

Community Gardens Survey Summary Report  
Credit for Product - FLPL  
Meghan Hill, Melissa Risto, Jesse Snider, and Carly White  
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Sara Kelly



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## **Executive Summary**

Towards Balance Support Network, Sir Sandford Fleming College, and the Food Security Working Group of the Kawartha Lakes Food Coalition collaborated on a project to gather data on community gardening within the City of Kawartha Lakes. The purpose of the study was to identify where current gardens exist and to ensure that these existing gardens meet the needs of their surrounding communities. This project also demonstrates evidence for potential garden funders on the impact of these types of programs and some of the needs served by community gardens in neighbourhoods throughout the city. Nine garden managers from across the City of Kawartha Lakes were interviewed, three of which were recorded on video. We asked questions based around the following topics; benefits of the gardens, garden harvest and distribution, required garden resources, and gardener and user demographics. This study was carried out from September to December 2015 by four Fleming College Ecosystem Management Technology students.

### Summary of Findings

- A majority of gardeners reported that a wide age range participated in the gardening responsibilities with 40% of the gardeners being seniors and 25% of gardeners being under 18.
- Fifty-seven percent of the produce from gardens was grown for personal use and use by friends and family while 36% of the gardens were intended to feed citizens of the City of Kawartha Lakes.
- Most gardens produce a large variety and quantity of food but have no formal process of keeping track of garden yield.
- Each gardener interviewed noted various physical and mental benefits to participating in gardening programs but mentioned how those with physical disabilities may encounter obstacles when using the gardens (e.g. lack of paved paths, low garden beds, etc.).
- All gardens claimed to abide by organic gardening practices and believed their garden to be a sustainable food source for their community
- Each garden expressed the need for additional resources including but not limited to equipment and funding.

### Major Recommendations

- Further encourage the establishment of community gardens that focus on growing produce for the whole community, rather than allotment gardens which are used by small groups.
- Establish a community garden that has direct connections to food banks and community kitchens (recommended sites: Elgin Park, Lindsay and Knox Presbyterian Church, Bobcaygeon).
- Make resources more readily available for garden upkeep, such as an umbrella organization that helps with garden start-ups and teaches gardening technique workshops.
- Strengthen connections between community garden members by holding monthly meetings between the managers.
- Attract younger audiences by utilizing social media more effectively.
- Continue to gather information from established community gardens and new community gardens to identify potential problems, as well as the impacts that they have on mental and physical health, community togetherness and the environment.

## Introduction

Community gardens are a useful resource for growing fruits and vegetables within the urban landscape. These small-scale gardens are easy to implement as they can be created on unused land or vacant city plots (Wakefield et al., 2007). This makes community gardens a useful tool for those who do not have regular access to affordable food. As the world population is expanding, food insecurity is becoming an increasingly complex problem to solve. Community gardens can help resolve the gaps in the food system by providing access to nutritious vegetables that individuals have grown themselves. This can benefit the individual by increasing his or her vegetable intake, as well as increasing physical activity through the act of gardening. Gardening can also be a source of stress relief and can have a calming influence on those who work in the garden as well as for those who visit or simply walk by. Community gardens are beneficial to the community as a whole as they can improve relationships between community members and increase community pride (Hale et al., 2011). The community aspect of these gardens is vital to their success, as without committed people these community gardens would be unable to thrive. Lastly, these gardens are also beneficial on a large scale. The majority of community gardens practice organic gardening which can help to lower the reliance on large scale farms that frequently use pesticides and herbicides in addition to increasing pollutants. Thus, community gardens can be seen as a sustainable food option for individuals who live in a food dessert as well as for those who wish to use a garden to benefit themselves and their community in a myriad of other ways.

