GROWING TOGETHER:
CULTIVATING COMMUNITY THROUGH GARDENING IN KENORA, ONTARIO

by

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ABSTRACT

Community gardens are places where people connect, share, and engage their social and ecological communities. The purpose of this thesis was to document and communicate participants' experiences of community-building through community gardening in Kenora, Ontario, Canada. The primary method used was Photovoice, whereby a group of twelve participants shared photos and stories of their garden communities in a series of workshops. Follow-up interviews were used to get participant feedback on the Photovoice process and fill gaps in the data, while participant observation was used to triangulate data. Results suggest a uniquely relational perspective of community gardening, the significance of sharing and learning in the garden, as well as success with and barriers to social capital and ecological citizenship among gardeners. Of particular importance, future garden initiatives should facilitate opportunities for intergenerational bonding, connecting across community gardens, building gardens in accessible locations, addressing systemic barriers to inclusion, and conducting further community-based research.

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1.0 INTRODUCTION

Community gardens can be broadly defined as inclusive places, marked by some degree of democratic process, where diverse people come together to grow food and other plants (Draper and Freedman 2010). But, community gardens are more than simply spaces for communal food production. They are places where people connect, share, learn, and engage their social and ecological communities. Among their many attributes, community gardens promote social connectedness and community cohesion (Saldivar-Tanaka and Krasny 2004; Armstrong 2000; Hanna and Oh 2000), positive cross-cultural interactions (Wakefield et al. 2007; Shinew, Glover, and Parry 2004), the (re)production and dissemination of ecological knowledge (Hale et al. 2011; Okvat and Zautra 2011; Andersson, Barthel, and Ahrné 2007), inclusive decision making and civic engagement (Glover, Shinew, and Parry 2005), neighbourhood advocacy, and civic action (Krasny and Tidball 2009b; Hancock 2001; Okvat and Zautra 2011).

Yet, these processes are not bound by the physical gardening space. Community gardening facilitates and depends upon the flow of knowledge, resources, and social capital among gardeners, as well as between gardeners and the community at large (Firth, Maye, and Pearson 2011; Glover, Parry, and Shinew 2005). Gardens provide platforms for individuals to learn about and advocate for their larger social and ecological communities (Krasny and Tidball 2009b), and create landscapes through which environmental perception and civic roles are transformed (Baker 2004; Travaline and Hunold 2010). Gardens and gardeners cultivate community.

1.1 Research Context

Kenora is a city of approximately 15 806 full-time residents (City of Kenora 2014), located in Northwestern Ontario, near the Manitoba border. Kenora has long been known for its

pristine lakes and cottage life, and during the summer, its population more than doubles as part-time residents take up residence in cottage country. Surrounded by several First Nations in Treaty 3 territory, Kenora is also home to many Aboriginal people who live in the city, either part or all of the time. Despite the diverse and fluctuating population, Kenora hosts a vibrant food community that includes urban farmers, market vendors, and community gardeners.

The majority of community gardens in Kenora are operated by community organizations. These gardens are designed to promote skills, capacity, community and inclusion among the people they serve. Examples include the community gardens operated by Kenora Association for Community Living, Women's Place Kenora, Waasegiizhig Nanaandawe'Iyewigamig Health Access Centre, and Changes Recovery Homes.

The community garden at Rabbit Lake is the only official community garden organized by a volunteer committee of gardeners. It is also the only community garden located on municipal land. The land is managed by the local recreation centre board. Gardeners come from all over Kenora and adjacent areas. However, it is located quite far from the centre of Kenora and out of range of the public transportation system. Opportunities to garden there are limited to those who live nearby or have access to private transportation.

Other examples of community gardening are found on private property throughout Kenora. For example, two seniors' apartment blocks – Gardner House and Benidickson Court – have community gardens that are shared by residents. In other cases, homeowners provide space to their neighbours to garden.

Partnering with the Arts Hub

This research on community-building through community gardening in Kenora stems largely from a two year research relationship with the Arts Hub (the Hub). Operated by the

Kenora Association for Community Living (KACL), the Hub promotes community inclusion for people with intellectual, learning, and physical disabilities through community arts-based programming in Kenora (see http://www.kacl.ca/kaclart.html).

My relationship with the Hub began in the summer of 2012. I was in the final term of my undergraduate degree in Geography at The University of Winnipeg, and completing a self-directed readings course on the benefits, motivations, and barriers to community gardening. Dr. Alan Diduck, who supervised this course, is an investigator with the Common Ground Research Forum (CGRF): a SSHRC-funded Community-University Research Alliance "to understand and build capacity for cross-cultural collaboration and social learning for regional sustainability in Kenora, Ontario (cgrf.ca), in a region strained by a legacy of colonialism dating back to 1873 (Wheeler Wiens 2011).

Initiatives to foster cross-cultural collaboration and positive social-ecological relationships are flourishing among some sectors of Kenora society. One area in which these values may be taking shape are community garden networks which bring together diverse community members, Aboriginal and non-Aboriginal alike, around common interests (Personal Communication with Lisa Gate-Villa, KACL Manager 2012). Dr. Diduck had been consulting with community members and organizations in Kenora interested in community gardening and action research, and saw the potential for master's level research to play a role in these conversations. Anticipating my acceptance to the Natural Resources Institute, and based on my research interest in community gardening, the CGRF offered me an undergraduate student position for the summer of 2012.

One of the organizations that Dr. Diduck consulted with is the Hub: an inclusive gathering space operated by KACL that promotes valued social roles for people with disabilities

and helps build inclusive community through arts-based programming and community events (Kenora Association for Community Living 2008). In 2010, the Hub added container gardening to its suite of activities and has since been working to expand its garden programming and networks. In 2012, it built an accessible garden (with raised beds and paved aisles) and hosted a series of garden workshops. In 2013, the Hub reserved a plot at the Rabbit Lake Community Garden, as an extension of its own gardening activities. The Trillium Foundation provided most of the funds for the 2012 expansion. However, CGRF funded one of the workshops (which I attended): a medicine walk on Tunnel Island with Elder Jan Longboat, co-hosted with Waasegiizhig Nanaandawe'Iyewigamig Health Access Centre (WNHAC) on June 15, 2012. CGRF also provided assistance in evaluating the garden expansion and its contribution to KACL's goals of equity and inclusion for people with special needs.

I was tasked with helping Dr. Diduck and the Hub in this process and, through this experience, built personal and professional relationships at the Hub. I participate (although not as often as I would like) in music and art, and have become friends with many community members who gather there. At the same time, I discovered that my own research goals were compatible with those of the Hub management, staff, and community. Furthermore, Hub personnel expressed interest in further action research within the context of my master's thesis. These shared interests and opportunities are the basis of my research relationship with the Hub, and informed the development of this thesis.

Shared Research Interests

Stemming from my critical social science worldview, and the organizational goals of the Hub, the approach of this research was to forward an action-oriented agenda for social change (Creswell 2009b). Management and staff of the Hub are particularly interested in research that

both investigates and builds on social capital and social role valorization. They recognize that connections made through community living organizations create opportunities for people with disabilities to fully participate in their communities and influence public perception (Curran 2008). They understand the significance of this social capital for their consumers (i.e. the people with disabilities with whom they work), and actively work to create such connections in the community (Curran 2008; Parris and Granger 2008). Through their participation in Hub activities and events, community members and consumers not only develop their talents and gifts; they contribute these to a collective effort. The Hub recognizes that promoting such valued social roles among people at risk of being devalued can result in many benefits, including: family connections and friendships, honest and respectful treatment, good health, agency in decision making, secure housing, and meaningful employment (Parris and Granger 2008; Race, Boxall, and Carson 2005).

This outlook is compatible with my research goals. Largely informed by critical geography, I consider place (e.g., a community garden or the City of Kenora) as constructed from the diverse assortment of values and meanings ascribed to it by actors with varying experiences of power and marginalization (Cresswell 2004). Of particular relevance to my thesis research, I was (and continue to be) interested in how – often marginalized – community gardeners perceive, define, and shape their community and environment through the political act of urban agriculture, especially within the context of cross-cultural collaboration and community-based resource management. I believe there is plenty of opportunity and benefit to giving voice to community gardeners, themselves.

Of particular importance to the CGRF and regional sustainability in Kenora, gardening groups and networks are often successful in bridging the gap between Aboriginal and settler

societies in Kenora. Not only does the Accessible Garden Project involve Aboriginal and non-Aboriginal gardeners, but the Hub has successfully partnered with other local organizations interested in promoting cross-cultural collaboration through gardening. For instance, as noted above, the Hub and WNHAC – which serves an exclusively Aboriginal clientele – co-hosted a medicine walk with Elder Jan Longboat from Six Nations of the Grand River First Nation. Medicine walk participants learned Aboriginal teachings about foods and medicine, and made a salve from medicines gathered on Tunnel Island.

Towards the end of the 2012 gardening season, I began dialogues with management and staff at the Hub to investigate the potential for partnering on a community-based participatory research project to investigate the contributions of community gardening to community-building in Kenora. In collaboration with the Hub management, I decided to focus on social capital[1] and ecological citizenship[2] as measures of social inclusion and valued social roles, respectively. Yet, in order to actively promote inclusion and valued social roles among participants, it was integral that the research also highlight the knowledge, experience and terminology of participants to ensure that their voices were included in discussions of community gardening in Kenora. Furthermore, Hub management and staff are interested in nurturing relationships and networks with other community gardening groups and individuals representing a diversity of abilities, knowledge, skills, and cultural experience. As a result, it was necessary that this research engage community gardeners throughout Kenora in a collaborative, participatory research process.

[1] I adopt Putnam's (1993) definition of social capital, as the norms of reciprocity and trust among social networks. Further details and other pertinent aspects of the social capital literature are reviewed in section 3.1.

[2] Ecological citizenship refers to the integration of social and environmental values in ecological stewardship practices. Through practices like community gardening, individuals learn about and engage their social and ecological communities for improved individual, social, and environmental well-being (Krasny and Tidball 2009a; Okvat and Zautra 2011). See section 3.2.

1.2 Research Purpose and Objectives

The purpose of this research was to document and communicate participants' experiences of community-building through community gardening in Kenora, Ontario. The objectives were to apply participatory methods to 1) explore how participants perceive, engage, and envision their garden communities, 2) determine whether and how community gardening contributes to the production of social capital and ecological citizenship in Kenora, 3) share results with the community at large to encourage further dialogue, throughout Kenora, regarding community-building through community gardening.

1.3 Research Design

As I alluded to above, this research was conducted using a community-based, participatory research (CBPR) approach. Ultimately, CBPR involves addressing community-identified problems, involving participants in the design and execution of the research agenda, and ensuring the equitable distribution of research findings (Mackinnon and Stephens 2010). As a result, it does not ascribe to any particular methodology, or methods, per se. Rather, CBPR is an attempt to deconstruct conventional research dynamics through any combination of methodologies, research designs, and data collection and analysis procedures that facilitates community participation and shared decision making at every step of the research process (Minkler 2004).

The primary data collection and analysis technique for this case study was Photovoice: a tool by which community members collaborate on identifying, representing, and enhancing their community through photography (Palibroda et al. 2009; Wang and Burris 1997). Photovoice was chosen because it includes community members in data collection, analysis, and dissemination, and promotes community ownership of knowledge and outcomes. It also complements the Hub's

arts-based mandate for community-building (Personal Communication with Lisa Gate-Villa, KACL Manager 2012). I used participant observation to triangulate Photovoice data and provide a more robust dataset. I also conducted follow-up interviews to gather feedback on the Photovoice process and ask questions related to gaps in the workshop data.

Photovoice

Twelve participants investigated their garden communities through a series of photography assignments and workshops. Participants were recruited through invitations that were distributed to Hub patrons and contacts with an interest in gardening or photography. As the Hub would like to build partnerships with other organizations that have community gardens, invitations were forwarded to such organizations, for distribution among their clientele. Participants included current and aspiring community gardeners who possessed a diversity of experiences and expertise with gardening and photography. The Photovoice group consisted of an even number of Aboriginal and settler peoples, and representatives from four community gardens.

After attending a Photovoice orientation meeting and workshop – where they received their cameras, practiced photography, and documented informed consent – participants participated in a series of four photography assignments and workshops. While the first of these workshops (My Garden Community) was assigned to participants, the three subsequent assignments (Relationships, Other People's Gardens, and Sharing Our Potential) were determined in the workshop setting. In workshops, participants shared their photos and stories related to that weeks photography assignment, and discussed key narratives that emerged from the photographs and accompanying stories. Photographs and key narratives were compiled into a public art exhibit, so the group could share what it learned with the general public.

Participant Observation and Follow-Up Interviews

In addition to Photovoice, I employed participant observation while engaged in activities at community garden sites (i.e. garden maintenance, garden-related celebrations). Immediately following each observation event, I completed an observation checklist to document participation, activities, and examples of community-building. My observation checklist is attached as Appendix 8.2. Observation data were used to triangulate Photovoice data and identify potentially significant themes not generated or canvassed by participants (Creswell 2009a).

Semi-structured interviews with individual participants were conducted, following the Photovoice project. In interviews, participants were asked for feedback on the Photovoice process, including their likes and dislikes. They were also asked about research themes not covered, or of emerging interest, in the workshop setting. Interviews also provided an opportunity to discuss sensitive subject matter not easily addressed in the Photovoice workshop setting (Ibid.).

Participants

Research participants included both Aboriginal and non-Aboriginal community members, of various intellectual, developmental, and physical abilities. Social science research on Aboriginal populations often results in the appropriation of local knowledge for external motives, while devaluing, or outright ignoring, Indigenous ways of knowing (Pualani Louis 2007). Furthermore, research agendas designed by non-disabled researchers tend to make inappropriate and, in some cases, damaging assumptions regarding the needs and desires of disabled people, who are presumed to be a homogenous group of individuals, rather than a diverse community (Munger and Mertens 2011).

This research actively sought to avoid perpetuating such research relationships by involving participants in the design and execution of the research agenda, and ensuring that the findings are distributed in a fashion that is meaningful and accessible to participants, the public, and academia alike (Mackinnon and Stephens 2010). Although the research purpose, objectives, and methods for this research were chosen in advance of participant recruitment, participants chose the topics for three of the four photography assignments, thus determining the thematic direction of data collection. Participants assisted in analysis during Photovoice workshops by reflecting on the photographs presented and discussing emergent themes of particular interest to their communities. Participants continue to share what they learned through the Photovoice exhibit, which has received an overwhelmingly positive response since its launch in September, 2013. While not without challenges or limitations (see Section 6.3), Photovoice provided opportunities to include participants in the design and implementation of the research.

Narrative Analysis

Data were analyzed using a narrative approach, focusing on stories that participants give to people, places, and events in their lives. NVivo 10 was used to code data from Photovoice workshop transcripts, according to themes that emerged from participant stories and discussions during workshops.[3] Nodes (codes) included concepts of particular significance to participants (e.g., teaching the next generation to garden, urban beautification, conserving water), and were grouped according to the major topics identified for the photography assignments (i.e. My Garden Community, Relationships, Other People's Gardens, Sharing, and Potential) [4]. This

[3] Castleden, Garvin, and Huu-ay-aht First Nation (2008) suggest Photovoice searchers code data according to themes that emerge though participant stories and group discussions.

[4] These major themes were not used to identify which workshop the data came from, but to organize data according to areas of interest to participants. (Each of these code groupings includes data from each workshop.)

analysis of Photovoice data produced a set of *contextualized* results,[5] which were compiled into a report and returned to participants for verification. These results are described in detail in Chapter 4.0, and address the first objective of this research: use participatory methods to explore how participants perceive, engage, and envision their garden communities.

As per Objective 2 of this research - determine whether and how community gardening contributes to the production of social capital and ecological citizenship in Kenora – I also developed frameworks for investigating social capital (Table 3.1) and ecological citizenship (Table 3.2) from a synthesis of relevant literature. Using NVivo 10, I coded Photovoice workshop transcripts, interview transcripts, and observation notes, according to these frameworks.

1.4 Knowledge Contributions

The final products of this project include this thesis, the Photovoice exhibit, a forthcoming project summary for community distribution and future publication of results in relevant journals. This research adds to a growing interdisciplinary body of literature on community gardening and its contribution to social capital and social-ecological engagement. Moreover, participants' insights contribute directly to local knowledge of community gardening, social capital, ecological citizenship, and cross-cultural collaboration. As I hope to show here, their knowledge also spurs action.

[5] According to Palibroda et al. (2009), Photovoice participants contribute to analysis by selecting photos, contextualizing these photos within a larger set of circumstances, and codifying data according to categories, themes, and issues that emerge within these contexts. As such, I refer to this first set of analysis and results as *contextualized* in order to differentiate them from the theoretical analysis and results that follow.

2.0 LITERATURE REVIEW: BUILDING COMMUNITY THROUGH GARDENING

In Chapter 1.0, community gardens are defined as inclusive places, marked by some degree of democratic process, where diverse people come together to grow food and other plants (Draper and Freedman 2010). Community gardening, however, includes more than just growing food. Gardens create space for social cohesion and community building (Wakefield et al. 2007; Shinew, Glover, and Parry 2004; Saldivar-Tanaka and Krasny 2004; Armstrong 2000; Hanna and Oh 2000), the reproduction of ecological knowledge (Hale et al. 2011; Okvat and Zautra 2011; Andersson, Barthel, and Ahrné 2007), as well as inclusive decision making and civic engagement (Glover, Shinew, and Parry 2005). Furthermore, these processes are not bound to the garden itself. While social interaction, sharing, and learning do transpire in the garden, often between gardening tasks, they also occur when gardeners gather outside of the garden to plan, organize, cook, feast, or simply socialize in an alternate setting (Glover, Parry, and Shinew 2005). Some community gardens are even associated with a community kitchen in which social cohesion, sharing knowledge, and building capacity are extended beyond the act of growing, to include preparation and nutrition (Mundel and Chapman 2010).

Drawing from the diverse and multidisciplinary literature on community gardening, and focusing on my research interests and those of the Hub, the following literature review highlights social capital, ecological citizenship, and cross-cultural collaboration within gardening communities. The literature presented here informed the theoretical frameworks I used to address Objective 2 of this thesis: determine whether and how community gardening contributes to the production of social capital and ecological citizenship in Kenora.[6] These frameworks for social capital and ecological citizenship are included as Table 3.1 and Table 3.2, respectively.

[6] Results for Objective 1 (exploring how participants perceive, engage, and envision their garden communities) will come from a contextualized analysis of the data, as described in section 3.4.

2.1 Social Capital and Community Gardening

Social capital, or the trustworthy and reciprocal connections that exist between individuals in social networks, is an integral component of robust communities (Manzo and Perkins 2006; Putnam 2000). Communities with high levels of social capital tend to foster mutual assistance, social cohesion, sense of place, and community identity through the creation and maintenance of informal networks of people with shared interests, identities, or place-based aspirations (Firth, Maye, and Pearson 2011; Manzo and Perkins 2006).

Although social capital remains a contested term (Walsh 2011; Manzo and Perkins 2006), Putnam (2000) and Woolcock (2001) concur on the significance of "bonding" and "bridging" social capital. Bonding social capital refers to relationships of solidarity between individuals who share strong social ties, such as culture, kinship, socioeconomic status, or neighbourhood affiliation. Through these ties, community members exchange resources, knowledge, and skills, thus maintaining a sense of community and reaffirming their membership in it. Firth, Maye, and Pearson (2011) add that such strong connections can also be forged, albeit with more difficulty, among communities of interest with little to no place-based affiliations.

Bridging social capital, in contrast, describes the reciprocal and trustworthy relationships that develop between individuals of differing socio-economic experience. These relationships facilitate the flow of resources and knowledge between diverse groups with a common interest (Firth, Maye, and Pearson 2011; Putnam 2000). Bridging social capital created through shared interests can help overcome conflict and facilitate the pooling of community assets for common social or environmental goals (Firth, Maye, and Pearson 2011; Manzo and Perkins 2006).

In addition to bonding and bridging social capital, other authors have referred to linking social capital. While bridging social capital can be thought of as the lateral relationships that are

built between diverse individuals or community groups, "linking" social capital is used to describe the relationships that link individuals and/or community groups with local and/or regional institutions that occupy positions of power, relative to these individuals or groups. Through such linkages, community members are able to access resources and impact policies that have bearing on their lives and well-being (Firth, Maye, and Pearson 2011; Woolcock 2001).

Social capital has not been immune to conceptual critique. For instance, measures of social capital have often been quantitative, relying on the number and type of relationships that people possess in their community. As a result, little has been done to measure social capital in qualitative terms, including the quality and meaning attributed to these relationships (Walsh 2011). It has also been argued that investigations into social capital often exclude political and historical considerations, such as colonization, that impact the production of trustworthy and reciprocal relationships. Furthermore, with a focus on society-wide analyses, social capital research tends to discount or elude community-based interpretations of this phenomenon (Ibid.).

On the other hand, social capital has been shown to operate at multiple scales – including individual; social group or organization; neighbourhood; and city, region, or society – resulting in strong and empowered social-ecological communities[7] (Manzo and Perkins 2006). For example, increasing recognition of the environment as a contributor to quality of life has led to the relatively recent creation of stewardship networks. These networks connect stewardship groups with individuals, other stewardship groups, and institutions that provide valuable resource and support for ecological integrity and community development (Svendsen and Campbell 2008; Pretty and Ward 2001). Community gardens, in particular, provide an example of how social capital can contribute to strong social-ecological communities.

[7] From a social-ecological perspective, "the definition of community is extended beyond human social ties to include connections with other species and the earth itself" (Okvat and Zautra 2011, 374). See section 3.2.

Evidence of Social Capital in Community Gardens

Community gardens have been demonstrated to facilitate the production of bonding, bridging, and linking social capital (Firth, Maye, and Pearson 2011; Walsh 2011; Glover, Parry, and Shinew 2005; Kingsley and Townsend 2006). For example, community gardens can contribute to bonding social capital by providing space for ethnic identity groups to grow and preserve their cultural ties, such as in the case of Latino gardeners in New York City (Saldivar-Tanaka and Krasny 2004). Furthermore, community gardens provide opportunities for families and close friends to share the experience and enjoyment of gardening, as well as places where individuals can get moral support in challenging times (Kingsley and Townsend 2006). Community gardeners also contribute to neighbourhood bonding, as they are often used as venues for neighbourhood events, including celebrations and feasts (Firth, Maye, and Pearson 2011; Saldivar-Tanaka and Krasny 2004).

Bridging social capital emerges in community gardens when participants, despite dissimilarities in class, culture, (dis)ability, or location, build relationships based on a mutual interest in gardening (Glover, Parry, and Shinew 2005; Kingsley and Townsend 2006). Yet, bridging social capital is not necessarily confined to the physical space of the garden. It is also achieved through relationships, and the bi-directional flow of knowledge and resources, between community gardeners and community organizations, groups, and individuals with similar interests (Firth, Maye, and Pearson 2011). As such, community gardening can also help bridge the gap between diverse gardening groups. It is, therefore, often difficult to differentiate between bonding and bridging social capital among community gardeners (Kingsley and Townsend 2006; Glover, Parry, and Shinew 2005). For instance, community members gardening in the same community garden space could build bonding social capital based on their common

neighbourhood affiliation and bridging social capital based on their common interest in gardening. On the other hand, a common interest in gardening could be the basis of bonding social capital, with the community garden creating the space for bridging diverse neighbourhood residents and their community goals.

