery are excellent examples of the entrepreneurial spirit that exists within the region. Both businesses have created ways to distribute blueberries widely throughout the region and beyond through building their own transportation networks. The AYBI also has created a transportation network. The AYBI demonstrates a novel way in which economic diversification away from a traditional market-based economy can help to incorporate aspects of Indigenous culture through reciprocity and sharing into a community-based model. This model provides a means to decolonize the community's food system and bring back traditional values.

5.2.3 Relationships with "Wild" Food

For aging food is often viewed as inferior to food from the industrial food system. For example, foraged food is sometimes seen as famine food, too time-consuming, and unprofitable to harvest (Pardo-de-Santayana et al. 2007). These negative connotations are part of the discourse derived from the global capitalist system or neoliberal values (Natcher 2009). This is not the case with the findings presented in my research regarding blueberries in Northwestern Ontario. Blueberries are a significant part of people's livelihood and food security, though there are some who find the effort too timeconsuming. The social economy of blueberries in Northwestern Ontario also combats this notion as wild blueberries become seen as specialty products that hold greater value than cultivated varieties. For example AYBI sells out of their berries within hours as people specifically search out the First Nation's berries at the Farmers Market. They also sell berries at a Regional hospital's food market. Hospitals are arguably associated with a heightened standard of cleanliness and quality in western societies. Algoma Highlands Wild Blueberry Farm on the other hand creates value-added products which garner high profits and are sold at specialty shops or other tourist locations.

Through selling wild berries in spaces such as hospitals, farmers markets and speciality shops, these case studies are working to counter the idea that land in its natural state is not valuable (Thom 2005) and supports relationship building with land. This in turn disrupts the idea of "wild" because wilderness is seen as an empty, barren place where ownership is ripe for the picking through the expression of neoliberal values of private property ownership that separates people from place (Thom 2005). This is significant because these case studies spoke to the hierarchy of industrial activities such as forestry over foraging activities and how this hierarchy creates barriers to the continuation of the foraging of blueberries such as glyphosate spraying.

5.2.4 Adaptive Capacity to Increase Community Resilience

In the previous chapter a number of barriers throughout the foraging cycle were identified. With this said the wild blueberry foraging social economy continues to persist in the communities profiled in this research. In terms of finding areas to pick, Arthur Shupe Wild Foods have faced restrictions as a result of the many different regulations that arise through running a business. For example, he learned that there were limits to the amount of gasoline and propane (for cooking and heating) that can be transported at any given time before requiring a dangerous goods placard on his vehicle. These regulations are the type of thing most of us would never even consider, but after more than 20 years in business many different situations have arisen in which he had to change his operating procedures to be compliant with government regulations.

An additional challenge found in the foraging phase, was that some of the case studies have a difficult time finding pickers. It is interesting to note that while Arthur Shupe Wild Foods and Algoma Highlands Wild Blueberry Farm and Winery have difficulties finding blueberry pickers, AYBI does not have the same issue. It seems like the social entrepreneurships may not be approaching the local community as effectively as the AYBI. The community of Aroland is resilient in its approach because they have demonstrated to their community the value in participating in the initiative as it benefits the whole community. They do not put pressure on the community to pick blueberries and the pickers self-organize to get the task accomplished. Overall, it appears that the stronger a case study was entrenched in the values of the social economy the more they were able to be resilient in this regard.

In the sharing phase, AYBI has been able to share or sell their blueberries in innovative ways that require minimal involvement of market regulations. Key to this success has been embracing values of the social economy such as being local, cooperation and reciprocity. Their model stays small; they sell on reserve through other communities like RRIB; and they are not incorporated as a business. They also work as part of a network with other First Nations to ensure that berries are available across the region if any particular area doesn't have berries that year. When it comes to eating blueberries, some are bruised during transportation making them less desirable by the consumer. Algoma Highlands Wild Blueberry Farm also uses machinery to pick their berries in addition to hand-picking, which can also cause bruised berries. To adapt to this change, Algoma Highlands Wild Blueberry Farm has created value-added products such as jams, sauces, and wine. The bruised berries are used in the creation of these products.

