



Local Environment

The International Journal of Justice and Sustainability

ISSN: 1354-9839 (Print) 1469-6711 (Online) Journal homepage: <https://www.tandfonline.com/loi/cloe20>

Seeking Indigenous food sovereignty: origins of and responses to the food crisis in northern Manitoba, Canada

Karlah Rae Rudolph & Stephane M. McLachlan

To cite this article: Karlah Rae Rudolph & Stephane M. McLachlan (2013) Seeking Indigenous food sovereignty: origins of and responses to the food crisis in northern Manitoba, Canada, *Local Environment*, 18:9, 1079-1098, DOI: [10.1080/13549839.2012.754741](https://doi.org/10.1080/13549839.2012.754741)

To link to this article: <https://doi.org/10.1080/13549839.2012.754741>



Published online: 29 Apr 2013.



Submit your article to this journal [↗](#)



Article views: 2161



Citing articles: 17 View citing articles [↗](#)

Seeking Indigenous food sovereignty: origins of and responses to the food crisis in northern Manitoba, Canada

Karlah Rae Rudolph and Stephane M. McLachlan*

Department of Environment and Geography, Environmental Conservation Lab, University of Manitoba, Winnipeg, MB, Canada R3T2N2

A food crisis confronts many Indigenous communities in northwestern Canada, as reflected by wide-scale food insecurity and diet-related disease. South-generated responses to this crisis generally disregard principles of Indigenous food sovereignty and are disengaged from concerns related to environmental and food justice. This study seeks to explore the needs and priorities of a First Nation (Misipawistik Cree Nation) and an associated Métis community (Grand Rapids) regarding existing and potential responses to the food crisis in northern Manitoba. Substantial changes to the traditional food system were initiated during the establishment of the reserve system in the 1800s and now extend to damage associated with hydro development. Responses to these changes were categorised according to themes and include the revival of country food traditions, individual and community gardens, agriculture in the North, and better quality imported foods. Regardless of response, decision-making needs to be community-driven, culturally appropriate, to reflect local priorities in order to effectively address the northern food crisis, and, ultimately, needs to work towards Indigenous food sovereignty to be effective.

Keywords: colonialism; environmental justice; food justice; food security; Indigenous food sovereignty

Introduction

Indigenous communities in northern Canada (i.e. that region of the country that is north of the 50th parallel) are facing a food crisis brought about by the introduction of processed foods and a decrease in the consumption of healthy land-based foods due to environmental decline, restrictive policies, and cultural change (Thompson *et al.* 2011). Processed foods and poor access to perishables contribute to the increased occurrence of Type II diabetes and heart disease in these communities (Martens *et al.* 2007, Haman *et al.* 2010). Impacts are aggravated by high rates of unemployment and poverty (Ho *et al.* 2008, Haman *et al.* 2010), and devastation caused by the residential school system and the “Sixties Scoop” designed to undermine and assimilate Indigenous livelihoods and traditional cultures (G. McKay, personal communication, 17 October 2009; Partridge 2010). Most studies characterise the food crisis as a result of highly priced healthy foods (Northern Food Prices Project Steering Committee 2003), poor nutrition (Kuhnlein *et al.* 2004), or even predispositions to diet-related illness (Haman *et al.* 2010), but very little work has examined any underlying structural causes of the crisis. We argue here that it is essential to politicise the understanding and discourse surrounding the northern food crisis if future responses are to be effective.

*Corresponding author. Email: mclachla@cc.umanitoba.ca

For most Indigenous communities, healthy foods are inseparable from and reflect the environments in which they are located (Page 2007, Alkon and Norgaard 2009). Consequently, environmental injustice related to intensive resource extraction, including hydro-development, mining, and deforestation, has deep implications for Indigenous food systems (Carino 2006, McLachlan and Miller 2012). Food insecurity and diet-related disease within Indigenous communities are thus best understood in the context of historical injustice. Yet, community views on the origins of and solutions to the northern food crisis are still poorly understood. Most existing responses continue to reflect and serve the interests of southern priorities, including those of governments, academia, or non-governmental organisations (NGOs). These responses in many cases act to undermine or even displace local actions (Rudolph 2012).

Colonisation and Indigenous foodscapes

There has been recent interest in the role of alternative food systems in resisting the impacts of a Global Agri-Food System that promotes the commodification and international trade of cheap food (Rosset 2008, Anderson and McLachlan 2012). However, these alternatives are often criticised as catering to the palates of privileged and urban consumers (Allen 2008, Guthman 2008a). Those that do engage with marginalised communities often seek to alleviate hunger through an emphasis on supply that is disconnected from the historical and often racialised underpinnings of food insecurity and injustice (Alkon and Norgaard 2009). These actions, in turn, tend to reproduce existing power structures and may invisibilise root causes, reducing the likelihood that they will ever be meaningfully addressed (Slocum 2007, Guthman 2008b, Levkoe 2011).

Politicised grassroots responses to the shortcomings of the global food system have increasingly emerged over the last decade, coalescing into a fast-growing international food sovereignty movement, as first popularised by the *Via Campesina* in Latin America. Proponents argue that this global system systematically dismantles all locally adapted food systems through neoliberal policies designed to facilitate global trade (Rosset *et al.* 2006). In contrast, food sovereignty recognises that food is more than a commodity and prioritises food policy; values the livelihoods of food providers; relocalises food systems, reducing distance between food providers and consumers and lessening dependence on corporations; shifts the control of food systems from corporations and consumers to the local food providers themselves; and designs these food systems to emulate natural systems (Anon 2003, Rosset *et al.* 2006, Holt-Gimenez and Peabody 2008). While global trade may play some role in sovereign food systems, proponents condemn the heavily subsidised food systems in the EU and North America that continue to prosper at the expense of food providers everywhere else (Satheesh and Pimbert 2005).

Food sovereignty, thus, contrasts strongly with food security and its supply-side emphasis, a construction that, in turn, generally ignores how power relations determine favoured production, distribution, and consumption patterns within a dominant food system that promotes high-input, intensive production methods (Wiebe and Wipf 2011). Food sovereignty has become a rallying cry for small-scale farmers and Indigenous people across the Americas (Desmarais 2007, Wittman *et al.* 2011). Adopted by Canadian groups such as Food Secure Canada and National Farmers Union, it also resonates strongly with calls for sovereignty by many Indigenous organisations across this country (PFPP 2010).

Indigenous food sovereignty acknowledges the unique offerings of Indigenous communities to alternative system. These include traditional knowledge, innovations, and land-use practices that serve as living viable alternatives to globalisation (Carino 2006) and as

examples of community-based control that results in sustainable food production and genuine food security (Wiebe and Wipf 2011). Allied support for Indigenous struggles with colonial governments when addressing concerns with “Aboriginal title and rights” and “self-government” has been identified as an essential requirement of cross-cultural collaborations towards Indigenous food sovereignty (PFPP 2010). Importantly, an Indigenous food sovereignty framework explicitly connects the health of food with the health of the land and identifies a history of social injustice as having radically reduced Indigenous food sovereignty in colonised nations (PFPP 2010).