Linking social capital is evident in community gardens, which often bring together community groups, non-profit organizations, government agencies, universities (Krasny and Tidball 2009a) and grade schools (Richardson 2011) around building strong social and ecological communities. Furthermore, many community gardens rely on government, corporate, or organizational support through financing, in-kind assistance, or policy reform in order to remain viable (Firth, Maye, and Pearson 2011). Like bonding and bridging social capital, linking social capital suggests a reciprocal relationship. Thus, community gardens that posses linking social capital, often do so because their powerful patrons have an interest in connecting with community (Firth, Maye, and Pearson 2011). Unlike bridging and bonding social capital, however, linking social capital is clearly distinguishable from other forms of social capital as a result of the clear power differentials between parties.

Yet, it should also be noted that social capital can create challenges for gardeners and their communities. For instance, the strong and intimate connections that constitute bonding social capital can also result in the exclusion of those who do not identify with the in-group (Glover 2004; Kingsley and Townsend 2006). Thus, it may be true that community gardens can contribute to bridging social capital by bringing together people from diverse ethno-cultural identity groups (Firth, Maye, and Pearson 2011; Hancock 2001) or experiences of (dis)ability (Kingsley and Townsend 2006). However, community gardens can also perpetuate the exclusion of ethnic minorities, people with disabilities, or other oppressed people, when these are excluded

from the bonding that happens among the dominant group (Firth, Maye, and Pearson 2011; Shinew, Glover, and Parry 2004; Kingsley and Townsend 2006; Glover 2004).

Furthermore, people with differing cultural perspectives may perceive social capital in quite different ways. For instance, non-racialized community gardeners who belong to the dominant settler society often perceive their community gardens to be more culturally heterogeneous than they actually are. While these individuals may think of their gardens as contributing to cross-cultural bonding, others may continue to feel excluded. In fact, it has been demonstrated that the degree to which social capital is accessible to individual gardeners is mediated by their social position or ethnic identity, with marginalized community gardeners having generally less access to social capital than their more privileged counterparts. Finally, whether it be bonding, bridging, or linking in nature, social capital often takes a long time to develop. As a result, it may not be readily apparent in recently formed community gardening groups (Kingsley and Townsend 2006).

2.2 Community Gardens and Ecological Citizenship

Ecological citizenship, also referred to as civic ecology, describes the integration of social and environmental values in ecological stewardship practices. Unlike human ecology, social ecology, or environmental justice, ecological citizenship "shifts the focus from power, individual rights, advocacy and planning to people acting as stewards of their environment through such practices as community gardening, community forestry and watershed restoration" (Krasny and Tidball 2009a, 466). Through such practices, individuals and communities can further individual, social, and environmental well-being (Okvat and Zautra 2011), and gain experiential and observational knowledge regarding their environments and the impacts of their actions on the biological, physical, and social underpinnings of their communities (Krasny and Tidball 2009a).

In the case of urban environments, such as Kenora, ecological citizenship compels us to think of such cityscapes as more than built environments with ecological footprints and largely-disconnected populations (Light 2003). Instead, conceptualization of human environments, urban or otherwise, should include consideration of the relationships among and between people, other species, and the earth itself, within these settings (Okvat and Zautra 2011). Ecological citizenship, therefore, presents a holistic view of community that blurs the line between social and environmental forces and actors.

Ecological Citizenship and Community Gardening: Learning and Action

Community gardens facilitate the (re)production of diverse types of ecological knowledge (Krasny and Tidball 2009a). From a western science perspective, community gardens offer opportunities for participants to explore the plants, insects, and ecological processes that make a garden thrive. As a result, community gardeners gain an improved understanding of general scientific, biological, and ecological phenomena (Krasny and Tidball 2009b). Yet community gardens also offer the opportunity to learn about social-ecological processes and relationships specific to the local context. They provide an oasis of social-ecological memory[8] on the urban landscape, where gardeners (re)create and disseminate knowledge on local vegetation, climate, ecosystem services, the best crops to grow under these conditions (Shava et al. 2010; Baker 2004), as well as food preparation techniques (Mundel and Chapman 2010; Wakefield et al. 2007; Hancock 2001). This knowledge is (re)produced through imitation, communication, and collective ritual in the physical space of the garden (Barthel, Folke, and Colding 2010),

[8] Social-ecological memory refers to experiential and intergenerational knowledge "of fluctuating local environmental conditions and societal adaptations... carried forward through time by locally adapted crops, landscape features and agrotechnologies like gardens, as well as by habits, oral traditions, written accounts and self-organised systems of rules" (Barthel, Parker, and Ernstson 2013, 6).

community kitchens (Mundel and Chapman 2010) and other public and private spaces where community gardeners convene (Glover, Parry, and Shinew 2005). Yet, community gardens and related venues also provide spaces for gardeners to meet, socialize, and learn about each other, local institutions and organizations, as well as social-ecological issues and activities in their local communities (Richardson 2011; Armstrong 2000). Furthermore, they provide learning opportunities related to decision making, maintenance, and governance – management – of the garden (Krasny and Tidball 2009b).

In addition to, and largely stemming from these learning opportunities, community gardens provide opportunities for individuals to develop capacities as ecological citizens, organize around garden and neighbourhood advocacy, and become engaged in civic action on food security[9] and local resource management within the larger community (Krasny and Tidball 2009b; Wakefield et al. 2007; Baker 2004; Hancock 2001). Community gardens can also act as platforms from which to learn about climate change processes and the impact of lifestyle choices on the environment (Okvat and Zautra 2011). Community gardens cultivate civic engagement by providing opportunities for on-going participation, strengthening social relationships, and developing the self-confidence and capacity to act upon acquired and shared knowledge (Travaline and Hunold 2010; Ohmer et al. 2009). Whether one actively participates in the growing process, the availability and distribution of fresh garden produce can raise awareness regarding environmental injustices and social inequities of the dominant food system (Travaline and Hunold 2010). Thus, community gardeners participate in "communities-of-practice",

[9] The World Health Organization (2014) defines food security in terms of availability (sufficient quantities of food), access (sufficient resources to acquire food), and use (preparation, nutrition, and sanitation knowledge). In the community gardening literature, food security is most often associated with the availability of and access to healthy, affordable, and culturally appropriate food, as well as the acquisition of food skills (see, for example: Wakefield et al. 2007; Baker 2004). While participants in this research discussed food knowledge, skills, and access (see, for example, Sections 4.4, 1.15.2.1, and 5.2.2), this research did not examine food security, specifically, nor did I attempt to make any contributions to the food security literature.

through which participation and the reification of social-ecological knowledge results in improved ecosystem services (Barthel, Folke, and Colding 2010), positive social outcomes and enhanced community well-being (Krasny and Tidball 2009a).[10]

Ecological Citizenship and Valued Social Roles

Of particular interest to this thesis research is the contribution of community gardening and resulting ecological citizenship to valued social roles among marginalized community members. It is well-understood that those who occupy valued social roles in society have greater access to all of the benefits that society has to offer (Parris and Granger 2008; Race, Boxall, and Carson 2005). Promoting, and creating, valued social roles among people at risk of being devalued, such as those with experiences of disability, racialization, or poverty, can result in stronger family connections and friendships, honest and respectful treatment, good health, agency in decision making, secure housing, and meaningful employment, among other positive outcomes (Parris and Granger 2008; Race, Boxall, and Carson 2005).

While the literature on community gardening does not make explicit reference to the realization of valued social roles, it does allude to how involvement in community gardening promotes the inclusion and contributions of marginalized participants to the creation of sustainable communities. For instance, community gardens often include the most marginalized community members in such decision-making processes as determining which crops to grow, how best to grow them, and the means by which they will be distributed among the community (Travaline and Hunold 2010). Furthermore, as people learn about other cultures, their local environment, growing methods, food preparation, and nutrition, they enhance the human

[10] Both Barthel, Folke, and Colding (2010) and Krasny and Tidball (2009a) frame these outcomes within a resilience framework, which will not be specifically canvassed in this thesis research. See also: Barthel, Parker, and Ernstson (2013); Krasny and Tidball (2009b).

capital[11] of their communities, or the availability of healthy, skilled, knowledgeable, creative and engaged citizens. The social, organizational, and practical skills and knowledge acquired in the garden may enhance not only gardeners' employability, but also their sense of self-esteem and purpose (Hancock 2001).

Yet it should also be acknowledged that, while often marked by social inclusion, urban agriculture initiatives, including community gardens, often exhibit inequitable power relationships. Leadership roles in community gardens tend to be filled by people with more privilege than the average gardener. For example, gardens in developing neighbourhoods or provided through social service providers are generally targeted toward marginalized community members, but are delivered through organizational staff that are relatively well employed, well-educated, and often white (Schmelskopf 1995; Travaline and Hunold 2010).

Ecological Citizenship and Cross-Cultural Collaboration

Community gardens tend to be a haven for a diversity of plant species representing the tastes and preferences of equally diverse gardeners (Okvat and Zautra 2011), and ensuring access to a variety of culturally significant foods (Baker 2004; Saldivar-Tanaka and Krasny 2004). Individuals who migrate from rural to urban settings, or across regional or national boundaries, often maintain culturally-diverse, experiential, or practical agricultural knowledge that can be applied to new gardening contexts (Krasny and Tidball 2009a; Shava et al. 2010). By sharing food and knowledge across cultural boundaries, community gardeners are introduced to new foods and cooking techniques (Travaline and Hunold 2010; Wakefield et al. 2007; Hancock

[11] Hancock (2001) associates community gardening with four types of "community capital": social, natural/ecological, economic, and human. Social capital is of particular relevance to the Hub, and it is one focus of this thesis research (see section 3.1). As demonstrated above, human capital is also relevant and can be tied to valued social roles and ecological citizenship among gardeners. Ecological and economic capital, however, will not be canvassed in this research.

2001) and set the stage for the production of further social capital through the establishment of cross-cultural, food-centred community events (Richardson 2011; Saldivar-Tanaka and Krasny 2004). Furthermore, through such collaboration, community gardeners are able to determine the most culturally suitable and regionally productive crops and cultivation techniques (Baker 2004; Saldivar-Tanaka and Krasny 2004).

Although there is a wealth of literature on cross-cultural collaboration among community gardeners, there is a dearth of knowledge on collaboration between settler and Indigenous community gardeners in the Canadian, or even North American, context. In contrast to Western cultivation practices, which rely on scientific ecological knowledge, precise sowing, and careful maintenance, Indigenous approaches to cultivation are less manipulative, involving spontaneous sowing of crops in or near forested areas and little to no intervention during the growing season (Stroink and Nelson 2009). This was particularly significant in the context of the thesis research, as it has been argued that combining diverse settler and Indigenous approaches to cultivation – including community gardening – may be integral to developing a robust local food system for Indigenous communities in Northern Ontario (Ibid.). Furthermore, community gardeners representing settler society in the region could very well benefit from Indigenous knowledge regarding the ways in which the cultivation and preparation of foods contribute to healthy relationships with the land, its resources, and other beings, human or otherwise, with which these resources are shared.

3.0 RESEARCH DESIGN: GARDEN PHOTOGRAPHY, COMMUNITY NARRATIVES

Actively and fully engaging community members in the research process can contribute to transformative research outcomes for participants (Mackinnon and Stephens 2010). As noted above, this research takes a community-based, participatory approach in order to promote social inclusion and valued social roles among participants. In this case, we (i.e. myself, Hub management and staff) decided to use Photovoice as the primary data collection method, supported by follow-up interviews and participant observation. But before I describe these methods in greater detail, I would like to provide a more in-depth description of community-based, participatory research.

3.1 Community-Based Participatory Research

Community-based participatory research (CBPR) is an umbrella term used to describe a variety of research strategies that combine participation, inquiry, and action (Minkler 2004) to achieve collaborative and equitable research with, as opposed to research on, marginalized and vulnerable populations (Delemos 2006). CBPR is grounded in participatory inquiry, reflection, and action as proposed by Kurt Lewin (1946), from which it acquires a focus on experiential knowledge, group dynamics, and local context (Castleden, Morgan, and Lamb 2012; Khanlou and Peter 2005), as well as the requisite participation of affected stakeholders (Minkler 2004). CBPR also draws from radical educators, such as Paulo Freire (2000), who advocate for critical self awareness among oppressed peoples and emancipatory approaches to knowledge, learning, and inquiry. Based on these conceptual and theoretical origins (as well as later contributions from feminism and post-colonialism), CBPR promotes mutually beneficial relationships between communities and researchers, methodologies that are attuned to the local culture and context, equity and reflexivity regarding researcher and community roles, and respect for processes and

outcomes (Shiu-Thornton 2003). Through this approach, CBPR seeks to address the inequitable relationships and objectification of informants that characterize much research on marginalized and vulnerable populations.

This was particularly relevant to my thesis research, which involved gardening community members who are Aboriginal and/or live with disability. Indigenous peoples are disproportionately objectified by research initiatives that misappropriate and misrepresent local knowledge for external motives while simultaneously devaluing, dismissing, or outright ignoring the sources and validity of this knowledge (Wilson 2008; Pualani Louis 2007). In addition, non-disabled (i.e. temporarily able-bodied and able-minded) researchers often make flawed assumptions about the needs and wants of people with disabilities and, as a result, develop research agendas that presume homogeneity of research subjects and produce irrelevant or harmful outcomes (Munger and Mertens 2011). As a result, my research attempted to facilitate the democratization of knowledge (Minkler 2004) and the transformation of research relationships from oppressive and extractive to those based on trust, empowerment, and accessibility (Delemos 2006).

By addressing compatible research objectives and using appropriate methodologies determined in collaboration with management and consultants at the Hub, this research sought results that are not only academically salient, but relevant to participants and the community at large (Ballard and Belsky 2010; Mackinnon and Stephens 2010). Representatives of the Hub, including Laura Cotton and Lisa Gate-Villa, were consulted throughout the research process and heavily involved in the design and execution of the project. Other support and recommendations were provided by representatives from Women's Place Kenora, Waasegiizhig Nanaandawe'Iyewigamig Health Access Centre, and Native Women's Health Association.

Participants were involved in determining the thematic direction of data collection, collected and analyzed data through Photovoice assignments and workshops, verified results, and disseminated their findings in a public exhibit.

We hoped that engaging community members in data collection, analysis, and reporting procedures would contribute to equity by enhancing community capacity, and that community members would be exposed to new knowledge and skills which can contribute to enhanced understanding of, engagement with, and changes to their social and natural environments (Castleden, Morgan, and Lamb 2012; Ballard and Belsky 2010; Minkler 2004). Also in line with CBPR, we wanted to ensure that data and emergent knowledge were documented and distributed in ways that were meaningful, accessible, and equitable to all stakeholders (Castleden, Morgan, and Lamb 2012; Mackinnon and Stephens 2010). In addition to the Photovoice Exhibit and this thesis, I presented my results at a community dissemination event at the Community Arts Hub on August 21, 2014. I have published a four-page community summary of the research for general distribution, and I plan to produce a more comprehensive 25-page report in the coming months.

It should be noted that CBPR also presents some ethical and practical challenges, especially when conducted by outside researchers. Most notably, researchers employing CBPR must be reflexive and attuned to the relational history between their participants and outside researchers, the impact and desirability of the research among community members, and the diversity of opinions which often make community difficult to define (Dempsey 2010). This is particularly relevant to CBPR among Aboriginal people (Castleden, Morgan, and Lamb 2012; de Leeuw, Cameron, and Greenwood 2012) and people with disabilities who face various forms of oppression which can limit who participates or controls the resulting knowledge resources (Minkler 2004). However, many researchers find it difficult to maintain collaborative and

equitable relationships with participants (Minkler 2004; de Leeuw, Cameron, and Greenwood 2012) or to accurately define community and its representatives (Dempsey 2010; Shiu-Thornton 2003). In such cases, CBPR can stifle community opposition or researcher reflexivity, and actually hinder "meaningful, accountable, and non-extractive relations" with affected parties (de Leeuw, Cameron, and Greenwood 2012, 191).

Although I did consider these issues before embarking on my thesis research, and I am confident that the results are meaningful for participants and the community at large, some of the challenges mentioned above were evident in experience. (See Section 6.3 for a more specific critique of Photovoice as an approach to research). As a resident of Winnipeg conducting research in Kenora, I relied heavily on connections with gardening groups and individuals – developed during my undergraduate work with the CGRF – to get a better sense of community gardening in Kenora and ensure that the research was relevant to the community. While these community garden contacts were extremely helpful for designing the research project, they were by no means representative of all community gardeners and gardening groups in Kenora, many of whom were not consulted in preparation for this research. As a result, I should be clear that this research does not provide a comprehensive view of community gardening in Kenora, nor will it necessarily be of interest to all community gardeners in Kenora.

I must also be clear that I am a white, middle-class, able-bodied, able-minded, cis-male settler and well-educated masters' student who occupies a place of privilege relative to many participants in this research. As a researcher, I have the power to record, analyze, and share participant knowledge. I also bring to this project a set of values, priorities, and research interests that do not necessarily coincide with those of participants. For example, as I described in Section 1.1, social capital and ecological citizenship were determined in consultation with personnel

from the Hub, and reflect the research interests I share with that organization. However, these concepts were not necessarily understood by, or relevant to, all participants in this research, many of whom had their own concepts and terminology for community-building through community gardening. In fact, two participants challenged me on my use of social capital, specifically, as it carries connotations of monetizing, or at least quantifying, relationships. Although I was able to clarify my intent in using this concept, as well as its organizational relevance for the Hub, it was clear that my research interests conflicted, to some degree, with the interests of participants.

While such conflicts are common in CBPR involving researchers and community members with differing values and priorities, researchers have a responsibility to critically reflect on their own research practice (Castleden, Morgan, and Lamb 2012) and respect the relevance of community-defined interests (Delemos 2006). In order to produce a theoretically robust thesis that reflects my research interests, while giving equal credence to participant-identified concepts, I decided to analyze the data according to both participant-identified concepts and theoretical frameworks for social capital and ecological citizenship (see also Section 3.4).

Finally, it is often difficult to reconcile the academic and bureaucratic obligations of university-based research with equitable decision making, capacity building, and co-learning prescribed by CBPR (Castleden, Morgan, and Lamb 2012). Researchers can face institutional barriers to mustering the time, funding, and training for CBPR, which is often seen as an illegitimate, inadequate, or unattainable form of research (Delemos 2006). This challenge was not so apparent in the case of my thesis research. While professors at the Natural Resources Institute cautioned me regarding the time and commitment involved in properly conducting CBPR, they were generally supportive of my intentions. They were aware of the relationships I

had developed through my undergraduate work with the CGRF, and showed confidence in my ability to develop the collaboration, trust, and communication essential to CBPR (Minkler 2004; Delemos 2006; Castleden, Morgan, and Lamb 2012).

3.2 Photovoice

Photovoice is an innovative and participatory approach to research, whereby a group of community participants use photography, stories, and public art to identify and engage community strengths and areas for actionable change (Wang and Burris 1997; Palibroda et al. 2009). Photovoice participants are, therefore, repositioned as co-researchers. They guide the identification of themes and subjects that are photographed, produce and collect data by taking pictures of relevant phenomena in their environment and discuss these as a group. They then analyze the data in partnership with the lead researcher, and actively participate in dissemination of findings through public exhibition and community engagement (Wang and Burris 1997). Through this participatory process, Photovoice participants create and communicate knowledge on issues of particular relevance to themselves and their fellow community members. Additionally, Photovoice participants can facilitate social change by exposing a broader range of actors, including policy- and decision-makers, to the valuable knowledge and insightful experiences of participant-researchers (Wang and Burris 1997; Castleden, Garvin, and Huu-ay-aht First Nation 2008; Nykiforuk, Vallianatos, and Nieuwendyk 2011).

Photovoice is well-suited to CBPR – including among First Nations communities (Castleden, Garvin, and Huu-ay-aht First Nation 2008) – because it alters power dynamics between researchers and participants (Dodman 2003) and promotes a sense of community ownership over the process and products of the research (Wang and Burris 1997; Nykiforuk, Vallianatos, and Nieuwendyk 2011). Photovoice was chosen for my thesis in consultation with

Arts Hub management and staff. We decided that Photovoice is appropriate because it 1) draws on participants' expert knowledge of their community 2), empowers participants by involving them as co-researchers, 3) amplifies marginalized voices, 4) overcomes potential literacy barriers and is reasonably accessible, 5) utilizes a stimulating and rich medium to capture deep meanings and inspire powerful conversations, and 6) complements the Hub's mandate to build community through inclusive arts-based programming (Personal Communication with Lisa Gate-Villa, KACL Manager 2012).

Sampling

The thesis was based primarily on the Photovoice model developed by Palibroda, Krieg, Murdock, and Havelock (2009) for the Prairie Women's Health Centre of Excellence, based in Winnipeg, Manitoba. Rather than using purposeful sampling, Palibroda et al. (2009) recommend a more organic approach to recruitment, offering the recommendations noted in the dot points below. These, along with input from the Hub, informed my approach to sampling.

- To sustain enthusiasm for the project, including after it is completed, Palibroda et al. (2009) recommend recruiting participants who are:
  - Experienced and passionate about the subject
  - Willing to tell their stories, share their knowledge, and learn as a group
  - Ready to work toward long term change
- A diverse representation of "cultural backgrounds, neighbourhoods or life experiences can provide a broader perspective" (p. 36). To reach a broad range of potential participants, they recommend using several recruiting mediums, including:
  - Formal means, such as flyers, invitations, and contacts at community organizations
  - Informal means, such as word of mouth and "snowballing"
- Participants should be made aware the project requires a relatively long-term commitment, consent to the project goals, and understand their responsibility for the direction of the project.

To promote the Hub's goals of being an inclusive community and building on-going collaborative partnerships between gardening groups, we decided to recruit participants from

gardens throughout Kenora. We initially distributed electronic and hard copies of an invitation to Hub patrons who are known to garden at the Hub or elsewhere. We also gave invitations to Women's Place Kenora, WNHAC, and the community garden group at Rabbit Lake to distribute to their gardeners. We feared these were sent out rather late (eight days ahead of the first workshop), and we were concerned that this would result in a low response. Laura Cotton offered to distribute the invitation more broadly through her personal and professional contacts. I agreed to this, as well as distributing the invitation to garden groups through social media. By July 24 (the day before the project launch), seven participants had confirmed through the Hub, four confirmed from Women's Place, and three from the gardening group at WNHAC who also garden at Del Art Manor. Of these 14 participants, one backed out the morning of July 25 and another was unable to make any of the meetings or events.

The final group of 12 participants included people from four community gardens, a combination of Aboriginal and settler gardeners, and individuals of various intellectual abilities and experience with gardening and photography. Three of these participants gardened at Women's Place Kenora, which is a resource centre for Aboriginal women in Kenora. While all three started gardening at Women's Place Kenora in 2013, two had never gardened before then, and one had some previous experience with gardening.

