THE CONTRIBUTION OF WILD FOOD EXPERIENCES TO SENSE OF PLACE IN McBRIDE, BRITISH COLUMBIA

by

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ABSTRACT

This study was undertaken to explore the contribution of wild food experiences (foraging, fishing, hunting, picnicking, processing, trading/gifting, eating) to three dimensions of sense of place (place attachment, place dependence, and place identity) in the intermountain village of McBride, British Columbia, Canada. For the purposes of the study, wild food is defined as plants, fungi, and animals that have been acquired locally and have required little to no human input for their existence. A household questionnaire was distributed and semi-structured interviews were conducted to assess the prevalence of wild food in McBride and the overall contribution of wild food experiences to three dimensions of sense of place. Additionally, the study examined the differences of sense of place among wild food consumers and the ability of wild food experiences to bring wilderness into the sense of McBride. The results show that wild food is consumed by 83.3% of McBride residents and berries, fish, moose, deer, mushrooms, and birds are most frequently and abundantly consumed. Wild food experiences contributed to each dimension of sense of place for all interviewees, though manifesting differently for each individual. Exploring sense of place through wild food experiences adds a novel perspective to the literature that links the place of residence and wilderness settings. This study provides preliminary insight to the overlooked presence of wild food in local food systems and the importance of wild food experiences in amenity-rich places.

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INTRODUCTION

Scholars have been exploring the relationship between people and places for decades. This interconnection between people and place was initially explored primarily by phenomenologists (e.g., Buttimer & Seamon, 1980; Relph, 2008; Tuan, 1974) in hopes of better understanding environment-behaviour connections (Low & Altman, 1992). Concepts like sense of place, place attachment, place identity, and place meaning have been examined to shed light on social housing, pro-environmental behaviour, community design, and more (Manzo & Devine-Wright, 2014). The increasingly globalized and mobile nature of our world continues to inspire researchers across disciplines to focus their attention on the processes and experiences that draw people to and keep people in places.

While there is still considerable debate among place theorists concerning how place concepts relate to one another (Hernández, Hidalgo & Ruiz, 2014), this study takes the position that sense of place encompasses other place terms as dimensions of the overarching concept (Shamai, 1991; Jorgensen & Stedman, 2001). Sense of place may be broadly defined as "the meaning attached to a spatial setting by a person or group" (Jorgensen & Stedman, 2001, p. 233).

This study was undertaken to explore the dimensions of sense of place through the lens of wild food, examining a range of wild food experiences that may contribute to person-place relationships for residents of the Village of McBride, located in the Robson Valley of British Columbia. The study examines three dimensions of sense of place (attachment, dependence, and identity) through past and present wild food experiences in both wilderness settings (hunting, fishing, foraging, and picnicking) and in residential settings (processing, trading/gifting, eating), with specific focus on experiences that occur in the McBride area. The primary research question

is: In what ways do wild food experiences contribute to sense of place in the village of McBride? The sub-questions include: What is the prevalence of wild food in the village of McBride? How do senses of place differ among wild food consumers? Do wild food experiences help draw the surrounding wilderness into the sense of place of residence?

Due to the wide-ranging wild food activities that can be associated with sense of place, it was hypothesized that wild food experiences would contribute to sense of place in various ways amongst consumers. It was further hypothesized that, due to the familiarity one must have with the surrounding environment, wild food experiences would encourage not only a sense of place in wilderness settings, but draw the wilderness into the sense of the place of residence, effectively broadening the place of residence to include wilderness.

This study looks at a specific and essentially place-based element of the food system: wild food. Similar to other place studies focusing on food, our study shows the multidimensional ways in which wild food experiences contribute to sense of place. For the purposes of this study, wild food is defined as plants, fungi, and animals that have been acquired locally and have required little to no input for their existence. For example, moose, rainbow trout, fiddleheads, and morel mushrooms acquired from the McBride area would all be included.

The varying activities associated with wild food experiences cover a broad range of literature. The study draws from, but does not hold strict reins to, human geography, environmental psychology, sociology of food, environmental anthropology, ethnoecology, and leisure studies.

LITERATURE REVIEW

The growing interest in the relationship between people and place has led to the proliferation of distinct yet related concepts for describing the human-place relationship. This includes sense of place (Williams & Stewart, 1998; Jorgensen & Stedman, 2001; Stedman, 2003), place attachment (Brown & Perkins, 1992; Low & Altman, 1992, Vaske & Kobrin, 2001; Williams & Vaske, 2003), place dependence (Gibbons & Ruddell, 1995; Pretty, Chipuer & Bramston, 2003; Hunt, 2008), place identity (Proshansky, Fabian & Kaminoff, 1983; Korpela, 1989; Dixon & Durrheim, 2000), topophilia (Tuan, 1974; González, 2005; Oliveira, Roca & Leitão, 2010), community attachment (Kasarda & Janowitz, 1974; Hummon, 1992; McCool & Martin, 1994; Brehm, Eisenhauer & Krannich, 2004), belonging (Jacobson, 2002; Mormon-Robinson, 2003; Trudeau, 2006; Nelson & Hiemstra, 2008), insideness (Relph, 2008; Rowles, 1983; Lim & Barton; 2010), and rootedness (Tuan, 1980; McAndrew, 1998; Andreotti, Galès, Fuentes, 2013), among others. Though it is still debated how place concepts relate to one another, many researchers argue that sense of place is a multidimensional concept comprising two, three, or five facets (Stokols & Shumaker, 1981; Williams & Vaske, 2003; Kyle, Graefe & Manning, 2005; Jorgensen & Stedman, 2006; Scopelliti & Tiberio, 2010; Raymond, Brown & Weber, 2010; Lewicka, 2011).

Place is defined as the meeting of the physical environment, human behaviour, and social processes (Stedman, 2003). It is "the experience of a particular location with some measure of groundedness (however, unstable), sense of boundaries (however, permeable), and connection to everyday life, even if its identity is constructed, traversed by power, and never fixed" (Escobar, 2001, 140). Relph (2008) posits that place is a phenomenon of experience with "remarkable capacity to make connections between self, community, and earth" (vii). In contrast to space,

which is seen as a generic and undifferentiated phenomenon, places are familiar, known, lived-in through experience (Beatley, 2004) and have "a range of subtleties and significances as great as the range of human experiences and intentions" (Relph, 2008, p. 26).

Sense of place has been described as a multidimensional concept comprising three dimensions: place attachment, place dependence, and place identity. Steele (1981) defines having a sense of place as "an experiential process created by the setting, combined with what a person brings to it" (p. 9). A sense of a place creates feelings of attachment to a place, and the more of an insider one is, the stronger these feelings are (Relph, 2008, p. 49). Place attachment is described as "the emotional bonds between people and a particular place or environment" (Seamon, 2014, p. 11). Place dependence is considered to be a "functional connection based specifically on the individual physical connection to a setting" (Raymond, Brown, and Weber, 2010, p. 426). On the other hand, place identity is defined as 'dimensions of the self that develop in relation to the physical environment' (Manzo, 2003, p. 47). Consistent with this literature, this study holds sense of place as the overarching term encompassing three dimensions; place attachment, place dependence and place identity.

Sense of Place

Sense of place "resides in human interpretations of the setting, which are constructed through experience with it" (Stedman, 2003, p. 672). Sense of place creates an identity of 'home' by offering the contrast of 'away' (Rose, 1995, p. 97), or in other words, what it means to be inside or outside a place. But to be *at home* in a place requires an *authentic* sense of place, which is:

> "understood to be a direct and genuine experience of the entire complex of the identity of places… It comes from a full awareness of places for what they are as products of man's intentions and the meaningful settings for human activities, or from a profound and unselfconscious identity with place" (Relph, 2008, p.64).

An authentic sense of place indicates a genuine attachment to place, yet paradoxically, being unselfconscious, often goes unnoticed (Tuan, 1977, p. 146). Tuan (1977) argues that this type of attachment "may come simply with familiarity and ease, with the assurance of nurture and security, with the memory of sounds and smells, of communal activities and homely pleasures accumulated over time" (p. 159). To have a place created and maintained unselfconsciously results in a place with "distinct and profound identity" (p. 68) that fits the unique group of people that live there. If a person does not have a place in which he or she feels like an insider, he or she is essentially placeless or without roots.

For a place to be authentically our home—a place to which we are really rooted and attached—the facets of its physical appearance, our awareness of its persistence through time, and the fact that it is where we know and are known must be "profoundly significant and inseparable" (Relph, 2008, p. 41). Relph (2008) says that these home places are the foundations of our existence and provide "the context for all human activity … security and identity for individuals and groups" (p. 41). While the experience of home implies the existence of place, place does not necessarily suggest the presence of home. Home is what Tuan (1977) calls an "intimate place" (p. 144). Platt (1996) also states that second only to the body, home is the "penultimate place of experience" (p. 112) and it provides a context in which boundaries are constructed between the inside and the outside (p. 113).

All places require an inside that is distinct from an outside, yet our experiences in place determine the degree to which we feel insideness. Relph (2008) says that home typically is experienced as "the most fundamental form of insideness" and is achieved when "a place is experienced without deliberate and selfconscious reflection yet is full with significances" (p. 55). This is what he calls existential insideness and is characterized by deep belonging and identity with a place; it is "part of knowing implicitly that *this* place is where you belong—in all other places we are existential outsiders no matter how open we are to their symbols and significances" (p. 55). A person who experiences place from this perspective "is part of that place and it is a part of him" (p. 55). The boundary between the inside (place) and the outside (space) is determined by our intentions and experiences. New experiences outside home redefine what it means to be inside or belong, and may make us feel "more at home in a larger world" (Platt, 1996, p. 114). Platt (1996) states that through venturing outward "meaningful places become visible and 'legible' in the blur of unfamiliar space" (p. 114).

The degree to which one experiences insideness of a place reveals much about the phenomenon. At the deepest levels, a person experiences a place authentically and is unselfconscious of his or her association with that place (Relph, 2008). This place is "home, where…roots are, a centre of safety and security, a field of care of concern, a point of orientation" (Relph, 2008, p. 142). To feel insideness to this degree is a personal yet intersubjective experience and creates the "essence of a sense of place" (Relph, 2008, p. 142). To experience existential insideness, a person becomes a part of place as it is a part of him or her (Relph, 2008, p. 55). Existential insideness works to foster an authentic sense of place; a sense of "being inside and belonging to […] place both as an individual and member of a community, and to know this without reflecting upon it" (p. 65).

Feelings of attachment, rootedness, and belonging to places come from communal and personal experiences that foster a "familiarity that is part of knowing and being known *here*, in this particular place" (Relph, 2008, p. 34). Attachment creates roots in places and familiarity encourages detailed knowledge and "sense of care and concern for that place" (p. 34). Relph (2008) indicates that "to have roots in a place is to have a secure point from which to look out on the world, a firm grasp of one's own position in the order of things, and a significant spiritual and psychological attachment to somewhere in particular" (p. 38).

The multiplicity of meaningful experiences we have in places creates feelings of attachment for that place and brings them into our "fields of care" (Relph, 2008, p. 38). Places fuse the human and natural orders of the world and are the loci of significant experiences. They are defined by experiences and intentions which work to give meaning to particular settings or environments. They provide identity to the individual and the community and often are "profound centres of human existence to which people have deep emotional and psychological ties" (Relph, 2008, p. 141).

Place and Food

It is widely accepted that a powerful relationship exists between food and place (e.g., Delind, 2006; Dusselier, 2002; Gombay, 2010; Sims, 2009). Feagan (2007) says "food and place are intertwined in robust ways in the geographic imagination and central to our lifeworld" (p. 23). When considering food terms such as slow food, local food, 100-mile diet, farmers' markets, terroir, placed-based diet, back-to-the-land, and homesteading, it is difficult to ignore the

connection between the food we eat and the places we live, as illustrated by the following perspectives.

Local food movement efforts, for example, support "the emergence of visible practices around the recreation of place" (Feagan, 2007, p. 30) with the hope that they will highlight the importance of the people-place relationship. Those who advocate for local food are aware of the importance of place as food creates a connection between people and the land (Delind, 2006). By encouraging practices that give meaning and attachment to a place, local food systems advocates suggest we may learn to live better in place.

Some have argued passionately that we must find ways to define the places we live in more biophysical terms—advocating for bioregions and foodsheds. This is what Thayer calls the Deep Home Place; the "region where the heart has taken root and 'home' territory sprung forth" (Thayer, 2003, p. 88). If we can begin to understand our actions in a bioregional sense, scholars argue, living more sustainable and place-based lives will become an easier feat. Kloppenburg, Hendrickson, and Stevenson (1996) suggest that our experience with food can help to foster attachment and commitment to the natural world. They state, "If we are to become native to our places, the foodshed is one way of envisioning that beloved country" (Kloppenburg et al., 1996, p. 123). By encouraging experiences that ground us in place, they argue, we will recognize more easily our ecological position in the world.

While most studies linking food and place have focused on agriculture, more and more scholars are looking to wild food as a way to ground people in places. However, until recently, studies on wild food have been scant. Wild food studies have largely focused on the folk knowledge and their uses in Aboriginal societies (Bharucha & Pretty, 2010; Etkin, 2000; Kuhnlein & Turner, 1991; Leonti, Nebel, Rivera & Heinrich, 2006; Rampedi & Oliver, 2013;

Reyes-García et al., 2008) and its potential to supplement breadbaskets in food insecure countries (Acipa, Kamatenesi-Mugisha & Oryem-Origa, 2013; Bharucha & Pretty, 2010; Shad, Shah & Bakht, 2013). While the documented reports of the folk classification of wild plants and animals are exhaustive, few studies have examined the use of wild food by non-Aboriginals in North America (Turner & von Aderkas, 2012), let alone its contribution to sense of place in such places.

What distinguishes wild food from agriculture is the wilderness element. This, in addition to the already rich relationship between people, the places they live, and the food they eat, adds another facet to the person-place-food phenomenon. Recently, scholars with primarily leisure studies backgrounds have explored sense of place in natural settings through wilderness experiences (Bricker & Kerstetter, 2000; Steel, 2000; Wickham, 2001; Vitterso, Vorkinn & Vistad 2001). While none examine the wild food facet specifically, many touch on associated wild food experiences such as fishing or hunting. However, few studies have merged these seemingly diverse settings by examining how such experiences may contribute to a sense of place beyond the recreational setting or how wild food experiences may be informed by attachment, dependence, or identity with other places (such as the place of residence).

Wild food has been explored in relation to sense of place by Crouch (1993-4), who pointed to the importance of the paw paw (*Asimina triloba* (L.) Dunal), a wild plant that is genetically similar to the banana and native to northern Indiana where she lives. She argues that those who learn about and eat the paw paw "will interact with, and come to know, their home places and the world-at-large quite differently than those who eat bananas" (Delind, 2006, p. 134). She suggests that her experience with the paw paw, and arguably other wild plants, displays the interactions between the biological, ecological, and the social.

The literature suggests that there is an opportunity to explore the contribution of wild food experiences to sense of place in non-Aboriginal communities. As food has been identified as an important element of place, it is natural to assume that wild food and experiences thereof would have a similar effect.

Place and Wilderness

Recognizing the dominance of the residence in place studies, some scholars focus on sense of place beyond the home. Research has revealed a strong connection between experiences in the wilderness settings and the development of people-place relationships (Frederickson & Anderson, 1999; Kaplan & Kaplan, 1989; Marcus & Barnes, 1999; Mitchell, Force, Carroll and McLaughlin 1993; Williams et al., 1992). Studies associated with forest resources and leisure studies have examined the creation of sense of place through experiences in wilderness settings (Bricker & Kerstetter, 2000; Steel, 2000; Wickham, 2001; Vitterso, Vorkinn, & Vistad 2001). Studies exploring sense of place and wilderness experiences such as camping, hiking, fishing, and whitewater recreation have defined sense of place as ecological stewardship or commitment to revisit the place (Manzo, 2003). Mitchell et al. (1993) measured wilderness place attachment by wilderness group membership, concern for place management, and attitudes toward the place.

Some studies have examined how person-nature relationships influence the sense of self (Manzo, 2003). Literature on concepts such as "deep ecology" (Fox, 1990; Nash, 1990; Zimmerman, Callicott, Sessions, Warren, & Clark, 1993) and "ecological self" (Bragg, 1996) suggest that experiences in natural settings are necessary to the perception of oneself. Some researchers have found that the self-construct can shift to include the natural environment through experiences in wilderness areas (Frederickson & Anderson, 1999).

Kalinowksi (1996) provides an insight into how Aldo Leopold's hunting practices allowed him to enter his ecological community as a good citizen. To be a good ecological citizen requires "an ethic founded in our instinctive moral sentiments, an aesthetic that connects and sensitizes us to our surroundings, and experience to teach us to expand our environmental awareness while remaining rooted in the primitive origins of our social conscience" (p. 141). Once this ethic, aesthetic, and experience are fulfilled, a person is fully included in the community when he or she becomes "emotionally rooted to a place they can call their own" (p. 141). Experiences that draw one into the ecological community, such as hunting, have the potential to give a person a unique experience of place, whereby they are no longer an "observer of the 'other' but as a participant in an ecological community that includes prey and predator" (p. 147). Kalinowski argues that these experiences are valuable because nature is not viewed "as merely a collection of entities 'out there,' belonging to someone else, that we picture as more or less 'scenic'" (p. 149). To heal our "environmental wounds" he argues we must seek experiences, such as hunting, that ground us in the ecological community.

Some scholars argue that ecological literacy contributes to sense of place, as it requires both the ability to read the environment and "interpret the stories of the landscape" (Curthoys & Cuthburtson, 2002, p. 226). Ecological literacy is defined as the ability to "comprehend and critically evaluate basic principles which govern natural systems; linkages among living organisms and the physical environment, and consequences of human activity on natural systems" (RELATE, 2001, first paragraph). Curthoys and Cuthbertson (2002) describe an ecologically literate citizen as "someone who knows about, cares for, and acts on behalf of the cultural and ecological integrity of their home-place" (p. 227). While wild food experiences may not require full ecological literacy of the participant, such experiences require at least some

knowledge or understanding of the local flora and fauna and therefore may help to convert generic wilderness into place. The recognition of natural elements as being essential to having sense of place means that we look at nature as more than simply natural resources. Evernden (1993) claims:

> If we encounter nature as natural resources, then we deny it any of the character of worldhood. And we simultaneously deny ourselves access to it as home. It is characterized as space, not place. There is no human involvement and therefore no sense of significance in such a nature (p. 66).

In areas where people are more integrated with or dependent on their natural environment, alternative visions of wilderness exist. Gómez-Pompa and Kaus (1992, p. 273) point out that "indigenous groups in the tropics […] do not consider the tropical forest environment to be wild; it is their home". The Posey (1998) and Fairhead and Leach (1996) studies on anthropogenic forest islands found that the distinction between nature and culture became difficult to discern "not only because they look natural but are culture, but also because they are cultural in a subtle way" (Dove and Carpenter, 2008, 3). Instead of strictly cultivated, the forests were managed (Posey, 1998) or enriched (Fairhead and Leach, 1996), and in the 'wildest' areas of the Amazon rainforest, the landscape has been manipulated by the people who call it home.

Inhabitants of rural areas too have an alternative to what urbanites may call wilderness. Because rural dwellers and agriculturalists have an intimate relationship with the environment, "nature is no longer an object, an *it*, but a world of complexity whose living components are personified and deified in local myths" (Gómez-Pompa and Kaus, 1992, p. 273). This means that those cultures that require a deeper relationship with the land do not see it as outside the place

they live. Rather, it is categorically and necessarily *inside* their place. Like urbanities, their conceptions of wilderness are determined by settings in which they have little or no experience and "to them, the urban setting might be perceived as wilderness" (Gómez-Pompa and Kaus, 1992, p. 273).

The literature shows that wilderness experiences contribute to sense of place in natural settings. Experiences in natural settings encourage place attachment to the wilderness and may contribute to the development of place identity, or "ecological self." Ecological literacy, or the knowledge of flora and fauna, contributes to sense of place as it requires familiarity with and understanding of wilderness settings. Wild food experiences often necessitate experiences in and familiarity with wilderness settings, and it is hypothesized that such experiences may contribute to sense of place similarly to other wilderness experiences.

Wild Food

For the purposes of this study, wild food is defined as flora and fauna that have been acquired for food consumption and have required little to no input for their existence. As indicated earlier, moose, rainbow trout, fiddleheads, or morel mushrooms acquired from the surrounding area of McBride would all be included. Wild food has been described as native or untamed plants and animals (Jones & Madsen, 1991; Melainey, Przybylski & Sherriff, 1999; Ryder & Latham, 2005), undomesticated (Dakora, 1997; Ockerman & Basu, 2009), uncultivated (Mazhar, Satheesh, Buckles & Akhter, 2002; Aryal, Berg & Ogle, 2009), neglected or underutilized species (Blench, 1997; Padulosi, Eyzaquirre & Hodgkin, 1999), famine food

(Guinand & Lemessa, 2001; Muller & Almedom, 2008; Khan, Hasan & Jahan, 2012), hunted and gathered food (Milton, 2000), traditional or indigenous food (Kuhnlein & Receveur, 1996; Pieroni & Price, 2006; Kuhnlein, Erasmus, Spigelski & Burlingame, 2013), non-timber forest products (Chamberlain & Bush, 1998; Boxall, Murray & Unterschultz, 2003), or perhaps, simply, not agriculture (Dwyer & Minnegal, 1991; Blake, Chisholm, Clark and Mudar, 1992; Shackleton, Shackleton & Cousins, 2000). Dufour and Wilson (1994) placed wild and domesticated foods along a continuum, whereby wild food can be found at one pole and domesticated food at the other: wild, managed, cultivated/raised, semi-domesticated, domesticated. However, defining wild and domesticated food in this context has also been controversial (Tardío et al., 2006). For example, wild plants or animals may be cultivated or raised, and domesticated plants or animals may grow or range as feral species (Etkin, 1994). And in many cases, it is impossible to genetically distinguish between wild and domesticated foods (Tardío et al., 2006).

Wild food is sometimes associated with non-timber forest products (NTFP). While there is no definition of NTFPs that is generally accepted (Mitchell et al. p. 117), they consist of elements of wild food "as those biological organisms, excluding timber, valued by humans for both consumptive and non-consumptive purposes found in various forms of forested landscapes" (Davidson-Hunt, Duchesne & Zasada, 2001, p. 5). Beatley (2004) points out NTFPs are not only important for supplemental food and income for communities, they "represent a method of forest use that generally conserves the resource and is both born from and strengthens a sense of connection to environment and place" (p. 153). A recent study (Mitchell et al., 2010) was conducted to classify plant and fungal NTFPs in the Robson Valley Forest District (including McBride) and while the study called for further research focusing on developing management

strategies, consumer markets, and economic opportunities for NTFP in the region, the economic and cultural value of NTFPs remains undocumented. No systematic data collection exists on the harvesting, sale, licensing or monitoring of most NTFPs and the national policy agenda has largely ignored the value they hold by those who harvest them recreationally, culturally, commercially or for subsistence.

The concept of wild food is tangled up in Western ideas of wild and wilderness, which in turn are informed by their distinction from agriculture. It was during the agricultural revolution that, for the first time, there came to be a distinction between cultivated, settled, and domesticated land and uncultivated, savage, and wild land (Short, 1991). In Hebrew, wilderness means *unsown land* and in Greek, *not cultivated*. Wilderness has long been characteristic of geographic space in the Western mindset. Like space, it is perceived as "generic and nonspecific," free from our embedded memories and stories (Beatley, 2004, p. 25). This conception of wilderness works to enforce the idea that humans are separate from nature, but this is not entirely accurate. Gómez-Pompa and Kaus (1992) call for a reinterpretation of the 'wilderness myth', arguing that "the concept of wilderness as the untouched or untamed land is mostly an urban perception" (p. 273). When the space of the wilderness becomes imbued with significance, it no longer simply comprises objective or indifferent geological features (Relph, 2008). Rather, it is infused with meaning, history, and community, and it becomes easier to attach ourselves to it (Tall, 1996, p. 110).

This study explores the colloquial understanding of wild food as it relates to its distinction to agriculture and its embeddedness in wilderness. This study hopes to build on Crouch's work that shows the connection between wild food consumption and connection to place.