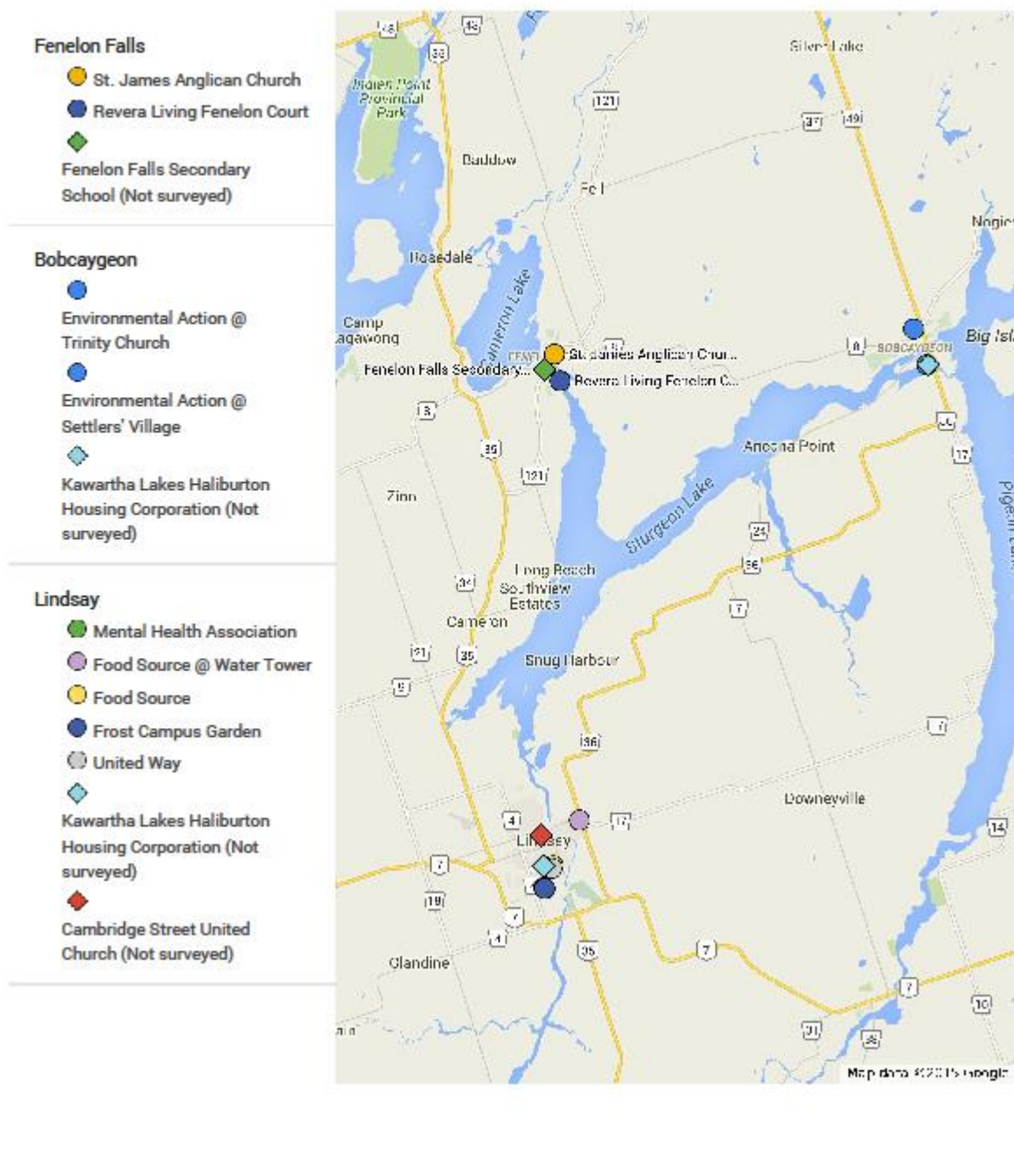
In the City of Kawartha Lakes (CKL), in Ontario, Canada, a network of community gardens has been established that attempts to provide a valuable food option for those who do not have regular, affordable access to produce. Towards Balance Support Network (TBSN), a volunteer-based organization, with support from the Food Security Working Group of the Kawartha Lakes Food Coalition identified 36 possible community garden sites (see **Table 1**) within the CKL and asked our research team to identify active gardens and collect data pertaining to their social, economic and environmental sustainability. Managers and volunteers of the active gardens were surveyed and/or interviewed at the identified garden locations within Bobcaygeon, Lindsay and Fenelon Falls and GPS coordinates were taken at each site. Coordinates were transferred to a map to provide a visual representation of the locations of each garden within the CKL region (see **Figure 1**). Interview and survey data allowed TBSN to ascertain areas where these community gardens may be struggling, which could then be further used to help the organization assist gardeners in obtaining the resources they need to make their gardens thrive.

**Table 1:** List of possible community gardens within CKL as identified by TBSN

<b>Organizations</b>	<b>Address/City</b>	<b>Garden Status/ Contribution to Study</b>
A Place Called Home	64 Lindsay St. S. Lindsay	Does not have a garden
Big Brothers Big Sisters KLH	Plot at United Way, Lindsay	Survey emailed, never returned
<b>Bobcaygeon Settlers' Village</b>	<b>85 Dunn St. Bobcaygeon</b>	<b>Partially Surveyed, Pictures &amp; Video Taken</b>
Boys & Girls Clubs of Kawartha Lakes	107 Lindsay St. S. Lindsay	Left a message x2 not returned
Cambridge Street United Church	61 Cambridge St. N. Lindsay	Left a message x2 not returned
Canadian Mental Health Association	Harrison House program, Lindsay	Left a message x2 not returned
<b>Canadian Mental Health Association</b>	<b>Reach for Recovery, Lindsay</b>	
<b>Canadian Mental Health Association</b>	<b>2 Hamilton St. House, Lindsay</b>	<b>Survey completed, Pictures &amp; Video Taken</b>
Coboconk Food Bank	#9 - 7th Concession Coboconk	Does not have a garden this year
Community Care / VON	Mary St. W. Lindsay	
Community Care / VON	70 Murray St. Fenelon Falls	Only has a Flower Garden
Community Living	At United Way	Left a message x2 not returned
Community Living	Elgin Street, Lindsay -Plot at Fleming	Survey emailed, never returned
Fenelon Falls United Church	123 Colborne St. Fenelon Falls	Does not have a garden, plans to build one
<b>Fleming College, Frost Campus</b>	<b>200 Albert St. Lindsay</b>	<b>Survey completed, Pictures &amp; Video Taken</b>
<b>Kawartha Lakes Food Source</b>	<b>41 George St. West Lindsay</b>	
<b>Kawartha Lakes Food Source</b>	<b>Hwy 36, Water Tower, Lindsay</b>	<b>Survey Completed, Pictures Taken</b>
Kawartha Lakes Haliburton Housing Corporation	123 Need Street, Bobcaygeon	
Kawartha Lakes Haliburton Housing Corporation (KLHHC)	19 Hamilton Street, Lindsay	Took pictures, no survey
Kawartha Lakes Haliburton Housing Corporation (KLHHC)	40 Mary Street, Lindsay	
Kawartha Lakes Haliburton Housing Corporation (KLHHC)	92 Albert Street South, Lindsay	
Kawartha Lakes Haliburton Housing Corporation (KLHHC)	8 James Street, Omemee	Left a message, not returned
Olde Gaol Museum (will be starting this year)	50 Victoria Ave. N. Lindsay	Left a message, not returned
Ontario Early Years Centre & HKPR District Health Unit	At United Way, Lindsay	Left a message, not returned
<b>Revera Fenelon Court (Retirement / Long Term Care)</b>	<b>66 Lindsay St. Fenelon Falls</b>	<b>Survey Completed, Pictures Taken</b>
<b>St. James Anglican Church</b>	<b>7 Bond St. E. Fenelon Falls</b>	<b>Survey Completed, Pictures Taken</b>
<b>Trinity United Church Bobcaygeon</b>	<b>44 William St. Bobcaygeon</b>	<b>Survey Completed, Pictures &amp; Video Taken</b>
<b>United Way for the City of Kawartha Lakes</b>	<b>50 Mary St. W. Lindsay</b>	<b>Survey Completed, Pictures Taken</b>
Alexandra Public School	65 Sussex St N, Lindsay	Survey emailed, never returned
Dr. George Hall Public School	374 Eldon Rd, Mariposa	Not contacted
<b>Fenelon Falls Secondary School</b>	<b>66 Lindsay St, Kawartha Lakes</b>	<b>Survey Completed, Pictures &amp; Video Taken</b>
Jack Callaghan Public School	5 Traceys Hill Rd, Kawartha Lakes	Survey emailed, never returned
King Albert Public School	49 Glenelg St, Lindsay	Left a message, not returned
Lindsay Collegiate & Vocational Institute	260 Kent St W, Lindsay	Left a message, not returned
Lindsay Alternative Education and Training Centres	230 Angeline St S, Lindsay	Does not have a garden
Woodville Elementary School	109 Nappadale St, Kawartha Lakes	Not contacted