Another three participants were gardening at Del Art Manor at the time of the Photovoice project, as part of a joint programme with WNHAC. Del Art Manor is a transitional home for Aboriginal men, while WNHAC provides health supports and programming for Aboriginal people in the Treaty 3 lands. All three of these participants had recently moved to Kenora from other communities in Treaty 3 territory. Similar to the Women's Place Kenora gardeners, two of the Del Art participants were new to gardening, and one had some limited previous experience.

Of the six participants who signed up through the Hub, one had been gardening at the Hub and at home for a few years; one learned to garden from her parents and was gardening at Rabbit Lake Community Garden; two were not currently gardening, but were interested in doing so; and two gardened only at home, but are looking to establish a community garden at their respective workplaces. Of the Hub participants, one identified with her Polish heritage, while another immigrated to Canada from Guatemala several years ago. While no participants identified with a disability diagnosis, two of the participants who signed up through the Hub were also Hub consumers, meaning they accessed services designed for people with developmental disabilities.

Although slightly larger than the seven to ten participants recommended by Palibroda et al. (2009), the group of 12 offered a diversity of perspectives, as well as opportunities to collaborate with various organizations and gardeners throughout Kenora.

Process and Workshops

Photovoice participants were asked to attend an orientation meeting on July 25, 2013 to document informed consent and participate in a photography workshop. At this meeting participants received their cameras and participated in a photography workshop facilitated by Tom Newell, a local and well-known photographer. They were also given the first of four photography "assignments" that they would complete over the next four weeks. Assignments for weeks two, three, and four were decided among the Photovoice group. See Chapter 4.0 for a list and description of weekly assignments. The Photovoice group met at weekly workshops where they shared their photos and stories, and engaged in a facilitated discussion on the weekly assignment theme. Discussions involved identifying key narratives that emerged from the photos and accompanying stories (see also Section 3.4). After all assignments were completed,

photographs and key narratives were compiled into a public exhibit so that the group could communicate what it learned to the public. Much of this compiling happened during an exhibit planning workshop on September 10, 2013. Workshop agendas are provided in Appendix 8.1. See Section 4.5 for a description of the exhibit. See Section 6.3 for a critique of Photovoice.

3.3 Supplementary Methods

Participant Observation

In addition to Photovoice, I employed participant observation to provide a more robust and rigorous account of community-building through community gardening in Kenora. This included participation in, and observation of, garden maintenance (i.e. sowing, weeding, watering, harvesting) and garden-related celebrations (i.e. community feasts and harvest celebrations). Immediately following each observation event, I completed an observation checklist to document participation, activities, and examples of community-building. My observation checklist is attached as Appendix 8.2. Through this method, I was able to fact-check data and triangulate findings that emerged from the Photovoice component of the research and follow-up interviews, as well as identify potentially significant themes not generated or canvassed by participants.

I had difficulty using participant observation to its fullest and only employed this method on eleven separate occasions. This is mostly attributable to the demands of transcribing, planning workshops, returning home on the weekends, and personal commitments and interests in Winnipeg. For example, on August 22, I attended a potluck dinner at the Hub, but had to return to Winnipeg before the garden concert that was to follow. I was also unavailable to attend a Rabbit Lake Community Garden potluck on September 6, because of previous commitments in Winnipeg. I also found it challenging to catch people in the act of gardening. I tended to visit

gardens during the day and during the week, reserving my evenings for transcribing and returning to Winnipeg on the weekends. It may very well be that gardeners are more active on evenings and weekends, but this did not specifically come up in my research. Even so, I should have made a greater effort to visit gardens during evenings and weekends. I could have also done more outreach, including scheduling to meet people in their gardens.

Follow-up Interviews

Semi-structured follow-up interviews were conducted with participants to get feedback on the suitability of Photovoice for this research and what participants liked best and least about it, as well as to elicit further data on research themes not covered, or of emerging interest, in the workshop setting. Of the twelve Photovoice participants, six provided interviews. Of the remaining six, one participant declined an interview and five did not respond to my request. I made a few additional attempts in each case of no response, but have heard nothing as of this time of writing. The majority of interviewees (five of six) were of non-racialized, settler descent. This may reflect some flaws in the design of my research (see Section 6.3 for a critique of the overall research process). Five of the six interviews were audio recorded, transcribed, and returned to the interviewee for verification. The sixth was not recorded, at the participant's request. However, I took notes that were later verified by the interviewee. Interviews ranged in length from 40 to 60 minutes. A semi-structured interview schedule is attached as Appendix 8.3.

3.4 Narrative Analysis

I employed a narrative approach to analysis, focusing on the storied accounts that participants gave to people, places, and events, as well as their own roles in engaging these. To be more precise, this involved a thematic narrative analysis, emphasising what is said over how it is said (Bryman and Teevan 2005b). This was particularly relevant to the research for a few

reasons. First, narrative analysis is ideal for investigating the social connections, knowledge, and skills that are developed and nurtured in community gardens (Mundel 2008). Second, narrative research provides an avenue for people with disabilities to reclaim their stories, which are often overshadowed by their diagnoses (Pitonyak 2010). Third, stories are an effective and appropriate way to approach research and gather relevant data among Indigenous participants (Castleden, Garvin, and Huu-ay-aht First Nation 2008; Mundel 2008). Lastly, Photovoice, as the primary data collection technique for this research, is particularly concerned with the stories that accompany participants' photographs (Palibroda et al. 2009; Castleden, Garvin, and Huu-ay-aht First Nation 2008; Wang and Burris 1997), and thus provides relevant data for narrative analysis.

Contextualized Analysis: Research Objective 1

As mentioned above, Photovoice involves research participants as co-researchers in all aspects of the process, including data analysis. Thus, the Photovoice stories and resulting group discussions were audio recorded and transcribed, and the transcript given back to participants the following week for verification. Using NVivo 10 software and a narrative approach, I coded stories about community-building according to themes that emerged from participant stories and discussions during workshops. Nodes (codes) included significant themes that participants wanted to discuss or ensure were represented in the results. Some of these themes included teaching the next generation to garden, urban beautification, conserving water, celebrating successes, and access to gardens. Coded data were also grouped into major themes that corresponded to the Photovoice assignments (i.e. My Garden Community, Relationships, Other People's Gardens, Sharing, and Potential). Coded data were then synthesized into an eight-page report, which was returned to participants for verification. They were invited to review the report at their convenience and inform me of any necessary corrections, clarifications, or additions.

The results of this analysis (featured in Chapter 4.0) emerged from the ideas and terminology used by participants. As much as possible, I tried to use the voice of participants in that chapter, along with their photographs, to highlight how participants perceive their garden communities and what they envision for the future. I refer to these as contextualized results in this document. These results fulfill my first research objective: apply participatory methods to explore how participants perceive, engage, and envision their garden communities.

Theoretical Analysis: Research Objective 2

As per my second research objective, this thesis investigated social capital and ecological citizenship among community gardeners in Kenora. Unlike with the contextualized analysis, theoretical analysis was conducted using analytic frameworks for social capital (Table 3.1) and ecological citizenship (Table 3.2), developed through my review of the literature presented in Chapter 2.0. In terms of social capital, this research looked for indicators of reciprocity and trust among family, friends, and fellow community gardeners with a common interest in gardening and community-building; the connections gardeners have with the community institutions that support their gardening endeavors; and the possibility that social capital may be perceived as a negative force, resulting in the exclusion of disempowered or marginalized community members.

As for ecological citizenship, this research examined knowledge that participants possess regarding the people, plants, animals, and environmental conditions in their gardening communities; practical gardening expertise and social skills acquired through gardening, as well as how these knowledge and skills translate into environmental stewardship and social action at the community level. Particular attention was given to collaboration across different cultural groups, most notably Indigenous and settler societies.

Table 3.1: Analytical framework for social capital

Type	Description	Indicators
Social Bonding	Developing reciprocity and trust among existing social groups (friends and family) through gardening and related activities[12]	• Reciprocity • Trust • Bonding opportunities
Social Bridging	Developing reciprocity and trust across social groups through gardening and related activities[13]	• Reciprocity • Trust • Bridging opportunities
Social Linking	Access to resources from institutions, decision-makers, and people with power[14]	• Support from the city • Support from business • Support from local organizations • Schools and workplace initiatives • Linking opportunities
Social Exclusion	Social barriers to bonding, bridging, or linking[15]	• Exclusion from strongly bonded groups • Exclusion from networks or resources • Inclusion
Social Capital and Photovoice	Development of, or barriers to, social capital through Photovoice[16]	• Social bridging • Social exclusion

[12] Kingsley and Townsend (2006), and Putnam (2000) define social capital in terms of trust and reciprocity between strongly connected groups like friends and family (bonding), or diverse people with a common interest (bridging).

[13] Ibid.

[14] Firth, Maye, and Pearson (2011) and Woolcock (2001) define linking social capital in terms of access to resources from institutions and decision-makers. The specific indicators for social linking, although informed by the literature, were determined according to the types of institutions and organizations described by participants.

[15] Kingsley and Townsend (2006) and Glover (2004) describe social exclusion through social capital: exclusion from strongly bonded groups, or lack of access to institutional or organizational resources. Early in analysis, it became apparent that inclusion (but not specifically social capital) was as significant a theme for participants and provided a more nuanced perspective of exclusion. Inclusion was therefore appended to the framework.

[16] Participants provided little evidence of social bonding and social linking through the Photovoice project.

Table 3.2: Analytical framework for ecological citizenship

Aspect	Description	Indicators
Social-Ecological Knowledge	Knowledge of the people, plants, animals, and natural resources that make up one's community[17]	• Knowledge of people • Plant knowledge • Food knowledge • Animal knowledge • Local environmental knowledge • Knowledge opportunities
Skills	Practical expertise with gardening or acquired through gardening[18]	• Practical gardening skills • Communicative / organizing skills
Action	Taking action on social-ecological issues in the community[19]	• Sharing, cooperating, learning • Capacity-building, access to food • Beautification and urban pride • Environmental stewardship • Action opportunities
Cross-cultural collaboration	People from different cultures cooperating, sharing, or learning together[20]	• Cross-cultural collaboration (general) • Aboriginal-settler collaboration • Cross-cultural opportunities
Ecological Citizenship and Photovoice	Exercising knowledge, skills, action, or cross-cultural collaboration through Photovoice	• Knowledge and skills • Action • Cross-cultural collaboration

[17] Krasny and Tidball (2009a, 2009b) highlight the importance of knowledge on plant, animals (insect), ecological processes, and local environment. Shava et al. (2010) and Wakefield et al. (2007) tend to focus on plant and food knowledge, particularly in a cross-cultural context.

[18] Through community gardening, citizens develop skills and capacities as growers and community organizers, and take action on social and ecological issues. See Krasny and Tidball (2009b); Wakefield et al. (2007); Baker (2004); and Hancock (2001).

[19] Ibid. Indicators for this aspect of ecological citizenship reflect the type of actions participants discussed in workshops and interviews.

[20] By sharing food and knowledge across cultural boundaries, community gardeners are introduced to new foods, knowledge, and skills (Travaline and Hunold 2010; Wakefield et al. 2007; Hancock 2001) . Cross-cultural collaboration among aboriginal and settler societies through gardening is not well addressed in the literature on community gardening (i.e. in English North America or Australia).

As noted in the introduction to Chapter 1.0, community gardening includes planning, organizing, cooking, feasting, or simply socializing around or about the garden (Glover, Parry, and Shinew 2005). I argue here that this Photovoice project is an aspect of community gardening worthy of analysing within these frameworks. This is supported in participant narratives (see Chapter 5.0). As such, these frameworks consider the Photovoice project as part of the participants' gardening activities, and include respective indicators for social capital and ecological citizenship developed through the project (the last row in each table).

NVivo 10 was used to code the Photovoice data according to these analytical frameworks. Indicators (far right column of each table) were used as specific nodes (codes) which were applied to segments of participants' stories and workshop discussions. In the case of social capital, nodes were organized into bonding, bridging, linking, exclusion/inclusion types of social capital. For ecological citizenship, nodes were grouped into knowledge, skills, action, and cross-cultural collaboration. Data showing evidence of social capital or ecological citizenship developed through the Photovoice project were assigned an additional code indicating this.

Analysis of Photovoice data provided robust results in many areas (i.e. social bonding and bridging, social-ecological knowledge and action). In some cases, Photovoice itself was a source of social capital and ecological citizenship. Yet, as expected, preliminary coding revealed gaps in the data. As a result, when finalizing the follow-up interview schedule, I reframed questions to both address gaps and triangulate data gathered through other methods. Interview and observation data were coded according to the frameworks described above and integrated with the Photovoice data for theoretical analysis. The subsequent *theoretical results*, featured in Chapter 5.0, fulfill my second research objective: determine whether and how community gardening contributes to the production of social capital and ecological citizenship in Kenora.

Dissemination: Research Objective 3

Results were included in a four-page community summary, and presented and discussed at a community dissemination event at the Hub on August 21, 2014. This summary and event, along with the Photovoice exhibit and community report (see Section 3.7), fulfill my third research objective: share results with the community at large to encourage further dialogue, throughout Kenora, regarding community-building through community gardening.

3.5 Trustworthiness

While reliability and validity have been adapted to qualitative research paradigms, some social scientists argue that trustworthiness is a better concept for ensuring rigorous qualitative research (Bryman and Teevan 2005a). Trustworthy research is that which 1) is meaningful and credible to academic and community audiences, 2) produces rich and descriptive accounts of the phenomena under study, 3) is supported by comprehensive record keeping and participant validation, and 4) acknowledges and minimizes the impact of researcher bias and values (Ibid.).

As mentioned in Section 3.1, community-based participatory research presents several ethical challenges which may threaten trustworthiness. Of particular significance are 1) the difficulty in maintaining collaborative relationships between researchers and community partners and 2) ensuring that the process and results are meaningful to both participants and academia. In order to counter these challenges, I employed an "auditing" approach, as suggested by Bryman and Teevan (Ibid.). This included keeping detailed records regarding, among other things, the formulation of research questions, sampling, fieldwork, transcripts, and decisions regarding analysis. My co-advisors reviewed these records along with the first draft of the thesis. This, along with the scrutiny and validation of results by research participants, helped ensure meaningful outcomes for the community and rich descriptions of the phenomena under study.

3.6 Additional Considerations

Informed Consent

Informed consent was obtained separately, and in writing, for participation in Photovoice activities and follow-up interviews. Photovoice and interview consent forms are included as Appendices 8.5 and 8.6, respectively. Participants also received consent from the human subjects they photographed. The form used to acquire this consent is included as Appendix 8.7.

Confidentiality and Anonymity

Because Photovoice participants share and analyze data as a group, confidentiality and anonymity could not be guaranteed in the workshop setting. This consideration was reviewed with participants in the Invitation to Participate (Appendix 8.4), Photovoice Consent Form (Appendix 8.5), and during the Orientation Meeting (Appendix 8.1, *Orientation Meeting and Photography Workshop,* II.vi.). I confirmed that I would not share any information that participants did not what me to share, including their name. I also asked participants to respect others' wishes for confidentiality and anonymity, in cases where participants ask that their stories not be repeated or associated with them specifically. Participants were given the option to have their name and contributions to workshop discussions excluded from any written results (see Appendix 8.5). Interview respondents were given the option to have their interview responses remain anonymous and confidential (see Appendix 8.6).

Data Storage

All data were stored on a laptop computer provided by Dr. Alan Diduck through the CGRF. The laptop was secured with a password, which I changed regularly. All data, besides those retained by participants, will be destroyed by October 2015.

Compensation

Participants were provided with a photography workshop, where they learned about technique and the ethics of photographing people. Participation in this workshop did not constitute a commitment to participate in the research project. See "Informed Consent" above.

Each participant was given a digital camera as an honorarium for participation in the project. Participants were informed that the camera was theirs to keep, should they decide to withdraw at any point in the process (see Appendix 8.5).

3.7 Thesis Timeline

Figure 3.1 provides a summary of the thesis process time-line, at time of writing. Future outputs will include the publication of this thesis (expected October, 2014), a community report that will expand on the four-page summary (expected winter, 2015), and at least one scholarly article in a relevant journal.

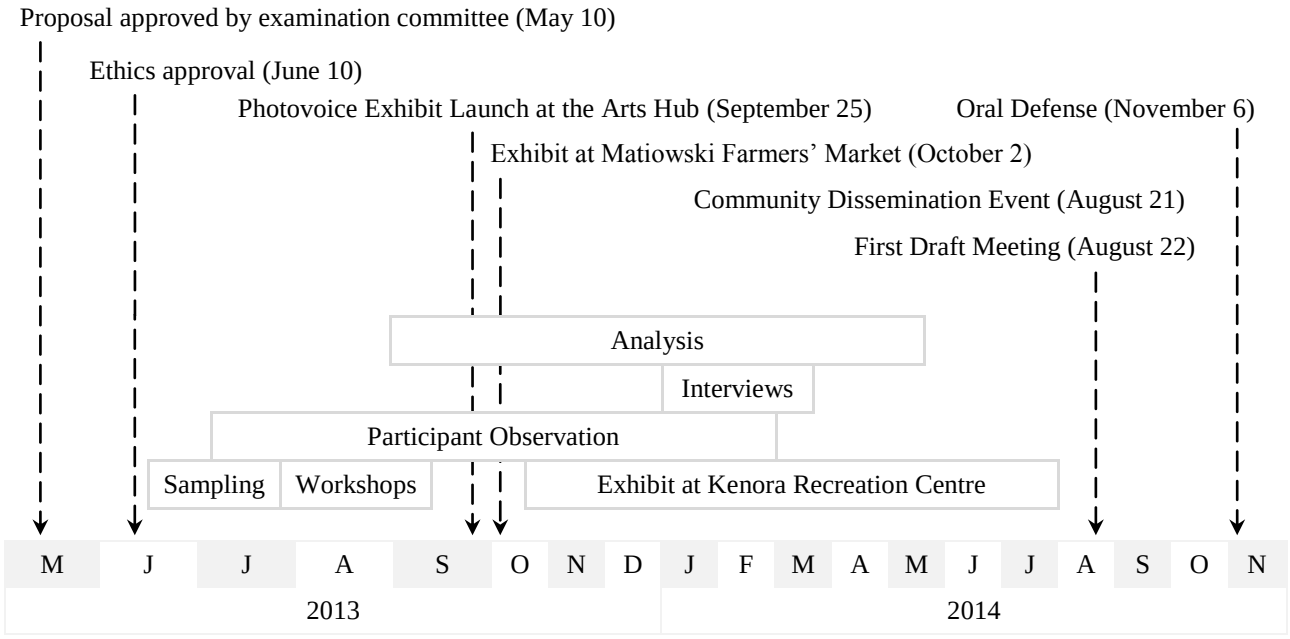

Figure 3.1: Thesis timeline

4.0 CONTEXTUALIZED RESULTS: PERCEIVING, ENGAGING & ENVISIONING GARDEN COMMUNITIES

This chapter includes findings from the contextualized analysis of Photovoice workshop data. In the first four workshops, participants presented photos and stories based on weekly photography assignments. Following these assignments, participants attended a final workshop where they collaborated to compile the Photovoice exhibit, which was later displayed at the Hub, Matiowski Farmers' Market, and Kenora Recreation Centre. The weekly assignments were:[21]

- My Garden Community – The broad theme of the first assignment was designed to let participants ease into the project and explore elements of their garden community that are meaningful to them. From here, participants identified the following three assignment themes.
- Relationships – For their second assignment, participants chose to explore the social and ecological relationships that make up their garden communities.
- Other People's Gardens – Participants decided to photograph other people's gardens as a way to highlight community assets and discover new sources of ideas and knowledge.
- Sharing Our Potential – Sharing and potential were common themes throughout the first three Photovoice workshops. For their concluding assignment, participants opted to investigate these themes in greater detail.

Figure 4.1 is a schematic of the contextualized results presented in this chapter; it reflects concepts, themes, and priorities identified by participants. The outermost ring is the community garden landscape, comprised of the various gardens types described by participants. The centre represents one's garden community, which may include any or all of the garden types in the outermost ring. Participants defined their garden communities in terms of social and ecological relationships and sharing on this landscape, so these are at the core of the schematic. Potential was an important concept to the Photovoice group, and is clearly marked. Participants saw

[21] Topics were not confined to their respective assignments. "Relationships", "Other People's Gardens", "Sharing", and "Potential" were discussed in each assignment workshop. "My Garden Community" was an overarching theme, to which all other assignments related.

success, growth, and benefits throughout the garden landscape as indicative of the potential for community gardening to transform them and their communities. They cited passing on knowledge (especially to the next generation), developing more gardens on the urban landscape, and getting connected with other gardeners, as particularly noteworthy potentials.

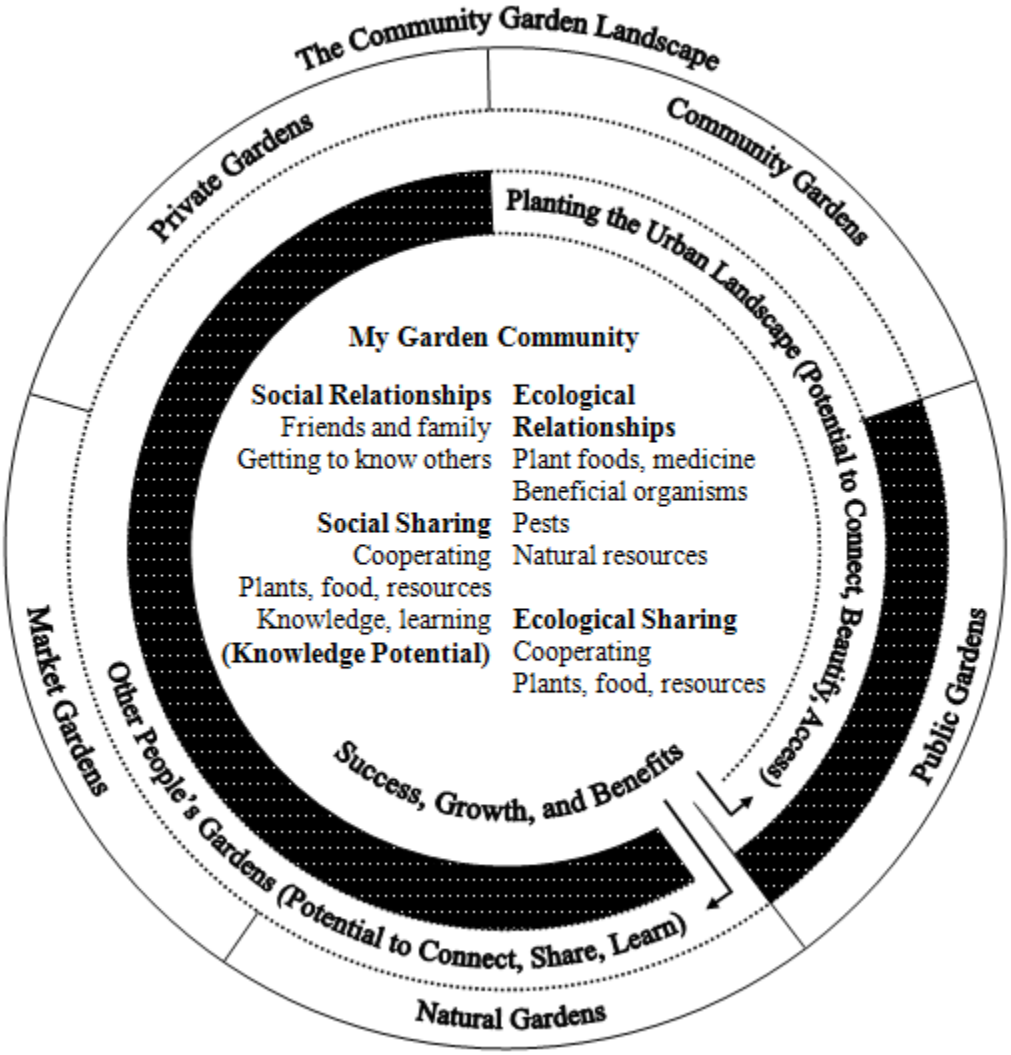

Figure 4.1: Schematic of contextualized results.
The outermost ring represents the community garden landscape, and includes the various types of gardens described by participants. The centre represents the individual's garden community, which may include any or all of the garden types in the outermost ring. Participants defined their garden communities in terms of social and ecological relationships and sharing on this landscape. Potential – the focus of the final workshop – was an important concept for moving forward. Arrows signify action and connections.