Frozen berries and value-added products also support the economic resilience of the blueberry farm. Whereas blueberry picking historically would have existed as one part of a diversified seasonal economy, for Algoma Highlands Wild Blueberry Farm, they derive most of their livelihood from the blueberry season. The use of frozen and valueadded products extends their ability to derive profit from the blueberries year-round.

Another strategy used by some of the case studies is to embrace the seasonal economy model. Algoma Highlands participate in a seasonal economy by hiring tree planters who work seasonally and compliments the tree-planting season, extending their work period. They also are diversifying their crops, creating a longer foraging season through strawberries, raspberries, and rhubarb. This also manages risk if they do not have a successful blueberry crop year. Arthur Shupe also works seasonally as a forager through other activities such as cone picking and mushroom harvesting.

5.4 Conclusion

The dominant perspective of the social economy arose from the failure of capitalism to provide social and economic stability (Restakis 2006). Bradley and Herrera

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(2016) recognize social movements related to community food security, food sovereignty, and food justice have arisen in response to the failures of the current multinational, industrial food system to fairly and equitably distribute healthy, affordable, culturally appropriate food.

Many Canadians are facing poverty, homelessness, and hunger (Restakis 2006). In modern society the world has gotten smaller as technology and transportation has connected people to a globalized capitalist market. Foods in our supermarkets come from across the world only to be thrown out through food waste before consumption due to quality control mechanisms and spoilage during transport (Kader 2005), yet the subsistence economy is viewed as backwards or primitive (Kuokkanen 2011). The industrial food system doesn't show respect for food by wasting approximately one third of all fresh fruit and vegetables (Kader 2005).

With the local food movement gaining prevalence, people are beginning to realize what the Indigenous Peoples of North America have known for millennia... there is an abundance of sustainable, nutritious, medicinal, and accessible food throughout the landscapes of North America. Foraging is an ancient form of social and economic wellbeing that has existed since our hunter-gatherer days. It is a practice that exists within the broader concept of traditional economies which exist in balance with nature showing respect by only taking what is needed (Kuokkanen 2011). In this economy, food is to be respected.

While local food movements, which work to decolonize the current food system and put food production back into the community hands (Bradley and Herrera 2016) are making a 'come back', there are many barriers in place such as transportation, tensions

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with industry, market and land regulations and relationships with land that hinder its full expression. And yet, wild blueberry foraging persists in Northwestern Ontario, bringing much more than economic value to their communities. There is a growing demand for sustainable local foods and often the recreational, aesthetic, traditional and cultural values of forest foods are viewed as more important than commercial values to those who harvest them (Mitchell and Hobby 2010).

When individuals participate in foraging they continue to build relationships with the land. They bring their children at a young age, some so young they cannot even walk to blueberry patches yet. Children learn to pick blueberries with minimal expectations; they are sat in front of the blueberry plant and shown how to place the blueberries into a bucket. Cultural values to respect nature are taught at a young age as they are reminded not to step on berries and be respectful of the plants. Children are given free rein to develop their own foraging style, as everyone builds a different relationship with the blueberry plants.

Being out in nature is a crucial part of human development. In the 2008 book *Last Child in the Woods*, Richard Louv concludes that exposure to nature is essential for the healthy physical and emotional development of children. He links a lack of nature in children's lives to obesity, attention disorders, and depression. The culprit is a generation of children so plugged into their electronic devices that they have lost connection to the natural world. Louv also reminds us that exposure to nature is vital for the physical and emotional health of adults.

Blueberry picking offers an alternative way of relating to each other and to the land. It is relational and contextual. Foraging for food brings people together and

connects them to the land while building social networks, trust, and a reciprocal relationship. Foraging is an effective method for increasing food security because foods such as wild blueberries have a long history of use in Northern Ontario and continue to provide a highly nutritious source of fruit to blueberry pickers and with those with whom they share. Though it may be difficult for some to access the berry patches, there is a desire by many to trek out into the wilderness and harvest their own supply of blueberries for the upcoming year. Foraging for wild blueberries connects people with their food and the land as they are transported into an ecosystem which elicits a deep respect and understanding for nature. It is here amongst the plants and animals that children experience and learn from their elders about the passion that exists in a select few who still hold dear the blueberry and the sustenance it provides.

