

**Geog402: Resilient Cities**

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# **Identifying opportunities to improve food resilience in Spreydon-Heathcote:**

An analysis of edible initiatives in the  
community

## **Abstract**

Due to the issues faced following the Christchurch earthquake sequence, food security and resilience is becoming increasingly important. Edible initiatives can foster food resilience; this study seeks to identify opportunities to improve edible initiatives, and food resilience in Spreydon-Heathcote, Christchurch. Edible initiatives identified included; edible community gardens, community kitchens, food foraging, farmer's markets and orchards. The results indicated that edible initiatives in Spreydon-Heathcote could be improved through; improving knowledge, community consultation, accessibility, and increased support for existing initiatives. Improving these aspects would have a positive effect on the overall food resilience in the area. However, the scope, timeframe, and technology-based methodology limited these results. Further research should build on this work, considering community consultation in the methodology.

## **Introduction**

Food resilience, as defined by the Christchurch City Council's Food Resilience Policy (Christchurch City Council, 2014), is; the access by all people to a food supply that can withstand natural and man-made shocks, to sustain an active and healthy lifestyle. The Canterbury Earthquake Sequence created issues of food security after this event, and as a result, food resilience has received increasing attention, and needs to be improved in Christchurch. Edible initiatives seek to improve food resilience in communities, types of initiatives include; edible community gardens, community kitchens, food foraging, orchards, farmers markets, and food distribution hubs. The purpose of this report is to identify opportunities to improve food resilience in Spreydon-Heathcote. Two aims have been acknowledged; (1) to understand how edible initiatives facilitate food resilience; and, (2) to provide recommendations to improve food resilience in Spreydon-Heathcote. First, existing literature on food resilience, edible initiatives, and Spreydon-Heathcote will be discussed to address the first aim. Following this, the methodology and results of this research will be explored. Finally, the results will be analysed to address the second aim of the research, and limitations and further research will be acknowledged.

## **Identifying opportunities to improve food resilience in Spreydon-Heathcote**

Food security or food resilience has received increased publicity in both New Zealand, and around the world. Food resilience is becoming more relevant as awareness of overproduction of food, under-nourishment, and the increasing price of produce become more prominent (Smithers, 2013; Healthy Christchurch, 2012). Climate change is predicted to increase the intensity of natural disasters, such as floods and droughts, threatening food supplies around the world (Wheeler & von Braun, 2013). Food supplies are extremely vulnerable to shocks, making the need for local, sustainable, and secure food vital for communities (World Food Programme, 2016).

One of the most well known examples of food resilience is in Todmorden, United Kingdom, where edible initiatives were employed by the locals to become self-sufficient to combat the effects of raising unemployment (Incredible Edible Todmorden Community Team, 2016). This example was driven by the community with the local council only becoming involved after the project became successful, demonstrating the influence that communities can have.

A study undertaken in New Zealand focused on edible gardens in Early Childhood Centres (Dawson, Richards, Collins, Reeder, & Gray, 2013). This study identified barriers found when establishing or attempting to establish edible gardens. These were a lack of funding, space, time, skills, and supportive staff, making it difficult to develop and maintain edible gardens. The importance of community gardens was also identified as they can teach children about fruit and vegetables, encouraging them to try new food, and learning how to produce, cook and share their food, proving incredibly valuable for a child's education (Dawson et al., 2013).

The majority of studies of edible initiatives focused on the benefits of community gardens in low-income areas, with minimal research completed across New Zealand (Guitart, Pickering & Byrne, 2012). It was also discovered that literature available for edible initiatives, focused mainly on community gardens, with little to no research completed on initiatives such as community kitchens or food distribution hubs. Therefore, it has been difficult to understand how these can enhance food resilience in communities unique to New Zealand, highlighting a research gap.

The policy regarding edible initiatives in Christchurch, New Zealand supports the implementation of initiatives; this is no longer a barrier communities must confront. As stated in the Christchurch City Council Food Resilience Policy, the council will remove restrictive policies surrounding edible initiatives, and replace them with guidance to achieve the initiatives (Christchurch City Council, 2014). It also states that they will encourage the use of public land that can be utilised for those edible initiatives in communities. The council will only act as a facilitator for these projects. Therefore, communities are required to co-ordinate and maintain edible initiatives (Cains, 2014).

Our research aims to identify opportunities to improve food resilience in Spreydon-Heathcote. 'Opportunities' is defined for our research project as identifying new edible initiatives and enhancing those currently existing. These seek to improve food resilience while benefitting and strengthening the Spreydon-Heathcote community. To achieve our aim, we strive to fulfil the objective, how do edible initiatives facilitate food resilience? This will enable us to recommend strategies to improve food resilience in Spreydon-Heathcote.

## **Methodology**

The strategy for inquiry for our project is separated into three parts; (1) to understand the literature and policy that exists on edible initiatives and how they contribute to food resilience; (2) to identify opportunities that exist for edible initiatives in Spreydon-Heathcote; and, (3) to provide recommendations based on the results of our research.