In an important contribution, Morrison (2011) indicates that Indigenous food sovereignty comprises four central tenets: that the sacred responsibilities and relationships with the land supersede any colonial laws or policies; that the ability to define and respond to food-related needs should be self-determined; that these goals should be achieved through continued participation in these food systems at all scales of organisation; and that these ends can ultimately only be achieved through policy and legislative reform (Morrison 2011, p. 100). While Indigenous people have played and continue to play an important role in *Via Campesina*, these activities and more generally Indigenous food sovereignty have not yet been adequately addressed in the literature. This is especially true as it relates to the potential of food sovereignty for Indigenous communities in Canada, with the important exception of the Indigenous Peoples Working Group of Food Secure Canada (PFPP 2010) and the British Columbia Indigenous Food Systems Network (IFSN 2012).

There is an emerging testimony to the unique ways that Indigenous people understand and respond to past and current food injustice. As Alkon and Norgaard (2009) document, members of the Karuk tribe in northern California locate their “current food need in the history of genocide, lack of land rights, and forced assimilation . . . [that] have prevented tribal members from carrying out land management techniques necessary to food attainment” (Alkon and Norgaard 2009, p. 297). Access to traditional foods is an essential element of Indigenous culture and language, which are prerequisites of community wellbeing (Bell-Sheeter 2004). While the Nez Perce of Idaho no longer rely on traditional foods as their primary source of food calories, the maintenance of ties to the land through food-provisioning activities is tied to political struggles concerning the protection of land-use rights guaranteed in treaties (Kawamura 2004). Food-provisioning on traditional territories may also contribute to the much needed on-reserve revenue generation (Kuhnlein *et al.* 2006) and gives community members an opportunity to take part in the sharing and giving of foods within a non-capitalist mode of exchange – an essential feature of traditional Indigenous food cultures (Kawamura 2004).

In North America, most Indigenous communities maintain an uneasy relationship with agriculture as a means of addressing food security. In Western thought, some argue, agriculture has long been viewed as a central feature that distinguishes between cultures that are “civilised” and ones that are not (Brody 2000, Mann 2005), a view that rationalised the suppression of these land-based food traditions. Early in the history of European contact, the Hudson’s Bay Company benefited from the commercial exploitation of the resources of Rupert’s Land (Tough 1996) and this disregard for traditional Indigenous foods and livelihoods and an insatiable European industrial demand for hides culminated in the slaughter of the North American bison (Taylor 2011). Immense migrating herds of bison were thus overexploited across western Canada and the USA and their near extinction was encouraged and precipitated by the military as a decisive strike against Indigenous populations in the late 1800s (Brown 1970, Smits 1994).

Attempts to convert Indigenous peoples into agriculturalists are thus long-standing. West, writing in the early 1800s suggests “... the scarcity of animals that now prevails... is a favourable circumstance towards leading them to the cultivation of the soil; which would expand their minds, and prove of vast advantage” (LaRocque 2010, p. 42). A wide diversity of agricultural approaches have since been introduced across Canada, including domesticated European reindeer, breeding programmes involving muskoxen, wood bison, and cattle, as well as land grants, transportation infrastructure, experimental farms, and land clearance programmes. These arguably all reflect the “eco-colonial” efforts of governments to expand the agricultural frontier into the far north while assimilating Indigenous livelihoods (Piper and Sandlos 2007).

While the increased reliance of Indigenous communities on farmed foods was forced (Friesen 1987, McLeod 2007), many have long practiced traditional forms of agriculture (Tang 2003). Crops developed and grown by First Peoples in the Americas account for 52% of all foods currently cultivated around the world (Bell-Sheetter 2004), although these Indigenous farming practices, along with their hunting and gathering systems, are still often perceived as “backward, wasteful and destructive” (Carino 2006, p. 7). Government food provisions guaranteed in treaties created reliance and dependency and contributed to poor health (Brown 1970). Signees anticipated that their restriction to reserves and the demise of the bison would require them to adopt farming, and thus demanded agricultural supplies and instruction in treaties (Carter 1990, Bateman 1996). However, on-reserve farmers were soon frustrated by governmental policies of control and emphasis on individualism at the expense of traditional collectivism, which acted to undermine their efforts (Tang 2003). Today, First Nations farmers are still disadvantaged as they cannot leverage reserve lands for operating loans from banks (J. Munroe, personal communication, 26 August 2010; SWDM 2010) and are prohibited from accessing many of the same subsidy programmes used by their non-Indigenous counterparts (Natcher *et al.* accepted for publication). Indeed, 80% of the 1.6 million acres of agricultural reserve land in Western Canada is now leased to non-Indigenous farmers (SWDM 2010). While Indigenous perspectives on agriculture as a means to achieving food security often varied dramatically among First Nations (Bell-Sheetter 2004), it is clear that most of them wanted the opportunity to frame (rather than farm) their own food security – an essential component of Indigenous food sovereignty and an opportunity that was and that continues to be denied.

Indigenous communities in northwestern Canada maintain a unique relationship with their traditional territories both as a source of food and livelihood. Access to and the quality of these country foods are affected by anthropogenic declines in the environment (Bell-Sheetter 2004). Recent food-related studies show that aquaculture (Page 2007) and climate change (Trainor *et al.* 2007) have created environmental injustice for Indigenous communities in British Columbia and the Far North, respectively, and Indigenous communities are disproportionately impacted by environmental decline in Canada as a whole (Haluza-Delay 2007). However, the relationship between environmental and food justice has yet to be adequately examined in an Indigenous context. We argue that Indigenous food sovereignty may provide such a link and help us better understand and respond to the food crisis in northern Canada while bringing the associated issues of food and environmental justice to light.

The goal of this study was to describe and explore the implications of northern Indigenous community conceptualisations of the northern food crisis as they relate to environmental and food justice. Our specific objectives were: to describe the needs and priorities that confront many northern Indigenous communities as they relate to food; to identify how these needs and priorities have changed over time and what factors underlie and

give rise to these changes; and to evaluate the relative importance of existing and potential responses to these challenges, and to what degree they reflect Indigenous food sovereignty.

Study area

Grand Rapids and Misipawistik Cree Nation (MCN) are located on opposite sides of the Saskatchewan River as it enters Lake Winnipeg in northern Manitoba. Archaeological evidence dating back 7000 years demonstrates extensive use of sturgeon and whitefish as food sources and oral history shows that hunting, gathering, and trapping have long played a central role in the lives of these communities (MCN 2010). Treaty negotiations with MCN ended in 1876 (Coates and Morrison 1986, Friesen 1987). Band members were forced to move from the west to the east side of the Saskatchewan where the Reserve was to be located, although many refused to move, opting out of the treaty and their Indian status (MCN 2010). As a result, the town of Grand Rapids, which is primarily Métis, and MCN are situated on the west and east sides of the river, respectively. In 1961, work began on the Grand Rapids Dam and Generating Station, which was completed in 1965 and the rapids then ceased to exist. The ensuing flooding and its effects, particularly on upstream Summerberry Marsh, had devastating impacts on the local culture, economy, and language (Kulchyski *et al.* 2006, MCN 2010). As part of this process, the town of Hibord, locally referred to as the “Taj Mahal”, was created 2 km outside of Grand Rapids for hydro employees. The differences between this “coloniser community” and that of the town and reserve persist as a remarkable picture of inequity today (Kulchyski *et al.* 2006).