4.1 My Garden Community

Participants identified several places where they and others garden. Many fit the definition of community gardens provided in Chapter 1.0[22] (i.e. the Hub, Del Art Manor, Rabbit Lake, Women's Place Kenora, Waasegiizhig Nanaandawe'Iyewigamig Health Access Centre, Gardner House). Yet, "the interpretation of [community gardens] can be so varied" (Judy, August 15, 2013). Participants discussed a broader community garden landscape that includes:

- Natural gardens: plants and foods found outside of the cultivated garden setting (i.e. berries, mushrooms, onions, rosehips, and medicines like sage and blueberry).

  The onions are natural. The onions: that's the only thing I've seen out there, so far, when I wander around, is wild onions. We've got a lot of berries, too (Tom, August 22, 2013).

  Whenever you pick that sage, you just take the leaf buds and you sprinkle them. You do the same thing with sweet grass. You just take the top (Mother, August 22, 2013).

- Public gardens: Tended by municipal employees, enjoyed by the public/community (i.e. McLeod Park and harbour-front, hanging baskets)

  *[The McLeod Park gardens are] part of the community, where community members and also tourists come to the particular spot and take pictures (*Mercedes, August 15, 2013).

- Market gardens: Places where local gardeners grow and/or sell their produce (i.e. Matiowski Farmers Market, Henry Rasmussen's market garden)

  [Wilma] *grows beautiful vegetables for the market* (Meg, September 10, 2013).

  [Henry Rasmussen's] idea is to allow more people to have the experience to grow gardens... and he's making it possible for them (Leanne, August 22, 2013).

- Private gardens: Participants also talked about engaging with their families and neighbours in private gardens, as a component of community gardening.

  [My neighbour] has really nice plants and lots of veggies and that stuff, from gardening... We share some veggies together (Johanna, August 22, 2013).

  I had extra plants, so I shared some with my neighbour next door. I didn't have enough containers, so she gave me some containers (Judy, August 1, 2013).

[22] Inclusive places, marked by some degree of democratic process, where diverse people come together to grow food and other plants (Draper and Freedman 2010).

Figure 4.2: *Au Natural* © 2013 by Judy Underwood
Many participants spoke of naturally occurring plants, like these raspberries, as part of the community garden landscape.

Figure 4.3: *Wilma at the Farmers Market* © 2013 by Meg Wheatstone
Merchants at the farmers market grow and provide local produce to residents of Kenora. They are valued among the many local gardeners and growers.

4.2 Relationships

Social Relationships

Many participants explored relationships with family and friends in the garden and related activities. Some participants photographed their own families and friends with whom they garden. Others captured their fellow community members engaged with family and friends.

> *[Terra and I are] very, very close... We do the plants* (Johanna, August 15, 2013).
>
> *I garden up [at Rabbit Lake] with my three children* (Fay, August 1, 2013).
>
> *[My daughter] comes with me to pick medicines* (Mother, August 8, 2013).

Some participants talked about getting to know others through community gardening, including participation in this project.

> *And you see all kinds of people: locals and people from out of town. And you can talk to them, too. And everybody's taking pictures* (Mercedes, August 15, 2013).
>
> *Quite often, I bump into people up there that I don't know, and we have conversations, usually about gardening (Fay, August 1, 2013).*
>
> *I'm enjoying the project, and getting to know each of the people sitting here, and seeing how they view the flowers and the vegetables and the gardens* (Mercedes, August 15, 2013).

However, gardening itself does not necessarily lead to such strong relationships, which likely require a greater connection besides just gardening.

> *I don't find that [community gardening] creates the deep relationships, unless it's somebody that... you find a common bond with in other places* (Fay, August 15, 2013).
>
> *I guess it could happen. It depends who you're talking to. It depends who the person is, I guess. I haven't* [met anyone], *though. Just us guys* (Nick, August 15, 2013).

Many described learning, cooperating, and sharing with friends, family and fellow gardeners, who often assist with the physical maintenance of the garden and are a source of experience, knowledge, and in some cases, produce. (See Section 4.3 for more on sharing.)

Figure 4.4: ***Family and Friends Working Together in the Garden on a Summer Day 1*** **© 2013 by Johanna Hendrickson**
Johanna's good friend, Terra, has gardened for a long time. They garden and cook together.

Figure 4.5: ***Sharing Success*** **© 2013 by Fay Clark**
Gardeners converse about vegetables and weed management.

Ecological Relationships

Not all garden relationships are social. When "relationships" was suggested by one participant as a possible workshop theme, I immediately reaffirmed the prevalence of family, friends, and other gardeners in participants' first round of photos. Yet, I was soon corrected. According to this participant, relationships exist between humans, other species, and their environments (Fay, August 1, 2013). Other participants confirmed this view by capturing a variety of social and ecological relationships in their garden photography.

Many participants talked about maintaining relationships with plants in their gardens and foraging grounds. Maintaining these relationships can be both challenging and rewarding. Some participants expressed a desire to garden more or more successfully, but identified time and energy commitments as a challenge. Others noted success and growth in their gardens.

> *When I first started off... I was neglecting them. And I did feel bad for that. So now I'm trying to take care of them. Ya, and it's just really exciting watching them grow, and seeing your cucumber, your broccoli, and everything else* (Amanda, August 8, 2013).

But the garden is home to other plants, besides crops. It is also home to animals that come for food, space, and protection. Some of these species provide ecological services. For example, bees pollinate plants, vegetables clean the soil, trees provide air to breathe, and worms provide fertilizer. We depend on the ecosystem. "We are all interrelated" (Mercedes, August 8, 2013).

> *[The garden] feeds us and it also gives other little animals a place to hang out and chill, you know, hide from its predators* (Jeremy, August 8, 2013).

> *[The trees] give us oxygen. They're doing that 24/7, 7 days a week, 365 days a year. I'd like to see you guys do that... And the grass, the plants, they feed us* (Mother, August 22, 2013).

While many animals were deemed helpful or harmless, participants also discussed pests. Deer are especially troublesome and commonly discussed among gardeners and non-gardeners alike. Yet, some participants noted the intrinsic value of pests and their place in the ecosystem.

You have to fence everything out, because the deer will get in... That's why I don't have a plot at home. [They] supply a fenced-in area at the community garden (Fay, August 1, 2013).

A bunch of the tomatoes have holes in them. It could be a worm or something... [Something] else is munching on our leaves (Tom, August 8, 2013)... *That's alright though. Having little critters come around the garden makes it more interesting, you know* (Tom, August 1, 2013).

They're helping the ecosystem that lives within that garden. There's other organisms relying on the growth that is taking place there (Mother, August 8, 2013).

Participants also spoke of relationships with land and water, which are particularly valuable assets to people and their gardens.

Knowing that you don't put any pesticides and you're not causing more damage to the land, than already has... Also, being more conscientious in the way that we use water... That's a very precious resource. There is lots of water in this area, but people don't really think about the future. What is going to happen when that resource becomes scarce, too?... Water is life: is what sustains us, and is what sustains our gardens... Without that natural source, there is nothing (Mercedes, August 8, 2013).

Water is a life-giver. It's giving my little plants life (Amanda, August 8, 2013).

Figure 4.6: *Alien among Us* © 2013 by Leanne Wheatstone
Pollinators provide essential services to gardens.

Figure 4.7: ***Rabbit Lake Community Garden*** **© 2013 by Meg Wheatstone**
This photo of the sign at Rabbit Lake Community Garden shows orange deer fencing in the background.

Figure 4.8: ***Natural relationships 3*** **© 2013 by Mercedes Alarcón**
A lily opens after a rain shower, demonstrating our dependence on water and the beauty that follows a storm.

4.3 Sharing

Many participants highlighted the importance of sharing with their community, and linked sharing with community gardening.

Cooperation

Participants spoke of cooperation (sharing time and energy), including with family, friends, fellow gardeners, new acquaintances and, in at least one case, the animals in the garden.

> *In Brandon, me and my aunty... we go to the garden, and she needs my help. So I told her that I like being needed. So I helped her out... And the same thing with my other friends, like family and that* (Johanna, August 22, August 8, August 1, 2013).

> *There's about five of us who garden at centre, and we're all in it together. That reminds me of tomatoes all [bunched up], working together... It's more interesting when you have a lot of people that are involved with gardening. It helps out quite a bit* (Tom, August 8, 2013).

> *I realized that a little sunflower plant had sprouted from the work of the squirrels and the chipmunks. So at first, I started plucking them out. And then I thought, 'No. That doesn't feel right. I'm just going to let them grow.' And that was sharing* (Judy, August 22, 2013).

Sharing Plants, Food, and Resources

Participants gave many examples of sharing food plants and resources among family, friends, and fellow gardeners. We also rely on the organisms that surround us to share their ecological services (see also "ecological relationships").

> *And she has really nice plants and lots of veggies and that stuff, from gardening... We share some veggies together... She wanted me to try the raspberries. That's really good* (Johanna, August 22, 2013).

> *[Henry] gave us a tomato and a cucumber, and we made salad the next day* (Tom, August 22, 2013).

> *[The trees] are forever praying for us. And they give us life. They give us oxygen... When I used to come out of sweats, I used to lay on the grass just like that, and I'm thinking, "Take care of me. Hug me. You know more than I do." I'm just here for a short time. And the grass, the plants, they feed us... Now that is a form of true sharing* (Mother, August 22, 2013).

> *The bees on the flower get nectar to make honey, pollinate the flowers* (Meg, August 1, 2013).

Figure 4.9: ***Family and Friends Working Together in the Garden on a Summer Day 4*** **© 2013 by Johanna Hendrickson**
Johanna grows flowers and vegetables with her mom, like these tomatoes and pansies.

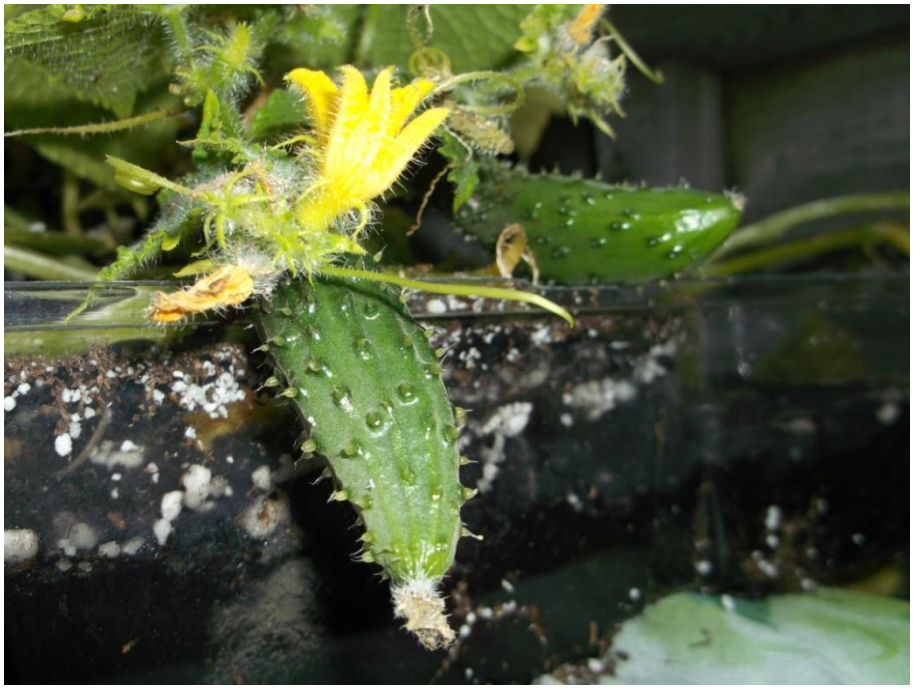

Figure 4.10: ***Good Things / Small Containers*** **© 2013 by Judy Underwood**
Judy started these cucumbers from seed. With too many plants and not enough containers, she swapped seedlings for containers with her neighbour.

Sharing Knowledge and Learning

Participants talked about sharing knowledge in the garden, and recognized the wealth of knowledge that some community gardeners possess. For example, it is common to share knowledge about deer (regardless of whether or not it is helpful).

> *This is a space that brings people together in a different way, with a common purpose, that they can share knowledge* (Judy, August 8, 2013).

> *Come down to the community garden. They know it all. Ya, you just strike a conversation, and then they know so much* (Fay, August 1, 2013).

> *We have a neighbour that thought rubber snakes would scare deer. And then that failed. So she tried human hair... I don't think either worked. But she asked for advice, and people suggested it. So she tried it* (Leanne, August 1, 2013).

While sharing knowledge does not necessarily mean learning, some participants supplied evidence of learning about gardening, their communities, and themselves in and through the garden. In many cases, participants describe learning from and with family.

> *I could notice an insect trying to get whatever it gets from the flower, but it certainly didn't look like anything I recognized... My husband informs me it's a type of moth* (Leanne, September 10, 2013).

> *Last year, I started a vegetable garden. [My husband] knew everything and taught me... It's really good to have him as my mentor, because he knows exactly what to do, and I'm struggling with some of the plants* (Mercedes, August 1, 2013).

And although participants were constantly sharing knowledge during workshops, there are explicit examples of learning in the workshop setting.

> *I learnt a few things I can take home and teach my children, too. And it's been a (really big) experience for me, anyways. I've enjoyed it. This was a fun couple of weeks. It was awesome... I'm just grateful for being here, and I learned some new things* (Nick, August 15, 2013).

> *One thing that kind of stood out for me is the picture you brought of the seniors' garden. Because I didn't remember that, when you move into a seniors' building, they lose that connection to things that they enjoy in their lifetimes... I never thought of that before you brought it now* (Mercedes, August 15, 2013).

4.4 Potential

Participants recognized success and growth currently happening in their garden communities, and throughout the garden landscape. Such successes show the potential of community gardens to transform themselves and their communities.

> *The last time I took care of a plant, it was a cactus, and it died on me. So I'm thinking, 'Can I do it?'... I was very fascinated at the growth spurt that took place... I went, 'Oh my god! You're growing!... I did that! I helped make that happen!'* (Mother, August 8, 2013).

> *They always have a garden... But this piece is a new project, so all these boxes are new [this year]. And so, it was really impressive to see what is coming up* (Mercedes, August 1, 2013).

> *I think it's important to note that we have successes in community gardening, and that it makes our city beautiful. And that it's possible, as well. So, I think that seeing it as a success and possibly building on it is something that we should consider* (Fay, August 22, 2013).

Figure 4.11: *Untitled 2* © 2013 by Jeremy Muckuck
Through gardening, Jeremy cracked his first pea pod. He was surprised by the space between the peas, and their potential for growth within that protective space.

But there is good reason to promote even more community gardening. According to participants, gardens provide: inclusive places to gather and share; enjoyment for gardeners and visitors; connection to the ecological processes and beauty; opportunities for relaxation, personal time, and play; a source of meaning, purpose, pride and accomplishment; increased food skills and capacity; and access to healthy food and physical activities.

> *He gave us a tomato and a cucumber, and we made salad the next day... It was a good day; it was a good afternoon. I enjoyed myself that day* (Tom, August 22, 2013).

> *They had to give up so much, moving into the seniors' blocks. But the garden was something that they had at home, that they enjoyed. And having a garden, when they moved into the seniors' blocks, was something that they could still do* (Judy, August 15, 2013).

> *It's part of a (food) security program, and also have fresh produce, and also helping them with skills and increasing their self-reliance and self-esteem* (Mercedes, August 1, 2013).

> *It is a very good thing actually, because the garden feels good for everybody: because they eat healthy, and strong bones, and exercise every day* (Johanna, August 15, 2013).

Figure 4.12: *Heads Up!* © 2013 by Meg Wheatstone
Community gardens provide healthy foods among other benefits.

Knowledge Potential

Many participants spoke eagerly of their future garden plans, expressing a desire to promote gardening and share gardening knowledge with their families and communities. Passing on garden and food knowledge to the next generation was a particularly noteworthy opportunity.

> *It's a whole new experience to see what I can grow back up north there.... [Henry gave] me a general idea of what to do when I get back. Well he mentioned something like getting some of [the raised garden boxes] heated, if you want to keep on going through the winter* (Tom, August 22, August 1, 2013).

> *I'm looking forward to teaching this to my kids... I would like to keep this going on.... I know they both like planting, and they love bugs and everything* (Nick, August 1, 2013).

> *I didn't pay much attention as a child... But now that I'm an adult doing it, I realize how much I learned just from being around it, being exposed to it. So it's definitely given me an advantage. And I hope it does them as well* (Fay, August 1, 2013).

Yet, according to some participants, not all knowledge should be shared with everyone. While it is important to share knowledge in danger of being lost, other knowledge requires particular protection.

> *If we're not passing those things down, people aren't comfortable doing it. Like, right now is mushroom season.... And if you're not comfortable or familiar with it, you can't pick them, because it's not the same as looking in a book. You need to be confident. Otherwise, you're going to get very sick from eating the wrong one. And so, I make sure that I'm teaching as many people as I can... and make sure that it carries on... But I won't share my locations* (Fay, August 22, 2013).

> *Some of the clients that I work with will not reveal their blueberry picking areas... because that's medicine... You talk about over-taxing. The same thing goes for the medicine picking. The sage is very scarce in some areas, because it's been over-picked* (Mother, August 22, 2013).

And some participants identified a lack of sufficient knowledge and skills as a challenge. These participants were interested in learning from other gardeners, including other participants.

> *How do you start from the beginning? Like, I'd like to know: Do you have to go buy the seeds from the store and just plant them yourself right away? Which month do you plant them in? And stuff like that* (Nick, August 1, 2013).

Other People's Gardens: Potential to Connect, Share, and Learn

While participants value the many friends, family, and others they garden with (see interpersonal relationships, above), they recognized the contributions of gardeners and growers throughout Kenora. As a part of the garden landscape, others' gardens are community assets and sources of new ideas and knowledge. Participants expressed interest in exploring gardens outside their immediate garden community, getting connected, and sharing what they learn with others.

> *Whether they're personal gardens, or workplace gardens, or the gardens with the seniors' blocks (Judy, August 1, 2013)... we should kind of map them out, because they're our assets in the community that we can build on* (Judy, August 22, 2013).

> *I'm curious [to find out] what would grow [back home, up north]... because we have the short summer* (Tom, August 1, 2013)... *I know we have a community garden up there... Maybe I can help them out* (Tom, August 8, 2013).

> *[Community gardeners at seniors' residences] will have lots of tips and knowledge of how to [garden], if they did it all their lives when they owned a home or when they were living in a particular community* (Mercedes, August 15, 2014).

Figure 4.13: *Henry the Innovator* © 2013 by Leanne Wheatstone
Many participants described learning from fellow gardeners throughout the community: like Henry, a well-known gardening guru, educator, and food activist.

Planting the Urban Landscape: Potential to Connect, Beautify, and Access

Some participants saw untapped potential on the urban landscape, recognizing that even the smallest spaces could be productive. They saw food production on municipal land and at workplaces as a way to bring people together, beautify the city, and improve access to food and gardens. However, they also noted the difficulty in getting community members and decision makers on board (see also Section 5.1.3). And, at least one participant saw these developments as possibly disruptive and harmful to the existing ecosystem.

> *You could see a community garden with a vegetable garden that's central that everybody could get to... [There are] empty spaces that just look like they need to be filled... with a garden or something that can pull people together* (Fay, August 22, 2013)

> *[There are] lots of flowers along the harbour front... Wouldn't it be great if, amongst the flowers, there [were] some vegetables, and people were free to pick them and eat them?* (Judy, September 10, 2013).

> *I wouldn't want to invade this space, because it's beautiful the way it is. Because in that space, there's an ecosystem: there's a whole bunch of insects and all different life forms that are living in that area* (Mother, August 22, 2013).

Figure 4.14: *Beautiful Potential* © 2013 by Judy Underwood
Flower boxes near the harbour front could be used to grow vegetables for local consumption.

4.5 The Photovoice Exhibit

The exhibit, titled "Growing Together: Cultivating Community through Gardening", includes 38 photographs, and accompanying stories, from eight of the Photovoice participants. However, all 12 participants were given the option to add their photographs. The exhibit is grouped into seven collections, which were decided on at the exhibit planning workshop (the agenda for this workshop is included as Appendix 8.1).

- *All Spaces, Big and Small* depicts a variety of spaces and places for growing, from the tiniest pot to the most spacious plot
- *Gardeners and Growers* showcases food producers, including family members, garden gurus, and market retailers
- *The Fruits of Our Labour* consists of large-scale prints of vegetables growing in the garden or waiting to be eaten
- *The Natural Garden* is dedicated to food and flowers found in uncultivated places
- *Friends and Family* includes photos of the people we garden with or people gardening together
- *Our Public Gardens* features the harbour front gardens at McLeod Park
- *Symbiosis / Interrelationships* pays homage to our relationships with, and dependence on, our environments, fellow species, and natural resources

The exhibit was launched at an open house on September 25, 2013, at the Hub, and this was covered by Kenora Online, the web-based media outlet of local radio station Q104. The following week, it was featured at the Matiowki Farmers' Market, where it was prominently displayed in the centre aisle. Following the market, the exhibit was installed at the Kenora Recreation Centre, where it stayed until the end of July 2014. The exhibit was returned to the Hub in August 2014, in anticipation of the community event on August 21, at which I disseminated the results of my thesis.

Throughout its travels, the exhibit has generated positive responses from viewers. As one participant pointed out in her interview with Kenora Online, "I think people are really impressed. When you see the pictures blown up, you just see how much beauty there is there and how people interpret the different concepts of gardening. So far I'd say the response has been very positive" (Judy Underwood quoted in Harris 2013).

The exhibit will soon be available on-line at the Kenora Association for Community Living website: kacl.ca.

4.6 Summary

Through Photovoice, participants both described their garden communities and suggested areas of actionable change. Participants defined their garden communities in terms of social and ecological relationships and sharing, on a landscape consisting of various types of gardens. They spoke of success, growth, and benefits throughout the garden landscape, and the potential for community gardening to transform them and their communities. Passing on knowledge (especially to the next generation), developing more gardens on the urban landscape, and getting connected with other gardeners were particularly noteworthy and actionable potentials. See Section 6.3 for a critique of Photovoice as a community-based participatory research methodology.