METHODS

This exploratory research centers on the Village of McBride, British Columbia (BC), an isolated settlement in the central-east part of the province (Figure 1). As described next, the history and location of the site provide an appropriate context to examine the relationship between wild food and sense of place. The chapter also describes the data collection methods for the household surveys and resident interviews and the techniques used to analyse the data. The chapter concludes with a discussion of limitations.

Study Site

The study site was selected primarily for its proximity to wilderness settings and potential for wild food opportunities in nearby forests, lakes, rivers, and mountains (Figure 2). The Village of McBride is located in the Robson Valley, 210 km southeast of Prince George, British Columbia, and 166 km west of Jasper, Alberta. The village occupies a part of the Simpcw First Nation and Lheidli T'enneh First Nation traditional territories. The Robson Valley is an agriculture- and natural resource-rich corridor along the Fraser River, nestled between the Rocky and Cariboo Mountain ranges. The valley is sparsely populated with a few communities throughout, McBride being one of the largest with roughly 600 residents.

Due to the aforementioned wilderness proximity, opportunities for wild food experiences in McBride abound. The richness of the valley attracts wild game (e.g. moose, deer, and grouse), and fishes (e.g. rainbow trout) are abundant in lakes and rivers in the area. Both the boreal forest and more disturbed land such as roadsides or farms provide wild foods like huckleberries, blueberries and shaggy mane mushrooms.

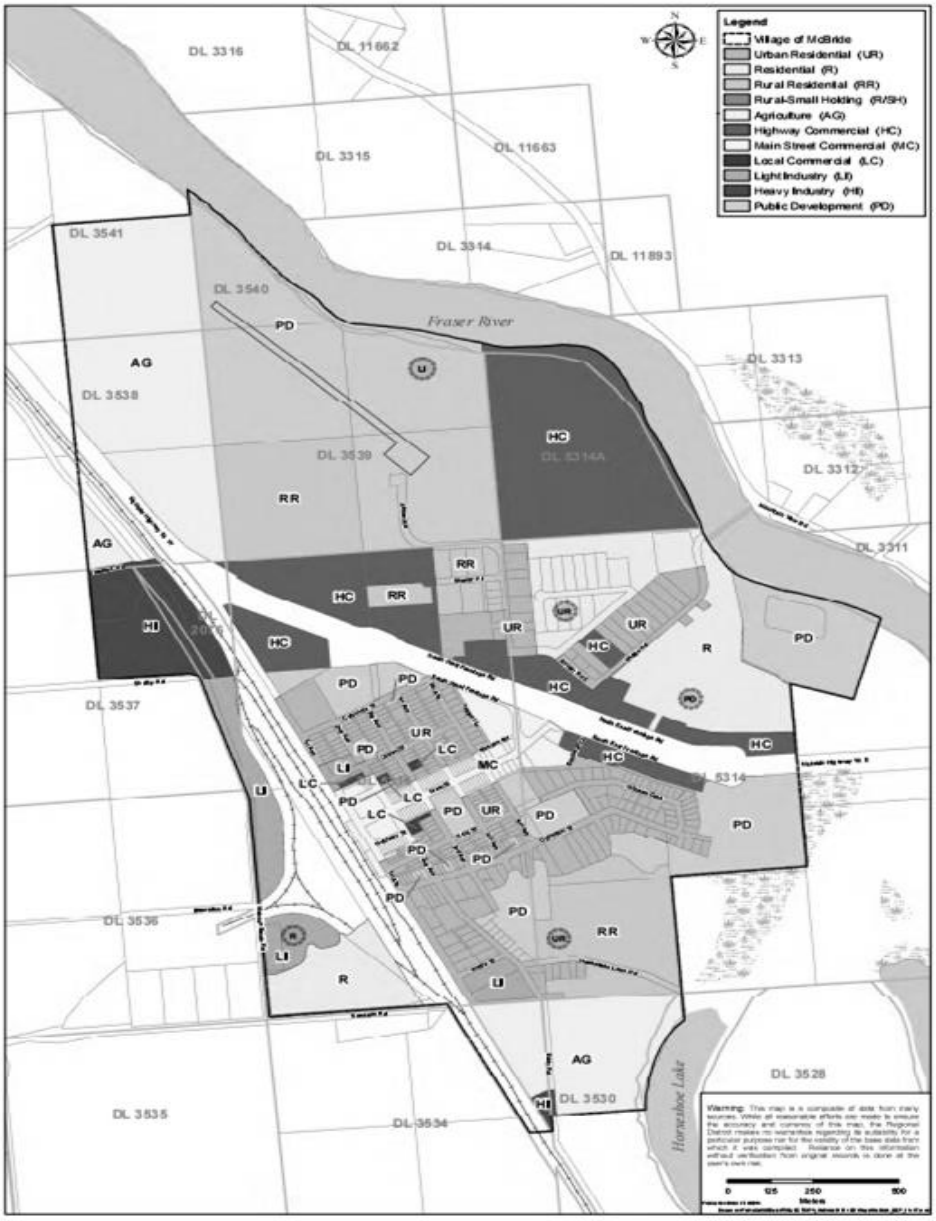
Figure 1. The Village of McBride in relation to British Columbia and Alberta (modified from Destination BC Corp., 2016)

The village grew up around the development of the Grand Trunk Pacific Railway and was established in 1913. Rail, shipping, agriculture, and forestry have historically been and continue to be McBride's primary industries. According to the 2011 Statistics Canada Census Profile of McBride, 586 residents live in 312 private dwellings, 256 of which are occupied by usual residents. The 2011 census data indicate that McBride residents are 51.3% female and 48.7% male.

Figure 2. The surrounding landscape of the Village of McBride, depicting wilderness and agricultural areas (modified from Google Maps, 2016)

McBride has been largely dependent on the forestry industry and subject to its booms and busts. Recent mill closures and a general decline in forest manufacturing in the area has led to job loss and out-migration of residents; McBride's population decreased by 11 percent from 2006 to 2011. The median age of the residents is 44 years, roughly five years older than the median age of the Fraser-Fort George Regional District. However, the tourism industry, largely in the form of eco-adventure, has become increasingly important to present-day life in McBride. The surrounding wilderness provides the backdrop for world-class nature-based tourism like snowmobiling, birding, hiking, skiing, and fishing. The Canadian National Railway, the school district, and the hospital are also important employers in the area.

Figure 3. Municipal boundaries of the Village of McBride (modified from Village Office website, 2016)



Data Collection

The research is based on household survey data collected during July 2013 and interview data collected between September 2013 and April 2014 in the Village of McBride, British Columbia. The household survey and interview methods selected to answer the research

questions were based largely on the research designs of two community attachment studies (Brehm, Eisenhauer & Krannich, 2004; Brehm, 2007). Brehm et al. (2004) examine the environmental facet in community attachment in two small communities in intermountain Wyoming and Utah. They draw from the work of Beckley (2003), who advocates for the use of several methods to understand the full details of a phenomenon.

Brehm et al. (2004) employed household surveys consisting of Likert-type scale questions to understand the importance of various aspects to the community in which they live, ranging from 1 = "not at all important" to 7 = "extremely important." Residential addresses from public utility records in the 2004 study were assigned a number and 200 households were randomly selected. Additional replacement households were randomly drawn to use if no contact was made, the home was vacant, or the address was non-existent. The questionnaire included a question addressing the respondent's willingness to participate in a follow-up interview process. Forty-eight respondents, from a total of 200, indicated a willingness to participate in this subsequent inquiry. The researchers contacted each volunteer respondent and from that conducted 28 face-to-face in-depth interviews.

While Brehm, Eisenhauer, and Krannich's (2004) household survey provided an overview of community attachment, the interviews unveiled "the emotional nuances of community attachment" (Brehm, 2007, p. 478). This type of research allowed the participants to frame their sentimental and emotional attachments to the natural environment in their own terms. Interviews were generally 45 minutes to two hours and were conversation style, following a loosely guided question plan. Brehm (2007) found that narratives from individual members of the community revealed a "less distinct separation between the social and natural environment dimensions of attachment" (p. 478) than previous quantitative analyses had shown. By using

narrative inquiry, she was able to build on the frame that the quantitative data provided. She argues that research into the environmental facet of community attachment is imperative in facilitating effective planning and reducing land use conflicts.

Household survey. The household survey for this study was designed to reveal the prevalence of wild food in the Village of McBride. Two-hundred-and-fifty household questionnaires were distributed around McBride, slightly fewer than the 256 McBride dwellings indicated by the census data. The five-page questionnaire consisted of fifteen questions directed toward the person most involved with wild food within the household. Unless otherwise stated, the questions sought the most appropriate response from a single individual. This section of the study was interested in understanding what wild foods are eaten in McBride, how often they are consumed, how they are acquired, the quantity acquired (dollar value and weight), motivations for consumption, overall importance to way of life, and support for wild food initiatives in the area. Beyond this, the study sought to understand if length of residence, generation Canadian, cultural background, or gender were influential on wild food consumption.

The questionnaire began by asking the respondent if they eat wild food. A follow-up question asked those who do not consume wild food for their reasons for non-consumption and then to proceed to the latter third of the questionnaire. Two Likert-type tables consisted of a comprehensive list of twelve wild foods found in the area and space to specify three others. These questions asked the respondents' frequency of consumption: quite often (many times per season), regularly (a few times per season), sometimes (at least once per season), not very often (every second or third season), or never; and their best estimation of the average quantity they acquire per season. This question was asked in the colloquially accepted measurement of pounds (none, less than 10 lb, 10-30 lb, 31-100 lb, 101-500 lb, 500+ lb) but converted to kilograms for

analysis. Respondents were asked how they acquire wild food and how they learned their practices. For these two questions, they were able to select all answers that apply from a predetermined list, with an option to specify another.

Three Likert-type questions were essential in determining the connection of wild food to the respondents' ways of life. The respondents were asked to indicate the level of importance of preselected motivators for consuming wild food (e.g. nutrition), the overall importance of wild food to their lifestyle, and supportiveness of wild food initiatives in McBride. The overall importance to way of life and the importance of each motivator were helpful in providing a preliminary understanding of place attachment, identity, and dependence. The data from these questions were later used to complement the results discovered through interview analysis.

The 2011 census data indicate that McBride residents are 51.3% female and 48.7% male. Though one gender would not likely apply to all members of the household, the survey asked the respondent to indicate his or her gender. As the household member most involved with wild food within the household was asked to complete the survey, a gender analysis of prominent wild food consumers could be done.

The age group representation of the village is not possible to discern, as the age of the respondent was intentionally omitted from the survey questions. This omission was for the primary reason that, being a household survey, one age would not have been applicable to all members of the household. The respondent was asked to indicate his or her length of residence within McBride (see Table 1), as the length of residence in an area has been linked to the strength of place attachment (Brehm, 2007). Also, with concerns for questionnaire brevity, an age question was unnecessary if length of residence was already addressed.

The completed questionnaire data were entered into the statistical analysis software program SPSS. The software allowed for easy organization of information and creation of frequency and cross-tabulation tables. For example, length of residence was cross-tabulated by wild food acquisition, frequency of moose consumption, or weight of berries acquired per season. Prevalence of wild food consumption was assessed through a general 'yes' or 'no' question concerning wild food consumption. Details of wild food prevalence were determined through questions asking the frequency, weight, and dollar value of preselected wild foods known to be in the area. Categories were created based on the overall importance of wild food to way of life (e.g. Not at all important, Not Very important, Neutral, Important, Very important). These categories were cross-tabulated with other respondent variables (e.g. gender) to explore the connection between wild food experiences and sense of place.

In order to raise awareness about the research, on July 18, 2013, I travelled to McBride to put up posters informing residents of the upcoming questionnaire distribution. Approximately ten posters were put up in public places that are frequently visited. Additionally, advertisements were placed in both The Valley Sentinel and The Little McBride newspapers prior to questionnaire distribution.

Two-hundred-and-fifty questionnaires were hand-delivered to each household over two days (July 22 and 23) and were picked up from each household within approximately seventy-two hours. As the response rate was relatively low upon first collection, reminders were taped to doors the following week (July 30) and additional questionnaires were gathered. The reminder and pickup process was repeated August 7 to ensure the collection of any other completed questionnaires. Eighty household questionnaires were completed for a response rate of 32% (80 of 250).

Interviews. The purpose of the follow-up interview was to draw out the nuances of wild food experiences as they relate to sense of place dimensions. Interviewees were recruited through the household survey which included a question asking respondents' willingness to participate in a follow-up interview process (see Appendix). The respondents were able to select 'Yes,' 'Maybe,' or 'No,' and asked to provide contact information. All of the respondents who indicated they were or might be interested in participating in the interview process were contacted several times through the contact information they provided, whether telephone number, email address, or both. Three of such respondents were not interviewed, as repeated attempts to connect with them became futile. The initial contact was brief and conversation focused on finding the best availability of the participant. Nine interviews with eleven respondents were completed. Seven of the interviews were conducted during the period between 23 and 27 September, 2013, three were completed between 9 and 13 December, 2013, and one was completed April 15, 2014.

The interviews were pre-arranged and took place in a setting that the respondent felt comfortable and the researcher felt secure. This setting was either the home of the interviewee or a local restaurant, aptly named 'Morels.' The interviewees were presented with a consent form detailing the study and the purpose of the research, and reminding them of the voluntary nature of their participation. Consent forms were signed by each interviewee and interviews were recorded. The interviews ranged from 30 to 80 minutes and were conversation-style, following a question guide.

The interviews had three general sections: (1) the respondent's understanding of wild food, (2) their personal experiences with wild food, and (3) their wild food experiences in the McBride area. Section 1 addressed topics like their definition of wild food, the universality of

their definition and wild food's relationship to agriculture. Sections 2 and 3 focused more on the relationship between wild food and sense of place. Section 2 built on the framework the questionnaire data provided, inquiring in more detail about wild foods consumed, methods of acquisition, knowledge acquisition, sustainability of practices, significant wild food memories, motivations for consumption, and how their experiences have changed over time. Section 3 sought to build on the overall findings from the household survey. The interviewees were asked about their relationship with McBride through the lens of wild food experiences. The interviews were structured to suit the individual experiences of the respondents, as per their questionnaire data.

The interview data were first organized by interviewee and question. Sense of place dimension tables were created and statements from each interviewee were organized into either place attachment, place dependence, or place identity subheadings. In some cases, statements would be relevant to two or three categories. Statements relating to wild food from each sense of place dimension were identified and 'Sense of place and wild food' summary tables were created for each interviewee. Summary tables were also created for wild food experiences relating to McBride and elsewhere, and for wild food experiences at different stages of the interviewee's life.

Limitations

This study contains certain limitations with respect to methods and applicability. The survey instrument did not include a comprehensive list of wild foods available in the McBride area. Wild foods that were later identified in the 'other' section of the survey, as well as in the interview process were not able to be quantified (e.g., elk, snowshoe hare). Additionally, the

survey respondents were only able to select from a predetermined list that did not include a high level of detail. For example, survey respondents were able to provide insight on berry consumption in general, but not the specific variety (e.g. huckleberry). These omissions prevent a detailed understanding of wild food consumption. The household survey instrument also omitted a question addressing details of the respondent (e.g. age, occupation, income), which prevents a more in-depth analysis of wild food consumption by consumer.

RESULTS

The purpose of the research was to explore the contribution of wild food experiences to three sense of place dimensions: identity, dependence, and attachment. The primary research question asked was, in what ways do wild food experiences contribute to sense of place in the Village of McBride? The three sub-questions were: What is the prevalence of wild food in the village of McBride? How do senses of place differ among wild food consumers? Do wild food experiences help draw the surrounding wilderness into the sense of place of residence? The household survey was employed to explore the prevalence of wild food in McBride and to validate the selection of the site as a laboratory for exploring sense of place dimensions through the lens of wild food. The interviews were later conducted to answer the primary research question and to assess the differences of sense of place dimensions among wild food consumers. The results from the two datasets will be presented in this section: (1) the results from the household survey and (2) the results from the interview process. First the results from the household survey will be presented, followed by the results from the interview processes.

Household Survey

The household survey results assess the prevalence of wild food in the Village of McBride and assess the validity of selecting McBride as a site for exploring the connection between wild food experiences and sense of place. While the household survey was designed primarily to reveal the prevalence of wild food in McBride, additional questions were included to gain insight to the contribution of wild food.

Overview of household survey respondents. The following overview of households is based on demographics of household members and the consumption of wild food. Eighty household questionnaires were completed of the 250 that were distributed, for a response rate of 32%. Reasons for non-distribution include apparent vacancies (empty homes with for-sale signs, for example), no trespassing signs, or territorial guard dogs. Forty-seven percent of the respondents indicated they are female, 43% male, and 10.0% preferred not to disclose or did not answer the question (Figure 4). As indicated earlier, the 2011 census data indicate that McBride residents are 51.3% female and 48.7% male. Thus, compared to all residents, the interview results suggest that a slightly higher proportion of men living in McBride are more involved with wild food.

Figure 4. Gender of household survey respondents *(n = 80)*

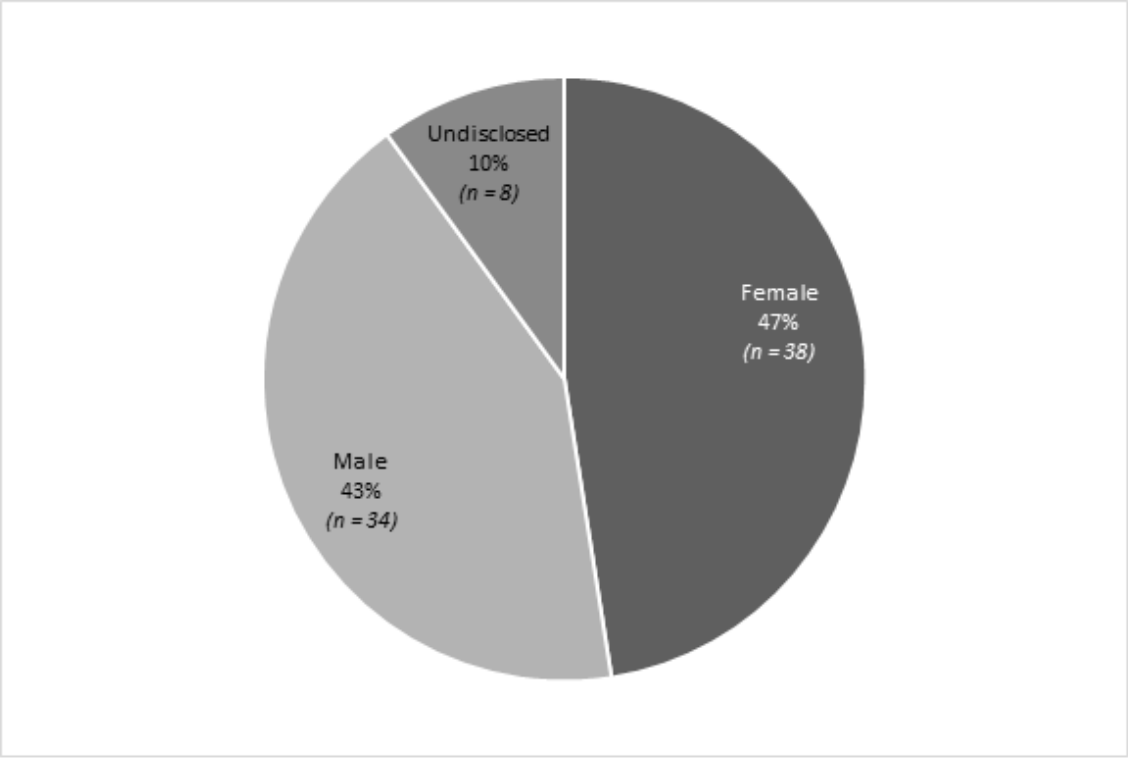


Figure 5 shows that 82.5% of residents did not identify with another heritage group or tradition aside from Canadian, 8.8% did identify another heritage group or tradition (German, Italian, Scottish, Danish, Mohawk, and Métis heritage groups were indicated), and 8.8% of respondents did not answer this question. The census profile of McBride indicates that the mother tongue of 10.3% of the population is a language other than English. While the minority numbers are too small to be representative in themselves, the survey results point to the other heritage groups or traditions suggested by the census profile.

Figure 5. Generation Canadian of household survey respondents *(n = 80)*

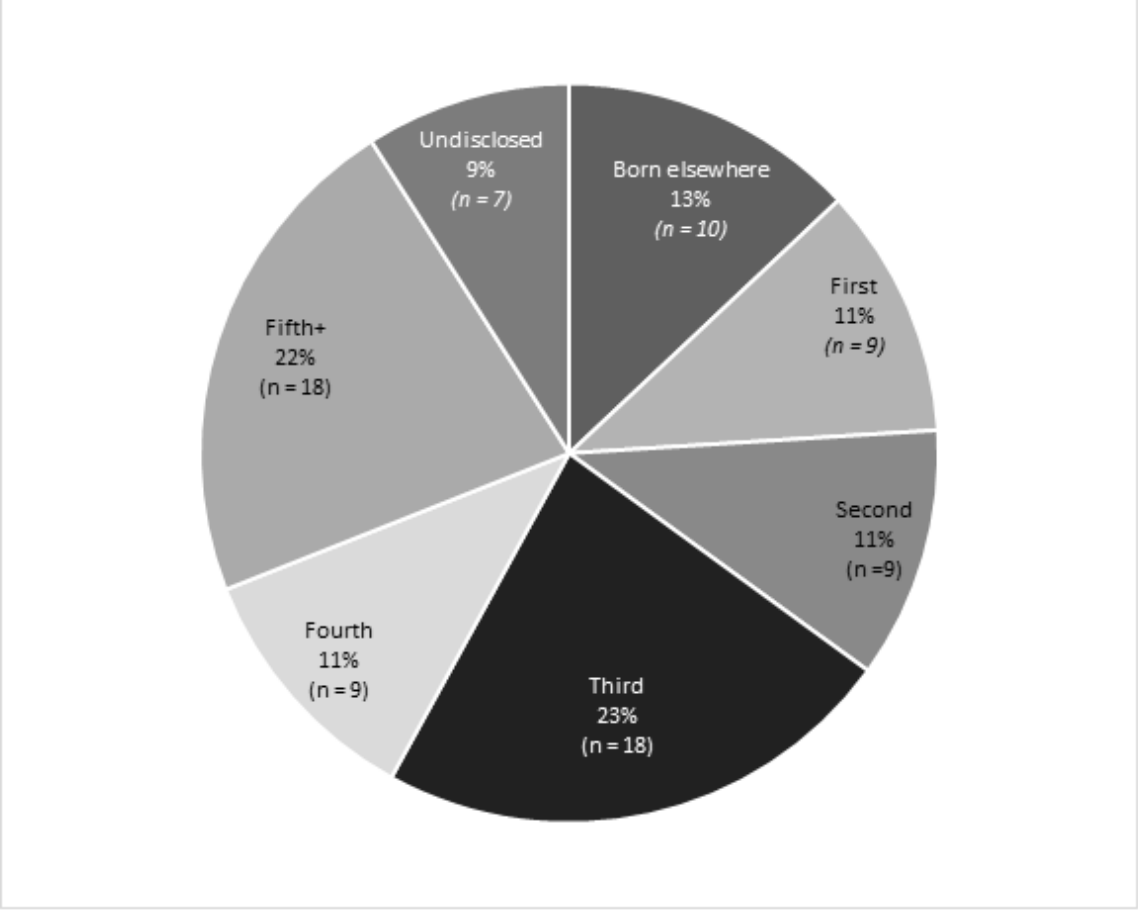
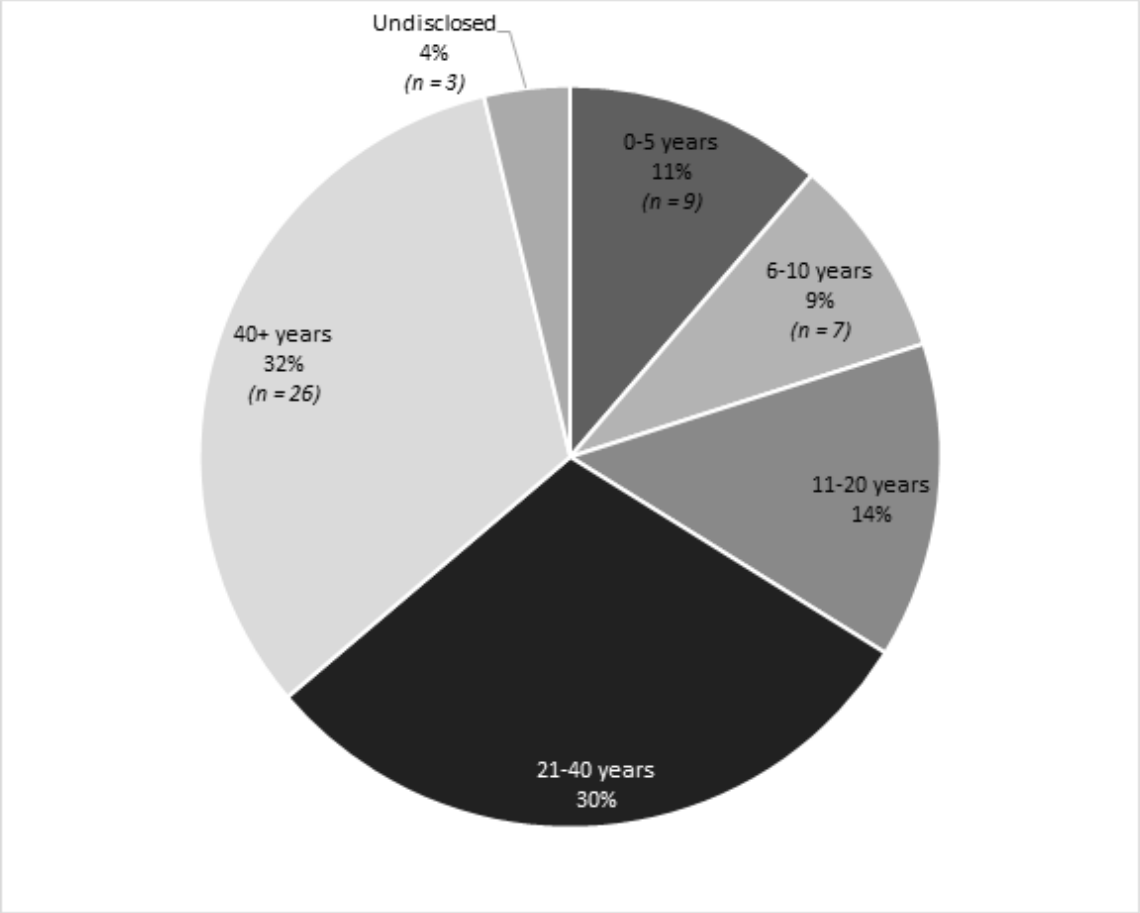