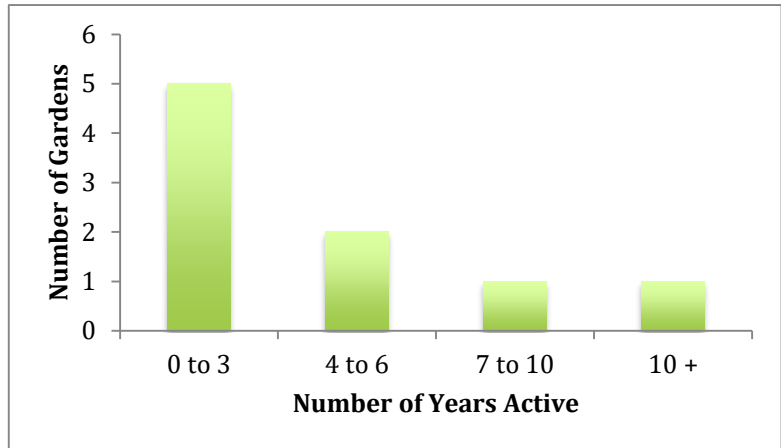
# Community Gardens in the City of Kawartha Lakes



**Figure 1:** Map of CKL showing surveyed gardens as well as confirmed existing gardens that were not surveyed

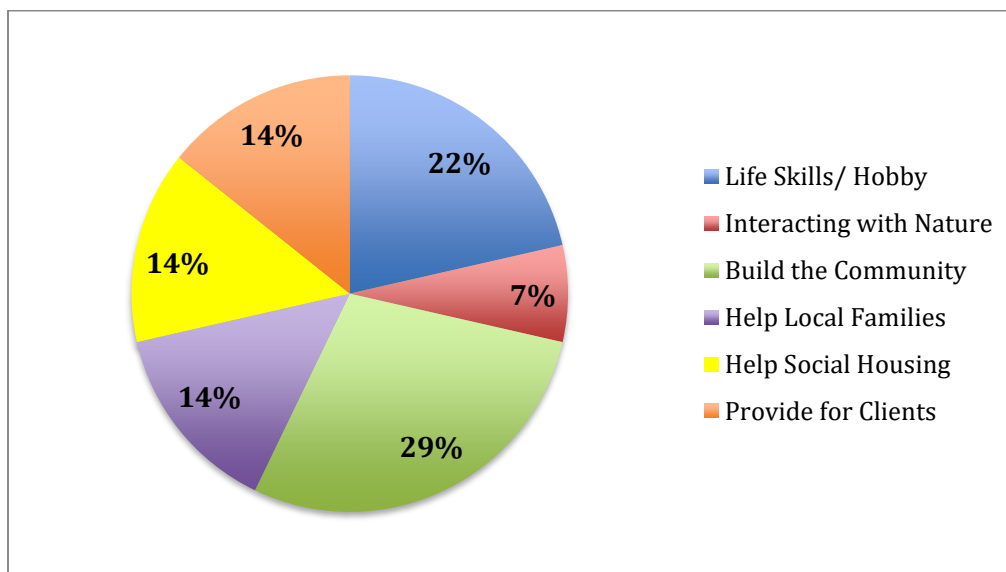
### Garden Background

The majority of the gardens surveyed in the City of Kawartha Lakes have only been established within the last 3 years. As seen in **Figure 2**, only a few gardens have been established for more than 4 years. Very few of the gardens in the area have been maintained over a long period of time, it is possible that new gardens may need more structure and guidance to ensure a successful gardening program in the future.