The results of the Photovoice project also reveal evidence of social capital and ecological citizenship, as described in Chapter 2.0. In the following chapter, I draw on Photovoice data, as well as participant observation and follow-up interviews, to explore social capital and ecological citizenship among community gardeners in Kenora.

5.0 THEORETICAL RESULTS: SOCIAL CAPITAL & ECOLOGICAL CITIZENSHIP IN GARDEN COMMUNTIES

This chapter includes results from my analysis of all data (Photovoice, participant observation, follow-up interviews), according to the analytical frameworks for social capital and ecological citizenship provided in Table 3.1 and Table 3.2, respectively.

5.1 Social Capital

As described in Section 2.1, social capital refers to reciprocal and trustworthy connections between individuals in social networks, and includes three types: social bonding, social bridging, and social linking. In this section, I present the key results from my analysis of social capital developed through community gardening. Reciprocity through gardening is evident in the responsibilities, time, energy, knowledge, and produce shared among family and friends (see also Section 4.3). In some cases, gardeners derive satisfaction, fulfilment, or self worth in exchange for their efforts. Table 5.1 summarizes these results, and frames the ensuing discussion.

5.1.1 Social Bonding

Social bonding refers to the development of reciprocity and trust among existing social groups, in this case through gardening and related activities. Many participants spoke of how community gardening[23] brings families and friends together (see *Social Relationships*, in Section 4.2). Although they did not speak of social capital or bonding, specifically, they certainly provided evidence of trust and reciprocity among familial networks.

[23] Here, I use the definition of community gardening provided by participants, and described in Section 5.2. This definition includes relationships and activities within conventional community gardens, as well as market, public, natural, and private gardens.

Table 5.1: Evidence of social capital

Type	Indicators	Summary of Findings
Social Bonding (Section 5.1.1) Reciprocity and trust among existing social groups (friends and family) through gardening and related activities	Bonding reciprocity	Shared responsibilities, time, energy, knowledge, produce; Satisfaction, fulfilment, self worth in exchange for efforts
	Bonding trust	Trust in family / friends to provide gardening knowledge or help maintain the garden; Dependability
	Bonding opportunities	Entrusting future generations with knowledge; Loss of gardening culture and associated bonding
Social Bridging (Section 5.1.2) Reciprocity and trust across social groups through gardening and related activities	Bridging reciprocity	Shared responsibilities, time, energy, knowledge, and resources among gardeners and new acquaintances
	Bridging trust	Trust in other gardeners' knowledge; Opening up to conversation; Letting others harvest from plots
	Bridging opportunities	Expanding social bridges; Developing more gardens on the urban landscape to build bridges
Social Linking (Section 5.1.3) Access to resources from institutions, decision-makers, and people with power	Support from the city	Donation of land for Rabbit Lake Community Garden; Public municipal gardens for tourism and beautification
	Support from business	Donation of garden inputs (plants, mulch)
	Support from local organizations	Many community gardens are governed by a local organization
	Schools and workplace initiatives	Successful and upcoming initiatives in schools and workplaces
	Linking opportunities	Greater support from, and direct involvement by, city council and businesses; Investment potential of gardens; Space, funding, management support for workplace gardens; Critique of linking, as community-driven initiatives may be preferable to formal institutional support
Social Exclusion (Section 5.1.4) Social barriers to bonding, bridging, and linking	Exclusion from strongly bonded groups	Exclusion of First Nations and other racialized groups; Hesitance to share knowledge outside of family / close friends
	Exclusion from networks or resources	Transportation
	Inclusion	Gardens bring diverse community members together through common activities and goals
Social Capital & Photovoice (Section 5.1.5) Development of, or barriers to, social capital through photovoice	Bridging	Getting to know others through the project; Reciprocity and trust through learning in the workshop setting
	Exclusion	Photovoice design could have posed barriers to participants

Bonding Reciprocity

Reciprocity through gardening is evident in the responsibilities, time, energy, knowledge, and produce shared among family and friends (see also Section 4.3). In some cases, gardeners derive satisfaction, fulfilment, or self worth in exchange for their efforts.

> *[My boyfriend] came up to help garden that day, because I always bring friends up to my garden plot, and talk them into helping me out. And then they get to take some of it home when they go* (Fay, August 1, 2013).

> *[My husband] knows how to grow things. And last year, I started a vegetable garden. So he knew everything and taught me. "Oh, your tomatoes are coming up." I said, "How do you know?" "See the flowers." And I didn't know that. So he would teach me things, but he wouldn't do anything in the garden. So I was doing everything. But this year, I had to go on a trip back to Guatemala. So I didn't have time to plant. So he did it this year* (Mercedes, August 1, 2013).

> *So she needs my help. So we did all kinds of veggies. I had a hot onion. I'm not used to it. It tasted really good. It's hot. And I got peas, rhubarb, onions, carrots. I didn't see any broccoli, but it's in there. There's all kinds of veggies. It was fun* (Johanna, August 8, 2013).

> *And my intention was, because I'm in a blended family, I thought, "Well this is going to help my family, it's going to help his family." And that's why I thought I'd do this garden: so that it would help not just my family, but his as well* (Mother, August 8, 2013).

I witnessed such reciprocity first-hand among two participants who garden at Women's Place Kenora. Immediately after signing them up for the project and attaining their informed consent, they invited me into their community garden. During our visit, they helped each other tend their individual plot and identify plants (Women's Place Kenora, July 31, 2013).

Bonding Trust

Gardeners trust their family and friends to provide gardening knowledge or help maintain the garden. One gardener noted that she could be counted on (trusted) to help in the garden.

> *For me, it's really good to have him as my mentor, because he knows exactly what to do, and I'm struggling with some of the plants. Last year, I grew lots of herbs and tomatoes and cucumbers. So he taught me how to do it* (Mercedes, August 1, 2013).

> *And if you're not comfortable or familiar with it [picking mushrooms], you can't pick them, because it's not the same as looking in a book. You need to be confident. Otherwise, you're going to get very sick from eating the wrong one... I don't really understand how I know, but it's been taught to me by my family* (Fay, August 22, 2013).
>
> *If my mom needs my help, she should ask, and I'll help her out. And the same thing with my other friends, like family... I help them out, if they need it* (Johanna, August 22, 2013).
>
> *My mom always used to make me dead-head her geraniums* (Fay, August 15, 2013).

Bonding Opportunities

Many participants discussed passing on gardening and related knowledge as a particularly significant opportunity. They spoke of the satisfaction they received in entrusting future generations with gardening knowledge. Participants spoke of intergenerational bonding already happening through gardening and related activities, as well as their plans to continue such bonding. See also *Knowledge Potential* in Section, 4.4. This passing on of knowledge may be significant, considering the loss of a general gardening culture over the years.

> *They're sharing knowledge. The grandmother, in particular, is sharing knowledge with her grandson. It's... family things that are being passed down* (Leanne, September 10, 2013).
>
> *I feel good about it, because I'm passing on a tradition* (Fay, August 1, 2013).
>
> *We all have our own mentors, and we're going to share whatever our grandparents told us, our mentors told, our sisters, our mothers. You know, we're going to pass that down... We all have that potential to keep it going and that's how our people do it, you know, with oral teachings and stories... But what I'm doing, and what I'm sharing with you, and what I share with my daughters: I would like her to pass those on to my grandchildren and my great-grandchildren. Keep that going. So that's where I'm coming from* (Mother, August 22, 2013).
>
> *It made me think about how families used to garden, and how they used their space and their land to provide food, and how that's changed to the manicured lawns and the pesticides for the dandelions and that. And what an important part it was, just to their family life: about maintaining the garden, and then also preserving the food... And I thought, "Wow! How we've lost that sense of backyard gardens."* (Judy, August 15, 2013).

5.1.2 Social Bridging

Social bridging refers to the development of reciprocity and trust across social groups through gardening and related activities. Many participants described gardens and the farmers

market as places that bring people together. They talked about meeting and getting to know new people through these activities (see *Social Relationships*, in Section 4.2). As with family and friends, connections with fellow gardeners and new acquaintances provide an opportunity to develop reciprocity and trust in the garden. Participants indicated that they also made connections with new acquaintance at events like community potlucks, where attendees shared garden and food knowledge (e.g., Garden Potluck and Concert at the Hub, August 22, 2013).

Bridging Reciprocity

Participants spoke of shared responsibilities, time, energy, knowledge, and resources among gardeners and with new acquaintances.

> *Very nice people help to grow it: very nice people to help it grow, help it clean up, help mow the lawn. Very nice people help the garden grow* (Meg, September 10, 2013).
>
> *This gentleman was a stranger that I had never seen at the community garden... They were helping him pull [weeds], but at the same time, sharing the plants that we had brought, because we had brought extras* (Fay, September 10, 2013).
>
> *I had extra plants, so I shared some with my neighbour next door. I didn't have enough containers, so she gave me some containers. So now we're talking about how each other's plants are doing, which is kind of fun* (Judy, August 1, 2013).
>
> *It's more interesting when you have a lot of people that are involved with gardening and all that. It helps out quite a bit, anyway, for sure. Like, I don't mind working with the guys back at the centre also* (Tom, August 8, 2013).
>
> *She's my neighbour... We share some veggies together* (Johanna, August 22, 2013).
>
> *Whenever you pick that sage, you just take the leaf buds and you sprinkle them. You do the same thing with sweet grass. You just take the top, and then you just (sprinkle it all), so that it's there next year... I only [take] what I [need], because there's going to be other people that are going to come* (Mother, August 22, 2013).

Bridging Trust

Gardeners demonstrate trust in other gardeners' knowledge about gardening and food. The data indicate that in some cases they demonstrate trust in their fellow community members by engaging in conversations, new experiences, or allowing community access to the garden.

> *Or come down to the community garden. They know it all. Ya, you just strike a conversation, and then they know so much (Fay, August 1, 2013).*
>
> *Yes. And you see all kinds of people: locals and people from out of town. And you can talk to them, too. And everybody's taking pictures* (Mercedes, August 15, 2013).
>
> *People would go out, and they would see an onion, and it was ready, and somebody would take the onion. So the intention of the garden was for sharing, for whoever saw something that they wanted. They were free to take it* (Judy, August 15, 2013).
>
> *I don't plan on picking from that garden. I just want to give it to whoever needs it* (Mother, August 22, 2013).

Bridging Opportunities

Although there is evidence of social bridging through gardening, participants expressed a desire to expand these bridges. They noted the contribution of other gardeners and the potential knowledge they posses. They were interested in tapping into this knowledge and sharing resources. Some saw developing more centrally located and functionally accessible gardens on the urban landscape as a way to build bridges in their communities (See also *Planting the Urban Landscape*, in Section 4.4).

> *It's important that we all have some place to go, so we can communicate with each other and enjoy each other's company. And a garden is a perfect way to be able to do that* (Fay, August 22, 2013).

A desire to network across community gardens and develop partnerships for resource sharing and learning was also clear from my conversation with participants and other gardeners during various garden visits (e.g., Del Art, August 22, 2013; Garden Tour with Participants, August 14, 2013; Garden Tour with Laura Cotton of KACL, July 30, 2013; WNHAC Lunch and Learn, July 24, 2013). See Section 5.1.4 for a discussion of transportation as a barrier to connecting across networks and accessing resources.

5.1.3 Social Linking

Social linking refers to accessing institutions, decision-makers, and people with power. In this case, social linking was associated with support from the city, businesses, local organizations, schools, and workplaces.

Support from the City

Many participants pointed out that the City of Kenora supports community gardening to some degree. The donation of land for the Rabbit Lake Community Garden was a common example of this support. However, other participants noted the importance of public municipal gardens to tourism and beautification.

> *At the big level, I would say that the municipality probably supports it, because of the space where we have the community garden out at Rabbit Lake* (Judy, January 31, 2014).
>
> *When visitors come, they will see the gardens at the harbour front. They have an interest in that, so that the tourists appreciate what we have, but also stay and spend in Kenora* (Participant 1, March 17, 2014).

Support from Business

Participants spoke of greenhouse operations donating garden inputs. Like the city, the business community benefits from a beautiful, welcoming, and sustainable Kenora.

> *Local greenhouses donate plants, and the wild rice processing plant provides free husks for mulch* (Summary from interview with Fay, January 17, 2014).
>
> *[Businesses] have an interest in making Kenora a place that is beautiful, that is self-sustaining... Some people in that particular group are really community-minded, and they really want growth and success in the community* (Participant 1, March 17, 2014).

Support from Organizations

Furthermore, many of the community gardens in Kenora are governed by local community organizations. Opportunities to garden require linkages with these governing organizations and, in some cases, participation in other programming.

> *The Fellowship Centre, which has a garden; [WNHAC], which has a workplace garden; KACL, which has a community garden; the seniors' blocks and supportive housing, because some of them do have garden plots* (Judy, January 31, 2014).

> *Women's Place clients and [clients] of Kenora Sexual Assault Centre have been working in these containers... It's part of a food security program* (Mercedes, August 1, 2013).

School and Workplace Initiatives

Some participants noted the relevance of garden-based programming in schools and at workplaces. They spoke of successful and upcoming initiatives at Thomas Aquinas School and Valley View School, as well as workplaces like WNHAC and the Arts Hub.

> *Valley View: they're doing the outdoor classroom. They want to have a garden component to that. And when I was at a recent meeting at Thomas Aquinas, one of the things that came up was community gardening there through the school. So at least it's on the radar. It's on their thought process* (Judy, January 31, 2014).

Linking Opportunities

While successes are apparent, so are opportunities for greater linking (see also *Planting the Urban Landscape,* in Section 4.4). Some noted that the city could be doing more to promote gardening, including creating more gardens and direct involvement of city councillors in community gardening activities.

> *[The city supports gardening] in a sense that they know that people will be self-sustaining, to a certain degree. But, I don't think that they are investing enough resources to help develop that more. I think that there is support, but I wish [they would] do more in the community: identify other plots of land [that can be used for gardening]* (Participant 1, March 17, 2014).

> *It would be great if city councillors participated in community gardening... It would give them first-hand experience of what is currently happening and how the city could be more helpful* (Summary from interview with Fay, January 17, 2014).

Restaurants, for their part, could promote more gardening by growing their own produce. Yet gardens may not be seen as a sound business investment.

> *[The planters downtown] could be used to grow fresh herbs [downtown]. Not only would you get to use them in the restaurants, but with things like mint and basil, you'd get that smell, as well* (Judy, August 22, 2013).

> *... But if you invest in land and growing things, it's a slow process and there are some teachings or preparation. And that would take more of their time, interest, or money. And I don't think that would provide them with a return. So I don't think that's something that is in their priorities, or something that would really want to invest in. They will invest in things that will produce money* (Participant 1, March 17, 2014).

Although there are successful workplace gardens in Kenora, participants often spoke of challenges in establishing a garden at their own workplace. These challenges can include lack of space or funding, or getting decision-makers on-board.

> *I tried to look in Kenora for a place that we could rent, that had some sort of garden. But unfortunately, with our funding, we couldn't find anything that we could afford* (Participant 1, March 17, 2014).

> *I would love to start [a garden] at our workplace, because there is some space there available. But it's selling people on the idea and figuring out a way to work with the landlord to do that* (Judy, August 15, 2013).

On the other hand, some critiqued the need for such linkages in the first place. Some participants suggested that community-driven initiatives, relying on the resources and positions of fellow gardeners, may be preferable to formal institutional support. (See also Section 5.1.2; and *Other People's Gardens: Potential to Connect, Share, and Learn*, in Section 4.4.)

> *There's obviously potential in the community to do more. But that takes a group to get organized and approach people. So, there's probably a lot of potential. Right now, most of that support is informal. Like [another participant] said, she shared plants with a fellow at the community gardens, and they shared gardening experiences... Sometimes things, more on a casual basis, are more successful* (Leanne, February 1, 2014).

> *It's important to also remember other community gardeners who may, themselves, be well positioned. Getting to know others in the garden may be a great way to connect with people in power or access untapped resources. Kenora should be more organic, building momentum for gardening from the ground up* (Summary from interview with Fay, January 17, 2014).

5.1.4 Social Exclusion

Social capital can also lead to social exclusion. Sometimes gardeners experience barriers when attempting to enter strongly bonded groups, connect across networks, or access resources.

Exclusion from Strongly Bonded Groups

While each of the six interviewees said that they had not experienced exclusion from gardening groups, at least one participant noted that such exclusion is experienced by First Nations and other racialized groups.

> *I know there are so many, especially First Nations people in Kenora, who don't feel part of the community. They don't participate in community gardens, because they don't feel like their opinions matter here* (Participant 1, March 17, 2014).

Others critiqued the ability of community gardening to break down barriers, noting that strong relationships in the garden may require a more significant, pre-existing connection.

> *I don't find that it creates the deep relationships, unless it's somebody that, obviously, you find a common bond with in other places* (Fay, August 15, 2013).
>
> *It depends who you're talking to. It depends who the person is, I guess, if you want to open it up to that kind of relationship* (Nick, August 15, 2013).

That some gardeners express caution about entrusting their knowledge outside of family and close friends is also indicative of a rather benign form of exclusion through bonding.

> *I won't share my [mushroom picking] locations... a few weeks ago, we went blueberry picking and the big joke was that I had to be blindfolded, because it was a secret spot that I was being taken to* (Fay, August 22, 2013).
>
> *Some of the clients that I work with will not reveal their blueberry picking areas. They refuse to share that information... And that's what my other client said. He says he doesn't know why Anishinaabe won't share their knowledge of where the blueberries are: because that's medicine... You talk about over-taxing; the same thing goes for the medicine picking. The sage is very scarce in some areas, because it's been over-picked* (Mother, August 22, 2013).

Exclusion from Networks or Resources

It was apparent from observation and conversations with participant gardeners that transportation was among the most pressing barriers to accessing garden networks and resources (Del Art, August 2, 2014; Garden Tour with Participants, August 14, 2014). In fact, transportation was the only network or resource barrier identified by participants in interviews. Without access to a vehicle, it can be difficult from some potential gardeners to get to a place where they can garden. Lack of suitable transportation also impedes gardeners from visiting and sharing with other gardeners, as many of the participants expressed their intentions to do.

> *We have to have [a day pass]... We got programming, and so on, and so on, you know. It would be kind of hard for us to get out. And none of us have a vehicle* (Tom, August 1, 2013).

> *Many of the people in and around Kenora that could benefit from more gardening don't have access to a vehicle. Transportation barriers are particularly ignored in Kenora, where everyone is thought to have a car* (Summary from interview with Fay, January 17, 2014).

> *Or thinking of our community garden [at Rabbit Lake]: transportation could be a barrier, just because of where it is and the buses don't run* (Judy, January 31, 2014).

Inclusion

To the contrary, many participants described gardens as inclusive places that bring diverse community members together through common activities and goals.

> *And I think, for me, it's thinking about the garden as that safe place for people to come together... It breaks down the barriers... There's no us or them. You have a common interest. You can build on things together. So I see that as a good vehicle for bringing people together* (Judy, August 15, 2013).

> *It's important that we all have some place to go, so we can communicate with each other and enjoy each other's company. And a garden is a perfect way to be able to do that* (Fay, August 22, 2013)*... I don't think that there are any negative comments about community gardening that you could actually come up with* (Fay, August 15, 2013).

> *[The gardeners] are always welcoming, smiling* (Johanna, January 17, 2014).

These descriptions were offered by non-racialized participants. My observations at WNHAC and Arts Hub garden events demonstrate that these gardens do bring together people

from different cultures and abilities (i.e. WNHAC Lunch and Learn, July 24, 2013, Garden Potluck and Concert at the Hub, August 22, 2013). However, it is important to note that many Aboriginal-identified gardeners participate in garden programs targeted to Aboriginal people, limiting opportunity for cross-cultural collaboration. See Section 6.2 for more on this topic.

5.1.5 Social Capital and Photovoice

Participants supplied evidence of bridging through the Photovoice project, as well as possible exclusion from the project. See Section 6.3 for a critique of Photovoice as a community-based participatory research design.

Bridging

Some participants took this project as an opportunity to expand on existing social connections between gardeners and across gardens. Through the workshops and assignments they got to know each other, other community members and gardeners. For example, when I arranged to take some participants on a tour of gardens in Kenora, they met a well known gardening expert. One participant was curious about how best to garden in a more northern climate, for which the garden expert was able to provide some helpful information (Garden Tour with Participants, August 14, 2013). Yet, evidence of reciprocity and trust developed in the project is most evident in the numerous examples knowledge sharing in the workshop setting. See *Sharing Knowledge and Learning* in Section 4.3.

> *I'm enjoying the project, and getting to know each of the people sitting here, and seeing how they view the flowers and the vegetables and the gardens and the beauty that surrounds us* (Mercedes, August 15, 2013).

> *I know some people, but some people I just don't know. I will get to know them. Because I was kind of a little bit shy, but not really though. But I am trying* (Johanna, August 8, 2013).

> *Jeremy and I were there. It was quite a fun afternoon and we spent, I think, an hour there. [Henry's garden] really impressed me the most, more than the other ones we went to go see... Henry's very creative, and he's a pretty smart man* (Tom, August 22, 2013).

> *I went in to ask who was helping out this year [at the garden], and he gladly stepped forward. He was really proud and posed for these pictures* (Fay, September 10, 2013).

> *My daughter and I would just go introduce ourselves to someone in their yard. It's making those contacts, right? And having something in common to open up a discussion, and be approachable* (Leanne, February 1, 2014).

Exclusion

However, it is also important to note that some participants may have been excluded based on the locations of the workshops. In this case, the Photovoice design could have posed barriers to participants, indicating exclusion.

> *We had some participants when it was at one location, and then the location changed. And I understand the need to spread it around, but I wonder if that was a barrier to some of the participants coming back* (Judy, January 31, 2014).

5.2 Ecological Citizenship

As described in Section 2.2, ecological citizenship refers to the knowledge, skills and actions of individuals working to enhance their social-ecological communities. In this section, I present the key results from my analysis of ecological citizenship through community gardening. See Table 5.2 for a summary of these results.

5.2.1 Social-Ecological Knowledge

Social-ecological knowledge refers to knowledge of the people, plants, animals, and natural resources that make up one's community. As expressed in Section 4.2, participants defined their communities in social-ecological terms, recognizing the value of both interpersonal and ecological relationships, as well as the interconnection of these components of community. In doing so, they revealed their extensive social-ecological knowledge.