Figure 6 shows the length of residence of the survey respondents. Approximately two-thirds of the respondents have lived in McBride for more than 20 years, while approximately

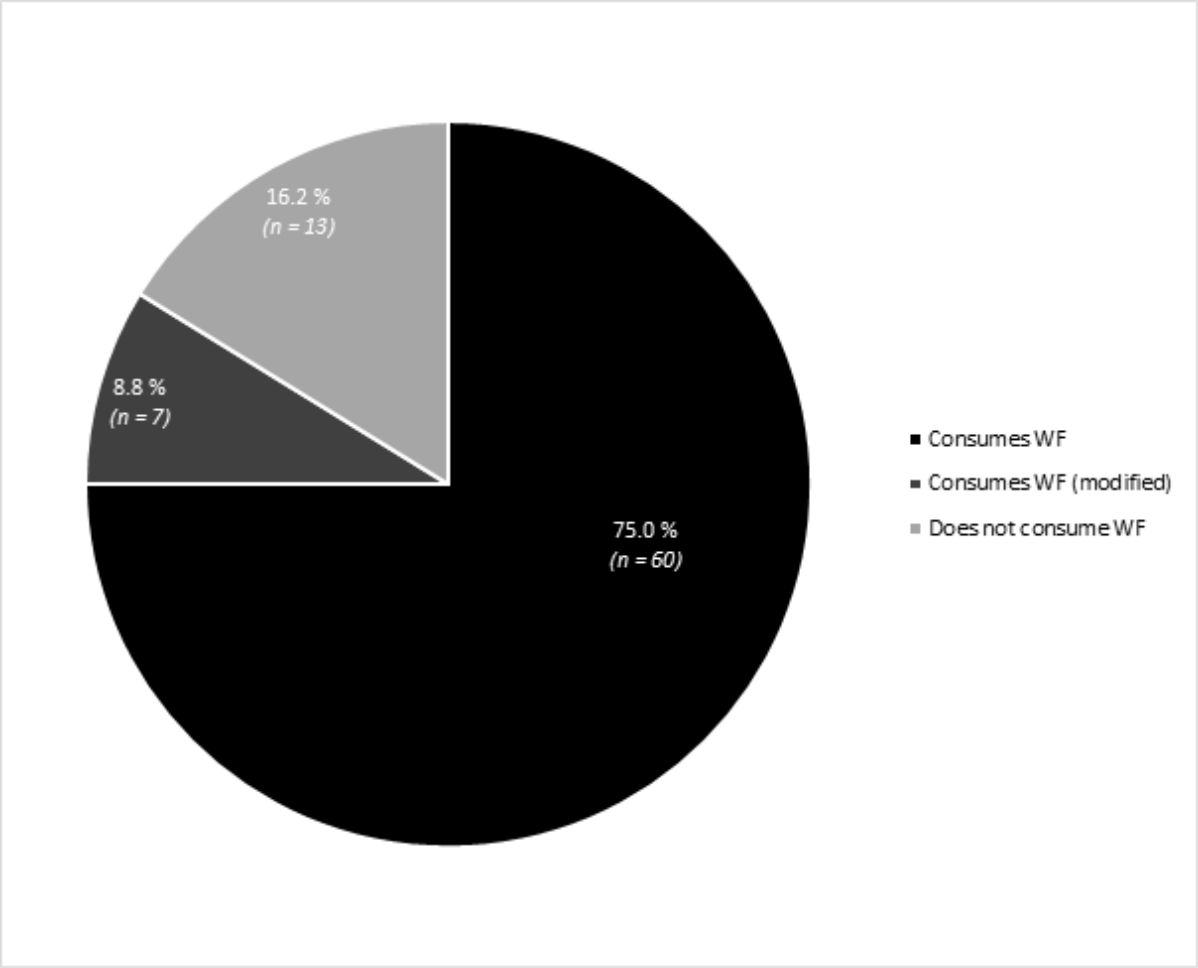
one-third has lived in McBride for less than 20. Census data do not include length of residence, so it is not possible to discern the representativeness of these results for the entire population.

Figure 6. Length of residence of household survey respondents *(n = 80)*



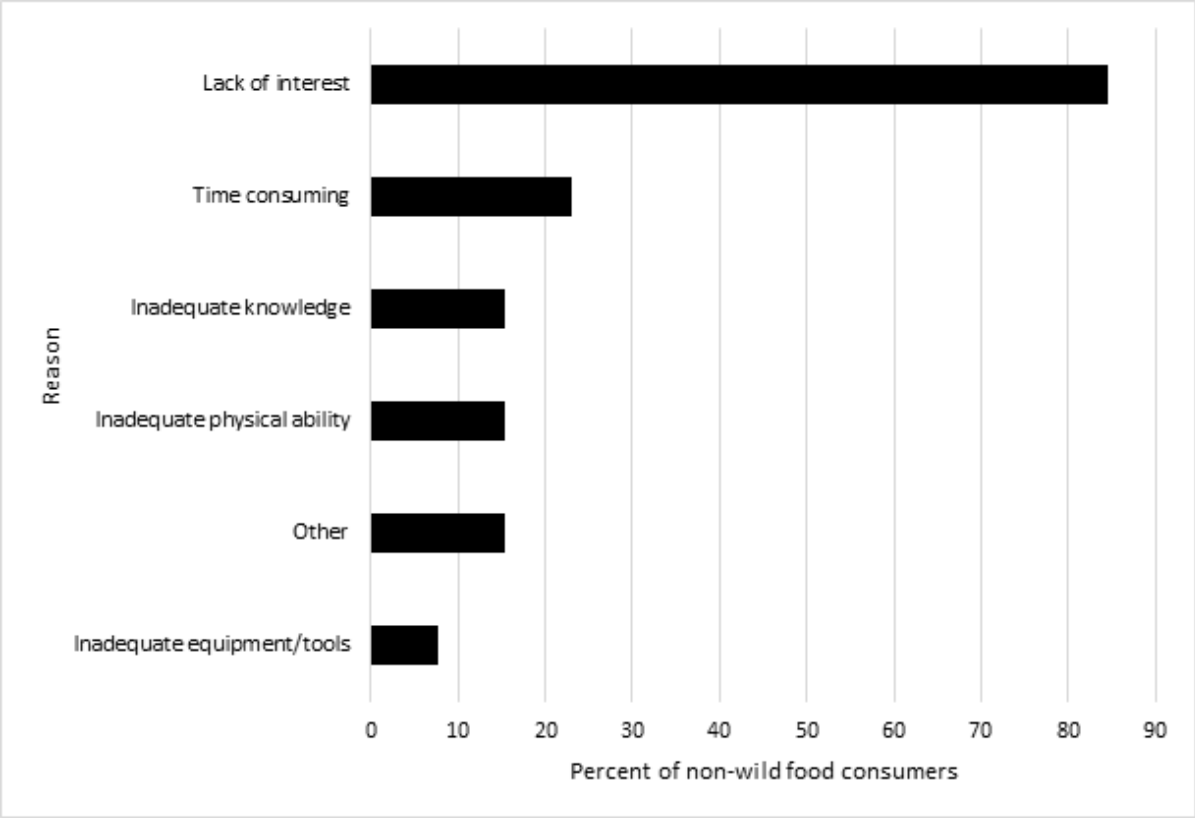
The results show that 83.8% of the respondents eat wild food (refer to Figure 7). Wild foods are plants, fungi, and animals that have been acquired locally and have required little to no input for their existence. It is important to note that 8.8% of respondents initially indicated that they do not eat wild food, yet proceeded to complete the questionnaire with full indication that they do eat wild food, if infrequently. This group of people was moved from the non-wild food-consuming group to the wild food-consuming group (i.e., they are included in the 83.8%).

Figure 7. McBride wild food (WF) consumers *(n = 80)*



Those who indicated that they did not consume wild food (16.2% of households) were asked to select all applicable reasons for not consuming wild food (see Figure 8). Lack of interest was the most significant factor in determining non-consumption of wild food.

Figure 8. Reasons for wild food non-consumption *(n = 13)*



Overview of wild food consumers. Almost half (seven out of fifteen questions) of the survey consisted of questions only applicable to wild food consumers (questions 3-9), such as method of wild food acquisition or dollar value consumed annually by household. The results presented in this section focus on respondents who consume wild food (n=67).

A profile of wild food consumers is presented in Table 1. The first column shows the percent of wild food consumers by demographic variable relative to the total population; for example, 47.5% of survey respondents are women. The second column shows the percent of wild food consumers by variable relative to all wild food consumers; for example, 47.8% of all wild food consumers are women. The third column shows the percent of wild food consumers within each category; for example, 82.4% of all women respondents consume wild food.

The representativeness of the wild food consumers relative to all respondents is also shown in Table 1. By comparing the results of the first two columns, we can see that the percent of wild food consumers is within a 3% range of the total respondents for each variable. For example, 42.5% of the total survey respondents are men, and 43.3% of wild food consumers are men, for a difference of 0.8%. Due to the close ratio of respondents within each category, the wild food consumers are considered representative of the total survey respondents.

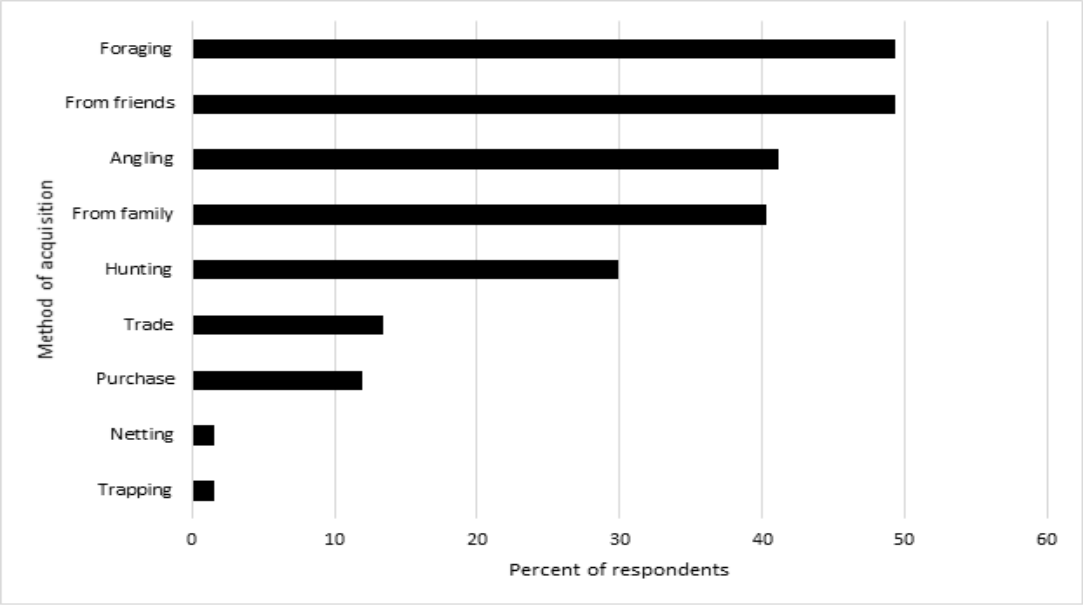
Table 1. Comparison of wild food (WF) consumers by total survey respondents

	Percent of total (%) ***(n = 80)***	**Percent of all wild food consumers (%)** ***(n = 67)***	**Percent of wild food consumers by variable (%)**	**Difference from average WF consumption (83.8%) (%)**
Gender				
Female	47.5	47.8	84.2	+0.4
Male	42.5	43.3	85.3	+1.5
Undisclosed	10.0	9.0	75.0	-8.8
Length of residence				
0-5 years	11.3	13.4	100.0	+16.2
6-10 years	8.8	7.5	71.4	-12.4
11-20 years	13.8	16.4	100.0	+16.2
21-40 years	30.0	26.9	75.0	-8.8
40+ years	32.5	34.3	88.5	+4.7
Undisclosed	3.75	1.5	33.3	-50.5
Generation Canadian				
Born elsewhere	12.5	9.0	60.0	-23.8
First	11.3	11.9	88.9	+5.1
Second	11.3	10.4	77.8	-6.0
Third	22.5	23.9	88.9	+5.1
Fourth	11.3	11.9	88.7	+4.9
Fifth+	22.5	25.4	94.4	+10.6
Undisclosed	8.8	7.5	71.4	-12.4

The last column of Table 1 shows the percentage difference between the overall average wild food consumption (83.3%) and the variable. For example, 100% of respondents with 11-20 years of residence in McBride consume wild food; a 16.2% increase from the average. Table 1 indicates that residents of McBride of 20 or more years of residence make up nearly two-thirds of wild food consumers. Respondents whose length of residence is 0-5 years, 11-20 years, or 40+ years consume wild food more than the overall average wild food consumption; residents of 6-10 years and 21-40 years consume less. First, third, fourth, and fifth or more generation Canadians consume more wild food than the survey average; those born elsewhere, and second generation Canadians consume less.

Methods of wild food acquisition. Figure 9 shows that the respondents typically employ multiple methods of wild food acquisition. The most significant methods for wild food acquisition were by foraging, from friends, angling, from family, and hunting (Figure 9).

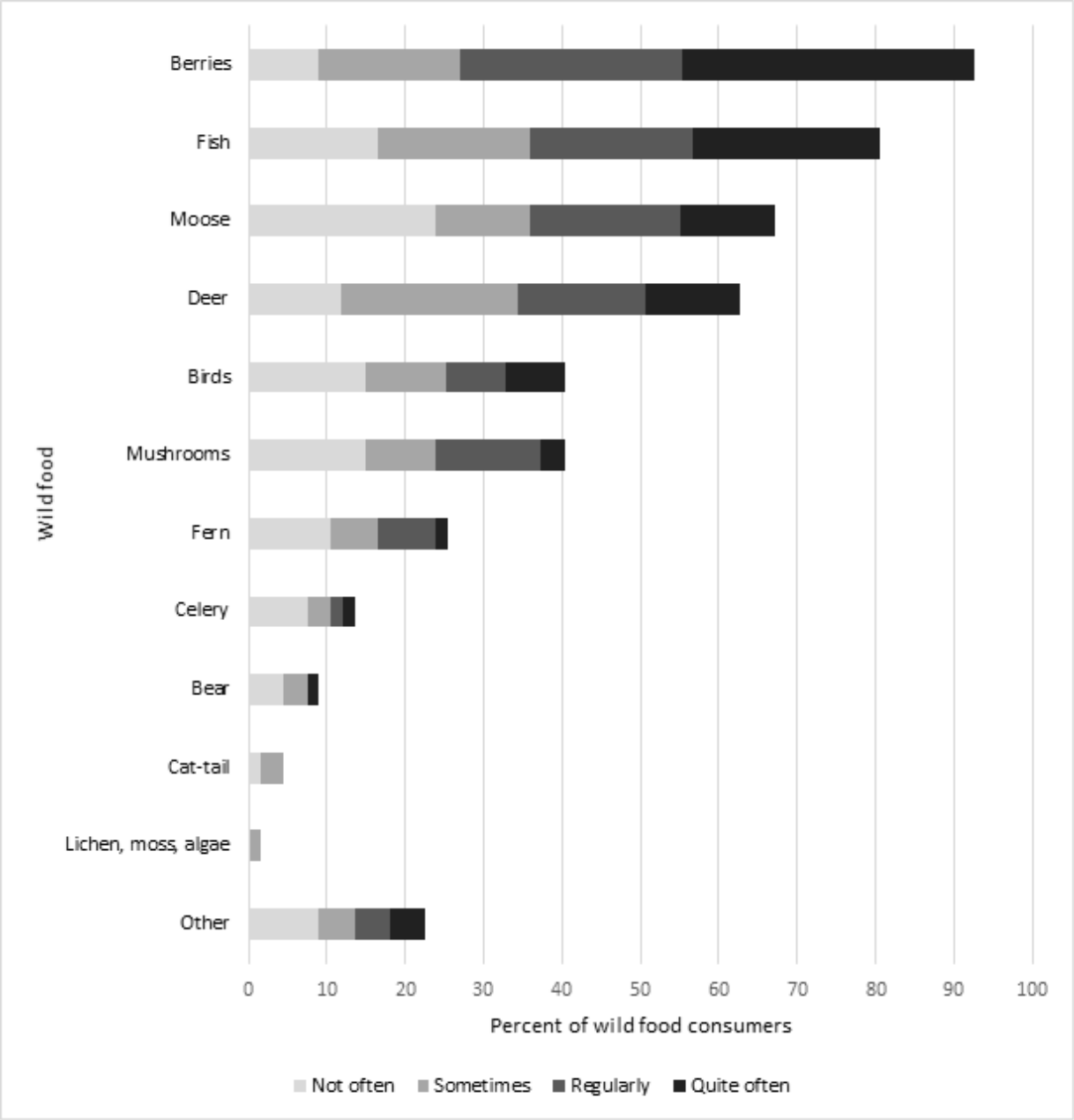
Figure 9. Methods of wild food acquisition *(n = 67)*



Profile of popular wild foods in McBride. Data were collected in the survey to provide a profile of the most popular wild foods consumed in McBride. Popularity was determined by total number of consumers, frequency of consumption, and weight consumed.

Respondents were asked to complete a table indicating the various wild foods they consume and the frequency consumed. Respondents were able to select 'Never,' 'Not very often (every second or third season),' 'Sometimes (at least once per season),' 'Regularly (a few times per season),' or 'Quite often (many times per season)'. 'Never' responses were not included in the results table. The most consumed wild foods were also found to be the most frequently consumed within households. As shown in Figure 10, berries (consumed by 92.5% of all wild food consumers) and fish (80.6%) have very high total consumption, moose and deer were high (60-79%), birds and mushrooms were medium (40-59%), fern was low (20-39%), lichens, mosses, and algae; cat-tail; bear; and celery were very low (0-19%), and other totalled 22.5%. Included in the 'Other' category were wild greens and herbs, mountain goat, snowshoe hare, caribou, and elk. Figure 10 shows the total number of consumers of selected wild foods in the McBride region. Further analysis below focused on the most frequently consumed wild foods, namely berries, fish, moose, deer, birds, and mushrooms.

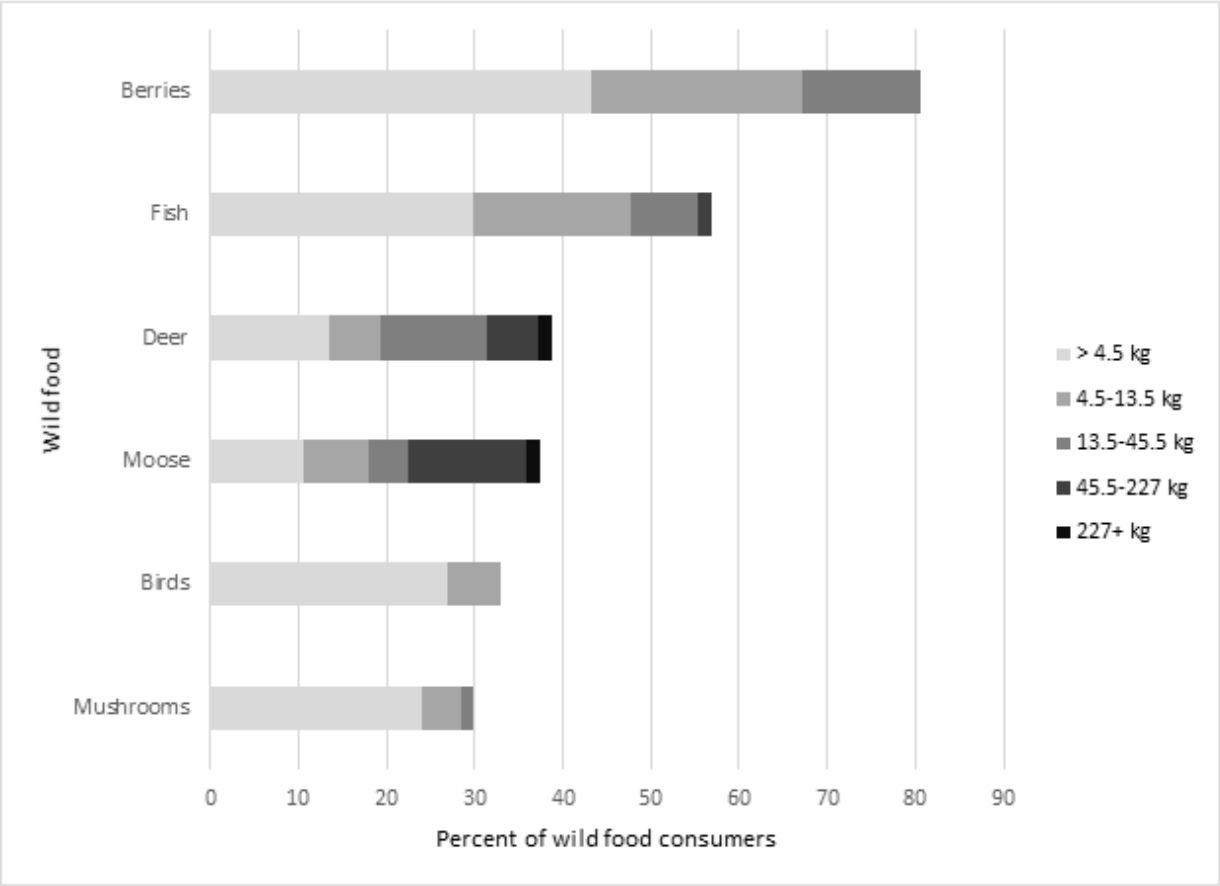
Figure 10. Wild food consumption and frequencies *(n = 67)*



Further details of household wild food consumption were determined by asking the respondents to estimate the amount (by weight) his or her household consumes yearly for various wild foods. Figure 11 shows the results of the most consumed wild foods (consumed by at least 40% of the respondents). Berries, fish, moose, deer, mushrooms, and birds were the most consumed wild foods in McBride by weight. Assuming these respondents are representative of

the entire population of McBride, it can be estimated that the village consumes 635-2270 kg of berries, 2085-7485 kg of moose, 1630-4765 kg of deer, 545-2085 kg of fish, 105-455 kg of birds, and 75-385 kg of mushrooms per year.