**Figure 2:** Number of years the gardens surveyed in CKL have been operational.

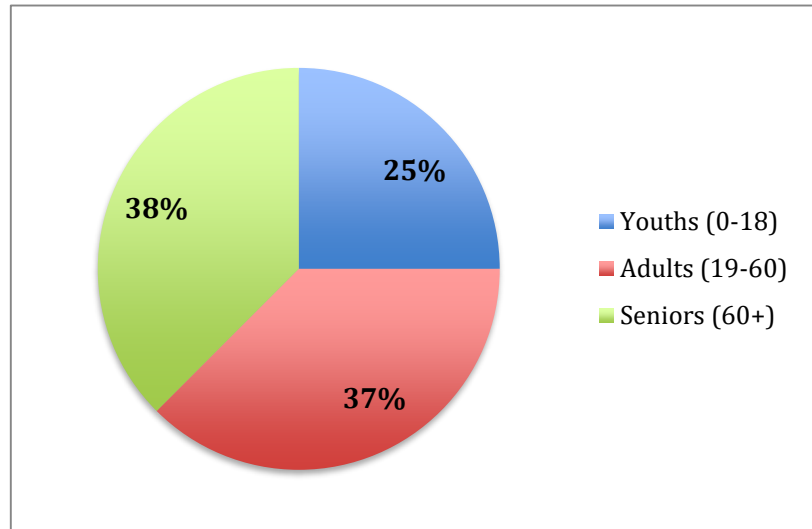
When surveying the garden managers, there were some common themes that emerged regarding the reasoning behind starting each community garden as shown by **Figure 3**. Many of the interviewees stated that their original reason for starting the community garden was not for use as a food source. The most common response to the original reasoning behind the creation of the garden (29%) is that gardeners wanted to build trust within the community, increase community involvement and develop the communities in which they live. 14% of the gardens began strictly to provide food for their clients of their organizations. Many referenced that they wanted to help families and members of the community by providing a space to work outdoors, and work on gardening skills as a new skill or a previous hobby. The Canadian Mental Health Association stressed that the garden was a place to interact with nature within a city setting.



**Figure 3:** Reasoning behind creation of the community gardens in the City of Kawartha Lakes. (n=9 of estimated 36 gardens in CKL)

## Garden Demographics

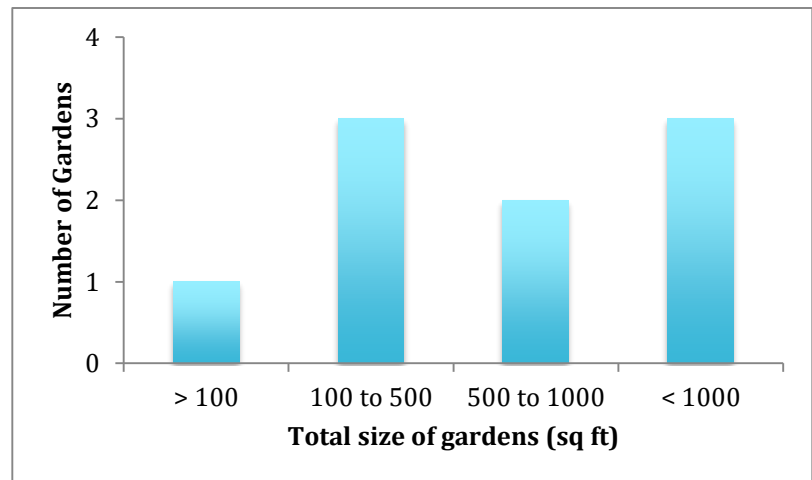
A total of nine gardens were represented by the City of Kawartha Lakes Community Garden Survey, representing 25% of the potential gardening sites as identified by Towards Balance Support Network within Kawartha Lakes. The majority of gardens reported having a mix of age ranges participating in the gardening responsibilities. Few gardens (33%) indicated “seniors only” as they are privately owned properties, while the other 67% of gardens reported to have a variety of age ranges (0- 60+) taking part in the maintenance of the community gardens. The majority of gardens were estimated to be attended to by the 19-60+ age range (**Figure 4**) with seniors involved in almost 40% of the gardening responsibilities. Each garden reported that participants have a wide range of gardening knowledge and experience from none to upwards of seven years.



**Figure 4:** Age of the participating gardeners (n=9 of estimated 36 gardens in CKL)

## Garden Plots

Few gardens (33%) offer individual plots, while the rest of the gardens (67%) offered communal plots. The size of garden plots was quite variable with no pattern. The smallest garden was reported as a 4ft x 4ft space, while the largest garden was 60ft x 35ft. Garden sizes are determined by the individual needs of each program and garden, as well as the total available space. It was found that the gardens surveyed varied hugely in size between <100 sq. ft. to >100 sq. ft. Of the nine gardens surveyed, three gardens that offer individual plots reported wait lists for interested new participants.