Table 5.2: Evidence of ecological citizenship

Component	Indicators	Summary of Findings
Social-Ecological Knowledge (Section 5.2.1) Knowledge of the people, plants, animals, and natural resources that make up one's community	Knowledge of People	Knowledge of friends, family, other gardeners; Learning about each other
	Plant knowledge	Knowledge of plants, characteristics, services, relationships, health, care
	Food knowledge	Knowledge of food preferences, quality, harvesting; Trouble identifying food
	Animal knowledge	Knowledge of animals and insects, services, pests
	Local environmental knowledge	Knowledge of local environment, conditions, regional differences
	Knowledge opportunities	A desire to learn more; Difficulty identifying some food and plants
Skills (Section 5.2.2) Practical expertise with gardening or acquired through gardening	Practical gardening expertise	Practical skills related to gardening and garden maintenance; Food preparation skills
	Communicative and organizing skills	Community engagement and organizing around social-ecological issues
Action (Section 5.2.3) Taking action on social-ecological issues in the community	Sharing, cooperating, and learning	Sharing, cooperating, and learning with their family, friends, and other gardeners through gardening and related activities
	Capacity-building and access to food	Enhanced capacity and access through gardening
	Beautification and urban pride	Beautifying the city through gardening; Celebrating such achievements
	Environmental stewardship	Preserving the natural environment through gardening practices; Caring for the resources used in the garden (e.g., land, soil, water)
	Action opportunities	More gardening on the urban landscape; Environmental stewardship and culture change; Time and energy commitments are a challenge to gardening
Cross-cultural collaboration (Section5.2.4) People from different cultures cooperating, sharing, or learning together	Cross-cultural collaboration (general)	Opportunities for food collaboration in restaurants, when cooking and eating with friends, and at community food events
	Aboriginal-settler collaboration	Using Aboriginal cultivation practices in gardening; Using traditional Aboriginal plants; Local Aboriginal-run restaurant
	Cross-cultural opportunities	Better understanding of cultural food and practices; Overcoming racial tensions; More investment of time, energy, and outreach
Ecological citizenship & Photovoice (Section 5.2.5) Exercising knowledge, skills, action, or cross-cultural collaboration through Photovoice	Knowledge and skills	Demonstrating knowledge and learning from each other; Advocacy skills; Photography skills
	Action	Project will spur further discussion and action; Seeds for Change; second Photovoice project in Kenora inspired by this one
	Cross-cultural collaboration	Cooperating, sharing, and learning cross-culturally through the project; Photovoice exhibit; Impact on participant perspectives

Knowledge of People

Participants talked about getting to know the many friends, family, and others they garden with, as well as gardeners and growers throughout Kenora. Through gardening, they learned about each other. See also Sections 5.1.1 Social Bonding and 5.1.2 Social Bridging.

> *[My mom's been gardening for] almost five years... And Vicki, I'm not really sure yet: I think 21 years, or more. Because I know gardening and things like that: have a big family and do gardening. My Aunty Barb's been gardening for a lot of years* (Johanna, September 10, 2013).

> *This is [a photo of] Wilma. She grows beautiful vegetables for the market* (Meg, September 10, 2013).

Plant Knowledge

Participants were able to identify many of the plants in and around their gardens, including food and flowers. They described plant relationships and processes (e.g., companion planting[24]), ecological services (e.g., providing oxygen, cleaning the soil), processes (e.g., going to seed, pollination), characteristics (e.g., colour, growth patterns, habitat), as well as maintenance, health, and care (e.g., reseeding, mulching, evidence of pests and dehydration): knowledge acquired through gardening experiences.

> *So this is a picture of the flowers from a radish that went to seed in the community garden... mine didn't produce: they turned woody and I couldn't eat them* (Fay, August 15, 2013).

> *The vegetables, themselves, are cleansing the earth* (Mother, August 8, 2013).

> *You would just soak [newspaper] full of water and then just lay them down, so it makes a fairly thick layer. And then [I took some] some woodchips and just put them over top, and it was really good for weed control* (Judy, August 15, 2013).

> *I guess the plants were kind of dusty, like it needed some moisture, some rain. So we turned on the water the other day, there: watered them down. I just kind of figured maybe they were thirsty, so we watered them down* (Tom, August 8, 2013).

[24] Companion planting means cultivating mutually beneficial plants together to increase productivity. A prime example is Three Sisters gardening: a traditional Aboriginal cultivation practice in which corn, beans, and squash are planted together in the same mound. The corn provides a stalk for the beans to climb, the beans fix nitrogen into the soil for the other plants, and the squash leaves provide shade for the plant bases, as well as weed control.

Food Knowledge

Participants were able to identify a number of food crops growing in their garden communities. Through gardening, they learned about food preferences (e.g., taste) and quality (e.g. inputs, taste, health), as well as when to harvest food crops.

> *It's just really exciting watching them grow, and seeing your cucumber, your broccoli, and everything else. It's just like, "Oh my god!... So that's what it is!"* (Amanda, August 8, 2013).
>
> *I had a hot onion. I'm not used to it. It tasted really good. It's hot* (Johanna, August 8, 2013).
>
> *You take pride in what you grow, and the taste of it is so much richer. (I don't know, taste for one). And knowing that you don't put any pesticides and you're not causing more damage to the land, than already has* (Mercedes, August 8, 2013).
>
> *Right now is mushroom season and chanterelles are out. And it's one of my favourite seasons; I look forward to it* (Fay, August 22, 2013).

Animal Knowledge

Participants demonstrated knowledge of the animals and insects with which they share the garden. They recognized that some provide ecological services (e.g., bees pollinate plants). Many showed familiarity with pests, especially deer, including their behaviour and preferences.

> *Finding a worm is always a great thing. It's really exciting in our garden... That brings the boys in, to play with the worm. But they're also good for gardens* (Fay, August 1, 2013).
>
> *The bees on the flower get nectar to make honey, pollinate the flowers... They're pollinating Lupines, and making some honey, because it's food for bees. The babies need food, right mom, to be healthy and stuff* (Meg, August 1, 2013).
>
> *So many of the deer here are multi-generational and they're urbanized. So maybe what would have distracted the deer... maybe now, they just have gotten so used to all these things... even plants that traditionally they wouldn't eat, now they're eating. So I wonder if that's a factor, just over time* (Judy, August 1, 2013).

Local Environmental Knowledge

Many participants noted the importance of local environment. They recognized the value of water, sunlight, and healthy soil for their gardens, as well as how growing conditions are different in different places (e.g., southern and northern Ontario, Guatemala).

> *It's a beautiful garden. It's a beautiful spot to have a garden. It has westerly exposure, and the lake is right there. So, it's easily watered and the soil must be nice and moist* (Fay, August 15, 2013).

> *I wasn't sure [about perennials], because in Guatemala, there are flowers all year long. So it never occurred to me* (Mercedes, August 8, 2013).

> *I just want to see how long it will take, what will grow properly up there, you know, because we have the short summer. I know rhubarb grows pretty good. But, it will be interesting to really find out what really grows up there, in just a short period of time* (Tom, August 1, 2013).

Knowledge Opportunities

Although participants possessed a wealth of knowledge about the people, animals, and plants in their socio-ecological communities, some participants spoke about crops or plants they did not know (e.g., patty pan squash, some types of flowers), or could not identify in their early growth stages (e.g., pumpkin). In some cases, participants were able to learn about these crops from each other. Others saw opportunities for teaching in the garden.

> *And those squashes were really bizarre. I can't even explain what the shape was: like a little flying saucer. I've never seen them before* (Leanne, August 1, 2013).

> *And this is a flower, I guess. I don't know if it's from my pumpkins that I'm growing, because I honestly forgot what I'm growing in there* (Amanda, August 8, 2013).

> *Those are called plantains...that look like bananas...but they're bigger* (Mercedes, August 8, 2013).

> *It's also a good way to teach children, if you do have a garden: to help them realize where their food comes from, and that it takes time to grow, and you have to help it grow to have a good harvest. Unless you have an amazingly green thumb, it just doesn't happen by itself. There's a bit of work there* (Judy, January 31, 2014).

Some expressed a desire to learn more (e.g., specific information on what will grow in a far northern community, basic information about where to get seeds and when to plant them). See *Knowledge Potential*, in Section 4.4.

> *Maybe they [another participant] could teach me how to [pick mushrooms]* (Johanna, January 17, 2014).

5.2.2 Skills

Here, skills refer to both practical gardening expertise and communicative or organizing skills associated with gardening. During the Photovoice workshops, participants spoke a lot about gardening knowledge, inferring practical expertise. However, skills were not explicitly discussed. As one participant pointed out,

> *We did talk a little bit about skills and expertise: maybe not specific skills, but the sharing of skills when you talk to people about their gardens. So, we touched a bit on it, but it didn't really get deep into it* (Leanne, February 1, 2014).

Practical Gardening Expertise

Yet, when explicitly asked in interviews, participants gave numerous examples of practical skills related to gardening and garden maintenance. Some participants also noted the relevance of food preparation skills to community gardening.

> *I have transferred some pretty flowers I find in other areas: cut a couple, take a couple, bring them to my own garden, transplant... So it has been that kind of experimenting: what works and what doesn't* (Participant 1, March 17, 2014).

> *Growing [vegetables], watering them... Get the weeds out, for one thing. And get the [rake] and get the stuff out of it: dead leaves and something. Pull them out, and put them in the garbage... Using snips [to prune]... I learned about getting the hose in the pots and water them... I could [even] teach [others] how to water the plants, or get the seeds in the pots... pick any kind of flower or veggies or carrots: things like that* (Johanna, January 17, 2014).

> *I had a conversation with her on how she cooks it, prepares it. So there's a whole dialogue. And he's part of the process* (Leanne, August 1, 2013).

> *Workshops: like cooking skills and things like that. [Terra] tells me how to cook, too... And of course, here [at the Hub]: remember we were doing the pizza thing, going on. It was a vegetarian one... [And making] the pickles* (Johanna, January 17, 2014).

Communicative and Organizing Skills

Participants also supplied evidence of a relationship between community gardening and communicative or organizing skills. In my experience, community gardens in Kenora – such as those at Rabbit Lake, the Arts Hub, and WNHAC – provide a platform for community

engagement and organizing around social-ecological issues as diverse as maintaining healthy food cultures to preserving the beneficial organisms that share the garden space (WNHAC Lunch and Learn, July 24, 2013; The Bats workshop at the Hub, September 25, 2013). Participants confirmed this in interviews.

> *The example of that is: in my former house, a lot of us had backyard gardens. So, we used to check each others' gardens out and talk about what's growing; but then, formally organizing a pumpkin growing contest. And then when the pumpkins were ready: picking the day, having a little celebration... It was building that sense of community, of pulling neighbours together that might not, as a whole, collectively have gotten together* (Judy, January 31, 2014).

> *I learned community advocacy and using conversation to stress the positive outcomes of community gardening: the enjoyment of it, the impact on food security, independence and self-sufficiency, and not taking things for granted: like getting food from the grocery store* (Summary from interview with Fay, January 17, 2014).

5.2.3 Action

In addition to knowledge and skills, ecological citizenship includes action on social-ecological issues in the community. Participants described examples of sharing, cooperating, and learning in the garden, as well as gardening initiatives that promote capacity-building, access to food, beautification, urban pride, and environmental stewardship.

Sharing, Cooperating, and Learning

Participants provided numerous examples of sharing, cooperating, and learning with their family, friends, and other gardeners through gardening and related activities. See Section 4.3 for details on how gardeners work to enhance their social-ecological communities through such acts of sharing.

Capacity Building and Access

Participants understood that community gardening contributes to capacity building and access to food and gardens in Kenora. They pointed to several new and existing developments,

organizations, and people (i.e. Women's Place Kenora gardens, Henry Rasmussen, WNHAC) who are influential in this regard. See Section 5.1.1 for evidence of capacity building among family and friends, and across generations.

> *Many of the women that [garden here] are struggling with food. So it's part of a food security program, and also have fresh produce, and also helping them with skills and increasing their self-reliance and self-esteem* (Mercedes, August 1, 2013).

> *[This garden promotes] access to safe, affordable, culturally-appropriate food. [It] is a means for people to take control of their own lives, and grow their own food, and grow the food that they want to grow* (Judy, August 8).

> *[Henry] has several active gardens right now using that construction...And so, you can stand and garden. And he's thinking - because people, physically, as they age or for whatever reason they run into an issue that they can't bend down – here's your option. You can continue enjoying gardening, and he's making it possible for them* (Leanne, August 22, 2013).

> *And in that garden, if you were in a wheel chair, you could still reach it. You wouldn't have to worry about bending down* (Fay, August 15, 2013).

Beautification and Urban Pride

Some participants identified the role of gardens and gardeners in beautifying the city, and the importance of celebrating such achievements.

> *I think [the flower baskets] are a community asset and, as far as I can tell, it's going well, because there are several throughout the community. And I think it's important to note that we have successes in community gardening, and that it makes our city beautiful (Fay, August 22, 2013).*

> *I just stopped and I looked, and here's a business that has put plants out on their own, right on the sidewalk, with 2 bright pink stools. And it really, really caught my eye. And I thought, "So here's somebody who's taking the municipal land and beautifying it, so that anybody going by on the street can enjoy it" (Judy, August 22, 2013).*

Environmental Stewardship

Many participants spoke of preserving the natural environment through gardening practices, and caring for the resources used in the garden (e.g., land, soil, water).

> *Rather than buying from the supermarkets, because they bring it from other places. And of course, we are all contributing, in some respects, to pollution and contamination* (Mercedes, August 8, 2013).

> *So she uses it for watering some plants. And sometimes she's got to get the hose, once in a while* (Johanna, August 22, 2013).
>
> *Well, if you compost, then that's less material that's going to the landfill, which definitely benefits the environment. My neighbour, who would bag up her leaves that would go in the garbage, now come in my yard. Because I do have a pile where, over the last three years, the leaves have been composting* (Judy, January 31, 2014).
>
> *[My husband] planted the milkweed to get the monarch butterflies to come. He orchestrated parts of the garden for different reasons* (Leanne, February 1, 2014).

Action Opportunities

As described in Section 4.4, some participants identified opportunities for more gardening on the urban landscape. Yet they also suggest that getting decision-makers on board continues to be a challenge (see *Linking Opportunities,* in Section 5.1.3).

At the individual level, participants indicated that gardeners could do more to conserve resources and preserve the environment.

> *[We should be] more conscientious in the way that we use water, because sometimes, I get a little bit concerned that people water their gardens, but they leave their hoses going for hours at a time. And that's a very precious resource. There is lots of water in this area, but people don't really think about the future. What is going to happen when that resource becomes scarce, too? And [use], to the maximum, the natural [source] when it rains... gather the water* (Mercedes, August 8, 2013).
>
> *Depending on the crops you grow, you can enrich your soil. And even with crop rotation: maybe something has a high nitrogen yield, but then maybe some other plant will give something back. And that's part of the learning too: learning about crop rotation and that. And it's ground cover, so it's got to be good for the environment* (Judy, January 31, 2014).
>
> *I want to be a writer. So maybe I could help you out again with the newsletter, and get all the people to come to the gardening and... workshops* (Johanna, January 17, 2014).

Some suggested that a change of culture is what is needed to ensure a better relationship with the environment and resources.

> *It's about changing the culture and the community, and getting people just engaged in whatever ways they can...And it's finding the key messages for the people that you want to engage: that it's going to be meaningful for them... And maybe it's not always coming from a gardening or food security perspective. Maybe it's coming from a workplace or [stress-reduction] perspective* (Judy, January 31, 2014).

> *We should be more attuned to what is going on in our community, be proactive, and take advantage of the resources available. People in larger cities tend to think of this more, because they have to work at it. But in Kenora, we're already so close to the bush that we tend to take the resources around us for granted* (Summary from interview with Fay, January 17, 2014).

> *Lots of people compost... there are also people who don't. They just want to have pretty gardens, but they don't really care what they are putting in their land... I think that the kids in school now are learning a lot about the environment, about recycling, about composting. But... I think there are opportunities to share more information and to have governments at all levels do a lot [more]* (Participant 1, March 17, 2014).

On the other hand, some suggested that time and energy commitments – not just knowledge, skills, or willingness – were a challenge to gardening more, or more successfully.

> *There was a bit there, when I first started off, where I was neglecting them. And I did feel bad for that. So now I'm trying to take care of them* (Amanda, August 8, 2013).

> *I was scared – really, I was scared – to do that little garden plot of mine, because that was a commitment that I didn't think I could fulfill, because of the things that I do. This time of the year is quite busy, because we have to harvest our medicines, and I'm doing that for the Ne Chee Friendship Centre* (Mother, August 22, 2013).

5.2.4 Cross-Cultural Collaboration

While participants came from both Aboriginal and various settler societies, cross-cultural collaboration – people from different cultures cooperating, sharing, or learning together – was not discussed much in the workshop setting. There were two notable exceptions. One participant, who emigrated from Guatemala, learned about perennial plants after moving to Canada. Another participant, who works in produce, talked about collaborating with recent immigrants in his home community.

> *I use to spend money on an annual basis, putting lots of annual plants. But then, somebody told me, "Why don't you put perennials?" And because I'm not from here, I wasn't sure, because in Guatemala, there are flowers all year long. So it never occurred to me* (Mercedes, August 8, 2013).

> *Back home, I work in the produce department. And we have a lot of Filipinos that are living there too, now. And they always ask for certain kinds of vegetables that we don't have in our store... They always try to put an order in to get some of that stuff that we have in the store.*

> *I've tried squid before, and it's not too bad, you know, and certain kinds of fish, too. But, you know, it helps out to help them out with what they need too, you know. And they check out the community garden, too. We all work together* (Tom, August 8, 2013).

From observing gardening events throughout Kenora, however, I knew of many instances of cross-cultural collaboration. Examples include: a medicine walk co-hosted by WNHAC and the Arts Hub, where Aboriginal and settler participants learned about traditional medicines from Elder Jan Longboat (I attended this event on June 15, 2012); a local organization, called Seeds for Change (SFC), which is dedicated to food security in Kenora and includes Aboriginal and settler representation (Seeds for Change Meeting, Jan 31, 2014); potlucks and events at the Arts Hub that draw people from various cultural backgrounds, such as the Arts Hub Garden Potluck and Concert, (Garden Potluck and Concert at the Hub, August 22, 2013); as well as this project - evident when culturally diverse participants took pictures together of the Women's Place gardens following the second Photovoice workshop (Post-Workshop 2, August 8, 2013) and when I accompanied a few of the participants on a tour of community gardens in Kenora (Garden Tour with Participants, August 14, 2013). As a result, I decided to follow-up on cross-cultural collaboration in the interviews.[25, 26]

Cross-Cultural Collaboration (General)

When asked in interviews about experiences of cross-cultural collaboration involving gardening and food, settler participants tended to think of cross-cultural collaboration, initially, in settler-to-settler terms. They spoke of opportunities for food collaboration in restaurants, and when cooking and eating with friends. Others spoke of a local food event at the museum called

[25] As noted in Section 3.3, five of the six interviews were given by non-racialized settler participants.

[26] It is also important to note that two interviewees were unfamiliar with the term culture, challenging the utility of this concept for this research and providing further insight into why this concept may have been little discussed in the workshop setting.

"Taste of Kenora" that highlighted different cultures and their foods. At the Arts Hub Garden Potluck and Concert (Garden Potluck and Concert at the Hub, August 22, 2013) attendees shared not only food, but also conversation and knowledge. Several people were asking and responding to what was in certain dishes or who made them. In some cases, this involved learning about and sampling from fellow attendees' cultural food practices and preferences. Yet, these opportunities are still seen as limited in a relatively homogenous city.

> *Not so much, other than eating in restaurants. We have a significant number of Chinese restaurants here* (Judy, January 31, 2014).
>
> *[Our friend is] first generation Canadian, but she's sharing what she grew up with [in Vietnam]. So Kenora's a little limited that way. There's not a huge influx of cross-cultural communities, but you get little snippets of stuff, and it's nice to share. And we've talked about not just main dishes, but also vegetables and preparing and that* (Leanne, February 1, 2014).
>
> *But those opportunities are not there often* (Participant 1, March 17, 2014).

Aboriginal-Settler Collaboration

When asked specifically about Aboriginal-settler collaboration, participants were able to identify some examples of cross-cultural influences on gardening and food. These include: incorporating Aboriginal cultivation practices into one's gardening; making use of traditional Aboriginal plants and medicines; as well as a local Aboriginal-run restaurant that serves culturally-inspired dishes such as bannock burgers. Others in the community have told me about this restaurant and its menu, but I have yet to sample it.

> *There were some workshops held in Kenora, and Jan Longboat White came and spoke to us. That was really significant, because she talked about the slow food. She talked about the corn: how it took a year to dry, and then how you'd have to grind the corn; and the impact of these slow foods both on the culture and on the nutritional value; and how they would cook the white corn with the ashes... So then you start thinking about heritage seeds when you hear a talk about the traditional seeds that people use. I think it's a good way for people to start thinking about food in a different way, when you're exposed to food from different cultures... [And] when I think of the three sisters gardening and the companion gardening with the corn, squash, and beans, and thinking about how I can incorporate that into my garden or other people that are developing gardens* (Judy, January 31, 2014).

> *There's been several situations where we were able to make bannock. So you know: a couple of things like that. And we've always picked berries, as a kid growing up. So that's one of their traditions, too, in the [Aboriginal] community... And wild rice: we enjoy wild rice. And there's a small restaurant in Kenora that is Aboriginal-run, and we've been there a couple of times* (Leanne, February 1, 2014).

Cross-Cultural Opportunities

Despite examples of cross-cultural collaboration from participants, opportunities for collaboration through gardening clearly remain. Some participants revealed a lack of understanding or acknowledgement in regards to the cultural origins and benefits of food plants and practices. Others were more vocal about racial tensions that remain in the community, and their impact on potential collaboration.

> *We don't know where everything comes from, but there are cultural influences all around: my knowledge of mushroom picking comes from my Polish culture and Aboriginal peoples gave us smoked fish* (Summary from interview with Fay, January 17, 2014).

> *I would say there's a fair lack of understanding. I mean, I know a lot of people who wouldn't be able to understand why there would be tobacco growing in a vegetable garden: because of it being a sacred gift* (Judy, January 31, 2014).

> *And there are opportunities. I'm not saying that there is no work done at the grassroots level between Aboriginal and non-Aboriginals, because I live in the community and I'm part of that. But not evolving into gardening, into the garden... It is a matter of people kind of opening their eyes: that there are so many other people that look different from them, that they can learn, and share [with]. I see our community, unfortunately, being a bit kind of racist and discriminatory on the basis of that. And so they're missing those opportunities to learn something different* (Participant 1, March 17, 2014).

Overcoming these obstacles will require a greater investment of time and energy. As initiatives tend draw the same group of concerned individuals, outreach to the wider community will be equally necessary.

> *Opportunities: yes. It's a matter of creating them. We can create those opportunities, but it's a matter of making the time and investment to do that. [Common Ground] is an example of some of the work that [the City and Treaty 3] have been doing. But I wish that could be said of other sectors in the community... There's a group [of regular contributors]. But [we need] to open [up] to others in the community* (Participant 1, March 17, 2014).

> *There's gaps around the [SFC] table. Like Ne Chee [Friendship Centre] used to have a garden; it would be great to have them on board. The Aboriginal Head Start programme used to have a garden... But I think, as long as we have that awareness of what are our gaps and then always have in mind when is it a good time to reach out to them and say "This is where we are, and can you join us? Would you see a role with us? Because we'd love to have you participate. Or do you just want to have a garden, and can we help you support that? What would you need to get that going?* (Judy, January 31, 2014).

> *Striking conversations among people from various cultures is important. Seeds for Change is doing a great job of building this capacity, but it is new and still being figured out. It will also be important to reach out to other people, besides the "usual suspects". Working alongside the participants from Del Art was a good reminder of this opportunity* (Summary from interview with Fay, January 17, 2014).

5.2.5 Ecological Citizenship and Photovoice

Not only did participants discuss knowledge, skills, action, or cross-cultural collaboration through gardening; they demonstrated ecological citizenship through Photovoice.