To understand how edible initiative can enhance food resilience a literature review was undertaken. This involved searching keywords in the University of Canterbury's library database and journal databases online. The findings from this illustrated that edible initiatives can improve food resilience of local communities as discussed in the above section. Most of this literature contained international examples (Incredible Edible Todmorden Community Team, 2016; Guitart, Pickering & Byrne, 2012); from this, we can identify a research gap. There is limited literature regarding how edible initiatives contribute to food resilience in New Zealand.

Alongside this, we conducted a review of the resilience policy and edible initiative policy that exists in Christchurch. This provided an understanding of the feasibility of edible initiatives in Christchurch. It also emphasised the purpose of edible initiatives and how they seek to contribute to resilience in Christchurch. Based on our review of the literature and policy we were able to develop our aim, objectives, and methodology.

Following this, we engaged in an informal discussion with Sara Templeton (Templeton, 2016). She has involvement in numerous community projects in Heathcote, notably, the Heathcote Village Community Garden. This discussion was based on her experience with edible initiatives and emphasised the need for community consultation to identify opportunities that exist for edible initiatives. Therefore, helping us to develop our aims, objectives, and methodology further.

The next stage of our research was to identify opportunities that exist for edible initiatives in Spreydon-Heathcote. This required identifying physical locations as well as understanding community perceptions of edible initiatives. To determine physical locations, Quantum Geographic Information Systems (QGIS) was used. This enabled us to map locations of existing edible initiatives such as community gardens and food distribution hubs in Spreydon-Heathcote. Location data was provided by Nina Perez, a member of the Healthy Families

Spreydon-Heathcote, and from relevant websites such as Canterbury's Community Gardens Association and Fruit and Vege Cooperative (Canterbury Community Gardens Association, 2016; Christchurch South Fruit and Vegetable Collective, 2016). We also mapped locations where new edible initiatives could be implemented. This included facilities such as primary schools, early childhood centres, churches, and parks, and the data were sourced through Nina Perez, Google, and Zenbu (Google, 2016; Zenbu, 2016). These were included, to show groups that may be willing to facilitate an edible initiative. Each different entity was colour coded so that using the map could identify them.

Mesh-blocks were added to our map to determine the suburbs and spatial extent of Spreydon-Heathcote. Mesh-blocks were provided from Koordinates.com (Koordinates Limited, 2016). Suburbs were colour coded with one of four colours relative to the New Zealand Deprivation Index, data for this were provided by the University of Otago website (University of Otago, 2013). Deprivation index is a measure of socio-economic status; it accounts for access to Internet services, unemployment, qualifications, home ownership, sole parenting, dwelling size, access to transport, income, and beneficiaries. The deprivation index helped to identify areas of high deprivation and where edible initiatives may be most beneficial. QGIS was employed to identify geographic locations.

The second component of our methodology required identifying opportunities for improving existing edible initiatives and introducing new initiatives, required community consultation. The purpose of this was to understand community perception of and desire for edible initiatives. A survey was created on Google Documents, and questions were asked regarding the awareness of current initiatives and the desire for more edible initiatives (Appendix 1). Demographic questions relating to age and sex were also surveyed to understand the demographics of the respondents. This survey was emailed to entities identified on our map. It was also distributed through Facebook to community groups in Spreydon-Heathcote. We received 56 responses from this survey; thus providing a sample of the Spreydon-Heathcote area.

To further understand community perception of edible initiatives we conducted a focus group. Six individuals participated; these people were members of the Spreydon-Heathcote community and are currently involved in edible initiatives in the area. The purpose of this was

to understand community perceptions of edible initiatives, and whether implementing new edible initiatives is adequate to enhance food resilience.

The final component of our research is to make recommendations for the future. From the opportunities we identified, we can provide recommendations for the future in regards to how edible initiatives can enhance food resilience in Spreydon-Heathcote. We will also relate these back to the context of the area, to justify our recommendations.

## **Results**

### *Existing edible initiatives*

Figure 1 illustrates the location of existing edible initiatives in Spreydon-Heathcote. Current initiatives include community gardens, food distribution hubs, and fruit and vegetable co-operatives. On Figure 1, the suburbs are coloured relative to the deprivation index. Blue represents areas with low deprivation and red signifies high levels of deprivation. Yellow and green reflect suburbs with medium levels of deprivation. The deprivation indexes for each suburb are displayed in Table 1. As seen in Figure 1, edible initiatives are employed in most suburbs, highlighting they are not only implemented in areas with the high deprivation and thus the greatest need for them. Edible initiatives are not distributed evenly over the suburbs; this may be related to the inaccessibility of certain areas, specifically the hills in the southern blue area on the map.