**Figure 5:** Size (in sq ft) of the gardens surveyed (n=9 out of estimated 36 gardens in CKL).

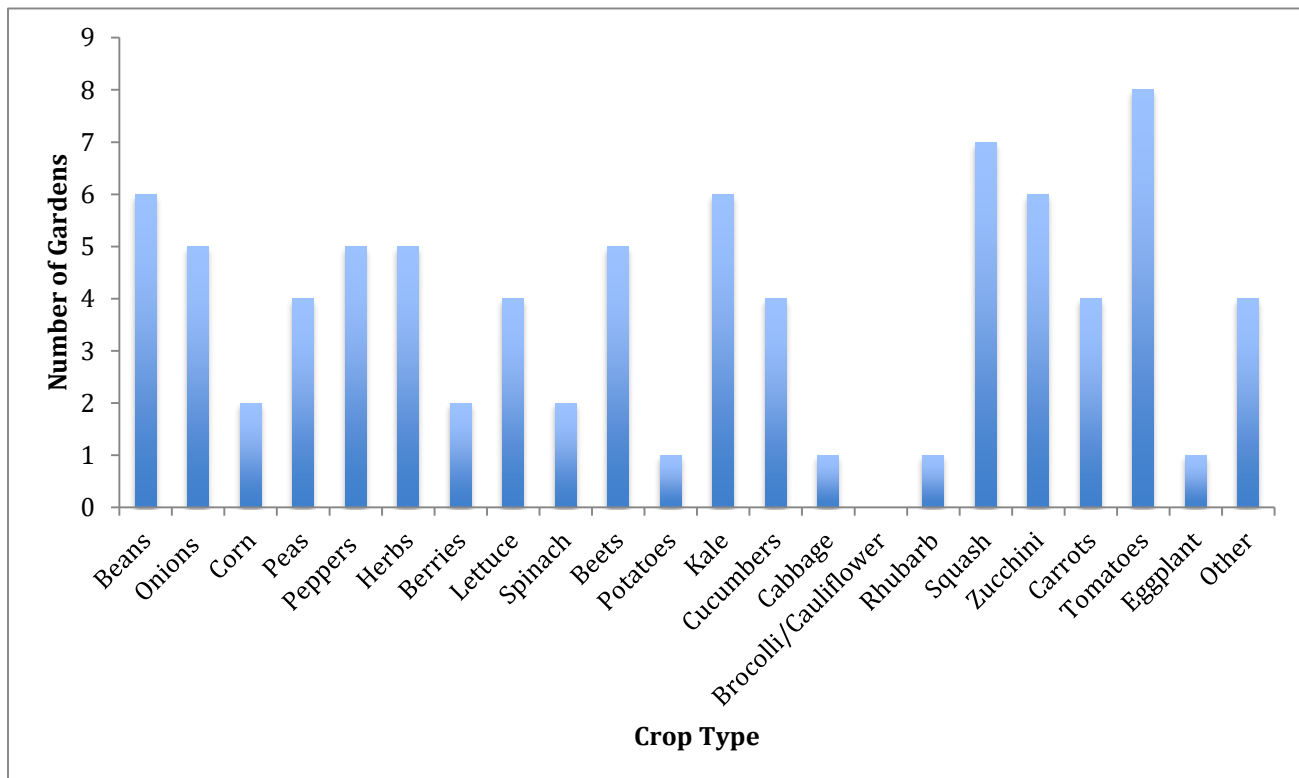
Individuals who obtained a plot were required to pay a small fee at the beginning of the season. Communal gardens were able to accommodate for fluctuating numbers of gardeners within their organization and therefore do not require a waitlist.



## Crops, Yields and Distribution

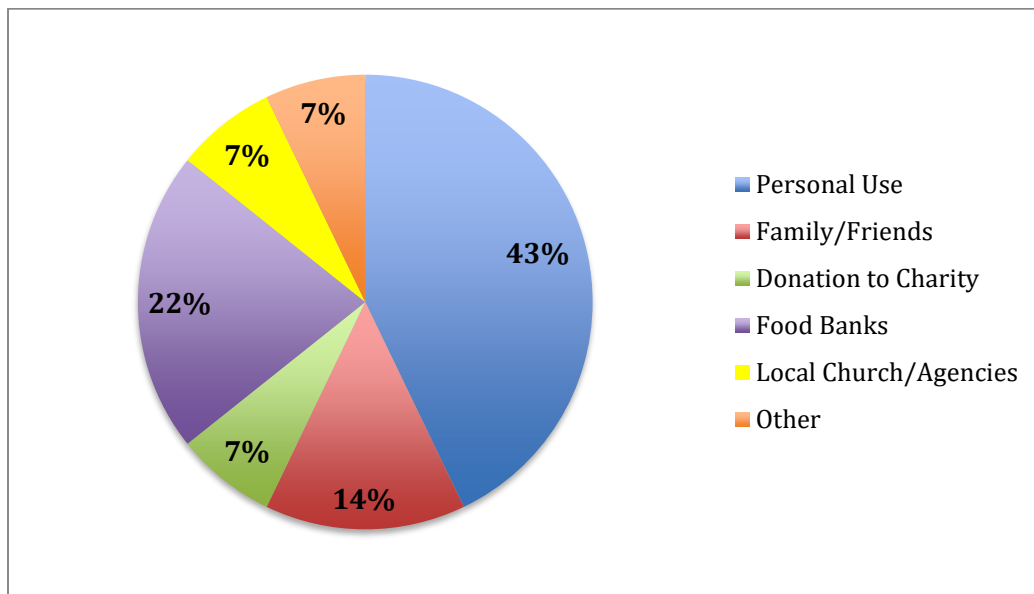
All community gardens that were surveyed indicated that they grew food using organic practices. The most popular crop was tomatoes, which appeared in every garden, followed closely by zucchinis, squash, cucumbers, kale, lettuce, herbs, peppers, onions and beans (refer to **Figure 6**). These vegetables, along with eggplants and beets, were considered the easiest to grow by the garden managers. In addition, a third of the gardens cultivated food that was not listed in the survey. These foods included garlic, radishes, pumpkins and apples.