While this research has demonstrated some of the common values of the social economy of blueberry foraging in Northwestern Ontario, it has also highlighted that these values may vary in how they are expressed based on a variety of contexts-cultural, social, geographical and economical. Each of the case studies is unique, operating in different contexts-social enterprise versus social entrepreneurship, small-scale versus regional scale, Indigenous versus non-Indigenous and this has resulted in different expressions of the social economy and its value system. For example, even the question, "What draws people out to this source of food?" had varied responses. For some it is a part of tradition since time immemorial, others a new hobby they learned from friends.

In this respect the pickers are a lot like the berries. Each year is different as a panarchy of complex adaptive systems interact within the boreal forest ecosystem to create the conditions that affect how many berries are available to harvest and one's own

set of circumstances determines if one will be able to indulge in the harvest such as the amount of time available, determination, and transportation situation to name a few. What does remain constant is that every summer pickers venture out to share in the bounty with basket or pail in hand to collect some blue gold.

With increasing pressure to commercialize natural resources as part of the industrial food system, I felt the need to conduct this research in an attempt to better articulate the barriers that hinder the expression of the social economy of blueberry foraging. In other words, this research works to enlighten readers to the fact that blueberry harvesting is increasingly becoming profit-oriented but the traditional values that have been expressed for millennia as a result of foraging for blueberries are part of the social economy and hold an important place within the identity and culture of the region. My hope is that others will continue and expand this research.

In the future it would be pertinent for additional research to explore the value of foraging in NWO by delving into other forest food businesses that exist. There is growing interest in the region which is evidenced by businesses such as Boreal Teas, Boreal Birch Syrup, and Windy Sunshine Farm that sells wild jams and birch sap-based beverages. Some of these businesses sell through farmers markets which are part of the social economy.

The complex relationship between harvesters and other land uses such as forestry is an area that calls for further study. Currently, forestry operations recognize the economic and social benefits of non-timber forest products through the criteria and indicators of sustainable forest management in Canada (Canadian Council of Forest Ministers 2007). However, there is not a formal expectation and process in place for the forestry industry to communicate with forest food harvesters before or after timber harvest resulting in ad hoc and irregular communication between harvesters and the forestry sector. Prior to timber harvest there are other forest foods that could be harvested before large machines tear up the vegetation. In other words, operationalizing and clarifying expectations of the policy framework which putatively incorporates multiple forest values into forest management planning would be useful in developing rapport between the forestry industry and the public which includes blueberry pickers.

Lastly, while this research has begun to examine how context impacts the social economy there is room for further research in this area. Questions that could be examined include: How does the economy of scale impact the expression of the social economy? Can the social economy go global? And, how do traditional economies differ from the social economy? Is the term social economy useful to Indigenous peoples, or does traditional economies serve as a better framework?

As we add more voices to the conversation, a regional voice begins to emerge as each community begins to contribute to the discourse. As these voices coalesce they get louder and as voices get louder they may encourage more balanced uses of the forest that supports foraging for blueberries.

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APPENDICES

Appendix A: Interview Guide

General Questions

- 1. How long have you been picking blueberries?
- 2. How did you start picking blueberries?
- 3. How do you get to the berry patch? Who do you go with? (i.e. family members, friends?)
- 4. How much blueberries do you pick in a day? In a season?
- 5. What do you do with the berries? Do you pick them to sell or eat, or both?
- 6. How do you prepare the berries to eat? What is your favourite way to eat blueberries?
- 7. How long do the berries last you?
- 8. Why do you pick blueberries?
- 9. What are the benefits of blueberries? Do you know of any health benefits from blueberries?
- 10. What do you feel when you are picking berries?
- 11. What do you experience while picking berries?
- 12. What is your favourite part of blueberry picking?
- 13. What is the worst part of blueberry picking?
- 14. Do you share your berries? With who? Why do you share your berries?
- 15. Have you formed any new relationships from berry picking? With who?
- 16. How is knowledge about berry picking shared? Are skills shared too?
- 17. Do you pick other types of berries or forage for other wild foods?