Knowledge and Skills

Many participants demonstrated their knowledge during the Photovoice workshops and learned from each other (See Sharing Knowledge and Learning in Section 4.3). As one participant summarized:

> *Well, we all learned about plants and vegetables. It was cool... It was nice sharing with a diverse group: just their perception, too, because we had discussions, and we talked about our photographs: just everybody else's slightly different point of view. So that kind of broadened how you look at things... It certainly has opened minds to what a garden is: the potential. It's not just looking at the flowers; it's the benefits. And that I find pretty exciting* (Leanne, February 1, 2014).

> *Everybody has different opinions, right? And so, as you're listening to others speak, and they may not necessarily agree with you, but they're letting you know what their perception is on that. So I think that's good for building common ground, and realizing that your way is not always the way everybody sees things* (Judy, January 31, 2014).

No participant talked about developing gardening skills in the Photovoice project, as there was a lack of hands on gardening during workshops. However, one participant talked about developing advocacy skills through gardening and this project, specifically (see *Communicative*

and Organizing Skills, in Section 5.2.2). A second participant talked about the opportunity to develop photography skills through the project, which she plans to use for further garden/market investigation. However, a third participant suggested that the initial photography workshop was too complex and not comprehensive enough to give the participants a greater advantage.

> *We're looking at colour and we're looking at light... We're looking through a lens, and we're looking at angles, and getting up close or going further back. We're looking at how to structure a better picture and stuff, too. So, I think that was really beneficial... And I think even, since we participated, coming up this summer, Meg, you and I will maybe just do it as a hobby. We can go back to the farmers market* (Leanne, February 1, 2014).

> *The first person who came to talk to us about the pictures, I didn't feel like he spent enough time. It was a technical conversation, and I'm not a technical person. So I thought he went too fast through some of the things... Perhaps using a more simple language, or having a visual to demonstrate his explanations better, or something like that* (Participant 1, March 17, 2014).

Action

During interviews, participants indicated the potential of this project to spur further discussion and action. Many shared examples of positive feedback from acquaintances who had seen the Photovoice exhibit and were inspired. Two participants – now members of SFC – suggested that this Photovoice project was instrumental in the resurgence of SFC and helped inform the design of another Photovoice project in Kenora. The SFC member organizing the above-mentioned project did not participate in this project. But during a visit to her garden, she confirmed the influence of this project on her decision to initiate another.

> *With KACL having this initial project, the spinoffs are going to be really wide-spread, too. So, I'm excited to see the potential that it will have. And knowing [KACL's] philosophy, it's going to bring a lot of people together who might not know each other* (Leanne, February 1, 2014).

> *Part of [SFC] can be attributed to this project... [Another SFC member] hosted [one of our workshops], and now she's doing her own Photovoice project. For me [an SFC member], it was seeing that sense of community that came together from [our] Photovoice project that I started thinking, "Well maybe we need to rally around this." And it truly was an organic process... but those ideas had to come from somewhere* (Judy, January 31, 2014).

Cross-Cultural Collaboration

As noted in Section 5.2.4, participants came from both Aboriginal and settler societies, successfully cooperating, sharing, and learning together. The results of this project, including their exhibit are testimony to this collaboration and its impact on participant perspectives.

> *Working alongside the participants from Del Art was a good reminder of the need to invite people who are not normally included in discussions and action on food security* (Summary from interview with Fay, January 17, 2014).

> *To have [your ideas] challenged... That especially came to the forefront when one [of the Aboriginal-identified] participants was talking about the land and what it means. We were looking at it as a space for development, and they were looking at it and saying, "Well, maybe it just needs to be the space that it is, because people gather there. You don't need to do anything to it."* (Judy, January 31, 2014).

5.3 Summary

As the theoretical results presented in this chapter suggest, community gardens are places where people (re)produce and exercise their social capital and ecological citizenship. Through cooperation and sharing, gardeners strengthen social bonds, build social bridges, and access resources through social linkages. Gardeners possess a vast amount of social-ecological knowledge and look for opportunities to pass this knowledge on to the next generation. They seek enhanced connectivity and resource-sharing among gardeners, and further action on social and ecological issues in their communities. Some suggest greater linkages, such as with the City of Kenora or local business, to improve access to gardens. At the same time, exclusion continues to pose a challenge to making connections, taking action, and collaborating cross-culturally.

In the following chapter, I discuss these theoretical results alongside the contextualized results presented in Chapter 4.0, in order to highlight potential implications for community gardening and garden developments in Kenora.

6.0 DISCUSSION & RECOMMENDATIONS: DESCRIBING AND PRESCRIBING COMMUNITY GARDENING

As outlined in Section 1.2, the purpose of this research was to document and communicate participants' experiences of community-building through community gardening in Kenora, Ontario. In partnership with the Hub, I applied participatory methods to 1) explore how participants perceive, engage, and envision their garden communities, 2) determine whether and how community gardening contributes to the production of social capital and ecological citizenship in Kenora, and 3) share results with the community at large to encourage further dialogue, throughout Kenora, regarding community-building through community gardening. In this chapter, I discuss the results of this research, and possible implications for community-building through community gardening in Kenora.

It may be common practice to format thesis discussions and implications according to the objectives set. In this case, however, the strong associations between the contextualized and theoretical results lend themselves to more nuanced discussion that recognizes the interplay between objectives. The first two sections of this chapter follow narratives supplied by participants, namely: the relational definition of community gardening (Section 6.1) and success, potential, and challenges associated with sharing, cooperating, and learning among community gardeners (Section 6.2). In these sections, I make relevant connections to social capital and ecological citizenship. Recommendations, derived from these discussions and presented under italicized sub-headings, are offered for consideration to the Arts Hub and other community gardeners or gardening groups. Before offering concluding comments, I reflect critically on my use of Photovoice and comment on successes, challenges, and limitations of this research approach.

6.1 Community Gardens: Uniquely Defined and Relational

In the first sentence of this thesis, I suggested that community gardens are inclusive places, marked by some degree of democratic process, where diverse people come together to grow food and other plants (Draper and Freedman 2010). Furthermore, authors such as Firth, Maye, and Pearson (2011) frame gardening activities in terms of place-based or interest-based community engagement. On the other hand, the contextualized results presented in Chapter 4.0 suggest a uniquely relational view of community gardening. Social-ecological relationships, according to participants, are the foundation for defining community gardens. In this context, community gardens can be defined as places where individuals interact with a social-ecological network, which includes the people, plants, animals, and environmental conditions that contribute to the production of food, medicines, and ornamentals in the community.

From this perspective, gardening happens whenever and wherever community members gather to grow food and other plants, organize and feast, or simply enjoy locally grown plants and produce. Community can be fostered through a variety of gardening practices that transpire, not only in conventional community gardens like those at Rabbit Lake or the Arts Hub, but also in the public, market, natural and private gardens that contribute to a robust community garden landscape. In other words, sharing plants with one's neighbour or sharing food with the animals and insects in one's garden are as much a function of community gardening as similar sharing among gardeners at a community plot. As a result, when envisioning community garden developments in Kenora, it may be insufficient to think simply of building inclusive and democratic places for growing food and plants. Rather, it may be more important to think about creating places where family, friends, fellow gardeners, and the community at large can nurture relationships around a common interest in growing food and other plants.

By defining community gardens in relational terms, participants drew attention to the role of social capital and the significance of ecological relationships in building community through gardening. Reciprocity and trust, the foundations of social capital, are exercised through shared responsibilities, time, energy, knowledge, produce, and resources among families and friends, other gardeners, and the community at large. Chapters 4.0 and 5.0 show that community gardening in Kenora provides opportunities for family and friends to bond through shared experience and enjoyment. They are also venues for neighbourhood events that promote community connectedness and social bridging. This was expected, given that similar results have been documented in a variety of locations, including Toronto (Wakefield et al. 2007), New York City (Saldivar-Tanaka and Krasny 2004), Melbourne, Australia (Kingsley and Townsend 2006), and Nottingham, UK (Firth, Maye, and Pearson 2011). Not confined to the physical space of the garden, bridging social capital is exercised through relationships between community gardening groups, organizations, and individuals with similar interests (see also Firth, Maye, and Pearson 2011).

Similar to findings by Firth, Maye, and Pearson (2011), Richardson (2011), and Krasny and Tidball (2009a), linking social capital was evident in the various relationships between gardening groups and local institutions, such as the City of Kenora, local businesses, community organizations, schools, and workplaces. Participants realized that these relationships were reciprocal, and it was explicitly clear to at least one participant that businesses and institutions are not necessarily altruistic in their contributions to community gardening (see also Firth, Maye, and Pearson 2011). As a result, social linking was considered important for realizing some, but not all, community garden goals. Regardless, increased supports from the City of Kenora and local businesses are encouraged.

Participants also recognized that community garden relationships extend beyond the social, and include complex ecological relationships. As described in Section 4.2, participants demonstrated familiarity with, or at least appreciation for, not only the people, but the plants, animals, and environmental systems that make up, and contribute to, their garden communities. By engaging these ecological relationships alongside their social counterparts, community gardeners practice ecological citizenship by furthering social-ecological well-being (Okvat and Zautra 2011) and (re)producing experiential and observational knowledge of their communities and social-ecological impacts (Krasny and Tidball 2009a).

Increase Opportunities for Intergenerational Bonding

Intergenerational bonding and cultural preservation through gardening is of particular importance in Kenora. Social bonding is particularly strong among family and friends who garden together, and passing on knowledge and skills to the next generation is considered key to ensuring greater engagement in gardening and preservation of various cultural and gardening practices. This finding parallels results by Saldivar-Tanaka and Krasny (2004) in their research among Latino gardeners in New York. In both cases, children were not necessarily required to garden but, rather, their presence in the garden was seen as sufficient to immerse them in – and therefore preserve – gardening culture and knowledge.

These results could have particular implications for how the Hub, other community organizations, or local institutions deliver garden programming. While the Hub cannot, according to its mandate, provide programming for minors, some regular attendees at the Hub participate alongside their adult children or grandchildren, and minor children are welcome to come help out and attend events at the garden. Considering the potential for social bonding through gardening, gardens like that at the Hub may want to encourage intergenerational family

participation – family, of course being self-defined. For example, the upcoming 2014 Photovoice project at Women's Place Kenora is designed for participant pairs, each with a child and parent or grandparent. They could also look at potential partnerships with organizations that already provide intergenerational programming.

Promote Bridging through Gardening: Learning and Sharing across Gardening Groups

Similar to findings by Glover, Parry, and Shinew (2005) and Kingsley and Townsend (2006), this research demonstrates that community gardening can help bridge the gap between diverse gardening groups. It is clear that there is potential to learn and generate new ideas by getting connected to other gardeners throughout Kenora. This knowledge can then be applied to one's own gardening context, among one's friends and family, or for the betterment of one's community. Participants recognized the diversity of garden types that make up the community garden landscape as a rich source of bridging social capital. In other words, connections can be made in community gardens, but also private yards, market gardens, public gardens, or common foraging grounds. On the other hand, participants recognize that getting connected is not always easy (see Section 6.2 for more on bridging, associated challenges, and implications).

Promote Respect for Ecological Relationships

This is a particularly important consideration for developing the community garden landscape. Initiatives to support a thriving and healthy community garden landscape must be attuned to the importance of social relationships and social well-being. However, such relationships must be considered within a larger and more complex set of relationships with other species and the ecological processes that surround us. For example, gardening initiatives aimed at promoting access to food, social inclusion, or capacity-building should also aim to promote healthy ecosystems through environmentally responsible gardening practices.

6.2 Sharing, Cooperating, and Learning: Success, Potential, and Challenges

Sharing, cooperating, and learning in relationships is foundational to how participants envisioned social-ecological action among gardeners. Through social bonding and bridging, community gardeners in Kenora help each other out, share knowledge and resources, and learn among family, friends, and fellow gardeners. Consistent with previous studies on the social and ecological aspects of community gardening, this research shows that community gardens provide a place to (re)produce knowledge on: the ecological processes that transpire in the garden (Krasny and Tidball 2009a, 2009b); the connections between gardening and the local environment (Shava et al. 2010; Baker 2004); and, gardening and food preparation techniques (Mundel and Chapman 2010; Wakefield et al. 2007; Hancock 2001).

Participants in this research recognized that sharing knowledge in, and of, the garden can enhance capacities and contribute to healthy environments and ecosystems services (see also Barthel, Folke, and Colding 2010; Krasny and Tidball 2009b; Hancock 2001). They identified some of the challenges associated with the dominant food system, and understood that community gardens can be a platform from which to learn about, and act on, environmental issues. Through learning and acting, many community gardeners were able to develop practical gardening expertise and/or organizational skills and facilitate positive outcomes for their gardens and social-ecological communities (see also Okvat and Zautra 2011; Travaline and Hunold 2010; Ohmer et al. 2009).

Consider Valued Social Roles and Diverse Means of Participation

Of particular importance to the organizational goals of KACL and the Arts Hub – and the methodological goals of this thesis – results suggest that learning and action through community gardening can contribute to valued social roles among gardeners. As Hancock

(2001) points out, gardening and related activities can contribute to the development of personal capacities and knowledge that are recognized and valued by one's self and others. Through cultivating their community gardens, cooperating with other gardeners, socializing in the garden, and sharing their skills and knowledge, many community gardeners in Kenora became recognized for their knowledge contributions and practical expertise on the local environment, growing methods, food preparation, and related skills, which are findings also evident in the work of Travaline and Hunold (2010). Furthermore, if we consider this Photovoice project as a community gardening activity, it is worth noting that some participants have been approached by individuals and organizations looking to acquire prints or permission to use their photos for a variety of purposes, suggesting a wider range of garden-related skills that add to one's social capital and social roles. It may be advisable for community gardening groups and organizations to think more broadly about how diverse community members can contribute to their gardening initiatives.

Increase Access to the Community Garden Landscape

Identifying and developing more places for community gardening will be essential for ensuring access to gardens, creating connections among gardeners, and promoting future success. According to participants, there is a need for not just more community gardens, but gardens that are located in places that are accessible to those who could most use them. This does not seem to be a consideration in the majority of community gardening literature, which tends to focus on more densely populated urban areas. In Kenora, the community garden at Rabbit Lake is not serviced by public transportation and is a distant walk from the city centre. Similarly, many residents from the sparsely populated and comparatively large municipal area would require private transportation to access community gardens run by organizations in the

city centre. Distance, mobility barriers and/or lack of access to reliable transportation can inhibit potential gardeners who live far from existing community gardens in Kenora.

Participants had different ideas of how to go about connecting, building gardens, and increasing access. Some participants looked to enhance linking social capital as a way to promote gardening on the urban landscape. Although a few schools were building gardens and the city was recognized for providing the land at Rabbit Lake Community, they saw greater support and investment from the city, businesses, schools, and workplaces as a key to building community gardens and garden networks. This could include direct involvement by city councillors and local businesses – especially restaurants – in community gardening activities or, where possible, establishing community gardens in workplaces for use by employees and/or clientele. However, many participants described difficulties in convincing workplace managers, the city, and local businesses of the value of gardens (see also Section 5.1.3).

Other participants pointed to the potential of, and preference for, grass roots organizing to transform the community garden landscape, noting the success of community potlucks and community garden programs at bringing people together. There is nothing to suggest, however, that such approaches cannot work in tandem toward a common goal. For example, this Photovoice project brought together community and university resources through a grassroots participatory research project. The project has since garnered favourable attention from representatives of the city and local institutions, such as the Matiowski Farmers Market and Northwestern Health Unit. It has also inspired community organizations to take on further grassroots action (see also Sections 5.2.5 and 6.3).

It should be noted, however, that participation in community gardening often requires a significant amount of time, energy, and knowledge. This is evident in the stories participants

shared about their challenges with identifying and caring for the plants in their gardens, in light of competing priorities (see Section 4.2). These challenges can impact who participates in grassroots gardening initiatives and who cannot. Time and energy, in tandem with transportation challenges could have, therefore, impacted who participated in this research and to what degree they were able to participate. (See Section 6.3 for a more comprehensive critique of the Photovoice project.)

While gardening may also be financially and temporally challenging for community organizations (Personal Communication with Lisa Gate-Villa, KACL Manager 2014), this did not come up in participants' narratives. Participants who spoke of organizational opportunities for gardening tended to focus on management and staff giving gardening higher priority and greater recognition for its benefits. Yet, in making recommendations for the Arts Hub and similar organizations, it is important to consider whether the organization has not just the will, but also the resources to prioritize gardening or enhanced community gardening initiatives.

Actively Work on Bridging Cultural Divides

As described in Section 2.2, community gardens can contribute to culturally diverse landscapes when they reflect the preferences and needs of culturally diverse gardeners (Okvat and Zautra 2011; Baker 2004; Saldivar-Tanaka and Krasny 2004). While participants in this research did not describe the cultivation of these types of multi-cultural landscapes, they did evidence the sharing of garden and food knowledge across cultures, including expertise brought from markedly distant and ecologically different locales – such sharing is also seen in the work of Krasny and Tidball (2009a), Shava et al. (2010), Travaline and Hunold (2010), and Wakefield et al. (2007). Also discussed were cross-cultural, food-centred community events (see also Richardson 2011; Saldivar-Tanaka and Krasny 2004).

Although there are examples of cross-cultural collaboration through gardening, this was not necessarily a priority in participants' visions for future community gardening initiatives. Furthermore, while I hoped to contribute to a greater understanding of Aboriginal-settler collaboration through gardening, explicit evidence of such collaboration was largely limited to that which transpired in the workshop setting. However, I do know through observations that broader collaborations exist. For example, the Hub has successfully partnered with at least two Aboriginal community organizations that also have gardens (Women's Place Kenora and WNHAC), and is seeking more partnership opportunities with both to expand bridges and ensure that their Aboriginal consumers have access to culturally appropriate programming. More recently, SFC has bridged culturally diverse community organizations around a food security focus and interest in gardening, and Women's Place Kenora's Photovoice project includes culturally diverse participants.

It is too early to speculate on how such collaborations might contribute to what Stroink and Nelson (2009) would consider a robust local food system for both Aboriginal and settler communities in the region. Even so, such collaborations may be integral to better understand cultural food and practices, and overcome the immediate exclusion felt by some racialized community members. For many non-racialized participants, community gardens were seen to bring diverse community members together through common activities and goals, and provide opportunities for people to feel part of a community of family, friends, and fellow gardeners. On the other hand, some racialized community members continue to feel excluded from some community gardening initiatives. These challenges to bridging and potential action through gardening – the result of colonialism and racism – are by no means unique to Kenora. Aboriginal foods, plants, medicines, and related practices have long been delegitimized,

appropriated, and/or criminalized across Canada, including in my own city of Winnipeg. Yet, this exclusion also reveals the potential of community gardening to create social divisions through the exclusion of those not in the gardening or cultural in-group (Firth, Maye, and Pearson 2011; Shinew, Glover, and Parry 2004; Kingsley and Townsend 2006; Glover 2004). It is clear that any future community garden developments in Kenora should not only recognize the potential for cross-cultural collaboration, but actively seek to address the colonialism, racial barriers, and social exclusion that continue to hinder equitable collaborations.

6.3 Photovoice: Research in Action

As described in the introduction of Chapter 1.0, community gardening is not bound to the physical space of the garden (Glover, Parry, and Shinew 2005). Wherever community gardeners gather to cooperate, share, and learn about gardening, for the purpose of enhancing their garden community, they are participating in community gardening.

Through Photovoice, participants got to know each other and other community members and, in doing so, developed social capital. For many, the project provided an opportunity to connect with fellow gardeners and develop bridging social capital. For a select few, it also provided an opportunity to connect with family and nurture bonding social capital. Through these bonds and bridges, participants demonstrated and shared their social-ecological knowledge, and learned from each other. They also took action by sharing what they discovered through the public Photovoice exhibit, and inspired others to do the same. The results of this project have contributed to further community action such as the resurgence of SFC and the development of another Photovoice project in Kenora. A willingness to cooperate, share, and learn across cultures led to new perspectives and appreciation of the other. Through community-based participatory research (CBPR), community members were exposed to new

knowledge and skills that have contributed to enhanced engagement with, and action on social and ecological issues – also described in the work of Castleden, Morgan, and Lamb (2012), Ballard and Belsky (2010), and Minkler (2004). It is clear from the response to the Photovoice exhibit – the photographs and stories of participants – that this research design can effectively involve participants as co-researchers and amplify marginalized voices.

Challenges and Recommendations

While I was prepared for the time commitment involved in building relationships with community partners described by Castleden, Morgan, and Lamb (2012), I underestimated the commitment involved for participants, who were asked to come to weekly, two-hour workshops, take photographs on their own time, help plan the exhibit, and participate in a follow-up interview. Furthermore, I regularly sent follow-up communication and workshops reminders to participants, which may have further imposed on their personal time. As anticipated, not all participants came to all workshops, with attendance ranging from 6-9 participants. This was a good number, as any more than nine participants would have required a longer workshop. Yet, these numbers may indicate competing time commitments and priorities. That said, I should also note that two participants attended only one of the workshops: the only workshop held at the location where they garden. Furthermore, these participants did not respond to my request for follow-up interviews, and so I cannot speak to the reasons for their absence. But the location of the other workshops may have also presented a barrier to participation. I did offer transportation, lunch, and child-minding at workshops to help facilitate participation. Furthermore, I consulted the Hub and other community organizations with gardens to determine the best workshop times and locations, and project duration. If I were to do this project again, however, I would consult potential community gardeners themselves, to determine how best to execute the project.

I would also consult potential participants, as co-researchers, on how best to approach the ethical considerations when collecting the photographic data, including acquiring informed consent from human subjects. While most participants had no difficulty getting written permission from human subjects, in a few cases they only received oral consent and had to re-approach the subjects for written consent. Thankfully, these subjects were all acquaintances of the photographers and it was easy for them to follow-up and get appropriate documentation. Although it would be more logistically difficult, it may be advisable to, first, recruit a dedicated group of participants, and then design the project in consultation with the group, in order to meet their participation requirements and expectations. In other words, fully involving participants in the design and execution of the research agenda as described by Mackinnon and Stephens (2010).

These examples, like those presented by Minkler (2004) or de Leeuw, Cameron, and Greenwood (2012), demonstrate the difficulty in maintaining collaborative and equitable relationships with participants while using CBPR, and Photovoice in particular. However, I also hope it provides some insights for those – especially Master's students – considering these approaches for their own research.

Limitations

It is also important to note that this research has some limitations. For example, this project required a significant commitment of time and energy, which likely impacted participants' decisions to participate. While none of the participants expressly said that time and energy commitments limited their participation in this project, some said that such commitments are barriers to gardening more or more successfully (see Section 6.2). As a component of

participants' gardening activities, it is also possible that these barriers prevented some participants from attending workshops, giving interviews, or contributing to the exhibit.

However, it is important to note that there is no clear correlation between participants who spoke of time and energy challenges and degree of participation in the project, indicating that these barriers alone did not limit participation. Rather, participation in the project was likely impacted by a combination of time and energy considerations and the value or priority participants placed on the research as an extension of their gardening activities. Regardless, these barriers and values may have contributed to a group of self-selected participants who could, and were willing to, devote the amount of time and energy required to attend workshops and complete the project.