Potatoes were absent from most community gardens in the City of Kawartha Lakes due in part to the presence of a strain of potato blight that severely compromised potato plants within the area. To avoid further spread of the disease, garden managers asked that potatoes not be planted for several years. Broccoli, cabbage and rhubarb were also rarely seen in the gardens due to the alleged difficulty of raising these plants.



**Figure 6:** Common crops produced in CKL Community Gardens (n=9 of estimated 36 gardens in CKL).

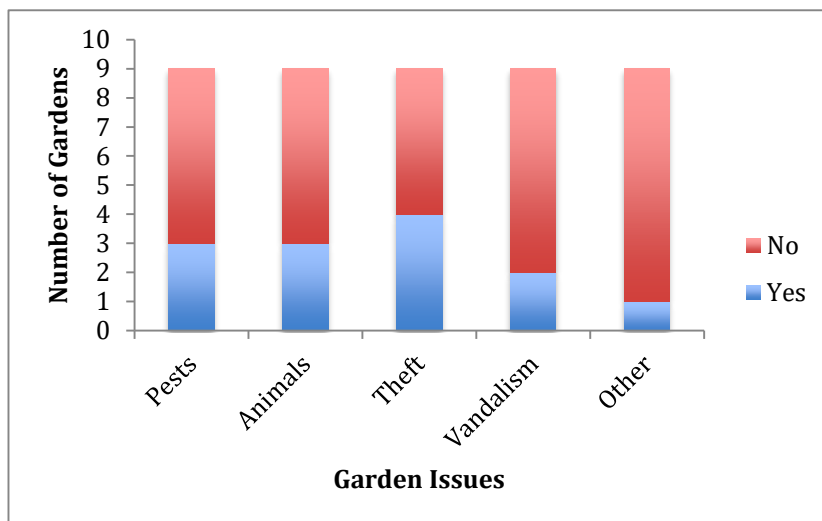
The yield of each garden location was also discussed within the survey. Only one garden had a formal process for recording the amount of food produced, with roughly 1300 pounds recorded as the yield for the 2015 season. Other gardens classified their harvest as “plentiful” and “abundant,” but had no definitive numbers. When asked about where the produce went, 43% of gardens indicated that the food was for personal use, as most plots belonged to individuals and their families. Moreover, 22% of the gardens specified that a portion (untracked) of the yield went to food banks, while 14% of the gardens said food went to local agencies and charities (see **Figure 7**). All of the community gardens agreed that they see this as a sustainable food option for the community.



**Figure 7:** The use of the produce from the community gardens surveyed (n=9 of estimated 36 gardens in CKL).

### Potential Garden Hazards

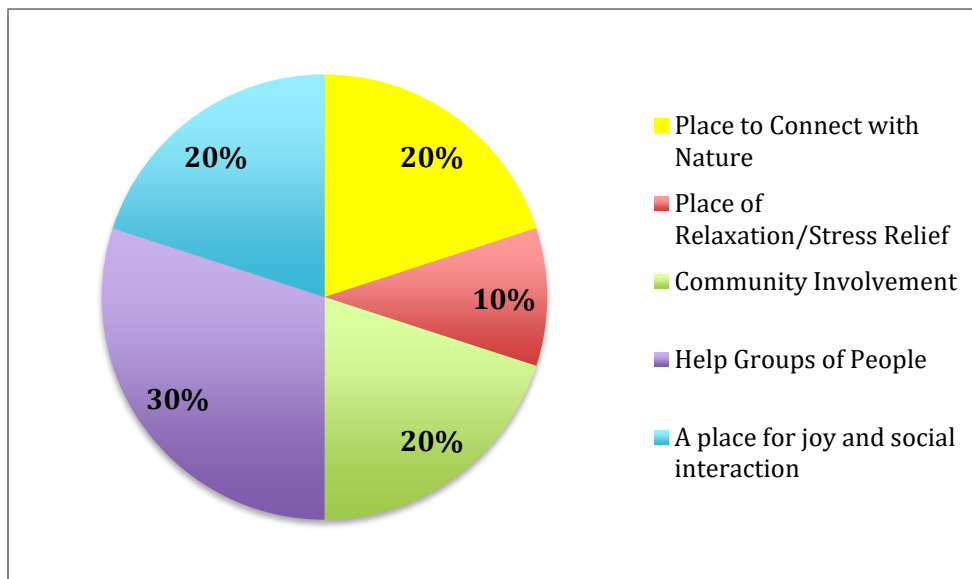
The majority of the surveyed gardens (78%) indicated the presence of a garden threat. **Figure 8** shows the most commonly cited threats. Overall, those surveyed recognized pests and animals as an inevitable part of gardening and tried to employ creative solutions for getting rid of any issues including homemade mixes to spray vegetables, the use of vinegar and the use of raised beds. As well, only 22% of the gardens surveyed indicated further issues such as vandalism, with all of the instances being petty acts. Four out of the nine gardens surveyed were found to have current or past issues with stolen vegetables, three out of those four gardens concluded that giving the community public access to the gardens may be the reason for the theft, while only one private garden had experienced any theft issues.