Initiative Questions

- 18. Why are you a part of this initiative?
 - a. Did you receive any new skills? (funding, knowledge, etc)
- 19. Can you tell me how a regular day working with this initiative looks like?
 - a. Is there any competition with other activities? (e.g. forestry, tourism, hunting)
- 20. Has there been any challenges working with the initiative? How were they dealt with?
- 21. Has there been any successes working with the initiative?
- 22. Are there any barriers to berry picking? (i.e. regulations)

Social Questions

- 1. Does the initiative rely on volunteer labour? Any other kind of "invisible" labour?
- 2. Are you connected to other groups / organizations that pick/sell blueberries? If so, how?
 - a. Do you know of any other groups who pick/sell blueberries?
- 3. Does the initiative bring people together in any way?
- a. When you're out picking who do you see also picking? (Different social

class/income levels, urban and rural residents, different ages, gender, different sectors – e.g., local residents, businesses, governments, non-government organizations)

- 4. What, if any, challenges or tensions has this group experienced in trying to connect across different social groups? How have these challenges been addressed?
- 5. Do you consider blueberry picking to be connected to a particular cultural heritage? If so, please describe that connection. (Identity)
- 6. In what other ways does blueberry picking contribute to the local community?

Economy Questions

- 1. Does the initiative provide income-generating opportunities for people? If so, how?
 - a. How important is this income? (e.g. Does it complement wage labour? Does it represent the only or the primary cash income?)
- 2. Does blueberry picking with the initiative decrease dependence on the cash economy? If so, for whom? To what extent?
- 3. Do you buy blueberries?
- 4. Does blueberry picking increase food security in your community? If so, how? For whom? To what extent?
- 5. Does blueberry picking support local economic development? Is there any tension with other industries or economic development?

Environment Questions

- 1. How does blueberry picking affect your relationship with the land?
- 2. How does it affect your respect for nature and the land?
- 3. Is sustainability practiced? How?
- 4. Have you encountered aerial spraying while blueberry picking? Has it affected the blueberries?

Climate Change Questions

- 1. Has blueberry picking changed in your lifetime? How?
- 2. Have the blueberry plants changed? If so how "(i.e. size of plant, size of berry, taste, ripeness, season length, time of season, etc)
- 3. Have the bugs changed? If so how? Are there new bugs in the area now?
- 4. Have you seen ticks? Have you been bit by ticks? When did you first begin to see ticks?
- 5. Have the animals changed? The plant life? The weather?

Future Questions

- 1. Can you identify any difficulties that would affect your ability to continue to pick blueberries in the future? Are there any other barriers to the initiative?
- 2. Ideally, what would your participation in the initiative look like in 5 to 10 years? What would have to happen for you to achieve your goals?

Conclusion

- 1. Do you know any blueberry stories you would like to share?
- 2. Is there anything else you would like to mention?
- 3. Thank you for your efforts here and all the helpful information. Do you have any questions for me?

Appendix B: Participant Cover Letter



The social economy² of food: Informal³, under-recognized contributions to community prosperity and resilience

Information for Blueberry Pickers

We are seeking your participation as a blueberry picker in a research project that will explore the strategies that communities use to cope with economic and social marginalization and inequities, with a particular focus on under-studied blueberry picking activities that occur within the informal economy. The disadvantages in question can be related to gender, race, class, and geography (e.g., tensions between urban-rural spaces) or any other socially divisive, real or perceived identity.

By understanding the role that blueberry picking plays in food security and community development, we aim to identify how foraging can benefit marginalized communities, including low- income groups, Aboriginal people, youth and women. We are also exploring how social economy initiatives can provide important environmental stewardship services.

Specifically, the proposed research asks whether and how a social economy of food can/does: 1) increase prosperity for marginalized groups; 2) build adaptive capacity to increase community resilience; 3) bridge divides between elite consumers of alternative

² We define social economy as economic activities that foreground social and environmental values while still recognizing the importance of economic viability.