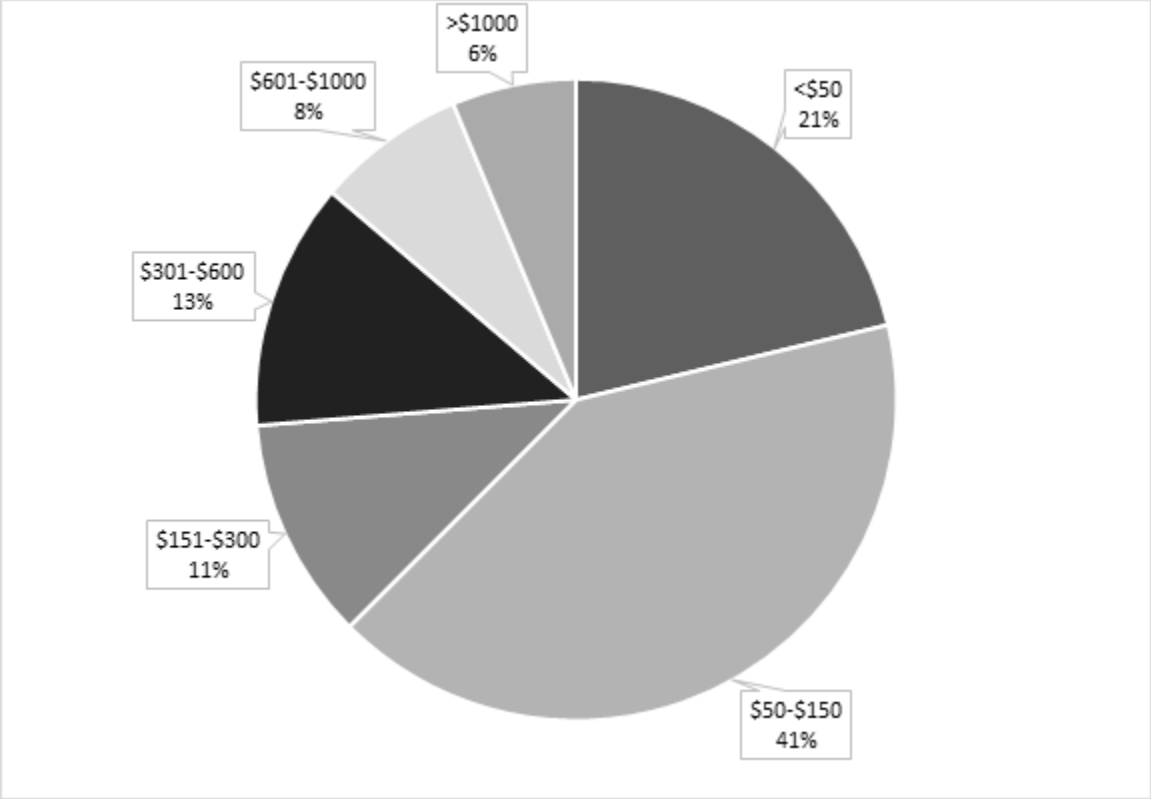
Figure 11. Quantity (kg) of selected wild food acquired by household per season *(n = 67)*



The economic contribution of wild food in McBride. The economic contribution of wild food in McBride was determined by asking the respondents to estimate the yearly value of wild food his or her household consumes if they were to buy it in a grocery store (Figure 12). The combined estimated yearly value for all respondents falls between $14,000 and $23,000, and possibly more as a cap was not provided in the survey. If these respondents are representative of the entire population of McBride, it can be estimated that the village consumes the equivalent of

$40,000-70,000 of wild food, were it bought in a grocery store. An internal check was completed to assess data consistency by comparing an estimate of household wild food to an assigned dollar value.

Figure 12. Estimated yearly value of wild food per household *(n = 67)*



A dollar value was assigned to deer, moose, birds and mushrooms based on the 2013 average retail prices of beef ($14.7/kg), chicken ($7.17/kg), and mushrooms ($7.88/kg) from Statistics Canada. The 2016 Loblaws catalogue was consulted for the market value of Canadian wild blueberries (the non-sale price is $11.32/kg) and rainbow trout fillets ($25.32/kg) and assigned to berries and fish respectively. The assigned dollar value was multiplied by lowest and highest weight of each wild food. The lowest and highest numbers were added together for a revised annual wild food value for the village of $75,000-$245,000. The difference in estimation

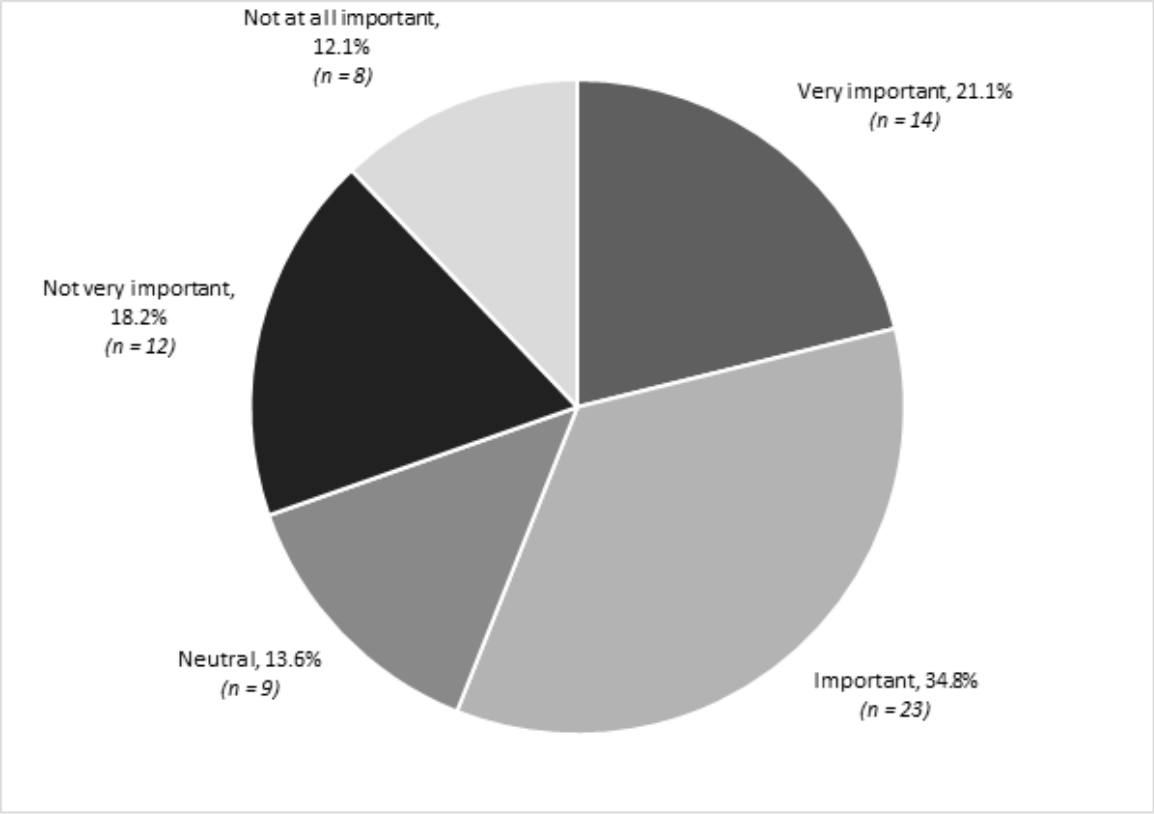
between weight value and market value could be explained by the lack of knowledge among respondents of accurate market values of wild foods (or their domestic equivalent).

The consumption of wild food was examined in relation to total annual food purchases by households. According to Statistics Canada, the 2013 average household food expenditure for food purchased in stores in British Columbia is $8,118. If the revised annual wild food values are divided by the 256 households occupied by usual residents, this would mean a value of $292-$957 of wild food is consumed on average per household, or 3.5%-10.5% of the food expenditure.

Household survey and sense of place. While the primary purpose of the household survey was to assess the prevalence of wild food in McBride, the results from the following questions lend insight to the connection between wild food experiences and sense of place at the household level.

The respondents were asked to complete a Likert-style question addressing the overall importance of wild food to their way of life, where 1 = Not all important, 2 = Not very important, 3 = Neutral, 4 = Important, 5 = Very important. The results show that wild food is important or very important to the way of life for over half of wild food consumers (Figure 13). The mean value for all wild food consumers is 3.348, indicating that the average level of importance of wild food to way of life falls between neutral and important.

Figure 13. Overall importance of wild food to way of life *(n = 66)*



The overall importance mean was cross-tabulated by gender, length of residence, and generation Canadian (Table 2). The second column of Table 2 shows the mean of each demographic. For example, the overall importance mean for women is 3.375, indicating the average wild food important for women falls between neutral and important. The third column shows the difference (+/-) between the mean for each demographic and the overall mean for wild food consumers. For example, the mean of residents of 21-40 years is 0.178 higher than the mean for all wild food consumers, putting them in the important to very important range. Overall, the mean is based on scale data and only indicates more or less.

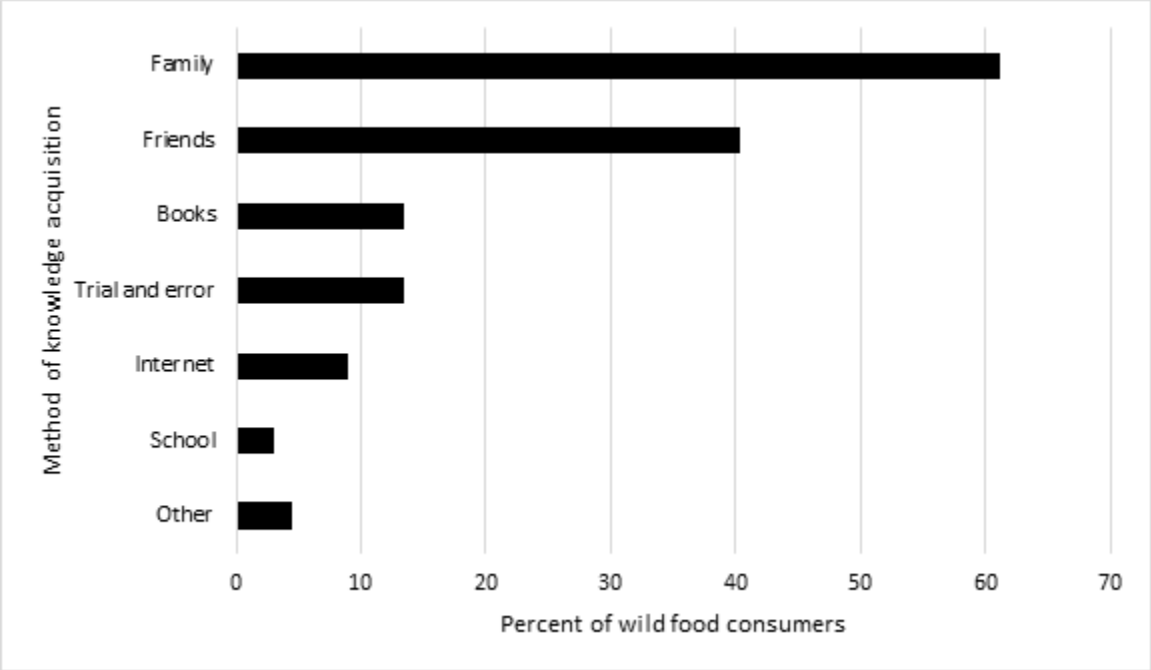
Table 2. Overall importance mean of wild food to way of life by gender, length of residence, and generation Canadian *(n = 66)*

	Overall importance mean	**Difference from overall mean of wild food consumers (3.348)**
Gender		
Female *(n = 32)*	3.375	+0.027
Male *(n = 28)*	3.350	+0.002
Undisclosed *(n = 6)*	3.167	-0.181
Length of residence		
0-5 years *(n = 9)*	3.000	-0.348
6-10 years *(n = 5)*	3.200	-0.148
11-20 years *(n = 11)*	3.273	-0.075
21-40 years *(n = 18)*	3.526	+0.178
40+ years *(n = 23)*	3.478	+0.130
Generation Canadian		
Born elsewhere *(n = 6)*	3.400	+0.052
First *(n = 8)*	3.500	+0.152
Second *(n = 7)*	3.286	-0.062
Third *(n = 15)*	3.600	+0.252
Fourth *(n = 8)*	3.125	-0.223
Fifth+ *(n = 17)*	3.059	-0.289

Table 2 shows a similar importance mean between the men and women. The importance mean for residents of 0-20 years is less than the overall importance mean of the respondents; for residents of 21-40+ years, it is more. Wild food appears to be more important to people who have lived in McBride for more than 20 years. The importance mean of second, fourth, and fifth or more generation Canadians is less than the overall importance mean; the importance mean of those born elsewhere, first, and third generation Canadians is more.

Wild food consumers were asked to select all ways in which they learned their wild food practices (Figure 14). The majority (61.2%) learned their practices from family and roughly 40% learned from friends. Books, internet, and trial-and-error were also cited as methods of knowledge acquisition.

Figure 14. Method of wild food knowledge acquisition *(n = 67)*



Overall importance mean categories. Profiles of each category of overall importance (Not at all important, Not very important, Neutral, Important, and Very important) were created to understand in more detail the demographics of each category. Table 3 shows the gender, length of residence, and generation Canadian of wild food consumers by the overall importance category. For example, the second column shows the percentage of respondents who indicated wild food is very important to their way of life. The highest values for each demographic variable are bolded. For example, the highest percentage of 40+ year residents (42.9%) falls under very important and is therefore bolded.

Table 3 indicates that the highest percentage of women is in the important category; the highest percentage of men is in the very important category. The highest percentage of residents of 0-5 years is in the not at all important category; 6-10 years not very important; 11-20 years neutral; 21-40 years not very important and neutral; 40+ years very important. The highest percentage of those born elsewhere is neutral; first generation not very important; second generation important; third generation important; fourth generation not at all important; fifth or more not very important.

Table 3. Profile of McBride wild food consumers by overall importance of wild food to way of life (% by quintile) *(n = 66)*

	Very important *(n = 14)*	**Important** *(n = 23)*	**Neutral** *(n = 9)*	**Not very important** *(n = 12)*	**Not at all important** *(n = 8)*
Gender					
Female	35.7	**60.9**	44.4	50.0	37.5
Male	**57.1**	34.8	22.2	50.0	50.0
Undisclosed	7.1	4.4	**33.3**	0.0	12.5
Length of residence					
0-5 years	14.3	8.7	11.1	16.7	**25.0**
6-10 years	0.0	13.0	0.0	**16.7**	0.0
11-20 years	14.3	17.4	**22.2**	8.3	25.0
21-40 years	28.6	26.1	**33.3**	**33.3**	12.5
40+ years	**42.9**	34.8	33.3	25.0	37.5
Generation Canadian					
Born elsewhere	14.3	4.3	**22.2**	8.3	0.0
First	21.4	4.3	11.1	**25.0**	0.0
Second	0.0	**17.4**	22.2	0.0	12.5
Third	21.4	**30.4**	22.2	16.7	12.5
Fourth	14.3	13.0	0.0	0.0	**37.5**
Fifth+	21.4	21.7	11.1	**50.0**	25.0
Undisclosed	7.1	8.7	11.1	0.0	**12.5**

Table 4 documents the estimated yearly value of wild food consumed by overall importance to way of life. The highest percentage of residents who estimated yearly value is less than $40 is in the not at all important category; $50-150 not very important, $151-600 important, and $601-1000 very important. Based on general observation, there is a relationship between importance to way of life and estimated yearly value of wild food the household consumed. The higher the estimated yearly value of wild food, the higher the overall importance of wild food to way of life.

Table 4. Estimated yearly value by overall importance of wild food to way of life (% by quintile) *(n = 66)*

Estimated yearly value	**Very important** ***(n = 14)***	**Important** ***(n = 23)***	**Neutral** ***(n = 9)***	**Not very important** ***(n = 12)***	**Not at all important** ***(n = 8)***
Less than $50	0.0	4.4	66.7	33.3	**75.0**
$50-150	21.4	39.1	11.1	**50.0**	12.5
$151-300	0.0	**26.1**	11.1	8.3	12.5
$301-600	21.4	**21.7**	11.1	8.3	0.0
$601-1000	**35.7**	4.4	0.0	0.0	0.0
$1000	**21.4**	4.4	0.0	0.0	0.0

Table 5 shows the overall importance to way of life by the frequency of consumption of the most popular wild foods. Means were calculated for the frequency of wild food consumption for the most popular wild foods (berries, fish, moose, deer, mushrooms, and birds), where 1 = Never, 2 = Not often, 3 = Sometimes, 4 = Regularly, 5 = Quite often. The means were compared to the overall importance to way of life categories. Means greater than or equal to 3 were bolded, as these wild foods are consumed at least once per season. General observation shows a

relationship between overall importance and frequency of consumption. Interestingly, even for those respondents who indicated wild food to be 'Not very important to their way of life,' berries were regularly consumed on average and fish were sometimes-regularly consumed on average.

Table 5. Frequency of consumption mean of wild foods by overall importance to way of life *(n = 66)*

	Very important *(n = 14)*	**Important *(n = 23)***	**Neutral *(n = 9)***	**Not very important *(n = 12)***	**Not at all important *(n = 8)***
Berries	**4.00**	**4.22**	2.89	**4.08**	**3.00**
Moose	**3.71**	2.90	2.14	2.09	1.43
Fish	**4.39**	**3.32**	2.83	**3.42**	2.29
Deer	**3.79**	2.68	2.57	2.55	1.57
Mushrooms	2.11	2.37	2.14	1.73	1.14
Birds	2.92	2.22	1.43	1.67	1.00

Table 6 elaborates on the analysis of the overall importance of wild food to way of life by motivation for wild food consumption. Means were calculated and based on the overall importance of each motivator, where 1 = Not at all important, 2 = Not very important, 3 = Neutral, 4 = Important, 5 = Very important. The most significant motivators for whom wild food is important or very important to way of life are nutrition, saving money, recreation, and connecting with nature. Nutrition, recreation, and connecting with people are important motivators for those who consider wild food to be neutral to their overall way of life.

Table 6. Importance mean of motivators by overall importance to way of life *(n = 66)*

	Very important *(n = 14)*	**Important *(n = 23)***	**Neutral *(n = 9)***	**Not very important *(n = 12)***	**Not at all important *(n = 8)***

Nutrition	**4.64**	**4.09**	**4.00**	2.36	2.33
Save money	**4.50**	**3.95**	3.14	2.46	1.86
Recreation	**4.50**	**3.58**	**3.50**	2.56	2.00
Connect with nature	**4.15**	**3.68**	3.17	2.73	2.27
Exercise	**3.93**	3.47	3.29	2.34	1.50
Tradition	3.42	2.75	2.50	1.70	1.86
Connect with people	2.92	3.37	**3.57**	2.64	1.71
Local food movement	2.20	2.84	2.83	1.60	1.33

Support for wild food initiatives (wild food land use planning; wild food festivals and events; more wild food available in stores and restaurants; and wild food workshops and classes) was also compared to overall importance of wild food to way of life (Table 7). This question was included to understand McBride residents' ideas for wild food in the future. Means were calculated for the support for each initiative, where 1 = Very unsupportive, 2 = unsupportive, 3 = Neutral, 4 = Supportive, 5 = Very supportive. The means were compared to the overall importance to way of life categories. General observation shows a relationship between overall importance of wild food to way of life and support for wild food initiatives. While a considerable number of the respondents indicated a neutral attitude toward the proposed initiatives, many more respondents were supportive than unsupportive. All results that are greater than or equal to 3.5 have been bolded, showing mild support or higher.

Table 7. Overall importance of wild food to way of life by support for wild food initiatives *(n = 66)*

	Very important ***(n = 14)***	**Important** ***(n = 23)***	**Neutral** ***(n = 9)***	**Not very important** ***(n = 12)***	**Not at all important** ***(n = 8)***

Land use planning	**4.00**	**3.50**	**3.50**	3.08	3.17
Events, festivals	**3.67**	**3.57**	**3.86**	3.08	2.67
Stores, restaurants	**4.08**	3.32	**3.89**	3.25	3.00
Classes, workshops	**3.90**	**3.64**	**3.63**	3.08	2.40

Table 8 shows a profile of respondents for whom wild food is important by method of acquisition. This table was created to further understand the differences between wild food consumers, particularly those for whom wild food is important (values of very important and important were combined, n = 37). Gender and length of residence were cross-tabulated by method of acquisition to assess the potential differences between men and women and length of residence. The higher percentage gender is bolded in each category, and any percentage of length of residence higher than 30 is bolded.

Table 8. Profile respondents for whom wild food is important by method of acquisition *(n = 37)*

	Foraging	**From friends**	**Angling**	**From family**	**Hunting**
Gender					
Women	**70.0**	**68.8**	30.0	**56.3**	21.4
Men	30.0	31.3	**65.0**	37.5	**78.6**
Undisclosed	0.0	0.0	5.0	6.3	0.0
Length of residence					
0-5 years	10.0	18.8	10.0	6.3	7.1
6-10 years	5.0	6.3	5.0	6.3	14.3
11-20 years	20.0	18.8	20.0	**31.3**	14.3
21-40 years	**30.0**	**37.5**	25.0	**31.3**	28.6
40+ years	**35.0**	18.8	**40.0**	25.0	**35.7**

Table 8 reveals that angling and hunting are employed more by men than women; women acquire wild food from family and friends, and by foraging more than men. More than two-thirds of foragers are residents of more than 20 years; residents of 21-40 years make up 37.5% of those who acquire wild food from friends, residents of 40+ years make up more than a third of anglers and hunters, and residents of 11-40 years make up roughly two-thirds of those who acquire wild food from family. General observation shows a relationship between gender and method of wild food acquisition as well as a relationship between length of residence and wild food acquisition, regardless of method. Based on these results it could be concluded that, for those who consider wild food to be very important to their way of life, women who have lived in McBride for twenty or more years make up the majority of foragers and those who acquire wild food from family or friends; men who have lived in McBride for twenty or more years make up the majority of anglers and hunters.

A category of 'regular' consumers was also analysed (Table 9). This group was created by combining the response categories of Regularly and Quite Often to the question about frequency of wild foods (berries, fish, moose, deer, mushrooms, and birds) consumed. Table 9 shows these regular consumers by gender and length of residence. The highest consumers (percentage greater than 10) within each category have been bolded. For example, women who have been living in McBride for more than forty years harvest berries more frequently than others. In the cases where there is a significant difference within the category (percentage greater than or equal to 20), the result has been bolded and italicized. For example, men who have been living in McBride for more than forty years harvest mushrooms *significantly* more than others.

Table 9. Regular consumers for whom wild food is important to way of life *(n = 37)*

	Berries *(n = 29)*	**Fish** *(n = 20)*	**Moose** *(n = 17)*	**Deer** *(n = 15)*	**Birds** *(n = 9)*	**Mushrooms** *(n = 7)*
Gender						
Women	***58.6***	45.0	29.4	33.3	22.2	**57.1**
Men	37.9	45.0	***64.7***	***66.7***	***77.8***	42.9
Undisclosed	3.4	10.0	5.9	0.0	0.0	0.0
Length of residence						
0-5 years	13.8	10.0	0.0	6.7	0.0	14.3
6-10 years	6.9	5.0	5.9	6.7	0.0	0.0
11-20 years	17.2	2.5	11.8	13.3	22.2	28.6
21-40 years	24.1	20.0	**41.2**	26.7	33.3	28.6
40+ years	**37.9**	***40.0***	**41.2**	***46.7***	**44.4**	28.6

Complementary to the results from Table 9, women make up the majority of regular berry and mushroom consumers, while men make up the majority of regular deer, moose, and deer consumers. Regular fish consumption is equal between the genders. Residents of more than 20 years make up the majority of regular consumers for each wild food.