**Figure 8:** Threats to garden health reported by the community gardens surveyed (n=9 of estimated 36 gardens in CKL)

## The Community Gardens' Place in the Community

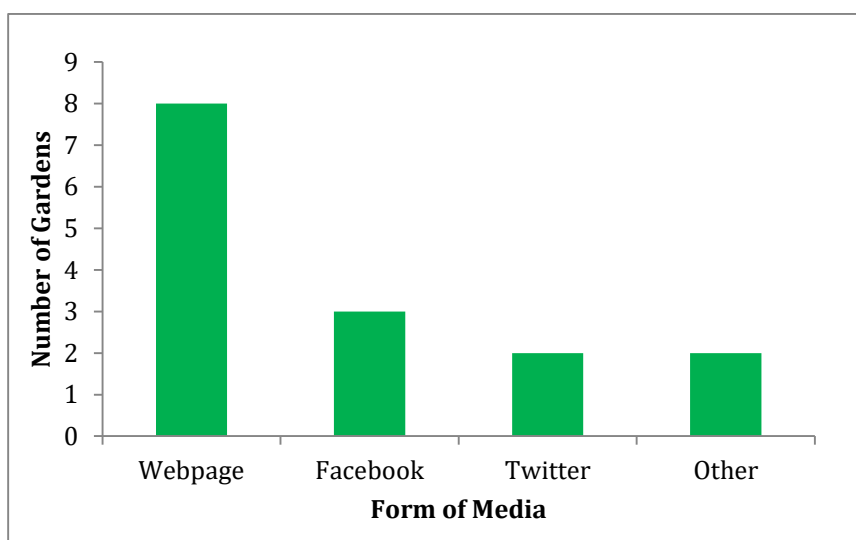
Each garden had different policies for how an individual can become a gardener. For each garden with plots available for individuals or families, the interested party is required to register and pay the fee for the season within a certain time frame. The individual must also begin work on their garden prior to a certain date. If the time line is not met, that party will forfeit their plot and the plot will then go to someone on the waitlist. Communal plots are those created by larger organizations who have sought out a plot for a larger group of people. The majority of these organizations have mentioned the mental and physical benefits of gardening to be the reasoning behind acquiring a plot. Each garden noted that beyond the overall physical and mental benefits they received from community gardens, their gardeners found enjoyment in being in nature and in social interaction with fellow gardeners and others visiting the gardens. **Figure 9** shows the breakdown of how gardeners saw the role of their garden within the community.



**Figure 9:** Pie chart showing the gardens' place in the community (n=9 out of 36 possible gardens in CKL).

## Media Connections to the Community

Eighty-nine percent of community gardens were found to have an online presence. Web pages were the most common digital tool used to inform the community. Social media sites, such as Facebook and Twitter were utilized to a lesser degree, but according to the survey respondents, they generated a great deal of interest from the public (see **Figure 10**).



**Figure 10:** Community gardens utilize a variety of web-based media to promote their garden and inform their community (n=9)

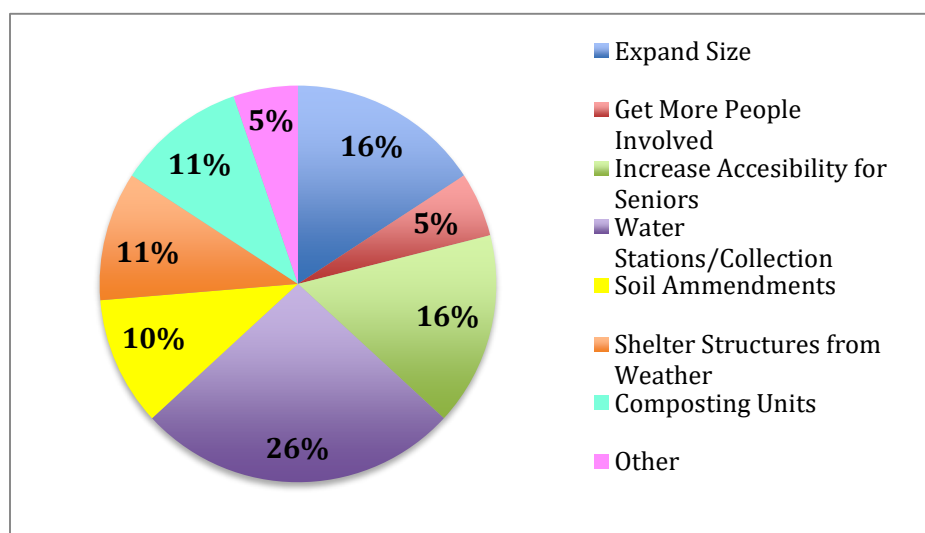
## Outside Funding

The majority of the gardens surveyed received outside funding at some point, either in funds or equipment donations. Environmental Action and the United Way both received funding from the Royal Bank of Canada, with the United Way also receiving equipment donations from Home Hardware. The United Way also donated some equipment to the Mental Health Association. St. James Anglican Church received a government grant that was used to purchase gardening equipment such as watering containers.

## Future Expansion and Garden Goals

A majority of the gardens do not have any room to further expand at their current locations. One garden located at Settlers' Village has room to substantially expand, while the garden located at St. James Anglican Church could potentially add a few more plots. No other gardens have the space for significant expansion. If gardens wanted to expand their size, they would need to find a new location or change the existing layout on their properties.

We asked the gardeners what they would do with their gardens if they were provided with unlimited resources. Twenty-six percent of the gardeners wanted rainwater collection systems and drinking water stations for those working in the garden. Many of the gardens wanted to expand their size if they had the capabilities, and to install better composting units on the property. Sixteen percent of the gardens utilized by seniors wanted to increase the accessibility of the site for wheelchair use and other physical restrictions. Raised garden beds and mobile garden units were among the suggested improvements for accessibility. Other improvements involved creating a better surrounding area for the garden, such as building shelter structures to protect gardeners from weather and provide spaces for taking a break, and finally survey respondents also would like funding for soil amendments to improve the garden (see **Figure 11**).