Methodology

Most participants in this research are residents of Grand Rapids and MCN; however, we also interviewed other mostly Indigenous “food experts” from Manitoba and Saskatchewan (Table 1). We asked participants to identify northern food needs and priorities, how these have changed over time, and what actions they felt would address these needs. The 16 interviews were conducted from May 2010 until August 2011, and were semi-directed in nature (Table 1). Participants were encouraged to explore their own views on these themes, and other issues if they so chose. Gerald McKay and Annie Ballantyne were members of K.R. Rudolph’s Master’s thesis committee.

As a function of these interviews, we became involved in a number of complementary activities that helped build personal relationships with community members and that actualised some research outcomes. These included helping youth in Grand Rapids create and care for small raised-bed gardens, facilitating a shared learning excursion of interested community members from Grand Rapids and MCN to Muskoday First Nations in Saskatchewan to discuss the potential of nation-to-nation trade of fish and potatoes, and coordinating workshops focused on food-related learning activities for youth.

Formal ethics approval for this project was obtained from the University of Manitoba Joint-Faculty Research Ethics Board (J2010:097). All participants were given the opportunity to review the outcomes of the interviews, to amend them as they saw appropriate, or for that matter to withdraw from the research at any time.

All data emerging from the interviews were transcribed and, along with field notes, evaluated using Atlas Ti, which helped identify and categorise emergent themes (Muh 1991, Creswell and Clark 2007). These spoke of the importance of food security, food

Table 1. Research participants and their home community, region, and self-identified role in community/organisation.

Name	Community	Province	Region	Role in community or organisation
Betty Calym	Grand Rapids	MB	North	Elder; gardener; retired nurse
Eileen Einarson	Grand Rapids	MB	North	Elder
Sarah Dumas	Grand Rapids	MB	North	Elder; former manager Grand Rapids grocery store
Jim Sangster	Grand Rapids	MB	North	Former principal, Grand Rapids School
Alice Cook	MCN	MB	North	Elder; former chief of MCN
Annie Ballantyne	Grand Rapids/MCN	MB	North	Principal, Grand Rapids School
Bernard Beardy	MCN	MB	North	Manager of MCN grocery store
Gerald McKay	Grand Rapids/MCN	MB	North	Fisher and entrepreneur
Heidi Cook	Grand Rapids/MCN	MB	North	Manager, Traditional Lands and Waters Office, MCN
Kim Izzard	MCN	MB	North	Gardener for community wellness
Blaine Klippenstein	Barrows	MB	North	Teacher; food activist
Brenda Gaudry	Norway House First Nation	MB	North	Traditionalist; northern gardener
Joe Munroe	Muskoday First Nation	SK	South	Indigenous Peoples Food Coordinator Heifer International (Canada)
Byron Beardy	Wasagamack First Nation	MB	North	Food Security Coordinator Four Arrows Regional Health Authority
Brian Hunt	Carmen	MB	South	Greenhouse and Alternative Crop Specialist Manitoba Agriculture, Food, and Rural Initiatives
Raquel Koenig	Winnipeg	MB	South	Northern Liaison Food Matters Manitoba

sovereignty, and an emerging food justice perspective, which framed the outcomes of this research project.

Changes to the northern food system

Until relatively recently, Grand Rapids and MCN functioned as one Indigenous community that remained healthy relying on local food resources. Their country foods consisted of fish; hunted and trapped meats such as moose, muskrats, ducks, spruce chickens, and rabbits; as well as wild berries and other plants and medicines. Summerberry Marsh provided a rich and diverse source of land-based foods. Gardens focusing on root crops such as onions, carrots, and potatoes complemented wild harvests and were situated wherever suitable soil was found.

Radical changes to this food system occurred when construction of the Grand Rapids Dam and Generating Station was initiated in 1961. This event fundamentally altered the entire structure of the local food system, with respect to land foods, hunting, fishing, and even gardening:

[Summerberry Marsh] was one of the most productive delta marshes in North America. It was managed for muskrat trapping. It was good for migratory birds, moose . . . for bears. And it supported all these people. People lived good by eating what was out there and trapping or selling fish to make some income. People never thought of themselves as poor. Nobody was hungry. Any time of the year you could get fish or moose. After [the dam], the marsh is underwater, the trapping is gone. The moose, the habitat for migratory birds are gone. The fisheries, the spawning grounds are destroyed. (Heidi Cook, Grand Rapids/MCN)

Most participants indicated how local gardens were destroyed when the dam was constructed, as any soil suitable for gardening was relocated to make lawns in Hibord, the small elitist community that was built for the (mostly white) Hydro employees. While the land and water base was radically altered by the dam, many other associated factors indirectly contributed to the dissolution of the local food system:

When they started construction of this dam in 1961, all of the things came in here. Like a hotel, a beverage room and a big grocery store opened. The people started getting dependent on the grocery store because it was right there all the time. And they had a good selection. It was actually called Superior Fruits. The problem is that it was only here for four years. After the dam was finished, all of the construction workers left and the store closed down and then there was no more. Nobody went back to gardening and it just basically died. So, the only place you could get fresh vegetables was down the highway in Ashern or Winnipeg or wherever. (Gerald McKay, Grand Rapids/MCN)

The social implications of the dam were equally striking, especially for women:

I didn't know what politics was until I started studying it in university and I learned politics means power. I always thought it was lies and bullshit, right? There's so much tied up in that Hydro project. Your food changed, your lifestyle changed, your environment changed. It must have been devastating. You can't drink the water and you can't eat the fish. You can't speak the language and if you're a woman, you can't walk by yourself at nighttime. I don't know if the story of the women of Grand Rapids will ever be told because it's still too painful. (Heidi Cook, Grand Rapids/MCN)

Many commented on the failure of medicinal and other traditional knowledge to transfer intergenerationally because of the loss of the Cree language through the residential schools. Others were critical of the provincial (Manitoba) government, which enforced restrictions on the wild harvests of the Métis hunters who did not have treaty status, in turn creating substantial hunger within Métis families.

It is clear that the Grand Rapids Dam and Generating Station cannot be viewed in isolation from the wider Indigenous experiences with colonisation, but rather aggravated the effects of already oppressive governmental policies. These results reveal the convergence between food justice and environmental injustice in these communities. While food might not immediately appear to be a justice issue, it becomes political because of the way that power has structured access to healthy food and promoted beliefs regarding what a desirable food system consists of.

Food and the construction of dependency

Indigenous communities in both the North and the South of the Prairie Provinces have unique perspectives on food security, reflecting the radical changes in land and food that have taken place since colonisation. Some reflected on how the creation of the treaties in the South undermined people's lives and their food systems:

Through the treaty process, we gave up our economy based on buffalo and moved onto the reserves to a more sedentary life than one of constant moving with the seasons. Our Elders often say, when we put ourselves under their care, the other side of the treaty, that was when we started knowing hunger and poverty. We took care of ourselves before that. Before contact, our people only had to go out four hours a day to get their food, cook it and eat it. People were taught that our people were starving. Far from it. We were living well. (Joe Munroe, Muskoday First Nation)

These observations not only speak to colonisation and its connections to the construction of poverty, but also collide with the common belief held by many non-Indigenous Canadians that the pre-contact food system and culture of Indigenous communities were inferior and merited replacing. Indigenous food systems declined soon after the treaties were signed, which had substantial and long-term implications for community food security:

Four or five years after the treaty was signed, our people were depending on handouts from the Government of Canada. In the treaty it was negotiated that we would have the means to take care of ourselves, which never really came. In the absence of that, they had to feed us. They're still feeding us today, with the welfare . . . not very well, but feeding us today. So, it's not like the world owes you a living, but, the Crown owes the First Nations food security. (Joe Munroe, Muskoday First Nation)