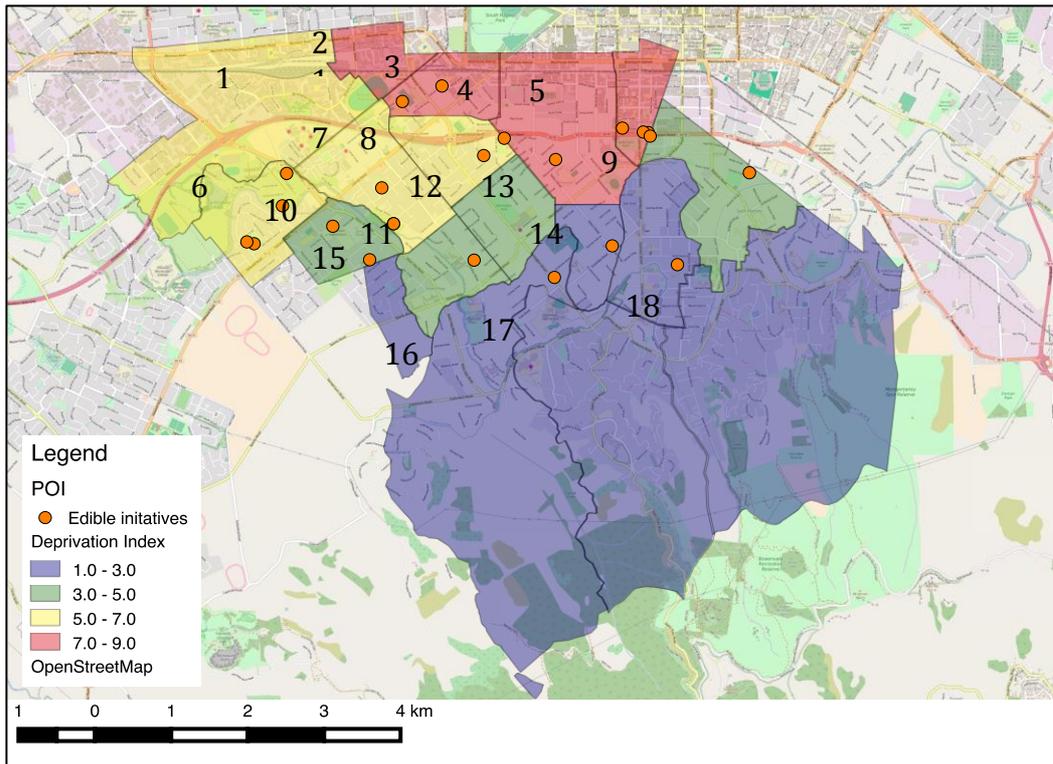


Figure 1. Map of Spreydon-Heathcote showing existing edible initiatives

Table 1. Suburbs and their deprivation

Number on map	Suburb	Deprivation Index
1	Middleton	6
2	Riccarton South	8
3	Addington	8
4	Sydenham	8
5	Waltham	9
6	Hillmorton	7
7	Barrington North	7
8	Spreydon	7
9	Opawa	4
10	Hoon Hay	4
11	Barrington South	4
12	Somerfield	4
13	Beckenham	1
14	St Martins	2
15	Hoon Hay South	2
16	Cashmere West	1
17	Cashmere East	1
18	Rapaki Track	2

Edible initiatives contribute to food resilience. Ten of our respondents who utilise edible initiatives indicated that they use them as a source of food, as seen in Figure 2. This suggests that edible initiatives can enhance food resilience. Other important uses included social and recreational activities as well as community events.

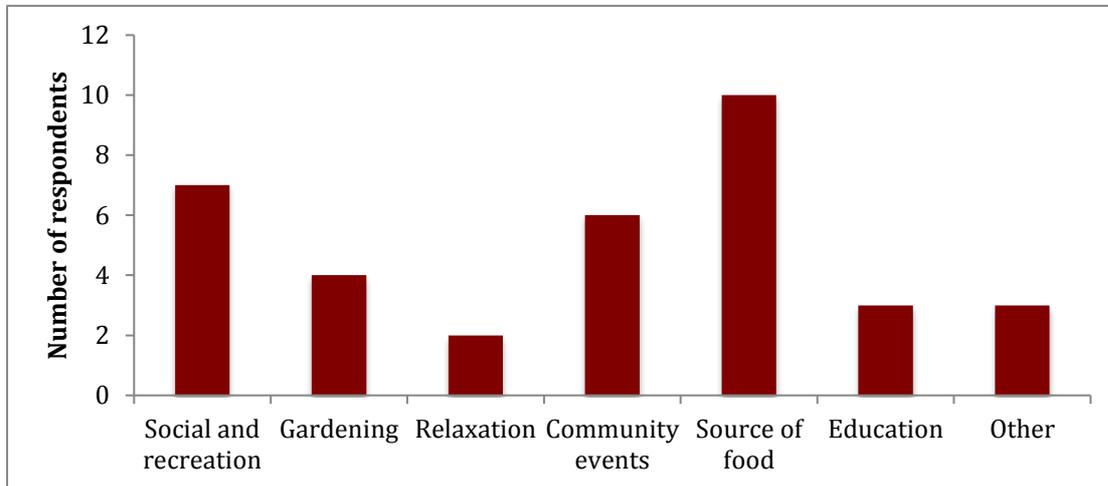


Figure 2. Reasons survey respondents utilise edible initiatives.