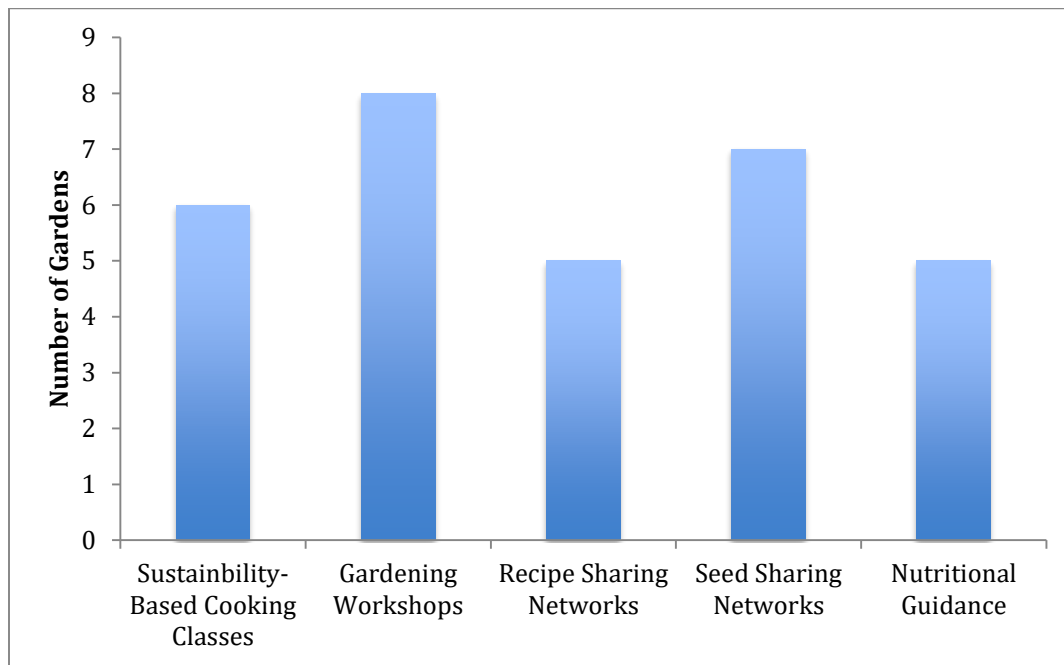
**Figure 11:** Potential utilization of additional funding for garden improvements by surveyed gardens (n=9 of estimated 36 gardens in CKL).

## Conclusions: Moving Forward

Although 36 potential community gardens were identified within the City of Kawartha Lakes only nine managers confirmed the existence and upkeep of their gardens. Four additional gardens were also confirmed by our team, but no interviews were conducted with the owners. Despite the lack of response, the information that was gathered provided us with a clear understanding of community gardens' roles within the Kawartha Lakes region as well as the hardships that they face on a daily basis. Our findings and some recommendations are listed below.

### Summary of Findings:

- The age ranges of those participating in gardening responsibilities varied between each community garden location. Most were maintained by a combination of adults and seniors, while the presence of the younger generation was notably lacking.
- Produce from the community gardens were found to be accessed mainly by those who tended to the gardens, while others acted as communal spaces for larger organizations.
- Large varieties and quantities of food were produced by most gardens, however, no formal processes were being implemented to keep track of the yield.
- All managers touched on the many physical, mental and emotional benefits that community gardening programs provide, but mentioned a concern for their overall accessibility.
- Organic gardening techniques were put into practice at each community garden and managers and volunteers believed their gardens were sustainable food sources for individuals within their communities.
- Garden managers expressed the need for additional resources, which included but were not limited to equipment and government funding.
- Composters, seating areas and water storing container/drinking foundations were the most needed and requested items.
- Most gardens expressed interest in connecting with a food bank or community kitchen if given the opportunity.
- Managers indicated volunteers at their community gardens would be interested in sustainability based cooking classes, gardening workshops, recipe sharing networks, seed sharing programs and nutritional guidance (See **Figure 12**).



**Figure 12:** This graph showing that many gardens would use increased funds for expanding their garden networks (n=9 of estimated 36 gardens in CKL).

#### Recommendations:

- Continue to gather information from the known community gardens to identify potential problems and monitor changes/trends over time. This will provide valuable information that will ensure the success of both old and new gardens.
- Move away from personal use gardens towards ones that can be accessed by many people within the community.
- Identify areas where gardens can be created that are solely for community use, whether they are open to the public at all times or serve as direct connections to food banks and community kitchens within the Kawartha Lakes region.
- Make resources more readily available and easier to access so that gardens can be continually maintained (perhaps an umbrella organization that keeps in contact with all managers could be developed that answers questions and helps with problems that the community gardens may have).
- Create or strengthen connections between all community gardens by holding a monthly or bi-monthly meeting with the managers.
- Improve interest within younger audiences by gaining a stronger social media presence (i.e. creating Twitter accounts, Facebook pages, Instagram profiles).
- Establish partnerships between community kitchen/food bank managers by setting up meetings between the two.



## References

Hale, J., Knapp, C., Bardwell, L., Buchenau, M., Marshall, J., Sancar, F., and Litt, J.S. (2011). Connecting food environments and health through the relational nature of aesthetics: gaining insight through the community gardening experience. *Social Science & Medicine*. 72, 1853-1863.

Wakefield, S., Yeudall, F., Taron, C., Reynolds, J., and Skinner, A. (2007). Growing Urban health: Community gardening in South-East Toronto. *Health Promotion International*. 22(2), 92-101.