These changes created long-term dependency on government, a dependency that continues to undermine local food initiatives today:

Going back to history with the treaties, the Crown had said that First Nations people will be taken care of as long as the rivers flow, the grass grows and the sun shines. And with that onus in mind, the Elders still hold the Government to that. But, if we could try and stay away from trying for handouts and if we could do this on our own . . . (Byron Beardy, Wasagamack First Nation)

In order to meet treaty commitments, the Canadian federal government provided agricultural training, tools, and materials to reserve communities across the Prairie Provinces. On-reserve agriculture is still seen by outsiders as representing an attractive opportunity for reserve residents to develop a cash economy and contribute to local food security (Carter 1990, Bateman 1996). However, at least some participants in this study questioned the relevance of Western approaches to farming and recognised that the government had other motivations:

When the treaties were made, farming was the big thing. We're going to move these people from this transient lifestyle and turn them into farmers. Farming never took off in some places because farming is not suitable in all places. For the most part, that can't be our primary source of food because that's not what our environment is. Our environment is fish and berries and moose and birds. And you can garden your root crops. (Heidi Cook, Grand Rapids/MCN)

At the time of European contact, communities were engaged in locally adapted food systems based on intact cultural and spiritual ways of life. Yet, mining, forestry, and hydro development have now drastically altered the northern landscape. Participants were aware of the implications of these extractive industries for food sovereignty and acknowledged the risks of resource exploitation for meeting local needs in the four nearby Island Lakes communities:

In Island Lakes, that we're not connected to a highway is a pro in itself – that it's only accessible by winter roads. It's good in preserving our hunting areas. It's good in that it's undisturbed. But I do hear that there is already exploitation of the natural resources there, namely through mining. (Byron Beardy, Wasagamack First Nation)

The case for a politicised food justice perspective that incorporates and responds to the past, ongoing, and potential threats imposed by dominant society is only too clear when addressing food security in Indigenous communities in both the North and the South.

Current food system and community health

Northern community members reported many problems with the conventional food system. Fresh food arriving in northern communities was expensive. Freight charges were added as the trucks arrived from the South and small northern grocers could not buy in bulk nor access the savings large urban stores received from wholesalers. This situation was particularly problematic for fly-in communities where fresh groceries were most often transported by helicopter. Products that did store well were shipped in bulk in large quantities and sold cheaply. These were mostly processed foods – the sugar- and preservative-laden meals that are primary culprits in diet-related disease (Kuhnlein *et al.* 2006, Ho *et al.* 2008). Poverty within northern communities played a role in directing food choices as well:

You can go into a grocery store, and you can buy a two litre Pepsi for ninety-nine cents, whereas you may be looking at six dollars for a jug of milk or two bucks for a litre of apple juice. So, I know that for a lot of parents, it really comes down to cost. And trying to get the biggest bang for their buck. Unfortunately, it leads to some bad choices when it comes to our food and nutrition. (Kym Izzard, MCN)

Much of the produce arriving in Grand Rapids from Winnipeg first travelled to Thompson, 600 km north of Grand Rapids, where it was repacked. Store managers and residents alike indicated that produce was often damaged by the time it was placed on a grocery shelf and that residents tended not to purchase these “fresh” vegetables and fruits.

The extreme ease of accessing unhealthy choices also played a role in structuring food choices in most northern communities:

It's too convenient to be honest. Why would you try to cook for yourself at home when you can just call the restaurant and get a meal cooked for you in 30 minutes? You can probably cook more than half the stuff we have here in the store [MCN Foods] in 30 minutes. I don't think there're too many people that are trying to eat health-wise, or even natural food that, supposedly, our parents had grown up with. Not too many of the younger kids want to eat that stuff any more. (Bernard Beardy, MCN)

The three-fold threat of expensive and scarce fresh produce, poor quality, and ready accessibility to unhealthy processed foods created a plethora of diet-related diseases in Grand Rapids and MCN. Community members were aware of the situation and their greatest concern was for their children, who they recognised as suffering from sugar addiction, diabetes, and obesity:

I think there's a problem. Kids are overweight. I can see that. I can see kids not very active because I live right by the school. That's just very bad for anybody as far as I'm concerned. To drink pop every day. There's so many diabetic people around here. And it's like that all over. (Sarah Dumas, Grand Rapids)

While northern communities are adversely affected by the conventional food system, it is not northern food that is making them sick. Indeed, land foods are amongst the most healthy of food choices available in the North (Thompson *et al.* 2011) and also form an important connection to land and culture for Indigenous residents (Kuhnlein *et al.* 2004, Power 2008). Indeed, many northern community members were aware of broader implications of the Global Agri-Food System, for farmers, consumers, and the environment:

The way the food system is, they grow huge monocultures and it's all corporate and unhealthy and has additives and chemicals. There's no biological diversity to protect it. The corporate food system – the huge factory farms and the monoculture farming – is really vulnerable. (Heidi Cook, Grand Rapids/MCN)

Solutions to the northern food crisis: northern perspectives and priorities

Many solutions to this “South-generated” food crisis are being actively explored, and a larger number and diversity of food alternatives are emerging across northern Canada. The history of change in the food system in Grand Rapids and MCN, combined with the urgent need to create effective alternatives to the conventional food system, affected how residents of these communities viewed both existing and potential responses. These responses were placed in four broad categories.

Revival of country foods traditions

When traditional lands were unaffected by intensive resource extraction, there was still access to country foods and many respondents reported these foods to be the healthiest. Even in the case of dam-devastated communities like Grand Rapids and MCN, many wild foods had persevered and northern residents, and others working towards northern food security, reported a recent interest in reviving wild food harvests and relearning the nutritional contributions of these foods. Procuring country foods had richer meanings beyond food security, as it affirmed treaty rights and represented an opportunity to engage in cultural and spiritual connections with the land:

Kids growing up think being from Grand Rapids is just this [pointing at the town]. And it's not, it's all that [traditional territory] too. That is important. That's when you feel really rich to be from here is when you go out and you know all these areas that we have and what's out there. And, we have to [procure foods from land], even just to protect our Treaties. I mean, what good is a hunting right if no one knows how to hunt? (Heidi Cook, Grand Rapids/MCN)

However, there were barriers to harvesting country foods. Provincial regulations limited the ability of wild harvesters to distribute their products widely and to generate any income from this distribution. This was especially problematic, given how expensive fuel and equipment had become. Many older community members worried that the upcoming generation lacked interest in these activities. There was also a fear that over-harvesting might damage wild populations already in decline due to industry, even irreparably. However, it was stressed that the most appropriate response to this decline was to immerse harvesters in traditional knowledge rather than for an external agency to impose restrictions.

Participants also recognised that it would be difficult to meet food needs exclusively through country foods because of the growing sizes of northern communities and regional declines in wildlife and the environment. Moreover, it was increasingly difficult for many residents to engage in traditional lifestyles that required much travelling, especially those that had inflexible employment:

Everything has got a cycle and a time. It depends on our Mother Nature and weather. You've got to come [when it's ready]. You can't wait until it's convenient for you. When they're ready, they're ready and when they're done, they're done. (Brenda Gaudry, Norway House First Nation)

Community and individual gardens

Gardens emerged as another key response to the northern food crisis, and were popular with most northern participants and the agencies and NGOs active in northern food security. Abundant garden harvests were seen as complementing mostly meat-based country foods and local gardens would also reduce the “price-squeeze” represented by fixed monthly incomes.