Our survey showed that 53.1% of our 56 respondents were aware of the locations of edible initiatives. However, only one-quarter of respondents utilised these. This may be related to the location of existing initiatives relative to the respondents' location. Alongside this, 85% of our respondents were interested in being involved in new initiatives.

### *New edible initiatives*

Figure 3 identifies organisations, groups and parks that may provide locations to implement or facilitate an edible initiative. There are many locations that are suitable for the implementation of new edible initiatives in Spreydon-Heathcote, as shown in Figure 3. Due to the close proximity of different organisations and groups, collaboration between these different groups could provide viable opportunities to implement new edible initiatives in the area. The results of the survey indicate that vegetable, gardens, community gardens and farmers markets are the preferred options to be implemented in Spreydon-Heathcote.

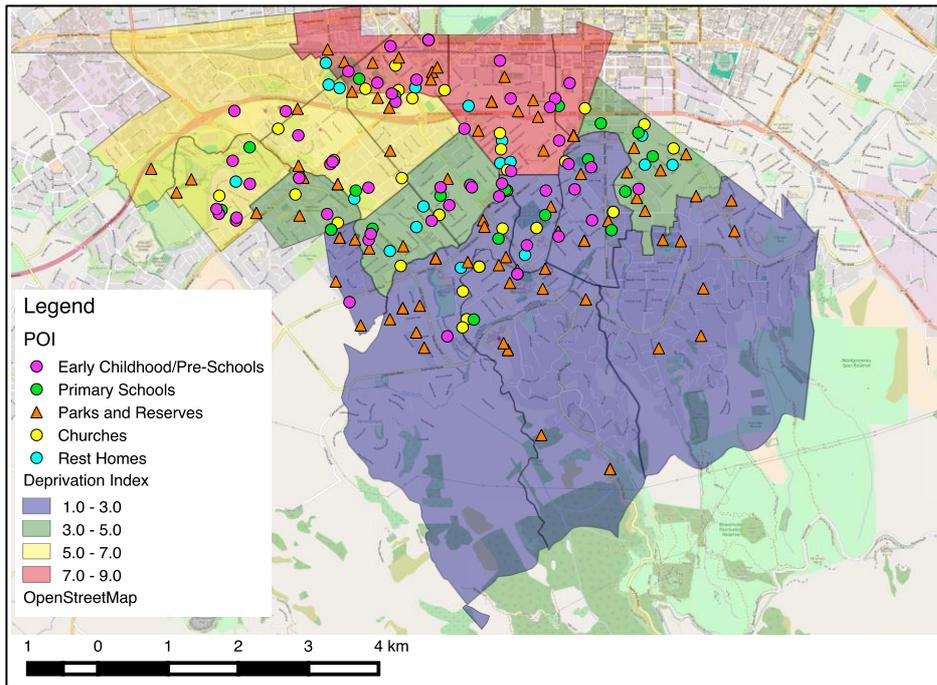


Figure 3. Map of Spreydon-Heathcote identifying potential new opportunities for edible initiatives.

The survey respondents were primarily aged over 30 and female. 27 respondents indicated they reside in an area with low deprivation, as seen in Figure 4. However, edible initiatives should seek to target groups with both low and high deprivation. Therefore, our method for data acquisition may not be suitable for all demographics groups, reflecting reasons for the high number of respondents from areas of low deprivation.