Interviews

This section presents the results from the interviews. In order to explore the contribution of wild food experiences to sense of place interview data were organized based on the three dimensions of sense of place: attachment, dependence, and identity. While the household survey is critical in understanding the overall presence of wild food in the village of McBride, interviews provide more flexibility that allows for more depth and breadth. First, an overview of the interview respondents will be presented, followed by wild food experiences as they relate to

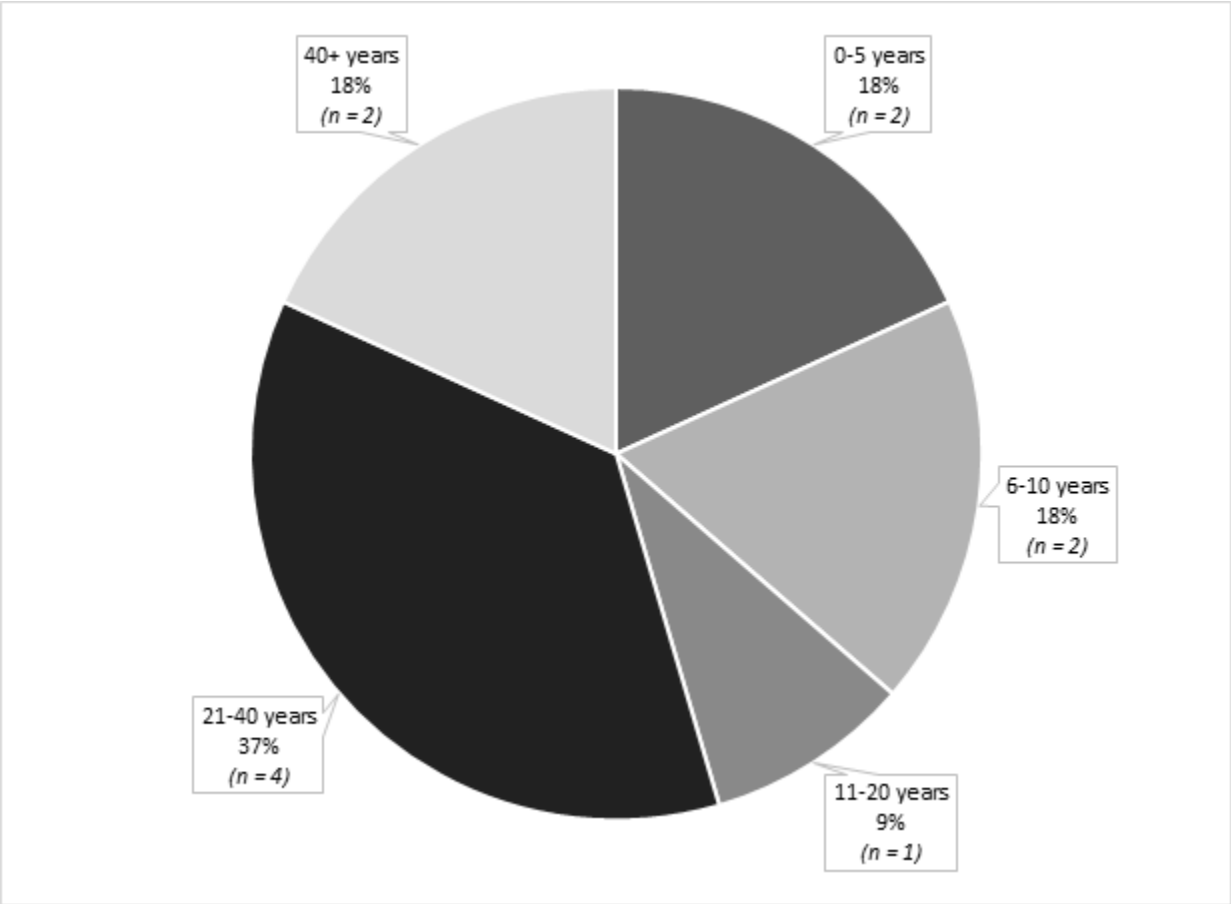
(1) place identity, (2) place dependence, and (3) place attachment. Each dimension of sense of place heading has several subheadings.

Overview of interview respondents and representativeness. Table 10 provides an overview of interview respondents as they relate to the total household survey respondents (n = 80) and wild food consuming survey respondents (n = 67). As all interview respondents were wild food consumers, the percentage of interview respondents are compared to percentage of wild food consumers (+/-). There is a relatively equal representation of men and women. Length of residence is better represented when divided into two categories, residents of twenty or less years (survey = 37.3%, interviews = 45.0%) and residents of more than twenty years (survey = 61.2%, interviews = 55.0%). Figure 15 shows the length of residence of interview respondents.

Table 10. Overview of interview respondents compared to total survey respondents and wild food (WF) consumers

	Percent of total (%) ***(n = 80)***	**Percent of WF survey respondents (%)** ***(n = 67)***	**Percent of interview respondents (%)** ***(n = 11)***	**Difference from average WF survey respondents (%)**
Gender				
Female	47.5	47.8	45.5	-2.3
Male	42.5	43.3	54.5	+11.2
Undisclosed	10.0	9.0	0.0	-9.0
Length of residence				
0-5 years	11.3	13.4	18.0	+4.6
6-10 years	8.8	7.5	18.0	+10.5
11-20 years	13.8	16.4	9.0	-7.4
21-40 years	30.0	26.9	37.0	+10.1
40+ years	32.5	34.3	18.0	-16.3
Undisclosed	3.75	1.5	0.0	-1.5

Figure 15. Length of residence of interview respondents *(n = 11)*



Acquiring wild food by foraging and from friends are the most employed methods (Figure 16); nearly half of the survey respondents acquire wild food by these means; and 90.9% of interviewees forage and 63.3% acquire wild food from friends.

Figure 16. Methods of wild food acquisition for interview respondents *(n = 11)*

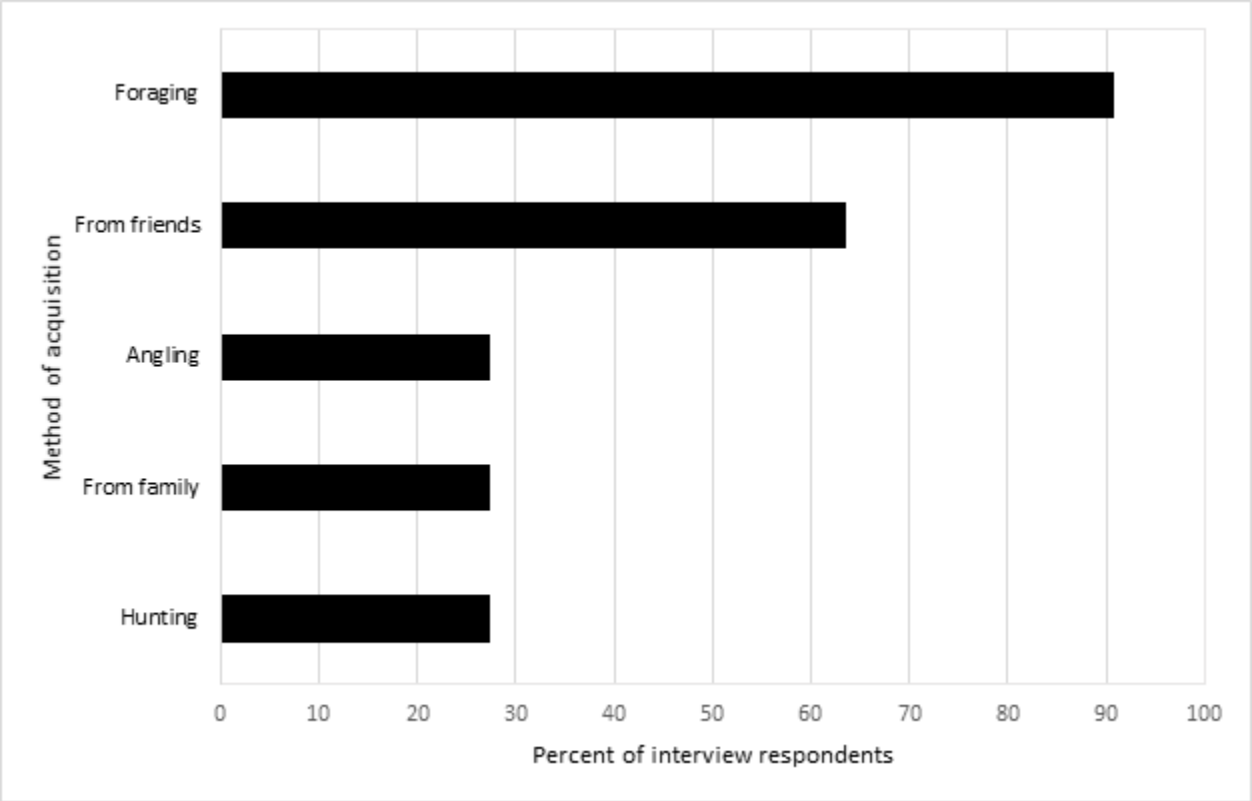


Figure 17 and Table 11 document the wild foods consumed by interviewees over their lifetime. These tables show all wild foods that have been consumed, whether regularly or not. Berries and moose have been consumed by 100% of interviewees, fish have been consumed by 54.5%, mushrooms 45.5%, deer 36.4%, and birds 18.2%. Table 11 gives more detail on type of wild food, such as huckleberry or morel mushroom, or other less frequently consumed wild food (e.g. spruce tips).

Figure 17. Wild food consumption of interview respondents *(n = 11)*

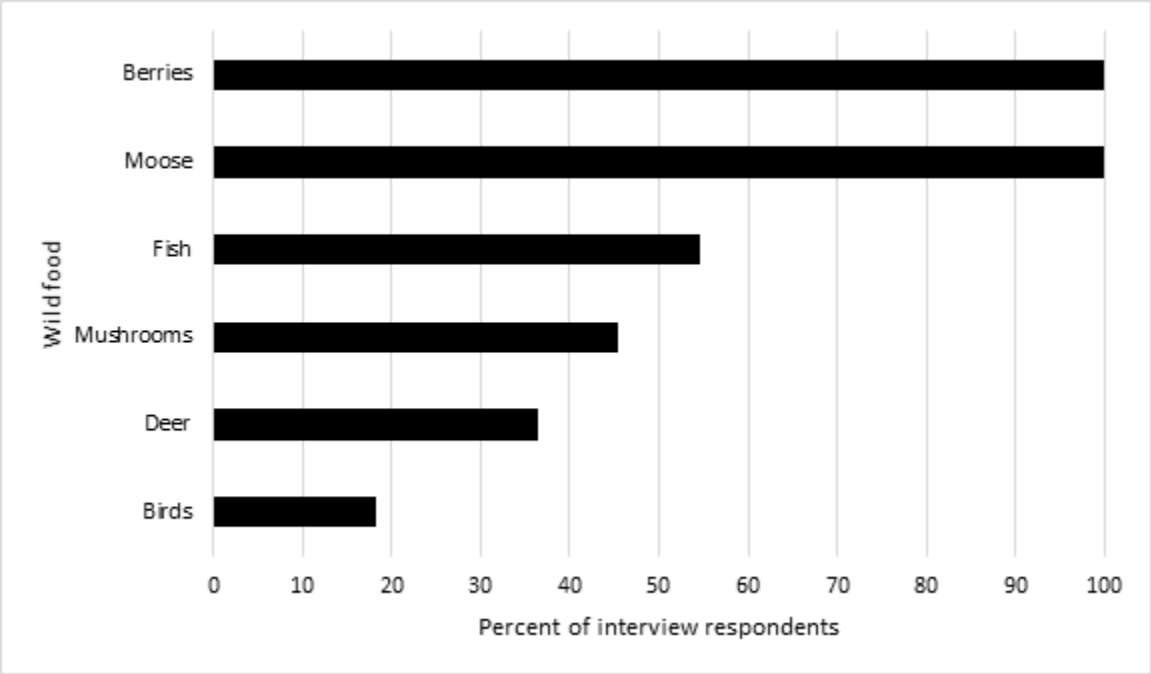


Table 11. Details of wild foods consumed over lifetime

Respondent*	Wild foods consumed
Shelly	Huckleberries, moose
Audrey	Saskatoon berries, blueberries, moose, black bear
Pete	Huckleberries, trout, moose
Andy & Lucy	Moose, rabbit, spruce tips, deer, raspberries, peppergrass
James	Moose, deer, elk, grouse, rabbit
Norma & Ed	Blueberries, chokecherries, raspberries, blackberries, salmon, moose, elk, morel and puffball mushrooms
Ben	Morel and shaggy mane mushrooms, huckleberries, blueberries, raspberries, moose, deer, fish
Margaret	Saskatoon berries, rosehips, chickweed, nettles
Harry	Lake and rainbow trout, salmon, lingcod, deer, moose, pheasant, spruce and blue grouse, morel, puffball and shaggy mane mushrooms, Oregon grape, huckleberries, blueberries, wild asparagus

*Pseudonyms were assigned to research participants.

Sense of place and wild food experiences. This study approaches the connection of wild food to sense of place in two ways. One is framed by literature illustrating the importance of food to sense of place, while the other is guided by studies that focus on sense of place in the wilderness. Wild experiences are organized by sense of place dimension (identity, dependence, and attachment) whether they relate to the McBride food system, the surrounding wilderness, or both.

Place identity and wild food experiences. Place identity is described as elements of the self that are reflected in the environment. The identity of a place is created by the characteristics that set it apart from other places. This section explores wild food experiences as they relate to McBride identity (history, food system, and wilderness) and personal identity. Knowledge of and familiarity with the place are also discussed through experiences with wild food.

McBride history. As mentioned above, McBride's history is inextricably linked to the building of the Grand Trunk Railway as the town was established as a maintenance depot for the project. The building of the railroad, the town's subsequent settlement, and wild food are tied together, says one respondent. Margaret describes the how the burning of the wilderness to make way for the railroad encouraged game traffic and the growth of berries, which are now among the most consumed wild foods in the area. She indicates that wild foods like berries and dandelion were important for the earliest settlers of McBride due to its isolation in a wilderness setting.

> Part of this was all bush and thick bush, very thick bush. And when the railroad was coming through, they sort of did things the fast and furious way—they just lit fires and burned through bush. And […] not much population [was] here then of course, lit the fire after the fire and regrowth and got this berry bushes coming up, game coming through.
>
> But I think people recognized the berries. I think that was predominately more than, well, because in the earlier years, people had to make do with what was around them, right. So I think the dandelion really came into play.

McBride's food system. The identity of a place is partially created by the characteristics that set it apart from other places. This section explores the role of wild food in McBride's food system and the abundance of certain types of wild food unique to the region. The results from the interviewees show a strong presence of wild food within the McBride food system. Norma believes that half the food base in McBride consists of wild food and locally grown food.

> Norma: If you count in the local organics as well, not just the wild, I'd say probably makes up half of the base.

Shelly points out that, "People eat lots of wild meat" in McBride, a statement to which Margaret, James, and Harry concur. Margaret states that wild game is the primary meat source for village residents, while James estimates that the majority of those who hunt in the area do so for the purpose of acquiring food. Overall, Harry guesses that a quarter of the village eats wild game.

> Margaret: There are people in the community who that is their main—the wild meat, is what fills their freezer.

James: I think probably you're gonna find that 90% of the people around here do hunt for the meat.

Harry: Like in a rural setting like this, I would imagine there's probably about 25% of the town eat wild game.

Respondents' understanding of wild food was typically through its contrast to agriculture. Instead of defining what wild food is, respondents indicated what it is not. Shelly indicates it is not grown, farmed, or domesticated; Pete says it is not husbanded or grown with intent; Norma, Ed, and Ben posit that it is not grown, but there on its own and does not need tending; Harry defines wild food as not domesticated; and Andy relates wild food to that of pre-settlement. Lucy and Margaret see wild food on its own terms as emergency food and volunteering, native species respectively.

With the exception of one respondent, all interviewees indicated that wild food is important to the people of McBride. Most interviewees make reference to berries and wild game (particularly moose and deer) as being the most important wild food for the people of McBride. Additionally, two respondents mention the importance of elk and fish and one respondent bear. Most interviewees indicated saving money to be the most important reason for wild food consumption in McBride. Recreation, health, and variety were also indicated.

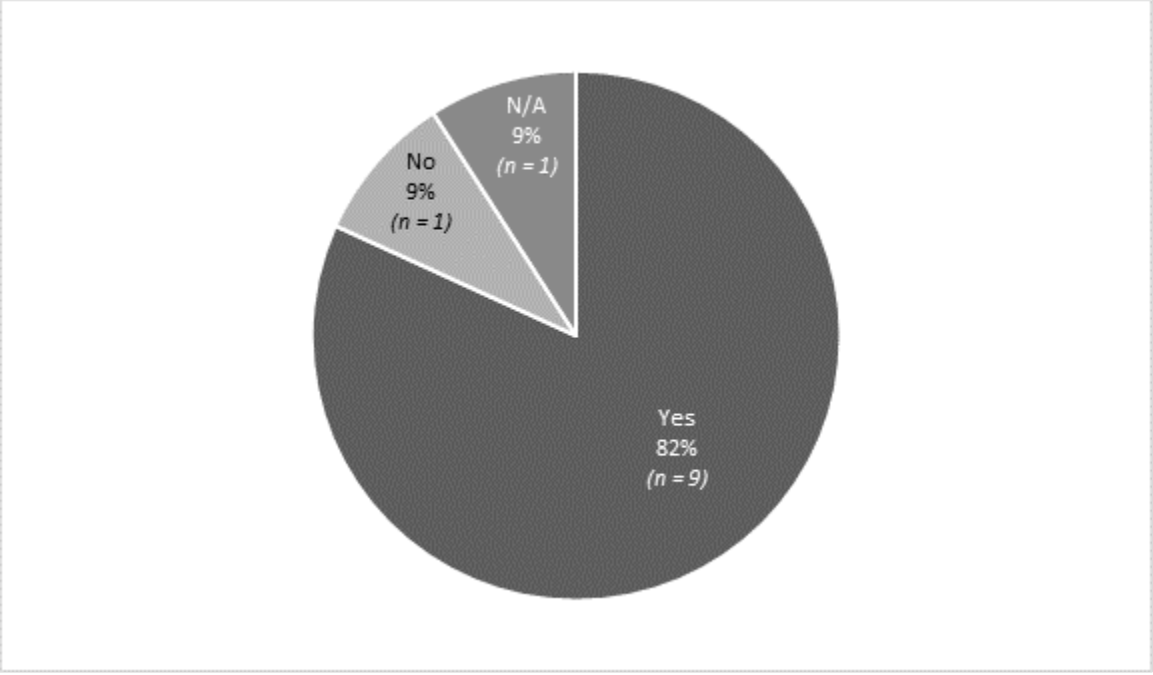
The bartering system in McBride and the presence of wild food within it was referenced by many of the respondents. Norma describes the barter system as "part of what makes McBride so incredible." The exchange of food (wild and domesticated), value-added products, knowledge, and services contributes to the unique identity of McBride and its people. When asked about her

thoughts on the regulated inclusion of wild food in grocery stores in the area, Norma says, "I don't think it would matter, we've all got our own."

> Norma: I've got canned goods. I can trade canned jams for some buffalo or some moose or some elk. And so we do a lot of the old barter system. […] Like, right now a jar of jam is about eight dollars in town and a pound of meat is about three. And we kind of go off that system. I also do a lot of home baking so pies, meat pies, and I freeze 'em or trade. You know, "Well I'm gonna give you so much moose. And in exchange for that I get two jars of jam and three meat pies, or…" And it's just whatever we feel's fair and sometimes it's—we'll help, you know, they'll go hunting and we'll help clean it and preserve it and make the sausage.

The sharing of wild food with friends, neighbours, and family is done by 82% of the interview respondents (Figure 18).

Figure 18. Responses to question asking interviewees if they share wild food *(n = 11)*



McBride's ready access to wilderness and wild food. The results show that interviewees consider the surrounding wilderness, though distinguishable in its physical qualities from the town itself (e.g. unpopulated, forested area), to be an essential element of McBride. Audrey no longer sees the wilderness as being separate from the village, but rather an integral element of it.

> Audrey: When you've lived in a place for as long as we have, well that's home. And I don't think of it as wilderness.

Ready access to and use of the wilderness for the purpose of acquiring wild food is considered by respondents to be important to the residents of McBride. Harry compares the wild food experience of bigger cities to that of McBride, highlighting the ready accessibility of the wilderness, "People say like in Kamloops they'd have to drive like 200 miles in order to pick up their wild game. We just have to drive five minutes."

Some of the respondents indicate that the wilderness is a strong impetus for moving to or staying in McBride.

> Norma: I think you'll find those that weren't raised here […] moved here because of the surroundings. We wanted the quiet, we wanted the beauty, we wanted the chance to be able to walk and talk and hike and get our own stuff.

> Harry: Most people that live here choose to live here, right. Because they like it—small town, close to the wilderness, close to the wildness.

> Margaret: I think a lot of people have been attracted to moving here from elsewhere because for some reason they come through for whatever reason and they've been struck by the beauty. Which, I forget that, I kind of take that for granted, because it's always there, I always see it. But it is an amazing and beautiful countryside.

Shelly, Andy, and Pete express the importance of the wilderness to identity of the people of McBride. Pete says that the presence of the wilderness is meaningful to McBride and contributes to the identity of many.

> Pete: It's significant to the community. I don't know if it's the whole identity or anything. It certainly is for a lot of people. […] Just like the fact that it's there perhaps.

Shelly rather poetically quotes a colloquial saying that suggests the creation of a strong bond between the people and the wilderness through the drinking of the Fraser river.

> Shelly: We always say, "Well if you drink the water out of the river, you're done—you're staying here."

The abundance and prevalence of certain types of wild food in the region contributes to the specialness of McBride. Huckleberries, raspberries, mushrooms (shaggy mane, morels, puffballs), elk, moose, and deer are among the most frequently referenced wild foods in the area. When asked why he thought these types of foods were more important to the people of the region, Pete stated, "Probably because they're more prevalent." However, it should also be noted that less favourable traits of wild food may also contribute to the distinct identity of a place. For example, both Pete and James point out the poor fishing in the area. The legality of fishing near salmon spawning beds make fishing less desirable in the area than in others. Harry indicates that McBride's rural setting and access to wilderness contributes to its unique identity, saying:

> In a rural setting like this […] probably about twenty-five percent of the town eat wild game. It's because there's so much abundance of it. Why wouldn't you? You know, why would you go to a grocery store buy a hundred pounds of deer that's gonna cost you a

thousand dollars? Whereas it costs you like ten dollars in gas and five bucks in bullets and get your own.

Norma acknowledges that while wild food experiences may occur in other places, the ways in which they manifest are unique to a particular environment and the people who live there. And while similar wild foods can be found in many places, she points out that the relationship she has with wild food in McBride differs from that of other places she has lived: "I grew up picking wild berries but, different culture, different environment."

Personal identity. Place identity reflects elements of the self in the environment. This section explores the personal ways in which place identity is expressed through wild food. Shelly links her huckleberry-picking experiences directly to her personal identity. "If the day comes when I'm too crippled to pick my own then you probably should shoot me. What's the point, you know. That'll be it." For Andy, bush experiences are vital in drawing out true elements of the self and of others. He says, "You'd find out who your friends are in the bush," while Lucy says you're able to discover "who is reliable."

> Andy: It's kind of obscure in civilization because you can mask yourself so much. And in a small town it's harder to mask yourself and in the bush, it's impossible. […] And the more you do it, the more you understand that. I used to travel in the bush here, way back. So we always packed and used plates 'cause we didn't have the toys back then. And also it's better to do all that yourself. If you climb a mountain with a quad, any fool can do that. If you climb the mountain with your legs, then by the time you get up there, you're in tune with what you're doing.

One respondent in particular had a deep connection with wild food and considers it to be an extremely important element of his life. However, his connection to McBride is weak and he feels no rootedness in and little belonging to the place. Instead, his experience with hunting allows him to feel more connected to wilderness in general. His practices allow him to experience and navigate unknown territories more easily and make him feel more comfortable in new wilderness areas. While hunting may not necessarily make him feel connected to the place in which he lives, it instead places him as an individual in a system of interconnected species.