Community members were also aware of the limitations of gardens as a response to food insecurity. The shorter growing season in the North limits the harvests of vegetables such as corn and tomatoes, although there are programmes that facilitate sharing cold-hardy seed varieties through the northern school system (B. Beardy, personal communication, 19 December 2011). A wide diversity of skills was required to grow vegetables and fruits well and to save and store the produce through the winter. Soils generally needed amendment and maintenance in order to be productive and soil-building materials often needed to be imported at great expense. Indeed, despite the general excitement around and government support for gardening projects, the challenges of establishing productive gardens led some northern participants to question the viability of these projects. Even an Elder who had gardened in Grand Rapids every year since 1968 questioned whether community gardens would adequately address local food needs and contribute meaningfully to community health:

I have these university graduate students come and they want to make gardens. First of all, where are you going to get soil? What grows in limestone? You tell me! I can see people starting off gung-ho. But, three years from now, that will all disperse. It will be disbanded because it's so difficult under the circumstances. (Betty Calym, Grand Rapids)

Yet, others who are active in the food security movement in northern Manitoba reported that there were many other benefits to community gardens established in this region – benefits that may actually out-weigh their role in addressing food security in the North:

I think sometimes people go in with these big ideas. That's what I always hear from community people. Like, it's the small projects and you've really got to be proud of those small successes. It's so much more than just a garden for those communities. (Raquel Koenig, Food Matters Manitoba)

Other studies indicate that the power of community gardens established in the inner-city has less to do with food and much more to do with building community, sharing knowledge between youth and Elders, generating a sense of pride and empowerment, enabling people to learn about food, and even mobilising social and political action (Turner 2011). Of key importance here, however, was community control over locally grown food and the larger multi-faceted food system.

Agriculture in the North

A wide variety of agricultural ventures were being explored in the North, as promoted by provincial agencies such as Northern Healthy Foods Initiatives, the provincial Manitoba Agriculture, Food and Rural Initiatives, and the federal Agriculture and Agri-Food Canada. Identified alternatives included market gardens, small-scale livestock projects, and greenhouses. Gardening and agriculture in the North might initially seem quite

similar; however, the first was seen as a widely acceptable solution to the northern food crisis while the second raised concerns for many.

A first concern was that farmed plants and animals represented an ongoing form of eco-colonialism (Piper and Sandlos 2007) and that their introduction simply expanded the agricultural frontier – with all of its cultural structures and environmental problems – into Indigenous landscapes:

I would like to see the North protected from that kind of food system. Do we want our land to be turned into a huge plantation of potatoes because we need to contribute to that kind of a food system? I don't think so. Food systems have to be local, right? And not homogenous. Just like we need biodiversity in an ecosystem, we need diversity in our food systems. So, a food system in the North is not going to be the same as a food system in the South. (Heidi Cook, Grand Rapids/MCN)

A second concern revolved around the need for land conversion. Proponents of commercial-scale market gardens sought high-light environments, in turn reducing habitat for wild game and wild edibles and creating even greater community reliance on farmed foods.

Livestock was also seen as potentially undermining country foods. Many youth in northern communities accessed farmed meats far more frequently, with some even preferring farmed over wild. However, some participants felt that raising any animal was disrespectful, and others indicated that such livestock were unnecessary:

It's a lot of work to raise those chickens. When they're ready, your neighbors go out and hunt geese. And they have instant food. Which is going to win out in the end? The goose hunting because it's easier, right? And, it's a traditional lifestyle. Raising chickens is not going to work in the North unless you like those chickens. Nobody's going to raise chickens if it's easier to get geese. (Gerald McKay, Grand Rapids/MCN)

However, other northern residents saw potential in locally raised domestic livestock, suggesting the cleared hydro lines might be used for grazing. Regardless, participants again wanted the ability to apply any livestock-related solutions within their communities through internal community decision-making protocols.

Another possible response was the establishment of greenhouses, both individual and commercial in scale, which would extend the length of the growing season and which represented another learning opportunity within the community. The MCN Band had been exploring the development of a commercial greenhouse, which would use technology imported from Israel in its design. However, many recognised that, without knowledge on how to use and maintain greenhouses, the actual physical structures would be of little or no use.

For many northern residents, it was less about the specifics of the agricultural “tools” and much more about the worldview underlying any suggested responses. Some believed that if new tools were implemented according to traditional laws and values, projects would then avoid many of the environmental and social problems that had emerged in the South. Traditional share-culture is still a fundamental aspect of modern-day Cree life. Continuing a free, community-operated food distribution system, particularly for Elders and those in need, was thus important to residents of Grand Rapids and MCN.

Unfortunately, this tension between public and private food systems is poorly understood by agencies providing funding to northern food projects, and some agency representatives found it difficult to secure funding for culturally responsive projects. We encountered this issue when attempting to secure funding for future food projects in

Grand Rapids and MCN from the Rural Secretariat (Agriculture and Agri-Foods Canada). Their programming would only support food-related projects that resulted in immediate job creation, that provided remuneration, that were adult-focused, and that were, thus, ultimately unworkable in northern communities.

Better imported food

This category represents another controversial response being explored by many northern residents. Many wanted access to the same exotic fruits and vegetables enjoyed in urban centres in the South, but which northern climates would not support.

One suggested option was to obtain higher quality food through improvements to the conventional grocery system. Residents hoped that a larger band-owned store, currently planned by MCN, would provide more fresh fruits and vegetables. An in-store meat shop would also provide fresh farmed meats to the community. However, the store has yet to be built. Another option was for community stores to buy on-sale items, in this case from a national food retailer in Thompson, which would help address the high costs of northern foods (L. Gardiner, personal communication, 10 January 2011).

Community members in Grand Rapids and MCN were also exploring alternative food supply streams. Some participants recollected that food from the South has been made locally available over the last 50 years through direct exchanges between southern farmers and northern fishers. While these exchanges generally no longer occur, an Elder in MCN accessed an abundant supply of southern foods through a small, family-owned distributor. Because of the short supply chains, these foods were generally cheaper than those available through the local grocery store. However, this relationship was discontinued when it became too time-demanding and when the supplier raised his prices.

The dysfunction of the conventional grocery system is not easily overcome and alternative food supply streams constantly encounter legal, regulatory, and infrastructural barriers (Anderson and McLachlan 2012). Regardless, community members indicated that food grown closer to home was typically of higher quality by the time it arrived in Grand Rapids and MCN:

The Peak of the Market [large scale Manitoba co-op] stuff is actually pretty good. And, it's grown here in Manitoba, too. So, the closer the stuff is that gets to us, the more nutrients it holds. (Byron Beardy, Wasagamack First Nation)

A direct North–South exchange project between Grand Rapids and MCN on one hand and the settler farming communities of Pilot Mound and Clearwater on the other was also explored in our related research. Yet, this initiative proved to be highly objectionable for at least some community members, as it was again seen as ultimately undermining more appropriate and locally-controlled initiatives (Rudolph 2012).