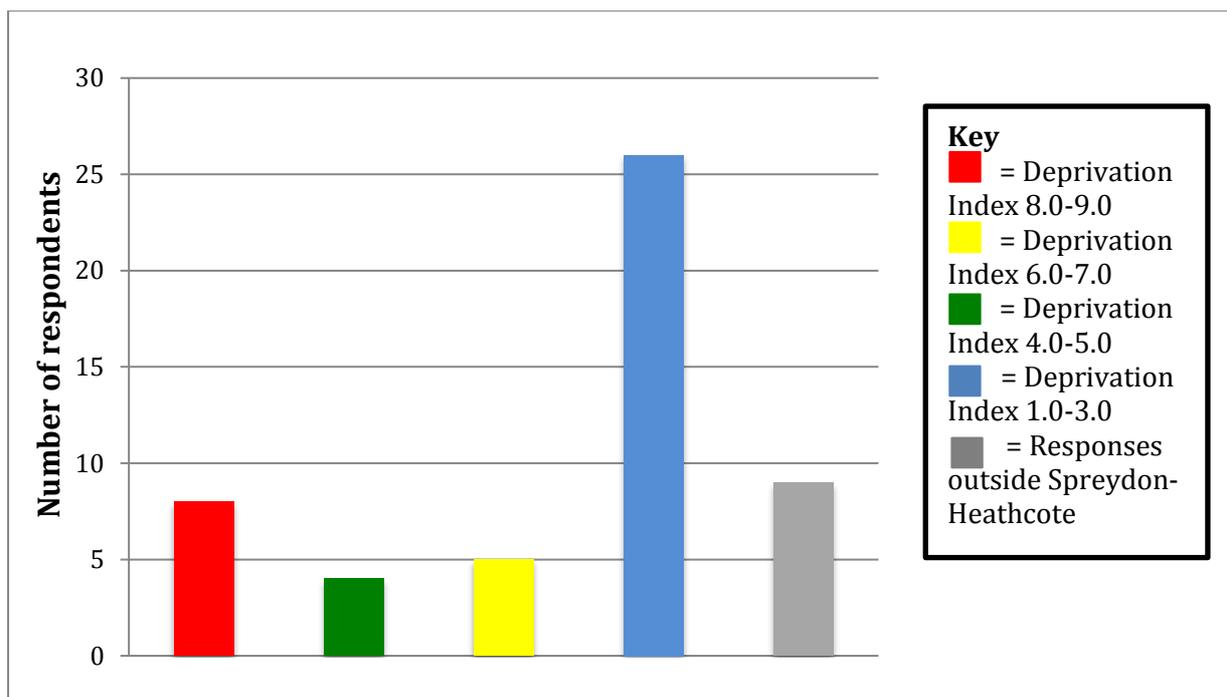


Figure 4. Deprivation levels of respondents.

### **Recommendations to improve food resilience in Spreydon-Heathcote:**

Edible initiatives in Spreydon-Heathcote can enhance food resilience. The purpose of this project was to identify opportunities for edible initiatives in Spreydon-Heathcote. The results collated above allow for discussion around the second aim of this report; how to improve food resilience in Spreydon-Heathcote through edible initiatives. Four issues in regards to edible initiatives in the Spreydon-Heathcote area became evident through the research process; (1) the lack of knowledge and education surrounding food resilience; (2) ongoing community consultation is necessary to support specific groups; (3) access to edible initiatives needs to be improved; and, (4) more support must be given to support existing edible initiatives. To understand these points, they will be discussed in the following section, and recommendations for how to improve food resilience in Spreydon-Heathcote will then be addressed.

#### *(1) Lack of knowledge and education*

Knowledge and education are essential to improve food resilience. For community members to implement edible initiatives effectively, they must have the knowledge and the ability to do so. Individuals with gardening skills, cooking skills and an understanding of the benefits of food resilience would enable edible initiatives to succeed and thrive. The results from the

survey and the focus group (Focus group, 2016) highlighted the need to improve these skills in Spreydon-Heathcote. Gardening skills, cooking skills, and an understanding of food resilience is necessary for implementation and involvement of communities within edible initiatives. However, it is likely that these skills and knowledge can be improved as an outcome of participation in edible initiative schemes.

One option for improving skills and increasing knowledge regarding food resilience would be the use of community kitchens. These kitchens provide a space for cooking lessons which can assist in improving the cooking skills of individuals as well as their knowledge regarding produce and its use. The respondents from the focus group indicated that food distribution hubs provided a source of affordable and fresh produce. However, as people were unable to select what vegetables were purchased, there was limited knowledge of how to cook using the produce supplied, leading to increased food waste. Cooking lessons at community kitchens would minimise this issue. Through the use of community kitchens, the ability to provide healthy food for themselves and their families would improve, enhancing the food resilience of the area. The improved knowledge and skills could be taught to younger generations. Previous studies highlight that the eating habits of children is influenced by their parents (Dawson et al., 2013; Vereecken, Keukelier, & Maes, 2004). Therefore, improving healthy eating habits in adults is likely to improve eating habits for children.

To address this information gap, edible initiatives must work alongside communities, allowing for information to be readily available to those in need. Also, support from outside organisations can reduce this gap; part four will elaborate on this section.

## *(2) Community consultation*

Community consultation is integral to the success of edible initiatives. This process involves considering a variety of factors of the target community including; the economic status of individuals; the demographics of individual families; the deprivation index of communities; and, the cultural values of the community participants. The results of this research indicated that this was an issue in Spreydon-Heathcote. The majority of respondents of both the survey and the focus group had some awareness of edible initiatives. Applying the appropriate consultation methods improves the ability to connect with a diverse range of groups in an area. It also enables an increase in knowledge, education of food resilience, and the options that

exist. Community consultation allows the needs of a community to be understood, facilitating their involvement in the planning process. Research has indicated that improving outcomes for communities is most successful when they are involved in all steps of the planning and implementation process (Ostrom, 1996).

Those with high deprivation in Spreydon-Heathcote need more effective community consultation. The large Pacifica population within this area is an example of a group who would benefit from an edible initiative. The unemployment rate of Pacifica people in New Zealand is twice that of the national unemployment rate and they more likely to reside in houses with high household occupancy (Ministry of Health, 2014). The focus group indicated that current consultation methods are not culturally appropriate for this community. Therefore, consultation methods must cater to the cultural diversity within communities.

### *(3) Accessibility*

Improving access to edible initiatives in urban environments is key to enhancing the food resilience of an area. Research has discussed physical access to sources of fresh food and growing space as being a key determinant of food resilience, and contributing to the effect of food deserts in an area; this is apparent in Spreydon-Heathcote (Adams, Ulrich, & Coleman, 2010; Reynolds, 2014). However, the results above indicate that physical access is not the only form of access that could be improved in the area. The discussion around access should focus on financial access, access to information, and physical access.