> James: You feel more—it's different—I think it's a little bit different when you're gathering your own—you know, some of your own food. I think you've got more of a connection with nature and the whole system, right. The whole food chain or whatever.

Andy reiterates James' sentiment saying that wild food experiences encourage one to "kind of live like a bear."

Knowledge and familiarity. Knowledge and familiarity with a place contribute to place identity, as they allow for intimate and comfortable experiences with place to occur. Knowledge of wild food creates knowledge of the wilderness in which it has been acquired. For Shelly, knowledge of wild food helps her to understand her relationship with a wilderness setting. She recounts her experience of moving to Quadra Island from the age of sixteen to twenty. Her account not only highlights the importance of wild food to her experience of place, but also recognizes its distinct quality in other places.

> Shelly: And I felt like I didn't know the names of any plants, I didn't know what I could eat and couldn't eat. Like, I just didn't know anything about it, so I felt really out of place

there and that was just one of the reasons I felt that way, but it was kind of a big one. Because there's no huckleberries down there. So I'm like, "What's that and what's that and is that poisonous?" You know, everything seemed really foreign. So for me, I think it's very true 'cause I ended up coming home just because I felt like I knew how to live here and I didn't feel like I knew how to live in that environment. […] I always wanted to come home.

The knowledge of significant places or methods for acquiring wild food was described to have been typically passed down through families or learned from friends. Figure 19 describes knowledge acquisition of the interviewees: 72.7% acquired wild food knowledge from family, 27.3% from friends and books respectively, and 9.1% from the internet. Figure 20 shows roughly three-quarters of respondents openly share wild food knowledge. Shelly's knowledge of local plants extends past what is edible. In fact, referring to poison hemlock of the carrot family, she says "probably the first thing I learned as a child was, 'this is the one that you never, ever eat.'"

Margaret: And I'm guessing that traditionally […] kids went with their parents or family and that's how the places sort of carried on, knowing where they are.

James: Me and my brother used to do it when we were kids and lots of my friends did it, so just—yeah got into it and I enjoy it more than anything.

Figure 19. Knowledge acquisition of interview respondents *(n = 11)*

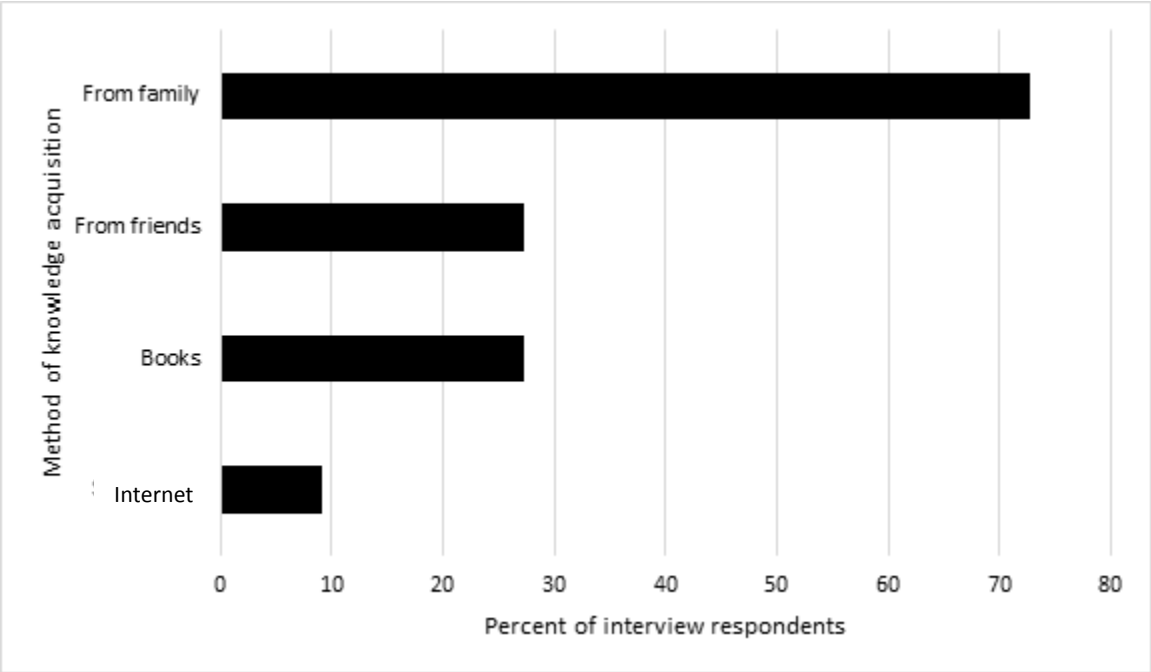
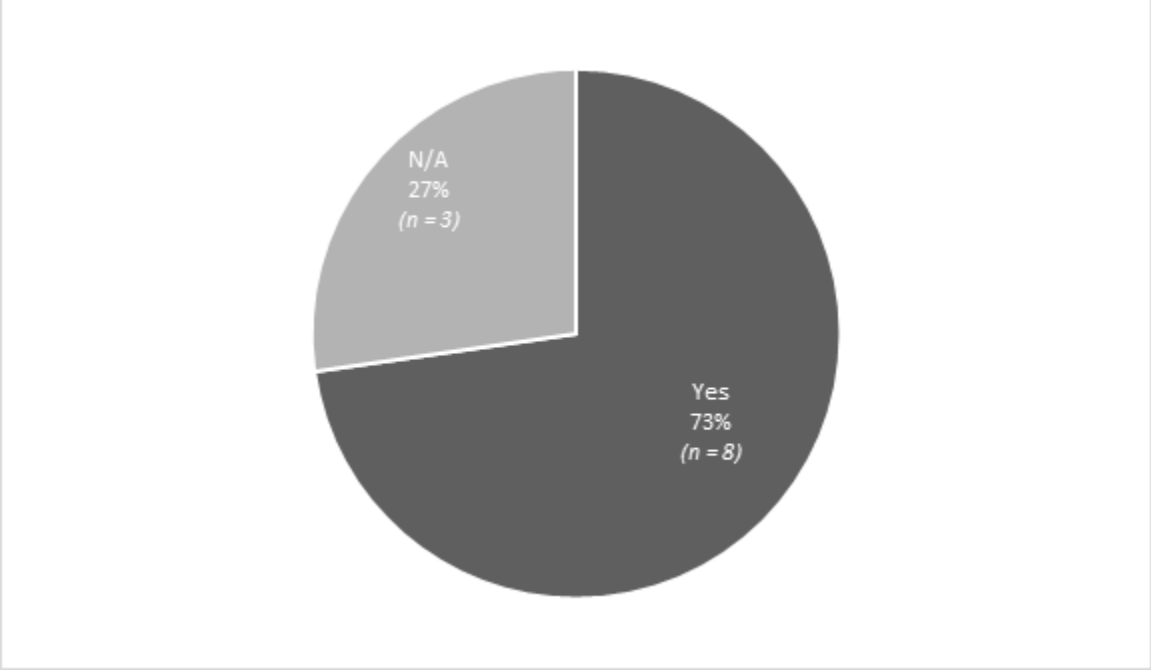


Figure 20. Responses to question asking interviewees if they share wild food knowledge *(n = 11)*



Although Norma has experience picking wild berries while visiting her Grandparents in Cody, Wyoming, she does not currently have the confidence to harvest wild foods in McBride. She says, "I think the hardest thing when you talk about wild food—and what you can and cannot eat and how—is just the learning of it. It's something that has become obsolete in most cultures. And it's really hard to go back and learn it without making yourself sick." She says she has used the internet and talked to neighbours, but the best way for her to learn is to be shown by a native to the area. While she has great interest in understanding the local flora, she has struggled to find time to go harvesting with someone.

Harry is now in the position where he can pass the knowledge he learned from his parents and grandparents to his grandchildren. By sharing his knowledge and experiences with his grandchildren, he is sharing pieces of his personal history while simultaneously creating tradition.

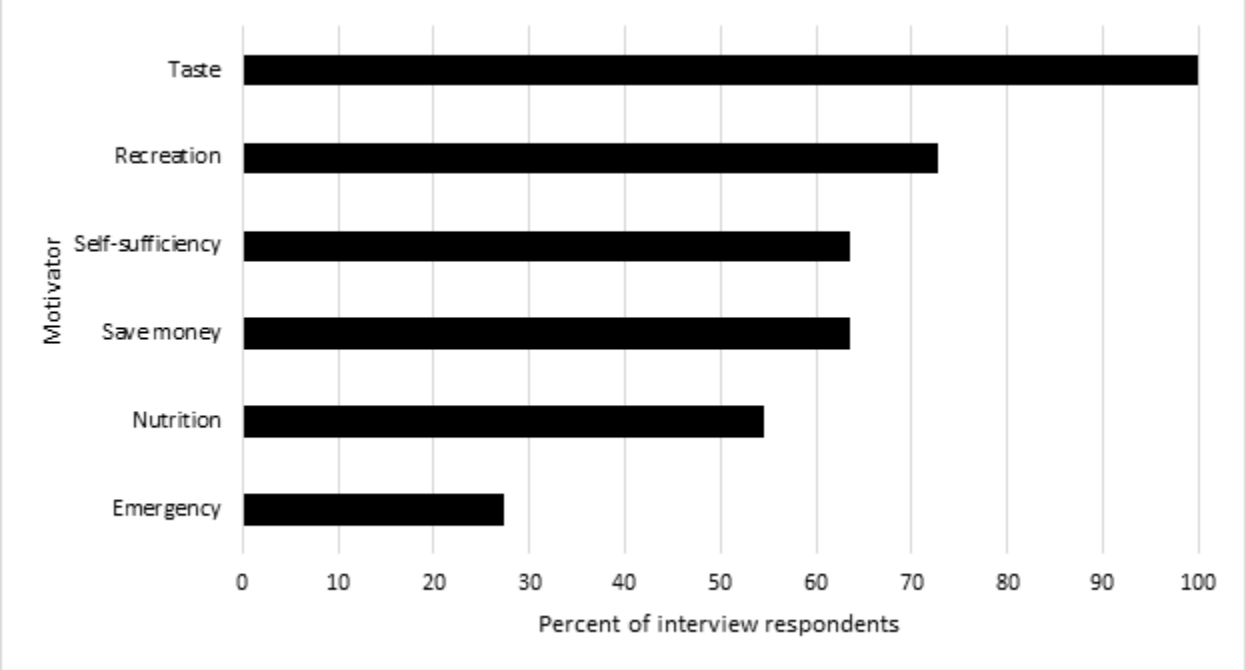
> Harry: Well, I'm sorta getting back into that sort of stuff 'cause we got grandkids now, right. […] So it's kinda you know, trying to get back to tradition like that and then I try to take my other two grandkids on little fishing excursions and stuff like that. Like, you know, showing them, "This is what I did when I was a kid."

James's hunting experience has given him a more formal understanding of the place in which he lives. As legal hunting is restricted to zones, he draws for moose in the 7-3 region, which includes McBride.

Place dependence and wild food experiences. Place dependence refers to the opportunities a setting provides an individual to fulfill his or her activities or goals. This functional dimension of

sense of place is explored to describe how the elements of place meet the needs of the respondent. Content analysis of interview data revealed five distinct functions were identified with reference to wild food experiences: economics, taste, nutrition, recreation, and emergency (Figure 21). These functions were initially explored through a question in the household survey and later explored through content analysis of the interview data. Saving money and self-sufficiency are grouped together as economical motivators.

Figure 21. Functional motivations for consuming wild food among interview respondents *(n = 11)*



Taste. Wild food, almost by definition, is not usually found in grocery stores or restaurants. While there are some exceptions, many wild foods must be acquired from wilderness places personally or by someone familiar. As a result, interviewees often seek wild foods for their

unique flavours that the interviewees link to the place where they acquire wild food. Many are attracted to the flavours of wild foods for their intrinsic value.

> Norma: The mountain blueberries around here are fantastic.
>
> Ben: I'd go out picking morels right now if I can find some 'cause they're tasty.
>
> Shelly: I love [huckleberries]—they're delicious.
>
> Lucy: The new growth on spruce trees in the spring, [Andy] always nibbles on that. It's a little strong for me, but he enjoys them.

Pete points out that many wild foods are not grown domestically or available for purchase in grocery stores, so they can only be found in certain places through hunting, fishing or gathering (Table 16).

> Pete: Huckleberries, as far as I know, are not grown domestically, so it was something you could only get by [picking].

Other respondents go on to describe the taste of wild foods in contrast to their domestic counterparts and value the depth of flavour of wild foods.

> Harry: I do like the taste of fresh fish rather than a canned fish or a fish that's in a grocery store. […] A couple years ago I went up to Moose Lake and I caught about an eight-pound lake trout. It was probably the best fish I had tasted for years, because it's in very cold water. A lake trout is a char so it's white meat and it was just—we barbequed it—it was just beautiful. And you can't get that from the store.
>
> Audrey: Blueberries though—and they're wild, we don't buy blueberries. I know the bought ones are larger, but they're not as flavourful.

Margaret: And that's the only liver I'll eat is moose liver. I had no problem eating moose liver. Other livers, not fond of.

Nutrition. Similar to taste, interviewees are motivated to eat wild foods because of their nutritious value.

Andy: They have the vitamins and minerals that we need.

Margaret: I mean the nutrition available is incredible. A lady that […] had been in Germany in the war […] said they made nettle soup all the time—it's delicious.

The wilderness area surrounding McBride provides village dwellers the opportunity to hunt, fish, and forage for healthy alternatives to store-bought food. As illustrated by the following statements, interviewees refer to wild food as a healthier choice than store-bought or conventionally produced farm food.

James: I enjoy it and it's healthier food. I like wild meat rather than [store-bought].

Shelly: It's healthier. It's generally leaner meat and you know that it's not full of chemicals—or you're hoping it's not. You know, so it ought to be a lot healthier for you than some of the things you get in the store.

Harry: And the thing is, wild game doesn't have any fat. […] There's no steroids put in it. It's not sat there in a pen and fattened up. And you can see it when you buy meat how much fat is in it, right. And you know, moose is very lean, deer is very lean, I mean, bison. All these different types of wild game—there's no fat. They don't have fat, really. Well, a couple species do like moose can get fat, depending on the year, right. But that's

for their own reserves, right. But it's not from just being lazy, you know, like stuck in a pen.

Recreation. Recreation was identified as an important motivator for participating in wild food experiences. The surrounding wilderness provides the backdrop in which such experiences may take place. James indicates that hunting is a good recreational activity in such a place, as "there isn't much else to do." Berry picking for Shelly provides her with opportunities to spend time with her mother or for solitude in the forest.

> Shelly: I usually take mum berry picking but if I want to be alone I'll just leave. I'll just go being alone in the forest. It's why you go out there. You know, there's no phones, nobody asking you to go to work, nobody asking you to crawl under their trailer and fix their plumbing. There's no relatives. There's no step relatives! Just me and the dogs, right. So it's very peaceful and you get a chance to relax and unwind.

Margaret has recently starting exploring wild native plants that volunteer in her yard.

> Margaret: Every year's an experiment and it's just kinda fun.

James hunts for recreational reasons mainly, and any meat he gets from experience is an added bonus. For him, challenge and excitement are the feelings he most often associates with hunting.

> James: It's just the love of the hunt. Finding what you're looking for. And you know, like some things, especially when you've got a challenging hunt, it might take you a couple weeks or years, several years before you find what you're after. […] What I like is the time when I find what I'm after to the time I pull the trigger—that's really what keeps me doing it. I enjoy that part of it. It's just adrenaline, just like any other thing you'd do for excitement.

Andy and Lucy often explore the surrounding wilderness with their off-road vehicle. While raspberry picking may not always be the primary impetus for exploration, picking wild raspberries is associated with the feelings of enjoyment they get.

> Lucy: We cruise all the roads and if it's raspberry time, we pick the wild raspberries. I mean, we have raspberries growing here too, but if we're out in the bush enjoying being out, we'll pick wild raspberries too.

For some interviewees, feelings of enjoyment are associated with the social opportunities that wild food experiences allow.

> Norma: Out of the harvesting and the growing of the local produce and of gathering some of the berries and stuff—yes, that's fun. That's—you get a group of ladies together, take a picnic lunch, and we gossip and pick berries and laugh and carry on.

Harry and Lucy associate the social opportunities mostly with past experiences. Harry talks about picking wild asparagus as a child, and Lucy references times when her children were young.

> Harry: Say you go out for the day and you're getting wild asparagus, you'd spend the whole day swimming in the lake or hiking or you know. And my mom always packed a picnic basket, so of course you know, you'd have your cast iron frying pan with onions frying and your hotdogs and relish and all that stuff and make a day of it!
>
> Lucy: So you'd go out as a family or with your neighbours and have an afternoon picking berries. And you'd come home with lots.

Emergency. Wild foods were identified by some interviewees as being important for their value as emergency foods. Emergency foods are directly related to experiences in place. For Norma, wild foods harvested or traded for from spring to fall may become necessary in the winter if Highway 16 that goes through McBride on becomes impassable.

> Norma: We've got a cold storage room; we've got a huge pantry. So when you do this and you live here, because the roads become impassable in the winter, you have a deep freeze and you stock up for the winter.

Similar to Norma, Lucy highlights the value of wild food if food supplies to McBride are cut. She also speaks to its importance as a bush food if one became lost in the wilderness.

> It's nice to know about the other foods that are available in case you were ever lost in the bush or food supplies were cut. That's how I think of the wild foods is in—well many of them, I don't use them now, but I know I can use them if I need to. For example the cambium layer on birch trees—do you know?—or dandelions, stinging nettle—'cause I know these things are edible and I rarely, but occasionally have harvested them and they're there and I like to know that they're there.

Harry references the value of his wild food knowledge in the event of an emergency of great scale: "I know that if there was some kind of major catastrophe, I could survive in the wilderness.

Self-sufficiency and economics. Self-sufficiency and economic reasons are considered by most interviewees to be an important motivation for engaging in wild food experiences (Table

18). Shelly points out that the socioeconomic position of residents necessitates the town's overall dependence on wild food.

> Shelly: Well, if you don't have a lot of money, that's a lot of food to feed yourself or your family or whatever. I think people around here have always been a little bit on the poor side. So, anything you can get for free is good.

Interviewees expressed views demonstrating that the surrounding wilderness provides an essential function in meeting the needs of McBride dwellers, as it contains necessary foodstuffs to augment their pantry, and lessens the dependency on food that must be purchased. For Ben, the primary purpose of hunting and fishing is to acquire wild food, whereas for James, acquiring food from hunting is an added bonus.

> Ben: I don't do stuff for enjoyment. Fishin' or huntin'. I do it for the food. That's what I've always done it for.

> James: I mean it's nice to be able to fill the freezer. [...] It's not like I never bought meat. But I haven't had to buy much the last couple years, because of […] the amount of hunting I've been doing.

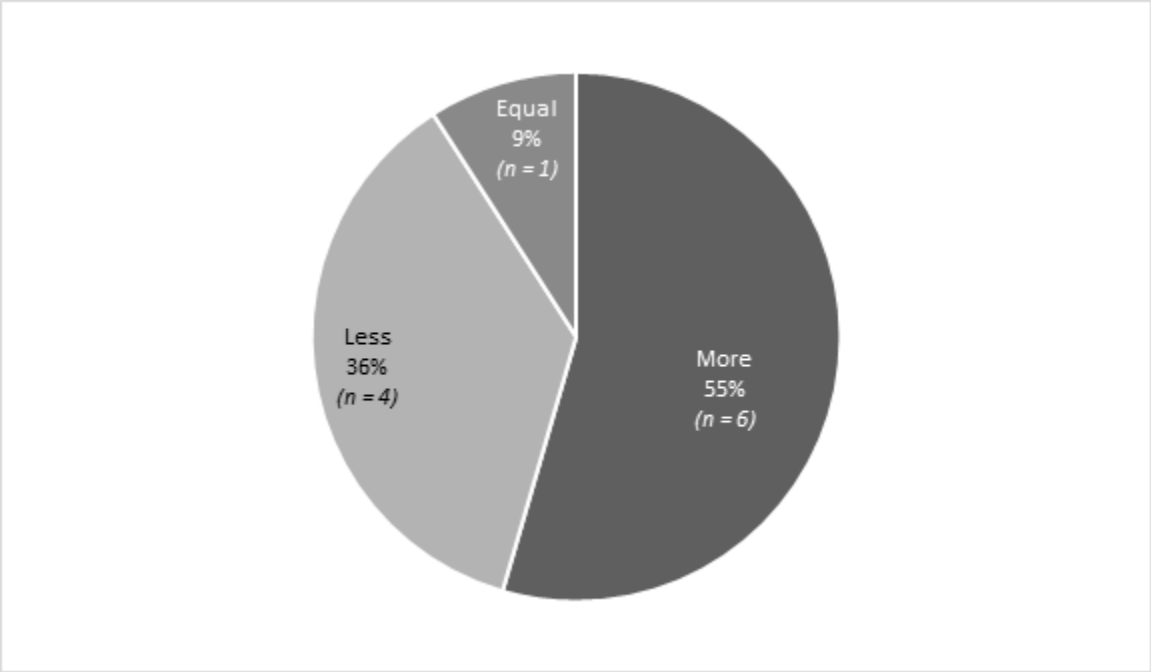
Margaret and Shelly are interested in the self-sufficiency facet that wild food allows. With her garden and berry picking, Shelly no longer purchases fruit or vegetables from the grocery store.

> Margaret: It's sort of working towards self-sufficiency idea. And I'm still learning—there's so much to learn.

Shelly: I don't actually purchase any fruit or vegetables from the grocery store anymore. Basically, with my garden and the berries that I pick I don't have to buy fruit and vegetables. I have everything I need and I can store it in the cellar.

Changes in place dependence. Approximately half of the interviewees note a decline in personal consumption of wild food throughout their lifetime. While all other motivators remain consistent throughout the interviewees' lifetimes, self-sufficiency and saving money are associated by many with the past. Figure 19 shows the interviewees' wild food consumption over their lifetime and indicates that, with the exception of one respondent, wild food consumption changes over time: 54.5% eat less wild food compared to past consumption, 45.5% eat more, and 9% eat roughly the equivalent.

Figure 22. Present wild food consumption of interview respondents compared to past *(n = 11)*



Changes in wild food consumption were explored further (Table 22). One interviewee attributes the decline in wild food dependence to the "ready availability of food." Another suggested that times were simply "better economically." Harry, for example, estimates his childhood diet consisted of eighty percent wild food, but now makes up less than ten percent. Lucy raised her children on wild game from the area, but says she no longer depends on it.

> Lucy: I mean my kids grew up on moose meat and venison and we don't hunt anymore. We'd rather have the moose and deer wander safely through the yard than think of putting them in the freezer. But in the past, I have depended on that.

Audrey simply states that because times are better economically, people do not need to hunt as often.

> Audrey: Well, people in the area, […] various people, hunted. And probably not just for the challenge and the fun of it, but for economical reasons. […] People don't do it as much as they used to.

Ben and Pete decreased their wild food acquisition as they noticed an increase of wastefulness.

> Ben: I used to eat moose and deer all the time, but the last two moose I got, got freezer burnt and I tossed 'em in the garbage. So I quit huntin'.

> Pete: I haven't actually gone huckleberry picking in a while. […] I have a tendency to wind up forgetting them in the freezer, so it just seems like a pointless exercise.

Norma and Ed on the other hand are largely motivated to eat wild food for health reasons. The ready access of wild food in McBride allows them to realize this goal and they have increased their wild food consumption since moving there.

Norma: In my case it has always been because—if I've grown it or it's grown wild—I know what's in it, where it's been, what's happened to it. And like I said I have severe allergies.

Place attachment and wild food experiences. Place attachment is understood broadly as the emotional bonds a person has with a particular location. All sentiments were categorized by interviewee as they related to the McBride area. Analysis of the interview data was employed to understand this dimension of sense of place. Some relevant survey data are included in these results (Figures 23, 24 and 25).

Interviewees were asked a series of questions that related specifically to the social and environmental (built and natural) facets of place attachment. They were asked if their wild food experiences make them feel more connected to the surrounding wilderness (82% said yes, Figure 20), to people (73% said yes, Figure 21), to the Village of McBride (73% said yes, Figure 22).