Politicised approaches

A final option presented by some participants was that food sovereignty would only be achieved through political sovereignty. The only realistic approach to resolving hunger in Indigenous communities was through addressing the broken relationship between Indigenous communities and the Government of Canada:

We have stewardship over the territory, given to us by the Creator. That's where our food is. Mother Earth – our food supply. Everybody is a Treaty person here, one side or the other,

in this country. There were three parties at the Treaty: the Crown, the First Nations and the Creator. First Nations understood the Treaty to mean we're going to hold the land together – our hand and your hand. We're going to share the land. The Government of Canada had a different idea of what the Treaty was to be about. It was to be about subjugation and assimilation. We need to rebuild our Nations. When we can deal with the Government of Canada effectively as a Nation, we can insist on fulfillment of the Treaty. Sovereignty and Nation-building is the way out of hunger and poverty for our people. (Joe Munroe, Muskoday First Nation)

Reflecting on community voice

A strong theme of food justice emerged when northern Indigenous participants described solutions that might address the food crisis confronting their communities while alleviating their dependence on an inequitable food system engineered in the South. In this case, by food justice we refer to the interface among food security, food sovereignty, and alternative food systems (MAFRA 2011). Participants largely recognised ongoing food insecurity and related poor health as only the most recent symptoms of a long-standing dysfunctional relationship with dominant society that continues to undermine Indigenous food sovereignty while attacking Nationhood and reducing the viability of traditional food systems. These concerns closely mirror those reported elsewhere in North America (Page 2007, Alkon and Norgaard 2009) and, indeed, internationally (Carino 2006, Kuhnlein *et al.* 2006, Dressler and Pulhin 2010).

The processes by which colonial policies and practices undermine Indigenous food sovereignty and eventually replace traditional food systems with ones created and introduced by dominant society are clear. Over time, communities shift from an independent existence based largely on land activities to one with few economic opportunities, aside from employment with resource extraction industries such as hydro, mining, forestry, or even agriculture. These industries generally work at odds with the priorities of nearby communities and the traditional territories in which they operate. Often failing to provide any sustained economic benefits to these communities, they instead act to further displace any remaining land-based activities and livelihoods.

Ironically, the major “invading industry” that radically altered the landscape and eradicated the food sovereignty of Indigenous communities, especially in the southernmost regions of the Prairie Provinces, has been intensive agriculture and livestock production based on private land ownership (McLeod 2007). Thus, colonisation in the South centred largely around the displacement of an Indigenous food system by a European industrial food system. Indigenous food activists participating in this research argued that the displacement of the original food system is part of a series of cultural myths promoted by the dominant society in order to undermine and assimilate these Indigenous cultures.

Within this historical context, it is not surprising that solutions such as the revival of country foods traditions and the creation of local gardens were largely preferred. These solutions are small enough in scale to be located in and controlled by the community. This need for local control indicates that food sovereignty plays a fundamental role in shaping how northern Indigenous residents prioritise and experience solutions to the food crisis that now confronts these and other Indigenous communities around the world (Carino 2006, Kuhnlein *et al.* 2006). Smith (1999) speaks clearly of the importance of self-determination within Indigenous communities, stating that activities should enable Indigenous communities to “determine priorities, to bring to the centre those issues of [their] own choosing, and to discuss them amongst [themselves]” as they are otherwise likely to reinforce past colonising influences (Smith 1999, p. 38).

Northern community participants in this study linked country foods traditions to the protection of treaty rights, and to decolonisation and resistance. Revival of these traditions and local gardening hold potential for autonomy and perhaps even broader political sovereignty from the South, an outcome deeply desired by many in the North. However, due to a variety of limitations, including the declining health of traditional territories and challenging growing conditions, some participants were uncertain as to when or even if these local initiatives could ever fully reverse dependence on foods sourced from the South.

A variety of agricultural projects are being explored in the North, and community members wanted the opportunity to decide whether and how their communities might benefit from each. Indigenous communities need not be limited to historical activities in order to retain their “Indigenosity” (LaRocque 2010). The specifics of these “tools” were of less concern than the desire for community control. Agricultural solutions implemented in the North without community direction could further contribute to environmental and food injustice, which often revolve around issues of cultural recognition within an Indigenous context in Canada (Mascarenhas 2007, Page 2007). Participants thus wished to protect their cultures and traditional landscapes from actions reflecting non-Indigenous perspectives (Fenelon and Hall 2008) and to use these unique perspectives to inform future approaches to food sovereignty.

Within programming initiated by the federal and provincial governments, and, increasingly, by mainstream NGOs, funding is often contingent upon programme applicants demonstrating that the projects contribute to business solvency, employment, and assumptions of individualism and privatisation – our experience with the Rural Secretariat being but one example. The incentives that these types of externally imposed conditions create for northern residents who want to establish food-related projects are highly problematic. Participants wanted to see viable business ventures in their communities, many of which related to food. However, the design of such ventures, when initiated by community members, often differed from outsider views, especially with the traditional emphasis on share-culture and incorporation of cultural and sacred relationships with the land (Morrison 2011).

Some participants were interested in sourcing higher quality “imported food”, which would help mitigate barriers to local food security, including poor soil conditions and a short growing season. This arguably could contribute to food sovereignty perspectives if northern community members were able to direct these solutions and how they operated (Rudolph 2012). Other Indigenous communities facing food insecurity are also exploring this option, while seeking to mitigate any risks of further “food colonisation” (Kuhnlein *et al.* 2006). However, it is uncertain as to what degree these solutions are compatible with an Indigenous food sovereignty framework, as they involve negotiated relationships with external interests and would first require mutually compatible expectations and protocols in order to function (PFPP 2010).

One alternative that might facilitate regional food sovereignty and reflect long-standing traditions of trade would be for northern Indigenous communities to exchange food with small-scale and especially Indigenous growers from the South. Members of MCN and Grand Rapids visited Muskoday First Nation in Saskatchewan, which operates a highly successful Indigenous agricultural cooperative (Hill 2009). Discussions focused on potential trading relationships with potatoes, corn, and other vegetables being exchanged for country foods including moose and fish, a relationship that will likely be explored in the future (Rudolph 2012). This nation-to-nation trading was much less problematic for participants than settler–Indigenous relationships, which undermined the idea of food sovereignty

for some. If successful, these initiatives would enable food sovereignty at local and regional scales while mitigating the impacts of the Global Agri-food System.

Defining priorities for food action in the North

Education about diet and nutrition, particularly that which is culturally appropriate with connections to health and healing (Power 2008) was identified as a priority. Skills and knowledge exchange and capacity-building regarding agricultural soils, gardening, green-house operations, and storing perishable goods through canning, pickling, and cold storage were also identified as important. Yet, again these relationships with food and the land were best contextualised by cultural traditions, especially pertaining to the education of youth and future generations. Rather than any one solution being strongly favoured, participants generally indicated that any food-related initiative that was locally designed and controlled, and which facilitated these outcomes, would be useful and well received. Solutions that emphasise food security over food sovereignty, still the norm for most southern agencies and NGOs, are thus unlikely to be adopted and will do little to resolve the northern food crisis. The “lack of food” is not the primary issue in the northern food crisis; instead, it is the generations-long and community-level experience with a wide array of colonising forces that have undermined and continue to undermine local food culture and food-related knowledge.

Yet, dominant society still has a potentially important supportive role to play in addressing these priorities – particularly as they relate to skills and knowledge exchange and capacity-building (Morrison 2011). Northern Indigenous participants in this research were welcoming and happy to host southerners who were there to exchange information and knowledge regarding food, as long as these exchanges were respectful, culturally appropriate, and community-centred in approach.