Results from our survey indicate the majority of respondents concerned with edible initiatives reside in less deprived areas (shown in Figure 4). Along with information derived from the focus group on the 23rd of May, we believe current edible initiatives in the Spreydon-Heathcote area cater to individuals with lower levels of deprivation. This leads us to question the financial accessibility of these initiatives. More community consultation is needed and should focus on areas of higher deprivation to address this issue in its entirety. However, we pose the question whether financial access to food markets, distribution hubs, and food box schemes could be improved, to improve food resilience for those groups currently financially less stable, and traditionally less food resilient (Acheson, 1998).

The map in Figure 1 shows the spread of current edible initiatives as outlined in the results section. Through observation, the spread of these initiatives is fairly even throughout the northern suburbs, with less existing in the hills to the south. Our results indicate that improving physical access to existing initiatives should not necessarily be the initial focus to improve food resilience in Spreydon-Heathcote.

Rather, improving access to information about existing edible initiatives could enhance the longevity of food resilience in the area. Specifically, forms of information available need to cater specifically to at risk groups in Spreydon-Heathcote, as discussed in part two of this section.

Edible initiatives should consider a variety of information mediums to cater to many different groups. Electronic maps and databases of edible initiatives circulated through email, social media and other technological channels. A second option is, informational brochures which could be distributed to relevant community groups including churches, community groups, and schools. Community notice boards and physical advertisement within communities themselves provides an alternative option.

These are merely suggestions from our results, and further research should consider appropriate ways to target groups that could benefit specifically from food resilience in Spreydon-Heathcote.

#### *(4) Lack of support*

To improve food resilience through edible initiatives in Spreydon-Heathcote, the previous three points must be understood as interconnecting issues. The results from the focus group (Focus group, 2016) and discussion with Sara Templeton (Templeton, 2016) acknowledged the need to improve the support of existing edible initiatives in the Spreydon-Heathcote area. This could have positive effects for specific edible initiatives in the area, and improve accessibility, community consultation, and knowledge of edible initiatives.

The discussion with Sara Templeton identified a key issue currently faced by the community garden in the Heathcote Valley area; the sustainability of the garden, around five years after it was first established (Harris & Templeton, 2016). This garden initially had a large amount of

community support. However, many of the community members had other commitments during the gardens existence, thus, the support for this garden diminished over time. A community garden on Strickland Street has not suffered the same fate; it began in 1999 and is one of the longest-standing gardens in Christchurch. This garden was commonly mentioned in the survey we conducted and has a paid coordinator to maintain the garden (Christchurch South Community Gardens, 2016). From these results, it seems financial support has improved the sustainability of the gardens, and the knowledge of individuals surrounding the gardens existence. In other types of edible initiatives, financial assistance is key to improving the sustainability of said initiative.

Support is also necessary to target specific groups in an area. Spreydon-Heathcote is made up of many neighbourhoods of both very high and very low deprivation levels (Figure 3). This area has a large Pacifica population and a large amount of social housing (Healthy Families Spreydon-Heathcote, 2015). This may mean targeting specific groups can be difficult due to the diversity of the area. Support in this area could be offered through outreach programmes that seek to help at risk individuals and families become involved in existing edible initiatives. There must be emphasis on the support of existing initiatives before attempting to employ new initiatives in an area, to improve the overall sustainability of these initiatives, and therefore, food resilience in Spreydon-Heathcote.

Only a small number of suggestions to improve food resilience have been made in this section based on the results of this study, however, much more could be discussed. Understanding the above four points provides a solid framework to assess the effectiveness of current edible initiatives in Spreydon-Heathcote, and offers suggestions to improve these. The next section will discuss limitations of the methodology, and potential further research to address food resilience in Spreydon-Heathcote in more detail.

## **Limitations**

The results of this report offer an insight into the mechanisms of edible initiatives in Spreydon-Heathcote. However, improvements to the methodology would allow for more in-depth analysis of the underlying factors influencing food resilience in the area. This section will discuss limitations existing in the methodology of this study, potential ramifications these will have for the results, and suggestions for further research will be made. This section will focus

on three key limitations; (1) the limited scope of the research; (2) time constraints of the methodology; and, (3) issues caused by the format of the research methodology.

### *(1) Limited scope*

Understanding food resilience in Spreydon-Heathcote is a complex task. Many factors contribute to the overall food resilience of the area, including; access to sources of fresh food, through supermarkets and grocers; number of fast food outlets, contributing to the urban food desert; amount of land per household, able to be used to grow fresh food; and, access to community edible initiatives. This report has focussed specifically on edible initiatives in Spreydon-Heathcote, however, to understand the overall food resilience of the area, all aspects of this concept must be taken into account. The limited scope of research conducted allows us to draw generalised conclusions about edible initiatives and food resilience in the area; however, further research should attempt to understand food resilience in its entirety, to assess the needs of the community in more detail.