Figure 23. Interview respondents' connection to surrounding wilderness through wild food experiences *(n = 11)*

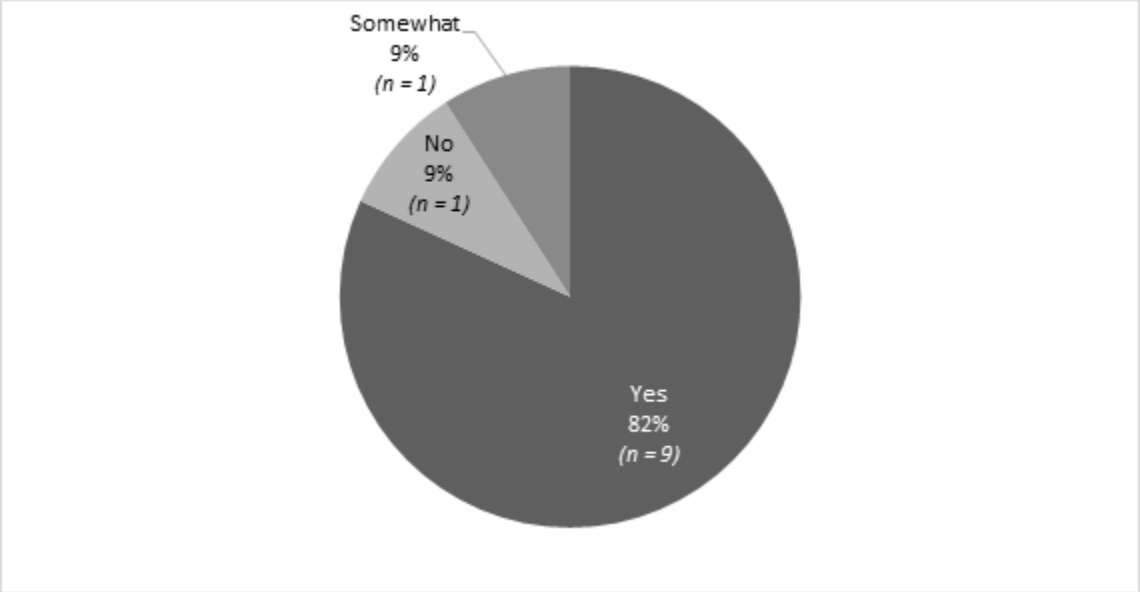


Figure 24. Interview respondents' connection to people through wild food experiences *(n = 11)*

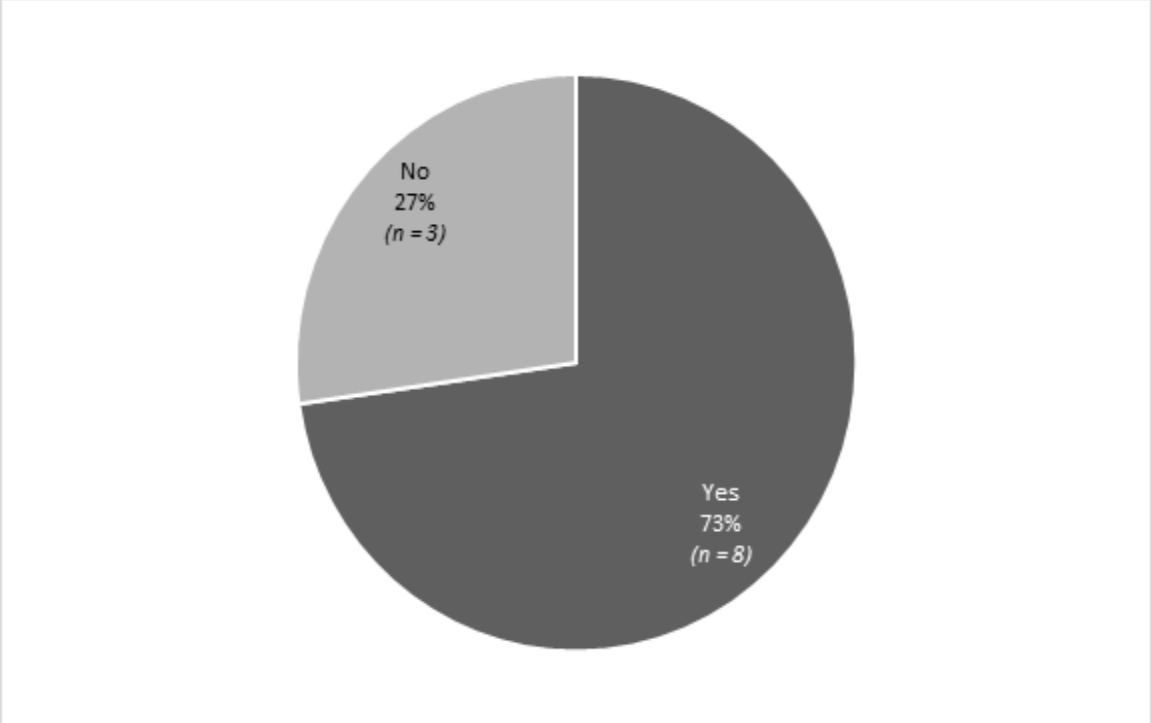
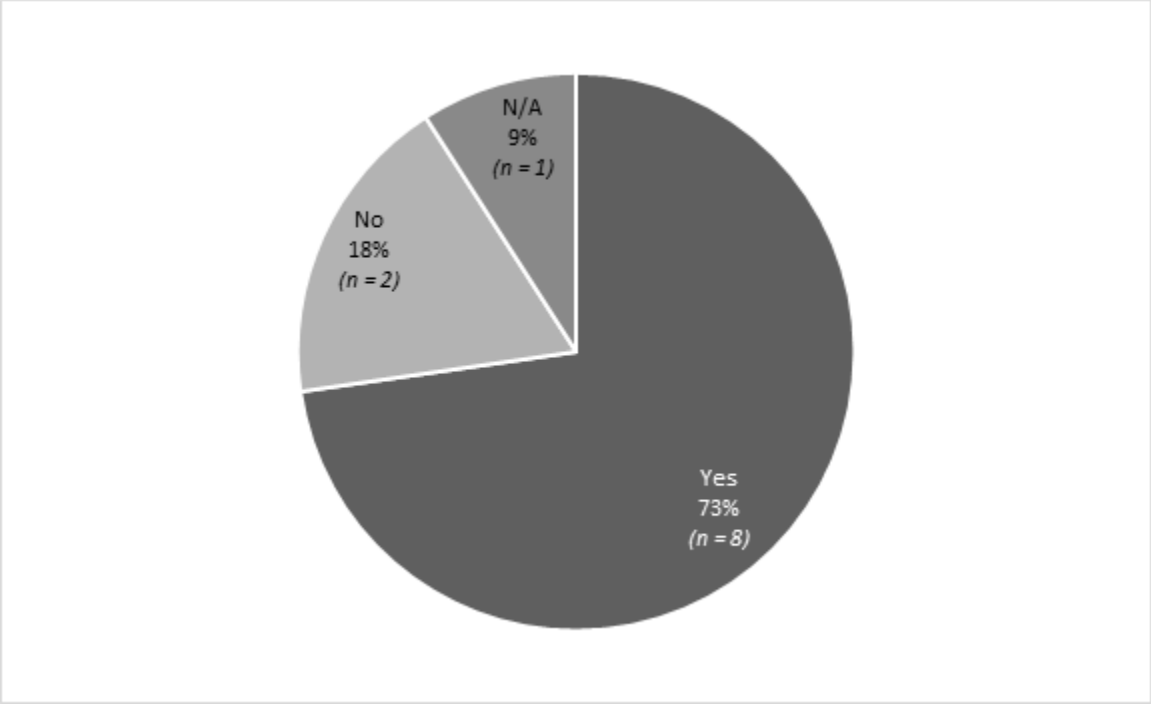


Figure 25. Interview respondents' connection to Village of McBride through wild food experiences *(n = 11)*



Care/concern. Care and concern are typically articulated by employing proper harvesting and hunting techniques or interest in plant and animal populations and their continued availability in the area. Most interviewees expressed either care or concern for place in specific reference to wild food experiences. Harry and James expressed care through their understanding of species preservation, as both are interested in the maintenance of local game species. An avid hunter, James describes his practices as "conservative" and indicates it is important to him that populations are maintained and hunting laws are obeyed.

> James: Definitely a conservative. There's lots of stuff that I don't agree with that they allow. Like, for instance […] in this area they have a calf season on moose for ten days or something.

Harry describes how conservative hunting techniques can ensure the continuation of deer populations.

> Harry: I think that people that hunt want to preserve because they know if they—you know, if there's like four deer there and three are does and a buck, they're probably gonna take maybe one doe out of that. So they know the species is gonna survive. They won't shoot the buck because then they know that that's the end of the species, basically. So they'll take one of the does.

Margaret expresses concern for the regional salmon populations due to their exposure to radiation from the Fukushima nuclear disaster which occurred in Japan in 2011.

> Margaret: Well, especially now it's going to get quite interesting because the ocean fish and therefore the salmon are [exposed to radiation]. What's this radiation travelling across the ocean from Japan going to do to them? And they are, they come up here to spawn and they spawn up here. Go down and they're exposed to that, come up again, and you know.

Shelly shows her concern for local huckleberry populations due to the increasing unsustainable practices in the area.

> Shelly: Actually, I've noticed people that used to be sustainable. […] But I notice now there's more […] stepping on the trees, breaking branches, […] picking the leaves and everything along with the berries. […] I think because people are in a hurry and they want the most berries they can have in the shortest amount of time. So, basically, they just go and kinda rip everything into their bucket. So, yeah, you do see damage to the berry plants and things that you didn't used to see.

When asked about the regulated inclusion of wild food in McBride, Pete expressed some concern for species populations: “Hmm, I have mixed feelings. It’d be nice if it was available, but I can see overharvesting complications.” James expressed distinct opposition to including wild food in the food system as it may “open the door for illegal activities” or threaten a way of life for some people.

> James: If they could market it and there was money in it, […] it would probably limit the guys that do it […] because they love doing it […] and become more of a harvesting of resources.

Shelly too has mixed feelings concerning a more regulated inclusion on wild food in the food system. She thinks it might be an interesting initiative provided it was carried out sustainably and indicates it might provide a good income for those who may have lost their jobs due to the sawmill closure. However, she feels this would conflict with her personal experience of harvesting, and again is concerned about the lack of care this may bring to the forest environment.

Comfort. Feelings of comfort in place are also expressed in relation to wild food experiences. Typically, feelings of comfort are expressed in reference to familiarity in wilderness settings. Andy and Lucy winter in the village and have a seasonal homestead in the McBride area. Lucy indicates that she gets a sense of security knowing an emergency supply of food can be harvested if necessary.

> Lucy: It’s nice to know about the other foods that are available in case you were ever lost in the bush or food supplies were cut.

Harry expresses a similar sense of security from having his knowledge of the wilderness and its food sources.

> Harry: I know that if there was some kind of major catastrophe, I could survive in the wilderness. […] 'Cause I know enough about the wilderness, where if I were sent out there, if I had just, you know, a pack of matches or a lighter, I know I could survive. 'Cause I've read, I've watched, I've learned from relatives and that. You know, like bulrushes—like I have 'em in my pond and stuff—but that's an edible food source.

James hunts recreationally for both trophies and meat and will typically include hunting in vacation time or even vacation for the purpose of hunting. He notes that his experience allows him to feel comfortable and confident in the bush, regardless of setting, saying "I'm comfortable in the middle of nowhere, in the middle of nowhere."

> James: It makes me feel more comfortable—I mean, you learn about the bush so you're more comfortable in the bush.

Shelly, on the other hand expresses her comfort with the McBride area by contrasting it with her discomfort living in a coastal environment for four years. Her discomfort there was directly linked to her unfamiliarity with the environment.

> Shelly: I felt really bewildered and unhappy because actually I didn't know anything about the landscape. […] I never felt comfortable completely down there.

Enjoyment. Wild food experiences are often associated with feelings of pleasure, joy, or excitement. Typically, feelings of enjoyment are expressed in reference to recreational activities that are associated with wild food, such as fishing, hunting, or berry picking. Berry picking for

Shelly provides her with opportunities to spend time with her mother or for solitude in the forest (see above, p. 68). For James, challenge and excitement are the feelings most often associated with hunting (see above, p. 68).

Feelings of enjoyment are sometimes linked to the social opportunities that wild food experiences allow. Norma and Harry both talk about making a day out of harvesting wild plants with friends and family. Harry talks about picking wild asparagus as a child in the Okanagan, and Norma references berry picking with friends in McBride.

DISCUSSION

This research sought to explore sense of place through the lens of wild food experiences. The primary research question was: In what ways do wild food experiences contribute to sense of place in the village of McBride? There were three sub-questions. (1) Do wild food experiences help draw the surrounding wilderness into the sense of place of residence? (2) Do senses of place differ among wild food consumers? (3) What is the prevalence of wild food in the village of McBride? This study revealed the connection of wild food experiences with the place of residence of the respondents, the Village of McBride.

Contribution of Wild Food to Sense of Place

The results showed that wild food experiences contribute to sense of place in McBride, BC. First, the results show that wild food is prevalent in McBride. It is important to the way of life of wild food consumers and holds an important economic place within the food system. Berries, moose, fish, deer, mushrooms, and birds are the most consumed wild foods (by percentage, frequency, and weight) in the area. The most important motivations for consuming wild food are nutrition, saving money, recreation, and connecting with nature.

Instructions given to households asked for the person most involved in wild food to complete the questionnaire on behalf of the household. The responses, therefore, provide some insights about the consumption of wild food among residents, but do not represent all residents of McBride. Some differences are found between genders and length of residence. While men and women consume wild food almost equally, differences exist between method of acquisition and amount of wild foods consumed. Some differences are found between genders and length of residence. While men and women consume wild food almost equally, differences exist between

method of acquisition and amount of wild foods consumed. Length of residence appears to be directly related to engagement in wild food in general (level of consumption and estimated household value). However, presumably due to the general transferability of wild food skills, length of residence was not shown to be an important variable in the connection of wild food experience to sense of place amongst interviewees.

Table 12 provides a summary of the qualities of wild food experiences as revealed by interviewees and the three dimensions of sense of place. The greyscale represents the numbers of interviewees associated with each indicator of sense of place. Light grey represents one to four interviewees (some), medium grey five to seven (several), and dark grey eight to eleven (most).

Table 12. Contribution of wild food experiences to sense of place dimensions

Place identity	**Place dependence**	**Place attachment**
Regional history	Save money	Awe
Familiarity and knowledge	Taste	Comfort
Personal identity (Elsewhere)	Nutrition	Enjoyment
Personal identity (McBride)	Recreation	Belonging
McBride identity	Economics	Care and concern

As evident in the summary table, many qualities of wild food experiences relate to the three dimensions of sense of place. Wild food experiences contribute across all sense of place dimensions for each respondent, and manifest slightly differently between wild food consumers. For example, Norma and Shelly mentioned day trips of picking huckleberries in the surrounding

area. For both, picking berries is a recreational activity that supplements the pantry. However, berry picking provides Shelly peaceful solitude, whereas for Norma, it is a chance to engage in social bonding. Differences in sense of place dimensions by interviewee (e.g. primary method of acquisition, gender, length of residence) were insignificant. It should be noted that differences by method of acquisition may be difficult to discern as most interviewees employed multiple methods of wild food acquisition. The insignificance of differences by length of residence may be accounted for by the fact that wild food skills are transferrable from other places. This is especially true as all interviewees either grew up in McBride or moved to McBride most recently from within British Columbia.

This study takes the position that sense of place comprises three dimensions: place identity (elements of the self that are reflected in place), place dependence (functional aspects that place provides), and place attachment (emotional bonds to place). The primary goal of this research was to explore the contribution of wild food experiences to each dimension of place to reveal their contribution to the overall sense of place. The results show that wild food experiences contribute to sense of place in McBride through all three dimensions of sense of place. As evident in Table 20, wild food contributes most to place identity through personal history and McBride identity; place dependence through taste, nutrition, recreation, and economics; and place attachment through comfort, enjoyment, and care and/or concern.

Identity. Wild food experiences contribute to dimensions of the self that are reflected in place through direct personal identity and the through personal connection to the overall identity of McBride. Many respondents linked wild food experiences to the general socioeconomics of McBride residents and the overall food system of McBride. Norma speaks to the importance of

wild food to the McBride identity when she describes the food system and the unique qualities that it has:

> "Most of the people in town that come here to hunt or fish or that live here and hunt and fish, don't just hunt and fish, they hunt and fish and they trade for a hind of beef or for some buffalo or you know, 'I've got a moose I only need a third of it, I'll trade you for you know, so many jars of jam and so many homemade bread for a month or'—it's just what we do."

The inclusion of wild plants, animals, and fungi in the food system requires knowledge of the bioregion and speaks to Kloppenburg et al.'s (1996) call for place-based foodsheds.

Dependence. Many qualities of wild food experiences are linked to sense of place through the functional qualities that wild food provides, particularly for its economic, nutritional, taste, and recreational values. As place dependence is considered to be a "functional connection based specifically on the individual physical connection to a setting" (Raymond, Brown, and Weber, 2010, p. 426), it is abundantly clear that wild food experiences require easy access to wilderness. Moreover, if wild food is to fulfill the functional needs in the place one lives, one would require easy wilderness access from their place of residence.

Attachment. Wild food experiences contribute to the emotional bonds the respondents have with McBride, including feelings of care, comfort, enjoyment, belonging, and awe. Feelings of attachment, rootedness, and belonging to places come from communal and personal experiences that foster a "familiarity that is part of knowing and being known *here*, in this particular place" (Relph, 2008, p. 34). Shelly's experience with wild food in McBride versus her experiences on

Quadra Island are a poignant example of the ways in which wild food experiences contribute to place attachment and identity:

> I felt really bewildered and unhappy because actually I didn't know anything about the landscape. And I felt like I didn't know the names of any plants, I didn't know what I could eat and couldn't eat. Like, I just didn't know anything about it, so I felt really out of place there and that was just one of the reasons I felt that way, but it was kind of a big one. Because there's no huckleberries down there. So I'm like, "What's that and what's that and is that poisonous?" You know, everything seemed really foreign. So for me I think it's very true 'cause I ended up coming home just because I felt like I knew how to live here and I didn't feel like I knew how to live in that environment. […] I liked the ocean. It's not hard to get attached to the ocean. It's interesting and beautiful. But I still—I always missed it here. I always wanted to come home—I never felt comfortable completely down there.

Sense of Wilderness as Place

Wilderness is important for sense of place in McBride and wild food experiences are meaningful ways of bringing wilderness into sense of place. Wild food experiences are unique place experiences as they bring elements of the wilderness into the place of residence in a tangible way: a physical piece of wilderness is brought from the outside in. Unlike experiences that may be considered more purely recreational, such as skiing or sport fishing, wild food experiences bring material elements of the wilderness back into the place in which the forager/hunter/fisher resides. As a result, the sense of place implications of the experiences in the surrounding wilderness are felt throughout the village. Such experiences create connections

between friends, family, and neighbours, and draw the wilderness into the sense of place. For instance, picking berries may, upon first glance, appears to be a simple activity that takes place in the late summer/early fall months to supplement one's pantry. Upon further investigation, however, it becomes apparent how impactful such an activity may be upon the sense of place of an individual or group. Table 13 summarizes the sense of place implications of picking berries in the McBride area. The first column shows experiences mentioned by interviewees, while the second column shows the sense of place implication of such experiences.

Table 13. Berry experience and sense of place implication

Wild food experience	**Sense of place implication**
A day trip of berry picking	Recreation, social bonding
Recognizing berries in the woods	Familiarity with plants in surrounding area
Picking berries in sustainable manner	Care and concern for environment
Teaching children about harvesting	Connecting generations and maintaining tradition
Sorting and processing collected berries	Supplementing pantry, social bonding
Trading a jar of jam for moose meat	Strengthening social ties to neighbours
Consuming moose meat with family	Social bonding
Reflecting on past berry picking experiences	Personal identity

Wild food experiences transcend place literature that relates to food and wilderness as wild food experiences contribute to sense of place whether in relation to its quality as food or as a wilderness experience. The results from this study reiterate the powerful connection between place and food as suggested by the literature (Delind, 2006; Dusselier, 2002; Gombay, 2010;

Sims, 2009). Local food scholars (Feagan, 2007; Kloppenburg, Hendrickson, and Stevenson, 2006) support the creation and maintenance of place through food movements and argue that such "visible practices" (Feagan, 2007, p. 30) will lead to better, more sustainable people-place relationships. While the prevalence of wild food in the McBride food system is clear, it can hardly be classified as an intentional movement. Rather, wild food experiences exist as a result of the geographic and economic circumstances that are inseparable from the place itself. In essence, wild food experiences are as much an expression of place as they are contributors to sense of place.

Wild food experiences bring qualities of wilderness into the discussion of place and food. It is the wilderness element after all that distinguishes wild food experiences from other food and place studies. This adds more depth to the already rich relationship identified between people, the places they live, and the food they eat. Delind (2006) posits that northern Indiana residents can create richer relationships with their place through learning about and consumption of the paw paw, a plant native to the region. Similarly, experiences with wild local plants, fungi, and animals by McBride residents arguably display the interaction between the social, ecological, and biological as seen in Table 13.

Wild food experiences not only bring qualities of food into discussion of place and wilderness, but also can contribute to bringing wilderness into the overall sense of place of residence. The results from this study are consistent with literature associated with forest resources (Mitchell et al., 1993) and leisure studies (Frederickson & Anderson, 1999; Bricker & Kerstetter, 2000) that have shown that wilderness experiences contribute to a sense of place in wilderness settings. This study shows that wild food experiences in wilderness settings (1) contribute to a sense of place where wild food was acquired, and (2) the residence of the

hunter/fisher/harvester, effectively bringing wilderness into the overall sense of place of residence. This will be discussed further below.

This study examined the dimensions of place as they relate to wild food experiences to explore the ways they contribute to a sense of place in the wilderness, but also the ways in which they bring wilderness into the sense of McBride. While other processes were mentioned as contributors to creating sense of place in wilderness settings (e.g., hiking, camping), most respondents indicate that wild food experiences are important in fostering this connection. In a unique way, wild food brings the wilderness into the sense of place of McBride through all dimensions of sense of place (identity, dependence, attachment).

Identity. Wild food experiences contribute to dimensions of the self that are reflected in the wilderness through direct personal identity and through personal connection to the overall identity of McBride. Most interview respondents indicated that the wilderness is essential to their personal identity and the overall identity of McBride and (with the exception of one interviewee) wild food experiences contributed to creating a sense of place in the surrounding wilderness. For example, James says his hunting experiences connect him "with nature and the whole system, […] the whole food chain." This speaks to the ecological self, or self-identity that includes the natural environment (Frederickson & Anderson, 1999), as well as Aldo Leopold's ecological community, making him a "participant in an ecological community that includes prey and predator" (Kalinowski, 1996, p. 147).

Dependence. Many qualities of wild food experiences are linked to sense of place in the wilderness surrounding McBride through the functional qualities that wild food provides, particularly for its economic, nutritional, taste, and recreational values. McBride's ready access to the wilderness and the availability of certain types of wild food allow for wild food

experiences to be more easily carried out. For example, hunting in the surrounding area of McBride is not only much more acceptable than doing the same in the Greater Toronto Area, it is more feasible. James said that one of the reasons he chose to make a short-term move to McBride was "the good hunting in the area." Berries (huckleberries, raspberries, Saskatoon berries) mushrooms (shaggy manes, morels, puffballs), moose, and deer are among the most abundant wild foods in the area and, as a consequence, are the most frequently consumed wild foods. As mentioned above, it can be estimated that the village consumes 635-2270 kg of berries, 2085-7485 kg of moose, 1630-4765 kg of deer, 545-2085 kg of fish, 105-455 kg of birds, and 75-385 kg of mushrooms per year for an overall yearly value of $75,000-$245,000.

Attachment. Wild food experiences contribute to the emotional bonds the respondents have with the wilderness surrounding McBride, including feelings of care, comfort, enjoyment, belonging, and awe. Wild food experiences require familiarity and knowledge of wilderness settings for all interview respondents encourage a sense of care and concern for the wilderness surrounding McBride. This reflects Relph's (2008) position that familiarity of a setting creates emotional bonds and with it such bonds foster care and concern.