³ We define informal economy as "the production, distribution and consumption of goods and services that have economic value, but are neither protected by a formal code of law nor recorded for use by government-backed regulatory agencies".

food products and more marginalized groups; 4) increase social capital; and, 5) foster social innovation, entrepreneurship, and economic diversification.

These questions will be explored through in-depth interviews with blueberry pickers and case studies developed and implemented through the lens of Community Based Research. In this four-year research project, we will be conducting interviews with four different blueberry initiatives in Northwestern Ontario that have been identified as successful informal or social economy models.

Documentation will include notes, audio recordings, and observations collected by the researcher for the duration of their time working with your group. We do not anticipate that participants in the research will experience any repercussions from participating in the research. We will only identify participants and their organizations if we have written consent to do so. Otherwise, we will maintain confidentiality to ensure participants and/or their organizations cannot be identified. We will use generic identifiers so that no associations can be made between interviewees and/or their organizations (e.g. 'a blueberry picker in the study indicated that...').

Your participation entails an interview to provide foraging-related data, as well as information about your initiative. This should take between 1 and 2 hours of your time, and will include questions about your organization, changes resulting from the project and PAR intervention, and challenges you anticipate or have experienced. Additional involvement may include opportunities to review drafts of the case study report and thesis, as well as provide feedback on a comprehensive report that will analyze all of the case studies together. Such additional involvement will be at your discretion.

There are no known risks associated with participating in this study. All data will be presented in aggregated form, or reported in a way that will protect the source of the information unless you agree to be cited directly. If this is the case, we will ask you to provide your stated approval at the end of this letter. You will be provided with a copy of the interview notes to review and confirm before they are deemed to be final. The information from the research will be used in a report on 'The Social Economies of Food' as well as academic publications and presentations with the goal of improving what we know about social and informal economy opportunities in rural regions.

If you choose not to be identified, researchers will remove identifiable information wherever possible. You will also be asked to review the chosen quotations to ensure that you are not identifiable. If either researchers or you are doubtful that your identity can be protected where such protection is desired, those quotations will not be used.

The researchers will keep the collected data in locked facilities or password-protected on computers. The only people that will have access to the files will be the supervisor and researchers. All data collected from this research will be retained until December 31, 2020. Your participation is voluntary and you are free to withdraw at any time. If you decide to withdraw from the research, all collected data will be destroyed or returned to you. You are not obliged to answer any questions that you find objectionable or which make you feel uncomfortable.

Note: This project has been reviewed and approved by the Lakehead University Research Ethics Board. If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Dr. Charles Levkoe, Assistant, Department of Health Sciences, Lakehead Laurier University, clevkoe@lakeheadu.ca or if you would like to speak to someone outside of the research team please contact Sue Wright at the Research Ethics Board at 807-343-8283 or research@lakeheadu.ca. **Appendix C: Participant Consent Form**



Name of Participant _____

(please print)

- I have discussed the details of this research project and agree to participate in the research.
- I understand that my participation in this study will bring minimal risks or harm.
- I understand that my participation in this study is voluntary and that I may withdraw at any time for any reason without penalty.
- I understand that there is no obligation to answer any questions that I feel is invasive, offensive of inappropriate.
- Unless explicitly agreed to otherwise, I understand that information I provide will never be attributed to myself individually, but may be attributed to my organisation in generic terms.
- I understand I may ask questions of the researcher at any point during the research process.
- I understand that the results of this study may be distributed in academic journals, conference presentations and in other publications and that a summary of the results is available to participants.

I give permission for this interview to be recorded and for parts of it to be shared publically (please circle one):

Yes No

I agree to be identified in this research (please circle one): YES NO

I am fully aware of the nature and extent of my participation in this project as stated above.

Participant's Signature

Date

If you have any questions or concerns about this study, please contact Dr. Charles Z Levkoe (<u>clevkoe@lakeheadu.ca</u>; 807-346-7954). If you have questions about your rights as a research participant in general, please contact Sue Wright at the Research Ethics Board at 807-343-8283 or <u>research@lakeheadu.ca</u>.

Appendix D: TCPS 2 Certificate of Completion