### *(2) Time constraints*

The three-month time frame of this research project had implications on the overall result. We ran the survey for approximately one week and conducted one focus group. With more time, we would have increased the duration of the survey, allowing for an increased response rate. Also, we would have passed the survey through more channels, to increase the diversity of respondents. This could have helped to reach more groups specifically in need of food resilience, and reduced the demographic bias existing in this research. Increasing the number of focus groups would supplement this. Targeting groups of individuals already involved in edible initiatives, and those who would benefit from edible initiatives, would provide a more accurate representation of the Spreydon-Heathcote community. Finally, more time would allow for an increased level of community consultation as suggested in the previous section of this report. This would allow our results to benefit the community to a greater extent.

### *(3) Format of research methodology*

The methodology applied in this project centred on the use of technology. The survey was distributed via email, community Facebook pages, and other electronic mediums. Members of

the focus group were also informed through these mediums. This created issues reaching out to individuals who do not have access to these channels, and these are the groups who should be the target of this study. This created bias, as the research method catered to a specific audience, and could have implications for the results. Further research should use a broad range of research methods, to reach a wider ample of the community.

## **Conclusion**

This study has aimed to understand ways to improve food resilience through the use of edible initiatives in Spreydon-Heathcote. The results in this report outline the importance of community consultation, and this should be central to the methodology of future projects. By utilising focus groups and interviews, research can begin to understand community wants and needs, regarding edible initiatives.

Further research should consider the above three points in unison, and focus specifically on community consultation and participation, to improve the support system for edible initiatives in Spreydon-Heathcote. By utilising focus groups and interviews, research can begin to understand community wants and needs, regarding edible initiatives. Expanding the scope of the research to include other aspects of food resilience would allow for exploration around this concept to be more extensive. Finally, this piece of research aims to understand how edible initiatives could be improved in Spreydon-Heathcote, and further research should build on results highlighted with an emphasis on community consultation

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## Appendices

### Appendix 1: Spreydon-Heathcote Community Survey

6/9/2016

Spreydon-Heathcote Edible Initiatives Survey

## Spreydon-Heathcote Edible Initiatives Survey

We are a group of post-graduate geography students from the University of Canterbury conducting research about edible initiatives in the Spreydon-Heathcote area. This research will form part of the course assessment for GEOG 402: Resilient Cities. In collaboration with Healthy Families Spreydon-Heathcote and the Food Resilience Network, we aim to increase our understanding of the impacts of edible initiatives, and how they might improve community resilience and well-being. We also seek to identify possible new opportunities for food resilience that exist in Spreydon-Heathcote.

Edible initiatives are community driven initiatives. For more information please visit: <http://www.ccc.govt.nz/environment/edible-christchurch/>. These include, but are not limited to:

- Community gardens
- Veggie gardens and orchards in schools, rest homes, workplaces, churches and public parks
- Food coops/ Food distribution hubs (i.e. Food Together)
- Farmers markets
- Food foraging
- Community kitchens

The purpose of this survey is to help us gain an understanding of the level of community engagement fostered by these initiatives and identify possible new opportunities in Spreydon-Heathcote. We appreciate your assistance and look forward to receiving your response. If possible, please complete the survey by Sunday the 15th of May.

Why have you been sent this survey?

We are looking for responses from both individuals and organisations within the Spreydon-Heathcote community. We believe you to be either a member of this community, or representing an organisation that we believe could support the implementation of new edible initiatives.

Should you require additional information or if you wish to withdraw your participation from the survey at any point please do not hesitate to contact us via the details provided below.

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Email: [oba16@uclive.ac.nz](mailto:oba16@uclive.ac.nz)

Please do not hesitate to contact the course coordinator for verification:  
Professor Simon Kingham  
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Please note that the content of this survey has received ethics approval from the University of Canterbury.

\* Required

**1. Are you completing this survey as an individual, or a representative of an organisation? \***

Mark only one oval.

- Individual      *Skip to question 2.*
- Representative of an organisation      *Skip to question 4.*

**2. What suburb do you reside in?**

.....

**3. Are you aware of any edible initiatives in or around your suburb? \***

Mark only one oval.

- Yes      *Skip to question 7.*
- No      *Skip to question 17.*

*Skip to question 7.*

<https://docs.google.com/forms/d/1JTXMW2czoKJ3--WqWtUKKbXO8qYl9WdsTVokEMiNonA/edit>

1/6

4. **What organisation are you Representing? \***

.....

5. **What suburb is your organisation in?**

.....

6. **Are you aware of any edible initiatives in or around your area? \***

*Mark only one oval.*

Yes *Skip to question 9.*

No *Skip to question 21.*

7. **Do you know where the edible initiative(s) is/are located?**

.....

8. **Do you utilise the edible initiative(s)? \***

*Mark only one oval.*

Yes *Skip to question 11.*

No *Skip to question 15.*

*Skip to question 11.*

9. **Do you know where the edible initiative(s) is/are located?**

.....