Furthermore, the majority of participants were unfamiliar with the terms social capital and ecological citizenship, and some even challenged me on their use (see Section 3.1). Although participants' narratives clearly demonstrated evidence of these phenomena, in all but one case, they did not describe their experiences in these terms. While I made a point of defining the terms from the outset, many participants took some time to fully understand them. This was exacerbated by the fact that I did not want to influence participants' choice of photography subject, and so downplayed the terms social capital and ecological citizenship during workshops. In all, these terms had limited utility for participants, and it may have been more prudent to work with a contextualized approach only: using theoretical concepts after the fact, where appropriate, as opposed to tying the research to pre-determined concepts.

Had I used a strictly contextualized approach, this thesis may have considered different, and perhaps more relevant, theoretical frameworks for supporting an analysis of social inclusion and valued social roles among community gardeners. However, this would have required a

significant amount of time and energy, after initial analysis, reviewing the community gardening literature through the lens of the contextualized results. I did not feel I had the time to approach the research in this way, given my timeline goals for completing this thesis and degree program. Furthermore, using a strictly contextualized approach could have produced data that did not explicitly speak to social inclusion and valued social roles. Although some participants challenged the theoretical concepts I chose for this project, crafting and informing participants of these concepts from the start ensured that data would lend itself to robust analysis and relevant results, while, at the same time, meeting my timeline expectations.

Finally, the results of this research have been sufficient to inform recommendations that speak to social inclusion and valued social roles. On the other hand, the results (including the theoretical results) are rather specific to the local context and rely heavily on the experiences of the participants. As a result, this research and its recommendations are not easily generalized to other community garden landscapes.

6.4 Concluding Comments

In the introduction to this thesis, I suggested that community gardens are more than simply spaces for communal food production. They are places where people connect, share, learn, and engage their social and ecological communities. I feel I demonstrated this to be the case, at least for the participants in this study.

Through community gardening and related activities, participants demonstrated an ability to build and maintain strong social and ecological relationships. Social bonding among family and friends through gardening was commonly cited and is particularly important for passing on gardening knowledge. Social bridging with other gardeners happens in some cases, and remains a clear priority for many participants. As ecological citizens, gardeners understand

the social and ecological aspects of their communities, and many possess a wealth of knowledge. Through their actions, community gardeners enhance access to food, build community capacity, care for their environments, and manage natural resources.

Furthermore, this research demonstrates that there are challenges to community-building through community gardening in Kenora. According to participants, transportation, the location of gardens, insufficient municipal and institutional support, and systemic barriers to social inclusion are among the challenges confronting community gardeners. While they may not agree or have all of the answers, the participants in this research provided valuable information as to why these challenges exist and how they may be overcome. According to their diverse insights, it will likely require a combination of institutional and grass-roots efforts to expand community gardening in Kenora, make gardens more accessible, and address colonial and racial barriers to connecting and collaborating.

Through their insights, participants demonstrated their ability to nurture social capital and take on roles as ecological citizens. While they did not necessarily use the terms social bonding, bridging, and linking, these certainly played varied, but clear roles in their gardening experiences. Furthermore, participants' insights demonstrated the knowledge they posses and the actions they take on social and ecological issues in their community. Future community gardening research in Kenora should (re)consider the utility of these concepts for potential participants and the community at large. More contextualized approaches, relying first and foremost on the concepts used by gardeners themselves could be more useful for producing not only equitable, but contextually useful research results. Furthermore, future CBPR on community gardening in Kenora could integrate explicit opportunities for sharing culturally-

specific gardening knowledge across Aboriginal-settler and ethno-racial divides, in order to promote greater social cohesion and enhanced gardening outcomes.

That said, the insights provided by the participants in this research offer valuable advice for developing the community gardening landscape and planning future community garden programming in Kenora. Furthermore, their participation in the research demonstrates the unique and varied forms that community garden action can take. As an extension of their gardening activities, participants used Photovoice to not only describe, but shape their garden communities. And, as described above, they inspired others to do the same. So while this research many be of interest to community garden scholars or those interested in social capital, ecological citizenship, or cross-cultural collaboration, the greatest achievement of this research is its contribution to local knowledge regarding community-building through community gardening. It is in this context that it is already making a difference.

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8.0 APPENDICES

8.1 Meeting Agendas

Orientation Meeting and Photography Workshop (July 25, 2013)

I) Introductions [12:30-12:45]

- Rob Moquin (community gardener and Masters student at the U of M)
- Laura Cotton (KACL Arts Hub and Photovoice co-host)
- Tom Newell (photography workshop facilitator)
- Participants (gardening experience, reason for participating in this project)

II) Our Research Project "Cultivating Community through Gardening" [12:45-1:15]

i) Why Photovoice?
ii) Photography "assignments"
iii) Developing themes for assignments and initial assignment theme
iv) Group discussion and analysis
v) Final exhibit
vi) Distribute / explain consent forms (complete and return by next week's workshop)

III) Photography Workshop [1:15-2:15]

i) Distribute cameras
ii) Basics of operating a camera and taking/sharing pictures
iii) Techniques (i.e. capturing the image you want)
iv) Ethical considerations (public domain; authorization for exhibit images)

IV) Initial Assignment: "My gardening community" [2:15-2:30]

i) Take as many photos of your garden community as you would like.
ii) Select two that best reflect the theme "my gardening community" to present to the group next Thursday.

Weekly Assignment Workshops (August 1, 8, and 15)

I) Welcome, thank you, acknowledgements

II) Introductions / reintroductions

III) Group discussion: the Photovoice process

  i) What was it like? What did it feel like doing this research?

  ii) What did you like best? Or least?

  iii) What would you do more of? Less of?

IV) Recap of previous week (by participants)

V) Present photos and share stories

  – Everyone will have the chance to present one or two photos that best reflect the weekly assignment theme.

VI) Reflection on the collection

  i) What do you find most interesting about any or all of these photos?

  ii) What similarities (or differences) do you see among the photos or hear in people's stories?

  iii) Where do you see opportunities to build on, change, or celebrate community?

  iv) Thinking of what we've learned so far, what "community garden themes" could we investigate next?

VII) Decide on theme for the next assignment (or subsequent assignments).

  i) Relationships (august 8) and Other People's Gardens (August 15) decided on August 1

  ii) Sharing Our Potential (August 22), decided on August 15

Assignment Workshop (August 22, 2013)

I) Welcome, thank you, and acknowledgements

II) Recap of previous week (by participants)

III) Present photos and share stories (Theme: Sharing Our Potential)

IV) Reflection on the collection

- i) What kinds of sharing are happening?
- ii) Where do you see opportunities for more sharing?
- iii) Do you see opportunities to build on, change, or celebrate community?

V) Venues

- i) Lake of the Woods Museum: Have to submit proposal in mid September for next year and include as much info as possible (i.e. preferred dates, sample work, type of mounting, display and space requirements, etc.) May not be available, even next year (50th anniversary)
- ii) Rec. Centre: Gets a lot of local traffic, but maybe not so much where the hub has space (near pool changing rooms).
- iii) Harbour front near Husky the Musky: Requires waterproofing the photos. Who would I contact?
- iv) HoJoe: Available when we want, but could probably only hold half of the photos (maybe 12)
- v) The last farmers market (October 2): They are keen to have us. Want to know if we want another table (besides the Hub's)
- vi) The Hub: May be a good place to have an opening, but doesn't get much traffic. It looks like we may have the opening at the Hub, followed by a travelling exhibit throughout the fall.

VI) Dates for:

- i) Exhibit planning (September, 9-13 or 23-27)
- ii) Exhibit (September or October)

Exhibit Planning Agenda

I) Open floor [6:30 – 6:55]

- Photographers are encouraged to browse and discuss each other's photos. They may want feedback from each other or T. Newell about their exhibit contributions.

II) Welcome back, thank you, and reintroductions [6:55 – 7:05]

III) Your Five Favourite Photos [7:05 – 7:50]

- Each participant presents up to five photos

IV) Grouping photos, exhibit themes [8:00 – 8:40]

V) Preliminary results from workshop analysis [8:40 – 8:50]

i) What did you contribute?

ii) What did I contribute?

VI) Final thoughts, thank you, and follow up [8:50 – 9:00]

8.2 Participant Observation Checklist

Observational notes will be recorded as soon as possible, following active participation in garden maintenance (e.g. planting, weeding, watering, harvesting) and community gardening events (e.g. workshops, feasts). Particular focus will be given to:

I) Who is present at the garden / event

- Community gardeners (what is their gardening experience?)
- Non-gardening community members (e.g. neighbourhood residents visitors, potential gardeners, community patrons)
- Representatives from government and local institutions

II) What activities are taking place

- Garden maintenance (e.g. planting, weeding, watering, harvesting)
- Social interaction (e.g. established and new relationships; social bonding, bridging, and linking)
- Learning (e.g. sharing knowledge on gardening, food, local environment, and community)
- Cooperation (e.g. sharing time, energy, and skills)

8.3 Follow-Up Interview Schedule (semi-structured)

Thank you very much for participating in this research project, and meeting me again today. The purpose of this interview is to 1) get your feedback on the Photovoice project and any other thoughts you want to share, and 2) ask you about some things that relate to my research. Is it alright if I audio record this interview? I will gladly offer you a copy of the transcript (or notes) for your review, and request you provide any feedback you see fit.

I) What did you think of the Photovoice project?

- Do you think it was a good way to do research? Why or why not?
- What did you like best about it?
- What would you have changed?

II) For my research, I want to know more about social capital. By social capital, I mean relationships between people who rely on each other to help out, learn or provide resources. Many people in the workshops talked about cooperating, sharing, and learning between friends, families, and fellow gardeners. But, sometimes gardeners rely on organizations, institutions, or people with decision-making power to help out.

i) What organizations, institutions, or people in power support community gardening in your community?

ii) Who else should be supporting community gardening?

- What is needed to make this happen?

III) Sometime close relationships between people, like family and friends, can make others feel left out, or excluded.

i) Can you think of a time when you or someone else was left out of a garden community?

- Or might feel left out (hypothetical)?

IV) Another thing I want to know more about is ecological citizenship. By ecological citizenship, I mean the knowledge, skills, and actions of people trying to improve their communities and environments. Although we discussed knowledge quite a bit in the workshops, we did not talk as much about skills or expertise.

i) What kinds of skills or expertise have you gained through gardening?
   - Practical skills related to gardening
   - Communicative or organizing skills

ii) How do you think gardeners' knowledge, skills, and expertise, including your own, benefit your environment?
   - Environmental stewardship and sustainability
   - Beautification

iii) How do you think gardeners' knowledge, skills, and expertise, including your own, benefit people in your community?
   - Food security and access
   - Passing on knowledge

V) Sometime ecological citizenship includes working together with people from different cultures. Some people in the workshops said they cooperated, or learned about gardening or food, from someone from a different culture.

i) Have you ever had any experiences like that?
   - Specifically, Aboriginal-settler

ii) Can you think of any other examples of people from different cultures working together through gardening?
   - Specifically, Aboriginal-settler

iii) Can you think of opportunities for more or better collaboration in your community?
   - Specifically, Aboriginal-settler

VI) Is there anything else you would like to add?

VII) Do you have any questions or comments for me?

Thank you so much, again, for your time and contributions to this project. It has been great to work with you. Congratulations on the beautifully powerful exhibit and an overall job well done!

8.4 Invitation to Participate

303 – 70 Dysart Rd.
Winnipeg, Manitoba R3T 2N2

Dear community gardener,

My name is Rob Moquin, and I am a student at the University of Manitoba. I am studying community gardens, and would like you to be a part of my research project.

I am interested in how community gardeners build relationships, what they learn from each other, and how they make their communities better. Also, I would like to share the research with the public, so they can learn from what you know and do at your garden.

The research will use a process called Photovoice. A group of seven to ten participants will take pictures related to their community gardens. Group members will share these pictures and talk about them with the rest of the group during weekly workshops.

As a participant in this study, you will attend a photography workshop on July 25, from 12:30 – 2:30pm, at the Community Arts Hub (528 3rd Avenue South). You will learn some photography skills and how to respect people's privacy when taking pictures. You will get a camera to keep.

From July 25 to August 22, you will take photographs of your community and garden. During these four weeks, you will meet with the other participants every Thursday from 12:30-2:30pm to share photos and stories, and talk about the process. Childcare and lunch will be provided at each workshop.

After August 22, you will be interviewed about your experience with the research project. You will also help put together a public photo exhibit that will be displayed in the fall (date and place to be determined). The exhibit will belong to the Photovoice group.

The project will take about three hours of your time per week for the first 4 weeks (one to two hours per workshop, and one to two hours for taking photos). The interview will take 1 hour or less. More time will be needed to put together the exhibit.

The benefits of being a participant are 1) working on photography skills, 2) learning about your community and gardening 3) having your photos displayed, and 4) sharing what you learned as a community expert.

As far as I know, there are no risks to you for participating in this study. But sometimes photos, and the stories that go with them, can cause negative emotions.

Participating in this research is voluntary. You can stop participating at any time before the results are made public.

I will not share any information or photos you want me to keep private. But, I cannot control what other participants repeat outside of workshops. I will ask participants not to share any information you want to keep private. You will decide if you want your name used at the exhibit.

Besides the exhibit, this research will be used to write a thesis, academic journal articles, and conference presentations. This is required for my Master's degree program. I will write a summary for the public, and share the results at a community event that I hope you will attend.

If you would like to participate in this research project, or have any questions about it, please email me at or call me at .

This research is supported by the Common Ground Research Forum (funded by the Social Sciences and Humanities Research Council of Canada), and the Government of Manitoba, Department of Advanced Education and Literacy (Manitoba Graduate Scholarship).

This research has been approved by the University of Manitoba Joint-Faculty Research Ethics Board. The University of Manitoba may look at your research records to see that the research is being done in a safe and proper way. If you have any concerns or complaints about this project you may contact me, or the Human Ethics Secretariat: phone (204) 474-7122 or e-mail margaret.bowman@ad.umanitoba.ca.

Thank you for your time. I hope to hear from you soon.

Sincerely,

Rob Moquin

8.5 Photovoice Consent Form

PHOTOVOICE CONSENT FORM

Project Title Growing Together: Cultivating Community through Gardening in Kenora, Ontario

Researcher Robert Laurent Joseph Moquin

Sponsors Common Ground Research Forum (funded by the Social Sciences and Humanities Research Council of Canada)
Government of Manitoba, Department of Advanced Education and Literacy (Manitoba Graduate Scholarship)

This consent form gives you a basic idea of what the research is about and how you will be involved. Let me know f you would like more information on anything related to this project.

My name is Rob Moquin. I am a student at the University of Manitoba, and I am studying community gardens. I am interested in how community gardeners build relationships, what they learn from each other, and how they make their communities better. Also, I would like to share the research with the public, so they can learn from what you know and do at your garden.

Thank you for participating in this research project.

The research will use a process called Photovoice. A group of seven to ten participants will take pictures related to their community gardens. Group members will share these pictures and talk about them with the rest of the group during weekly workshops.

As a participant in this study, you will attend a photography workshop on July 25. You will learn some photography skills and how to respect people's privacy when taking pictures. You will get a camera to keep.

From July 25 to August 22, you will take photographs of your community and garden. During these four weeks, you will meet with the other participants every Thursday from 12:30-2:30pm to share photos and stories, and talk about the process. Childcare and lunch will be provided at each workshop.

After August 22, you will be interviewed about your experience with the research project. You will also help put together a public photo exhibit that will be displayed in the fall (date and place to be determined). The exhibit will belong to the Photovoice group.

The project will take about three hours of your time per week for the first 4 weeks (one to two hours per workshop, and one to two hours for taking photos). The interview will take 1 hour or less. More time will be needed to put together the exhibit.

The benefits of being a participant are 1) working on photography skills, 2) learning about your community and gardening 3) having your photos displayed, and 4) sharing what you learned as a community expert.

As far as I know, there are no risks to you for participating in this study. But sometimes photos, and the stories that go with them, can cause negative emotions.

Participating in this research is voluntary. If you do not want to participate in a group discussion or the interview, that is ok. You do not have to answer any questions you do not want to. You can stop participating in this project at any time before I publish my thesis (expected September 2014). But anything included in the Photovoice exhibit will become public when the exhibit starts in fall (date to be determined). If you want to stop participating, please contact me (Robert Moquin), Dr. Alan Diduck, or Dr. Iain Davidson Hunt. Our phone numbers and email addresses are on the next page. The camera is yours to keep, even if you stop participating.

I will not share any information or photos you want me to keep private. But, I cannot control what other participants repeat outside of workshops. I will ask participants not to share any information you want to keep private. You decide if you want your name used at the exhibit.

Please choose one:

☐ You **cannot use my words or my name** when sharing this research

☐ You can use my words, **but not my name**, when sharing this research

☐ You can use my words and my name when sharing this research

Please choose one:

☐ I want my name used in the exhibit

☐ I **do not** want my name used in the exhibit

I will audio record each workshop, type it out, and give you a copy. That way, you can let me know if you want to change anything you said. **By signing this form, you agree to be audio recorded during workshops.** You choose if you want your interview audio recorded or not. I will ask for your consent about that before we start the interview.

All information will be stored on a laptop computer provided by Dr. Alan Diduck. It will be secured with a password that I will change regularly. This information will not be seen by anyone, unless you share it during a workshop or in the exhibit. All information and photos not included in the exhibit or kept by you will be destroyed by October 2015.

Besides the exhibit, this research will be used to write a thesis, academic journal articles, and conference presentations. This is required for my Master's degree program. I will write a summary for the public, and share the results at a community event that I hope you will attend.

Your signature on this form means that you understand the above information and agree to participate. This does not waive your legal rights, nor does it release the researcher, sponsors, or institutions from their legal and professional responsibilities. You can ask for clarification or new information at any time.

Robert L. J. Moquin

Dr. Alan Diduck, Academic Co-Advisor to Robert L. J. Moquin
(204) 786-9777
a.diduck@uwinnipeg.ca

Dr. Iain Dividson-Hunt, Academic Co-Advisor to Robert L. J. Moquin
(204) 474-8680
iain.davidson-hunt@ad.umanitoba.ca

This research has been approved by University of Manitoba Joint-Faculty Research Ethics Board. The University of Manitoba may look at your research records to see that the research is being done in a safe and proper way. If you have any concerns or complaints about this project you may contact any of the above-named persons, or the Human Ethics Secretariat at (204) 474-7122 or e-mail Margaret.Bowman@ad.umanitoba.ca. A copy of this consent form has been given to you to keep for your records and reference.

_____

Participant Date

_____

Co-signer (if required) Date

_____

Researcher Date

8.6 Interview Consent Form

INTERVIEW CONSENT FORM

Project Title Growing Together: Cultivating Community through Gardening in Kenora, Ontario

Researcher Robert Laurent Joseph Moquin

Sponsors Common Ground Research Forum (funded by the Social Sciences and Humanities Research Council of Canada)
Department of Advanced Education and Literacy (Manitoba Graduate Scholarship)

Thank you very much for participating in this research project. And thank you for agreeing to meet again today. The purpose of this interview is to 1) get your feedback on the Photovoice project and any other thoughts you want to share, and 2) ask you about some things that relate to my research. This interview will take 30 minutes to one hour, depending on how much you want to share.

Remember that participating in this study is voluntary. If you do not want to participate in this interview, that is ok. You do not have to answer any questions you do not want to. You can stop participating in this project at any time before I publish my thesis (expected September 2014). But anything included in the Photovoice exhibit will become public when the exhibit starts in fall (date to be determined). If you want to stop participating, please contact me (Robert Moquin), Dr. Alan Diduck, or Dr. Iain Davidson Hunt. Our phone numbers and email addresses are on the next page. The camera is yours to keep, even if you stop participating.

I will not share any information you want me to keep private. All information will be stored on a laptop computer provided by Dr. Alan Diduck. It will be secured with a password that I will change regularly. The information you provide today will not be seen by anyone, unless you agree to share it. All information **not included** in my thesis, academic journal articles, presentations, community summaries **or** kept by you **will be destroyed by October 2015.**

Please choose one:

☐ You **cannot use my words or my name** when sharing information from this interview

☐ You can use my words, **but not my name**, when sharing information from this interview

☐ You can use my words and my name when sharing information from this interview

You choose if you want your interview audio recorded or not. I will be taking notes throughout the interview. I will give you a copy of my notes. If the interview is audio recorded, I will give you a copy of the typed out interview. That way, you can let me know if you want to change anything you said.

Please choose one:

☐ You can audio record this interview

☐ You **cannot** audio record this interview

Your signature on this form means that you understand the above information and agree to participate. This does not waive your legal rights, nor does it release the researcher, sponsors, or institutions from their legal and professional responsibilities. You can ask for clarification or new information at any time.

Robert L. J. Moquin

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_____

Participant Date

_____

Co-signer (if required) Date

_____

Researcher Date

8.7 Authorization for Use of Photographs

AUTHORIZATION FOR USE OF PHOTOGRAPHS

I _____, give my permission to _____(photographer) and Robert L. J. Moquin (masters student at the Natural Resources Institute, University of Manitoba) to use photos of _____(name) in a public exhibit tentatively entitled "Cultivating Community through Gardening".

The exhibit will be displayed in Kenora later this year (location to be determined). It may also be made into a book or featured on the websites of the project partners (such as the Kenora Association for Community Living: www.kacl.ca). Because this exhibit is part of a research project, photos may appear in research papers, articles, and presentations. Pictures may also appear in a community summary of the research.

_____

Signature Date

_____

Photographer Date

_____

Robert L. J. Moquin Date

If you have any question regarding the exhibit or research, feel free to contact Rob Moquin at , or .

8.8 Release of Photos for Publication

RELEASE OF PHOTOGRAPHS FOR PUBLICATION

For thesis, academic articles, presentations, and community summary

☐ I give permission to Robert L. J. Moquin (masters student at the Natural Resources Institute, University of Manitoba) to use photos I presented in the photovoice workshops and exhibit in his thesis document, academic journal articles, presentations, and a community summary.

I know that Robert Moquin has to give me credit for my art. Exhibit photos will be credited to me, under the name I used in the exhibit. However, I can choose a different name for workshop photos not included in the exhibit.

☐ Use **my real name** with photos not in the exhibit

☐ Use **this name** with photos not in the exhibit _____

☐ **No**, you cannot use my photos

For commemorative book or website about the photovoice exhibit

☐ I give permission to Robert Moquin and the Kenora Association for Community Living (KACL) to use my exhibit photos and stories in a non-commercial (not for profit, not for sale) book or website about the exhibit. If a book is made, I will be given a copy. Copies may also be given to community donors, research partners, and public institutions such as the Lake of the Woods Museum or Kenora Public Library. **My name will be printed with my photos and stories, as it appears in the exhibit.**

☐ **No**, you cannot use my photos and stories

For thank you cards to donors

☐ I give permission to Robert Moquin and KACL to use the following exhibit photo(s) on thank-you cards for project donors. **My name will be printed with my photos, as it appears in the exhibit.**

_____ **(title)**

_____ **(title)**

☐ **No**, you cannot use my photos

Name of photographer

Signature (photographer) Date

Co-signer (if required) Date

KACL representative Date

Robert L. J. Moquin Date