Place and Time

Wild food experiences were linked in many cases to other places and times, yet inform sense of place in McBride regardless. Space and time are attributes that transcend all dimensions of sense of place as they relate to wild food experiences. Wild food experiences in McBride were linked to other places and times through past and present places of residence and/or recreation: The Village of McBride, the regional wilderness of McBride (Robson Valley), and other places of residence in British Columbia, Canada, or internationally. Wild food experiences in other places

inform sense of place in McBride, particularly through its contribution to personal identity. The contribution of wild food experiences to sense of places other than McBride varies among interviewees (see Table 14).

Table 14. Scale of wild food experiences as they relate to space and time by interviewee

Respondent	McBride	Robson Valley	British Columbia	National/ International
Margaret	Strong	Weak	N/A	N/A
Ed	Strong	Moderate	Weak	N/A
Norma	Strong	Moderate	Weak	Weak
Andy	Strong	Strong	N/A	N/A
Lucy	Strong	Strong	N/A	Weak
Audrey	Strong	Strong	N/A	Weak
Shelly	Strong	Strong	Weak	N/A
Pete	Strong	Moderate	Moderate	N/A
Ben	Strong	Moderate	Strong	N/A
Harry	Strong	Strong	Strong	N/A
James	Strong	Strong	Strong	Strong

Table 14 illustrates further the individualized breakdown of the scale (influenced by space and/or time) of wild food experiences into either strong, moderate, weak, or not applicable (N/A). The lightest shade of grey (weak) indicates that wild food experiences contribute to one dimension of sense of place, which is in all cases place identity. The medium shade of grey (moderate) indicates that wild food experiences contribute to two dimensions of sense of place.

For example, wild food contributes moderately to Glen's sense of place in the Robson Valley, as his past experiences contribute to his personal identity (place identity) and to emotional bonding (place attachment) with the area. However, he no longer regularly engages in wild food experiences in the area, and therefore the Robson Valley no longer fulfills a functional element of sense of place (place dependence). The darkest shade of grey (strong) indicates that wild food experiences contribute to all three dimensions of sense of place.

Shared characteristics between respondents help explain the differences observed. Based on similarities, interviewees can be broken down into five categories (1 = Margaret; 2 = Ed and Norma; 3 = Andy, Lucy, Audrey, Shelly, and Pete; 4 = Ben and Harry; 5 = James). Category 1 contains only Margaret, a relative newcomer to wild food, but long-time resident of McBride. She has minimal experiences with wild food, only harvesting wild plants that volunteer in her garden. Category 2 contains Ed and Norma, newcomers to both wild food and McBride, but very much engaged in the local food system and interested in learning more about wild edibles. Category 3 has the greatest number of respondents. All are long-time residents of McBride and/or the Robson Valley and have had many important experiences with wild food in the area over their lifetimes. Category 4 consists of Ben and Harry. These respondents have all lived throughout British Columbia and/or Alberta and have significant wild food experiences in McBride and elsewhere. Category 5 is made up of only James, a self-proclaimed short-term resident of McBride for whom hunting has long been and likely will continually be an integral element of his way of life.

All dimensions of sense of place are affected by the attribute of time to wild food experiences. The dimension of time is important for sense of place, as it is over time that meaning and culture become embedded. Relph (2008) highlights the awareness of the

persistence of a place through time as a criterion for creating and maintaining a sense of place, and Tuan (1977) suggests that place is "time made visible" (p. 179). While time was not explored as a distinct dimension in this study, its relationship with wild food experiences is evident in the results. Typically, wild food experiences were linked to place and time through memories of past wild food experiences and interest in conservation and/or sustainability. One respondent linked the history of McBride directly to wild food, describing the emergence of more berries from the settling of the area and the building of the railway (see p. 55). Most respondents indicated that wild food experiences have a strong connection to time, connecting one's present sense of place to both the past and the future.

Wild food experiences, for all respondents, are tied to memories of past experiences, whether in McBride or elsewhere. While not all wild food experiences are explicitly linked to the place in which the interviewees currently reside, past wild food experiences give context for present wild food experiences in McBride. Harry, for example, has lived and fished in the McBride area for twenty years and considers the place to be home, even if many of his wild food experiences reference his childhood in the north Okanagan region of British Columbia. Audrey, on the other hand, links her wild food experiences to habits that became ingrained when living in Saskatchewan throughout the First and Second World Wars and Great Depression. Wild food experiences can provide insight into the socioeconomic position of a place at a given time. In Audrey's case, wild food experiences were directly influenced by war and economic depression and speak largely to the functional role (place dependence) wild food played. In turn, such experiences inform personal identity (place identity) and the development of emotional bonds with places (place attachment).

Conservation and sustainability are essential concepts in providing a further temporal dimension of wild food experiences by connecting present practices to the future. All interview respondents who currently engage in wild food experiences indicated that they employ sustainable methods for the purposes of conserving populations. The conservation and sustainability of wild food practices addresses an emotional connection with places as it infers a level of care and/or concern for the continuation of place qualities (e.g. abundance of huckleberries).

Other Considerations

Authentic sense of place. Wild food experiences contribute to sense of place regardless of selfconscious or unselfconscious motivations, and both arguably contribute to an authentic sense of place. Some place scholars indicate that authentic sense of place requires experiences that are undeliberate and unselfconscious. Tuan (1977) points out that the activities that contribute most to creating an authentic sense of place are often overlooked for their mundaneness. Motivations for engaging in wild food experiences for some interview respondents were not immediately apparent to them; some respondents considered wild food experiences to be mundane and/or embedded in lifestyle, and it was therefore somewhat difficult for them to identify specific motivations. The survey results point to the unselfconscious nature of berry and fish consumption in McBride. Respondents who indicated that wild food is not very important to their overall way of life consumed berries at least a few times per season on average and consumed fish at least once per season on average. Respondents who indicated that wild food was not at all important to their way of life still consumed berries at least once per season on average.

However, some respondents were conscious of their motivations to engage in wild food experiences: to save money, connect with nature, support local food systems, connect with people, or maintain tradition for example. Awareness of motivations may be attributed to relative newness with the area and/or to wild food experiences, as is the case with Norma and Ed.

> Norma: I think the hardest thing when we moved here was just learning what was right and wrong and what was safe around. […] The internet, as wonderful as it is, doesn't give you a detailed description of what's everywhere, of what would actually grow in our area and how it would grow and what's around it. […] None of that's on there. So I think the hardest thing when you talk about wild food and what you can and cannot eat and how—is just the learning of it. It's something that has become obsolete in most cultures.

While place theorists suggest that the elements that make a place authentically home are undeliberate, conscious wild food consumption arguably contributes just as authentically to sense of place.

Limitations

As mentioned above, the study contains limitations in regard to applicability and methods. Due to the confines of the survey instrument, an assessment of all wild foods in the area was not able to be completed. Excluded from the study were elk, snowshoe hare, and leafy greens for example.

Additionally, being a household survey predominantly focusing on the prevalence of wild food in the area, few conclusions were drawn with respect to individual consumers. The survey purposed to answer the research question of wild food prevalence by asking about frequency, weight, and dollar value consumed by household. While the survey was completed by the

respondent most involved with wild food, a question was not included to assess other potential consumers in the household. Conclusions therefore can only be drawn from the respondent as a representative of his or her household. The omission of questions addressing respondent details (e.g. age, occupation, income) limits an in-depth analysis of wild food consumption by consumer.

The study is limited in applicability. Though wild food has begun to attract attention in urban areas (CBC, 15 April 2013), wild food experiences as strong contributors to sense of place will likely be typically applicable to rural communities with direct access to wild food resources.

CONCLUSION

The results of this research demonstrate that wild food is an important contributor to sense of place for the people interviewed in McBride. Furthermore, given the prevalence of wild food among households in McBride as shown in the household survey, it can be inferred that wild food experiences contribute to the sense of place for a large majority of McBride residents. Through its quality as food, wild food has become embedded in the food system of McBride. Through its quality as a wilderness experience, wild food experiences help create a sense of place in the surrounding wilderness and draw the wilderness into the overall sense of place of McBride. It is important to note that this study demonstrates the contribution of wild food experiences to sense of place in a non-Aboriginal community. This research presents a preliminary exploration of sense of place and wild food in a non-Aboriginal context.

An inquiry into experiences that encourage a connection between wild food and place is valuable if we are to not completely lose our means of creating and maintaining places of natural and cultural significance. As Edward Relph states, "to be human is to have and to know *your* place" (Relph, 2008, 1). Wild food experiences represent one way of understanding and becoming familiar with place. Wild food experiences are unique in that they incorporate food to wilderness experiences and wilderness to food experiences in a tangible and intimate way. Unlike other wilderness activities, wild food experiences are linked to sustenance.

Although the results of this study may be somewhat limited in applicability to other geographic areas, the results suggest the potentially overlooked prevalence of wild food in rural food systems. To date, place studies have largely focused on processes or experiences in residential or recreation places, rarely linking the two. Furthermore, studies have not explored how specific wilderness experiences contribute to a sense of a place of residence or how sense of

place may affect experiences in the surrounding areas. This study reiterates the importance of food to sense of place and the importance of wilderness experiences in creating sense of place in wilderness settings. This study demonstrates that wild food experiences contribute to sense of place in McBride and demonstrates that such experiences help to bring the wilderness into the sense of place through three dimensions: place identity, place dependence, and place attachment. This study further demonstrates through the lens of wild food how sense of place is affected by other places and by the dimension of time. Therefore, the results show an opportunity to examine the contribution of wild food to sense of place in other locales, particularly rural communities with ready access to wilderness. This study also shows that there may be many opportunities to examine the place of wild food in local food systems specifically, and the Canadian food system in general.

This study examined the ways in which wild food experiences contribute to these sense of place dimensions. It is shown that the experience of wild food encourages people to feel at home in a larger world and thus encourages compassionate and kindly use and helps to foster a sense of place that includes the land in a rich way. The wild food experience by definition requires an intimate knowledge of the natural elements of place and works to reinforce local food systems. These practices have been shown both to create and maintain the resilience of places. Therefore, as Turner et al. (2011) suggest, regional agriculture and rural development plans should account for and support the creation of innovative for-profit activities such as the controlled hunting, fishing, and gathering of wild foods.

Motivations for engaging in wild food experiences are directly linked to sense of place and change through time and location. Sense of place influences and is influenced by wild food experiences. Places are not closed environments. The boundaries are in flux and influenced by

experiences in other places and times. The characteristics of a place allow for certain activities to develop and in turn contribute to sense of place. Sense of place is impacted by the wild food experiences that occur within the place of residence or wilderness and the social actors present during such activities. Regardless of what comes first, having a sense of place or engaging wild food experiences, this study shows that wild food experiences continually strengthen the bond between people and the places in which they live and recreate.

Wild food experiences are not a prerequisite for creating or maintaining a sense of place in McBride or drawing the wilderness into one's sense of place. A person may have a strong sense of place and/or a connection to the surrounding wilderness without an intimate knowledge of wild food. While wild food experiences do not necessarily make one feel at home in the place in which they reside, such experiences contribute to the overall sense of place, as evident for each respondent in this study. For some respondents, wild food experiences help to bring wilderness into the sense of place through ecological citizenship. This membership places a person within the broader ecological community, essentially making one a part of the biological system in which one lives. In a similar vein to avid hunter, Aldo Leopold, one participant (James, also a hunter) commented on this connection specifically. He indicated that his practices made him feel as if he were part of the whole system, highlighting the potential for wild food experiences to contribute to the creation and maintenance of ecological citizenship.

Future studies on sense of place and wild food should include an examination of activities that take place in wilderness settings and previous places of significance. Such experiences, though occurring outside municipal boundaries, may be equally important to contributing to sense of place as those that occur within. It is important to address the experiences that give meaning to the places where people reside and recreate, and to address the experiences that

connect them. Ultimately, wild food experiences do not occur as one specific activity in one specific locale, but rather encompass many activities that occur in many places throughout a person's lifetime.

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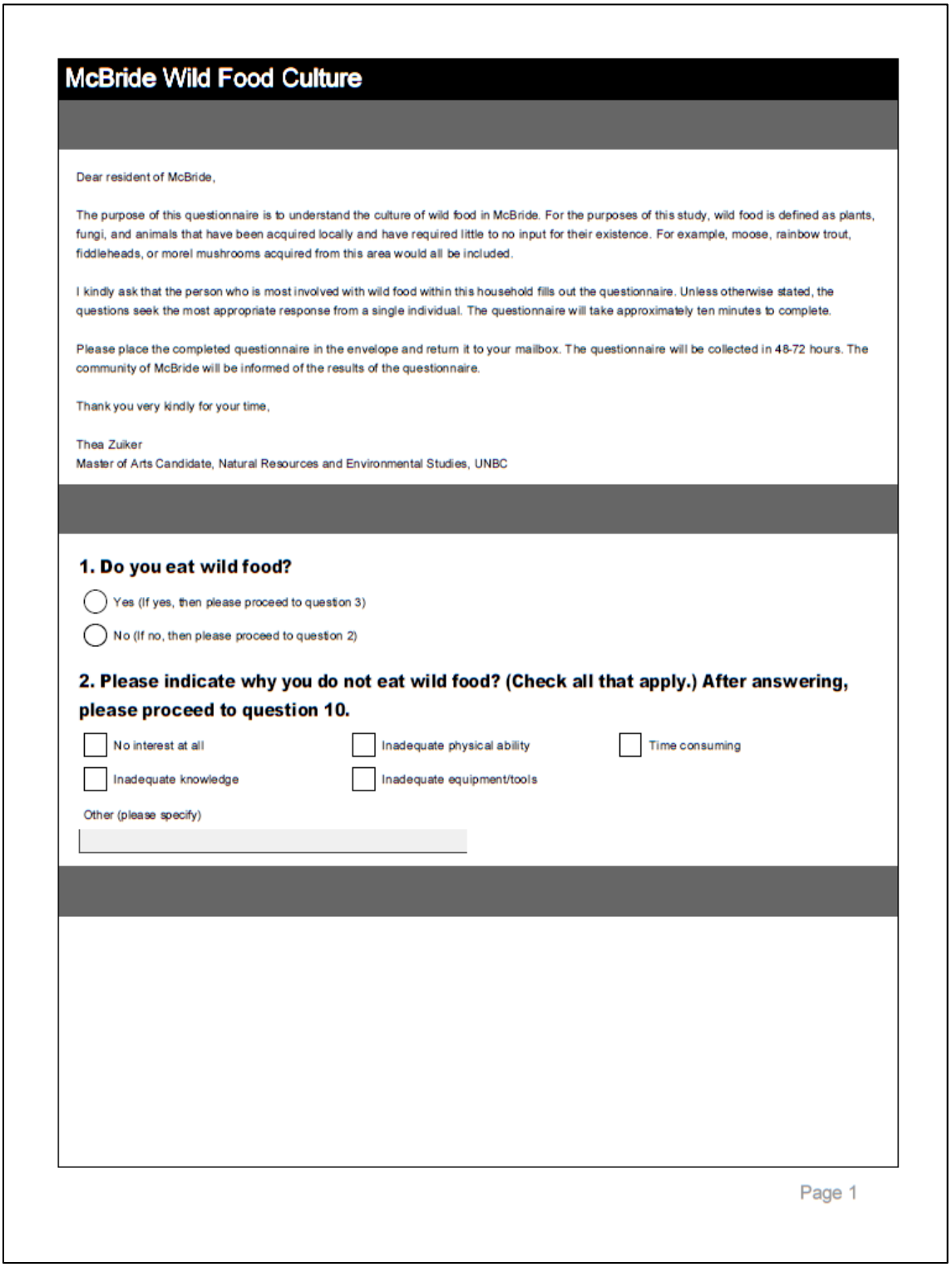
APPENDIX

Household Survey



McBride Wild Food Culture

Dear resident of McBride,

The purpose of this questionnaire is to understand the culture of wild food in McBride. For the purposes of this study, wild food is defined as plants, fungi, and animals that have been acquired locally and have required little to no input for their existence. For example, moose, rainbow trout, fiddleheads, or morel mushrooms acquired from this area would all be included.

I kindly ask that the person who is most involved with wild food within this household fills out the questionnaire. Unless otherwise stated, the questions seek the most appropriate response from a single individual. The questionnaire will take approximately ten minutes to complete.

Please place the completed questionnaire in the envelope and return it to your mailbox. The questionnaire will be collected in 48-72 hours. The community of McBride will be informed of the results of the questionnaire.

Thank you very kindly for your time,

Thea Zuiker
Master of Arts Candidate, Natural Resources and Environmental Studies, UNBC

1. Do you eat wild food?

◯ Yes (If yes, then please proceed to question 3)

◯ No (If no, then please proceed to question 2)

2. Please indicate why you do not eat wild food? (Check all that apply.) After answering, please proceed to question 10.

☐ No interest at all ☐ Inadequate physical ability ☐ Time consuming

☐ Inadequate knowledge ☐ Inadequate equipment/tools

Other (please specify)

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McBride Wild Food Culture

3. Please indicate how often you eat the following wild foods.

	Quite often (many times per season)	Regularly (a few times per season)	Sometimes (at least once per season)	Not very often (every second or third season)	Never
Moose	◯	◯	◯	◯	◯
Deer	◯	◯	◯	◯	◯
Bear	◯	◯	◯	◯	◯
Birds (e.g. quail)	◯	◯	◯	◯	◯
Fish	◯	◯	◯	◯	◯
Mushrooms	◯	◯	◯	◯	◯
Lichens, mosses, algae	◯	◯	◯	◯	◯
Fruiting bodies (e.g, berries)	◯	◯	◯	◯	◯
Ferns (e.g. fiddleheads)	◯	◯	◯	◯	◯
Lilies (e.g. false Soloman's seal)	◯	◯	◯	◯	◯
Cat-tail	◯	◯	◯	◯	◯
Celery (e.g. cow parsnip)	◯	◯	◯	◯	◯
Other (please specify)	◯	◯	◯	◯	◯
Other (please specify)	◯	◯	◯	◯	◯
Other (please specify)	◯	◯	◯	◯	◯

4. How do you acquire wild food? (Check all that apply)

- ☐ Angling
- ☐ Netting
- ☐ Trapping (water animals)
- ☐ Trapping (land animals)
- ☐ Hunting
- ☐ Foraging/gathering
- ☐ From friends
- ☐ From family
- ☐ Purchase
- ☐ Exchange/trade

Other (please specify)

5. If you acquire wild food yourself, how did you learn your practices? (Check all that apply)

- ☐ Family
- ☐ Friends
- ☐ University/college classes
- ☐ Elementary/high school classes
- ☐ Workshops
- ☐ Books
- ☐ Internet
- ☐ Trial and error

Other (please specify)

McBride Wild Food Culture

6. Of the wild food that you acquire yourself, can you please provide your best estimate of the average quantity you acquire in a season?

	None	less than 10 lb	10-30 lb	31-100 lb	101-500 lb	500+ lb
Moose	◯	◯	◯	◯	◯	◯
Deer	◯	◯	◯	◯	◯	◯
Bear	◯	◯	◯	◯	◯	◯
Birds (e.g. quail)	◯	◯	◯	◯	◯	◯
Fish	◯	◯	◯	◯	◯	◯
Mushrooms	◯	◯	◯	◯	◯	◯
Lichens, mosses, algae	◯	◯	◯	◯	◯	◯
Fruiting bodies (e.g. berries)	◯	◯	◯	◯	◯	◯
Ferns (e.g. fiddleheads)	◯	◯	◯	◯	◯	◯
Lilies (e.g. False Soloman's Seal)	◯	◯	◯	◯	◯	◯
Cat-tail	◯	◯	◯	◯	◯	◯
Celery (e.g. cow parsnip)	◯	◯	◯	◯	◯	◯
Other (please specify)	◯	◯	◯	◯	◯	◯
Other (please specify)	◯	◯	◯	◯	◯	◯
Other (please specify)	◯	◯	◯	◯	◯	◯

7. Can you please provide your best estimate of the value of wild food your household typically consumes in a year were you to buy it in a grocery store?

◯ Less than $50 ◯ $151-$300 ◯ $601-$1000

◯ $50-$150 ◯ $301-$600 ◯ $1000+

8. How important are the following reasons for including wild food in your diet?

	Not at all important	Not very important	Neutral	Somewhat important	Very important
Maintain cultural and/or family tradition	◯	◯	◯	◯	◯
Save money	◯	◯	◯	◯	◯
Connect with people	◯	◯	◯	◯	◯
Connect with nature	◯	◯	◯	◯	◯
Local food movement	◯	◯	◯	◯	◯
Exercise	◯	◯	◯	◯	◯
Recreation	◯	◯	◯	◯	◯
Nurtrition	◯	◯	◯	◯	◯

McBride Wild Food Culture

9. Overall, how important do you consider wild food to your way of life?

Not at all important	Not very important	Neutral	Somewhat important	Very important
◯	◯	◯	◯	◯

10. How supportive would you be of new wild food initiatives in the McBride area?

	Very unsupportive	Unsupportive	Neutral	Supportive	Very supportive
More wild food available for purchase in restaurants, grocery stores, and/or markets	◯	◯	◯	◯	◯
Wild food festivals and/or events	◯	◯	◯	◯	◯
Land-use planning for wild food	◯	◯	◯	◯	◯

11. How long have you lived in McBride?

◯ 0-5 years
◯ 6-10 years
◯ 11-20 years
◯ 21-40 years
◯ 40+ years

12. What generation Canadian are you?

◯ Born elsewhere
◯ First generation
◯ Second generation
◯ Third generation
◯ Fourth generation
◯ Fifth or more generation
◯ Not Canadian

13. Do you identify with any other tradition/heritage group?

◯ No
◯ Yes

(please specify)

14. What is your gender?

☐ Female
☐ Male
☐ Prefer not to disclose

McBride Wild Food Culture

15. Would you be interested in participating in a follow-up interview about wild food? The interview will take about one hour and will take place in McBride. If yes or maybe, please include your contact information.

- ◯ Yes
- ◯ No
- ◯ Maybe

Please provide additional information

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Interview Guide

The purpose of the interview is to reveal the nuances of wild food in the creation and maintenance of sense of place. The interview will be pre-arranged and take place in a setting that the respondent feels comfortable, and the researcher feels secure. Likely, this will be in the home of the respondent. The respondent will be informed of the purpose of the research, and will be asked if the interview can be recorded. If the informant does not give permission, notes will be taken instead. The interview will be approximately an hour and will be conversation style, using the following question guide. The interview will be slightly restructured to suit the individual interests of the respondents.

1. Defining wild food (10 minutes)
   This section will attempt to show the variability in the concept, as supported by the literature.
   Prompt: How do you define wild food? Would you consider your definition to be universal? Why or why not? What do you think the most important wild foods are in the McBride region? Why those?

2. Wild food and the respondent (15-20 minutes)
   This section will display the story of wild food in the life of the respondent. While the following section will focus on its role in sense of place, I anticipate such ideas will be evident here as well. The previously completed survey will be used as a point of reference and the following prompts will be phrased to be consistent with their responses to the questionnaire.
   Prompts: Tell me more about the kinds of wild food you include in your life. Why do you include these and not others? Tell me more about your methods for acquiring wild food. Tell me more about how you learned to do this? Do you think your practices are sustainable? Why or why not? How would you feel about regulated inclusion of wild food in the McBride food system? Would you be interested in supporting new wild food initiatives in the area? Why or why not?

3. Wild food and sense of place (25 minutes)
   This section will seek to tease out the role of wild food in creating and maintaining sense of place. I will ask questions about feelings of connectedness to the community and to the local environment.
   (a) Can you recount a memorable experience you had with wild food? What about that experience made it memorable? How does that compare with your general experiences? Does wild food make you feel more connected to your local environment? To people? To McBride? How long have you lived in McBride? Do you share wild food with other people in your community? Do you share your knowledge with others in your community?
   (b) How important do you believe that wild food is to McBride as a whole? How important do you consider McBride's connection to the 'wilderness' is in creating a sense of identity for those who live here? Would you say that your knowledge makes you feel more comfortable in a new wilderness environment?