Conclusion

Participants had ready solutions to many of the food-related problems confronting their communities. Importantly, they identified most strongly with options that were pragmatic, accessible and that promoted their knowledge systems and control. Solutions to the northern food crisis are thus likely to be multiple and varied in approach. Options that are now being explored or are of potential worth need financial and political support. Yet, the food crisis in the North is also political in nature. These responses need to be generated by and generally located within northern communities in order to be successful – yet, very, very few of them are.

The solutions to the food crisis as they are now being implemented in the North are problematic for several reasons. The gardening initiatives favoured and celebrated by many mainstream food-related NGOs and agencies, while otherwise extremely beneficial, are labour-intensive and unlikely to be productive enough to adequately address the crisis. In and of themselves, they are unlikely to alleviate a food crisis that has a direct impact on food security and contributes to debilitating ill-health. Ongoing dependence on the South fundamentally undermines the capacity of these communities to respond to this and numerous other challenges in the North.

Most organisations addressing northern Indigenous food security are government funded or affiliated. These organisations and their activities tend to be apolitical and uncritical of the dominant paradigm that informs solutions to the northern food crisis, and often reinforce and promote culturally inappropriate approaches. In contrast, we have argued that

this food crisis is inherently political and is, at its roots, linked to land and treaty rights and many generations of colonisation. A wider diversity of alternatives is required, many of which are or will be explicitly political in nature, and thus embedded in an Indigenous food sovereignty framework.

In the spring of 2005, the Mayor and Council of Grand Rapids and the Chief and Council of MCN set up a blockade to oppose opening the spillway of the hydro dam. The uncleared brush in the spillway, once deposited in Lake Winnipeg, interferes with fishing and destroys equipment, devastating traditional livelihoods and food sovereignty every time the spillway is opened (G. McKay, personal communication, 14 July 2011). These outcomes and, as importantly, the processes that give rise to them are grounded in hundreds of years of food and environmental injustice, and lead directly to a desire for food and political sovereignty.

Food insecurity with its roots in past injustices cannot be addressed through supply-side approaches, but also require such politicised responses (Guthman 2008a, Levkoe 2011). The discourse surrounding the northern food crisis needs to move beyond food security to the more important dialogue around Indigenous sovereignty (food and otherwise), land rights and the political reasons as to why local control is so essential to any genuine resolution (Working Group on Indigenous Food Sovereignty 2011).

Indigenous priorities for education, skills development, capacity-building, and reconnecting to language and culture can only be facilitated if Indigenous food activists and educators with knowledge of traditional nutrition, hunting and trapping, medicines, and gardening practices are identified and empowered. Yet they, in turn, can only become a part of this desperately needed resolution if they are invited – or if they demand their way – to the political table, to frame the discourse and to communicate Indigenous priorities and visions surrounding Indigenous food sovereignty perspectives to all the other actors with an interest in resolving the northern food crisis.

Acknowledgements

We wish to acknowledge the generous hospitality of and guidance by residents of Grand Rapids and MCN. In particular, Gerald McKay, Annie Ballantyne, and Heidi Cook played a critical role in shaping this work. Funding for this research was provided by a Social Sciences and Humanities Research Council (SSHRC) graduate scholarship to KRR and by a SSHRC Communities-Universities Research Alliances (CURA) grant to SMM.

References

- Alkon, A.H. and Norgaard, K.M., 2009. Breaking the food chains: an investigation of food justice activism. *Sociological Inquiry*, 79 (3), 289–305.
- Allen, P., 2008. Mining for justice in the food system: perceptions, practices, and possibilities. *Agriculture and Human Values*, 25 (2), 157–161.
- Anderson, C.R. and McLachlan, S.M., 2012. Exiting, enduring and innovating: farm household adaptation to global zoonotic disease. *Global Environmental Change*, 22 (1), 82–93.
- Anon., 2003. What is food sovereignty [online]. La Via Campesina. Available from: http://viacampesina.org/main_en/index.php?option=com_content&task=view&id=47&Itemid=27 [Accessed 7 August 2012].
- Bateman, R.B., 1996. Talking with the plow: agricultural policy and Indian farming in Canada and the U.S. prairies. *The Canadian Journal of Native Studies*, 16 (2), 211–228.
- Bell-Sheeter, A., 2004. *Food sovereignty assessment tool*. Fredricksburg, VA: First Nations Development Institute.
- Brody, H., 2000. *The other side of Eden: hunters, farmers and the shaping of the world*. New York: North Point Press.

- Brown, D., 1970. *Bury my heart at Wounded Knee: An Indian history of the American West*. New York: Henry Holt and Company.
- Carino, J.K., 2006. Aboriginal land, food sovereignty and the right to self-determination: Indigenous Peoples' perspectives on agrarian reform. In: Civil Society Issues Paper "Land, territory and Dignity", for the *International conference on agrarian reform and rural development (ICARRD)*, Porto Alegre, Brazil, 7–10 March. Philippines: Cordillera Women's Education and Resource Centre (CWERC).
- Carter, S., 1990. *Lost harvests: prairie Indian reserve farmers and government policy*. Montreal: McGill-Queen's University Press.
- Coates, K.S. and Morrison, W.R., 1986. *Treaty research report: treaty five (1875)* [online]. Indian and Northern Affairs Canada, Treaties and Historical Research Centre. Available from: <http://www.aadnc-aandc.gc.ca/eng/1100100028692> [Accessed 15 October 2011].
- Creswell, J. and Clark, V., 2007. *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage.
- Desmarais, A., 2007. *Globalization and the power of peasants: La Vía Campesina*. Halifax: Fernwood.
- Dressler, W. and Pulhin, J., 2010. The shifting ground of swidden agriculture on Palawan Island, the Philippines. *Agriculture and Human Values*, 27 (4), 445–459.
- Fenelon, J. and Hall, T., 2008. Revitalization and Indigenous resistance to globalization and neoliberalism. *American Behavioral Scientist*, 51 (12), 1867–1901.
- Friesen, G., 1987. *The Canadian prairies: a history*. Toronto: University of Toronto Press.
- Guthman, J., 2008a. Bringing good food to others: investigating the subjects of alternative food practice. *Cultural Geographies*, 15 (4), 431–447.
- Guthman, J., 2008b. "If they only knew": color blindness and universalism in California alternative food institutions. *The Professional Geographer*, 60 (3), 387–397.
- Haluza-Delay, R., 2007. Environmental justice in Canada. *Local Environment*, 12 (6), 557–564.
- Haman, F., et al., 2010. Obesity and type 2 diabetes in Northern Canada's remote First Nations communities: the dietary dilemma. *International Journal of Obesity*, 34 (S2), S24–S31.
- Hill, A., 2009. *Muskoday organic farm sprouts job opportunities* [online]. The Prince Albert Daily Herald. Available from: <http://www.paherald.sk.ca/Business/Agriculture/2009-10-20/article-180741/Muskoday-organic-farm-sprouts-job-opportunities/1> [Accessed 4 February 2012].
- Ho, L., et al., 2008. Food-related behavior, physical activity, and dietary intake in First Nations – a population at high risk for diabetes. *Ethnicity and Health*, 13 (4), 335–349.
- Holt-Gimenez, E. and Peabody, L., 2008. *Solving the food crisis: the causes and the solutions*. Oakland, CA: Food First.
- IFSN (Indigenous Food Systems Network), 2012. Available from: <http://www.indigenousfoodsystems.org/> [Accessed 22 September 2012].
- Kawamura, H., 2004. Symbolic and political ecology among contemporary Nez Perce Indians in Idaho, USA: functions and meaning of hunting, fishing and gathering practices. *Agriculture and Human Values*, 21 (23), 157–169.
- Kuhnlein, H., et al., 2004. Arctic Indigenous peoples experience the nutrition transition with changing dietary patterns and obesity. *The Journal of Nutrition*, 134 (6), 1447–1453.
- Kuhnlein, H., et al., 2006. Indigenous Peoples' food systems for health: finding interventions that work. *Public Health Nutrition*, 9 (8), 1013–1019.
- Kulchyski, P., et al., 2006. *The town that lost its name: the impact of hydroelectric development on Grand Rapids, Manitoba* [online]. Canadian Centre for Policy Alternatives, Social Housing, Neighbourhood Revitalization, and Community Economic Development. Available from: <http://www.policyalternatives.ca/publications/reports/town-lost-its-name> [Accessed 4 December 2009].
- LaRocque, E., 2010. *When the other is me: native resistance discourse 1850–1990*. Winnipeg: University of Manitoba Press.
- Levkoe, C.Z., 2011. Towards a transformative food politics. *Local Environment*, 16 (7), 687–705.
- MAFRA (Manitoba Alternative Food Research Alliance), 2011. *Academic summary* [online]. Local and Just. Available from: <http://www.localandjust.ca/about/summary/> [Accessed 14 December 2011].
- Mann, C.C., 2005. *1491: new revelations of the Americas before Columbus*. New York: Alfred A. Knopf.