10. **Do you or others in your organisation utilise the edible initiative(s)? \***

*Mark only one oval.*

Yes *Skip to question 13.*

No *Skip to question 16.*

11. **How often do you utilise the edible initiative(s)? \***

*Mark only one oval.*

More than once a week

Weekly

Fortnightly

Monthly

Yearly or less

**12. How do you utilise the edible initiative(s)? Select all applicable options. \***

*Check all that apply.*

- Social / Recreation
- Gardening
- Relaxation
- Community events
- Source of food
- Education
- Other: .....

*Skip to question 17.*

**13. How often do you, or members of your organisation utilise the edible initiative(s)? \***

*Mark only one oval.*

- More than once a week
- Weekly
- Fortnightly
- Monthly
- Yearly or less
- Unsure

**14. How do you/they utilise the edible initiative(s)? Select all applicable options. \***

*Check all that apply.*

- Social / Recreation
- Gardening
- Relaxation
- Community events
- Source of food
- Education
- Other: .....

*Skip to question 21.*

**15. What initiatives would influence you to utilise the edible initiative(s)?**

.....

.....

.....

.....

.....

*Skip to question 17.*

16. What initiatives do you think would influence members of your organisation to utilise the initiative(s)?

.....  
.....  
.....  
.....  
.....

Skip to question 21.

17. Would you be interested in having a new edible initiative in your community? \*

Mark only one oval.

- Yes
- No

18. Would you be willing to support a new edible initiative? \*

Mark only one oval.

- Yes
- No

19. If yes, what initiatives would you be willing to support?

Check all that apply.

- Community gardens
- Veggie gardens and orchards in schools, rest homes, workplaces, churches and public parks
- Food coops/Food distribution hubs
- Farmers markets
- Food foraging
- Community kitchens
- Other: .....

20. Are you aware of any space that can be utilised for an edible garden in your area? If yes please give details below.

.....

Skip to question 25.

21. Would you or individuals in your organisation be interested in having a new edible initiative in your community? \*

Mark only one oval.

- Yes
- No
- Unsure

**22. Would you or individuals in your organisation be willing to support a new edible initiative? \***

Mark only one oval.

- Yes
- No
- Unsure

**23. If yes, which initiative/s would you like to support?**

Check all that apply.

- Community edible garden
- Veggie gardens and orchards in schools, rest homes, workplaces, churches and public parks, Food foraging
- Food coops/Food distribution hubs
- Farmers market
- Food foraging
- Community kitchen
- Other: .....

**24. Are you aware of any space that can be utilised for an edible garden in your area? If yes please give details below.**

.....

Skip to question 25.

**25. Would you be interested in participating in a focus group surrounding edible initiatives?**

Check all that apply.

- Saturday the 21st of May, at 7pm
- Sunday the 22nd of May, at 7pm
- Neither date suits, but I would be interested in being a part of a focus group in the future

**26. If you would like to be involved in a focus group, please enter your email address below to receive further information.**

.....

**27. Gender \***

Mark only one oval.

- Male
- Female

**28. Please select your age group \***

*Mark only one oval.*

- 0-18 years
- 19-29 years
- 30-39 years
- 40-49
- 50-59
- 60-69
- 70 years and above

**29. Thank you for participating. Do you have any additional comments?**

.....

.....

.....

.....

.....



*Appendix 2: Focus group consent form*

**University of Canterbury edible initiative  
research consent form:**



We are a group of post-graduate geography students from the University of Canterbury conducting research about edible initiatives in the Spreydon-Heathcote area. This research will form part of the course assessment for GEOG402: Resilient Cities. In collaboration with Healthy Families Spreydon-Heathcote and the Food Resilience Network, we aim to increase our understanding of the impacts of edible initiatives, and how they might improve community resilience and well-being. We also seek to identify possible new opportunities for food resilience that exist in Spreydon-Heathcote.

Edible initiatives include:

- Community gardens
- Veggie gardens and orchards in schools, rest homes, workplaces, churches and public parks
- Food coops/ Food distribution hubs (i.e. Food Together)
- Farmers markets
- Food foraging
- Community kitchens

The purpose of this focus group is to help us gain an understanding of the level of community engagement fostered by these initiatives and identify possible new opportunities in Spreydon-Heathcote.

By signing this form you give us consent to use any information discussed during the focus group on the \_\_\_\_\_ of May, 2016. This will be used in our research project discussed above, and other research conducted by the University of Canterbury, Healthy Families Spreydon-Heathcote, and the Food Resilience Network. We will not publish your name in any research. The University and our community partners will have access to the information provided, and this will be published and available publicly. The discussion during this focus group will also be recorded.

You can withdraw from this research at any time.

Any further questions please email Rubie McLintock:

[rubiemclintock@hotmail.com](mailto:rubiemclintock@hotmail.com)

The course coordinator Simon Kingham:

[simon.kingham@canterbury.ac.nz](mailto:simon.kingham@canterbury.ac.nz)

Or our community partner at Healthy Families Spreydon-Heathcote Nina Perez:

[Nina.Perez@pacifictrust.co.nz](mailto:Nina.Perez@pacifictrust.co.nz)

Participants Name: \_\_\_\_\_ Signature: \_\_\_\_\_