- Martens, P.J., *et al.*, 2007. Diabetes and adverse outcomes in a First Nations population: associations with healthcare access, and socioeconomic and geographical factors. *Canadian Journal of Diabetes*, 31 (3), 223–232.
- Mascarenhas, M., 2007. Where the waters divide: First Nations, tainted water and environmental justice in Canada. *Local Environment*, 12 (6), 565–577.
- McLachlan, S.M. and Miller, A.M., 2012. *Environmental and human health implications of the Athabasca oil sands for the Mikisew Cree First Nation and the Athabasca Chipewyan First Nation in northern Alberta*. Phase One. Final Report. Submitted to Mikisew Cree First Nation, Athabasca Cree First Nation, and Health Canada (Regional First Nations Environmental Contaminants Program). 17 September 2012.
- McLeod, N., 2007. *Cree narrative memory: from treaties to contemporary times*. Saskatoon, SK: Purich.
- MCN, 2010. *Misipawistik Grand Rapids: nit askinan ni nipiminan ni pimatisiwinan, our land, our water, our life*. Grand Rapids, MB: Office of the Band.
- Morrison, D., 2011. Indigenous food sovereignty: a model for social learning. In: H. Wittman, A. Desmarais and N. Wiebe, eds. *Food sovereignty in Canada: creating just and sustainable food systems*. Halifax: Fernwood, 97–113.
- Muhr, T., 1991. ATLAS/ti – a prototype for the support of text interpretation. *Qualitative Sociology*, 14 (4), 349–371.
- Natcher, D., Allen, T., and Schmid, T., accepted for publication. Canadian policy interventions during the mad cow crisis: cause and consequence of First Nation exclusion. *Journal of Aboriginal Economic Development*.
- Northern Food Prices Project Steering Committee, 2003. *Northern food prices project report*. Government of Manitoba: Healthy Child Committee of Cabinet.
- Page, J., 2007. Salmon farming in First Nations' territories: a case of environmental injustice on Canada's West Coast. *Local Environment*, 12 (6), 613–626.
- Partridge, C., 2010. Residential schools: the intergenerational impacts on Aboriginal peoples. *Native Social Work Journal*, 7 (1), 33–62.
- PFPP (People's Food Policy Project), 2010. *First principles protocol for building cross-cultural relationships* [online], 5. Available from: <http://peoplesfoodpolicy.ca/protocole> [Accessed 5 September 2012].
- Piper, L. and Sandlos, J., 2007. A broken frontier: ecological imperialism in the Canadian North. *Environmental History*, 12 (4), 759–795.
- Power, E.M., 2008. Conceptualizing food security for Aboriginal people in Canada. *Canadian Journal of Public Health*, 99 (2), 95–97.
- Rosset, P., 2008. Food sovereignty and the contemporary food crisis. *Development*, 51 (4), 460–463.
- Rosset, P., Patel, R., and Courville, M., 2006. *Promised Land: competing visions of agrarian reform*. Oakland, CA: Food First Books.
- Rudolph, K.R., 2012. *Close to the land; Connecting northern Indigenous communities and southern farming communities through food sovereignty*. Master of Environment thesis. Department of Environment and Geography, University of Manitoba, Manitoba, Winnipeg.
- SWDM (Saskatchewan Western Development Museum), 2010. *First Nations and Métis farming in Saskatchewan*. Saskatoon, SK: Saskatchewan Western Development Museum.
- Satheesh, P.V. and Pimbert, M.P., 2005. *Affirming life and diversity: rural images and voices on food sovereignty in south India*. Kerala: Palum.
- Slocum, R., 2007. Whiteness, space and alternative food practice. *Geoforum*, 38 (3), 520–533.
- Smith, L.T., 1999. *Decolonizing methodologies. Research and Indigenous Peoples*. New York: Zed Books.
- Smits, D.D., 1994. The frontier army and the destruction of the buffalo: 1865–1883. *The Western Historical Quarterly*, 25 (3), 312–338.
- Tang, E., 2003. *Agriculture: the relationship between Aboriginal and non-Aboriginal farmers*. Saskatoon, SK: Western Development Museum/Saskatchewan Indian Cultural Centre Partnership Project.
- Taylor, M.S., 2011. Buffalo hunt: international trade and the virtual extinction of the North American bison. *American Economic Review*, 101 (7), 3162–3195.
- Thompson, S., *et al.*, 2011. Is community economic development putting healthy food on the table? Food sovereignty in northern Manitoba's Aboriginal communities. *Journal of Aboriginal Economic Development*, 7 (2), 33–45.

- Tough, F., 1996. *As their natural resources fail: native peoples and the economic history of northern Manitoba, 1870–1930*. Vancouver, BC: University of British Columbia Press.
- Trainor, S., et al., 2007. Arctic climate impacts: environmental injustice in Canada and the United States. *Local Environment*, 12 (6), 627–643.
- Turner, B., 2011. Embodied connections: sustainability, food systems and community gardens. *Local Environment*, 16 (6), 509–522.
- Wiebe, N. and Wipf, K., 2011. Nurturing food sovereignty in Canada. In: H. Wittman, A. Desmarais and N. Wiebe, eds. *Food sovereignty in Canada: creating just and sustainable food systems*. Halifax: Fernwood, 1–19.
- Wittman, H., Desmarais, A. and Wiebe, N., eds., 2011. *Food sovereignty in Canada: creating just and sustainable food systems*. Halifax: Fernwood.
- Working Group on Indigenous Food Sovereignty, 2011. Indigenous food sovereignty [online]. Indigenous Food Systems Network. Available from: <http://www.indigenousfoodsystems.org/food-sovereignty> [Accessed 14 April 2011].