

Where's the Food?

A survey of community food producers in Newfoundland and Labrador

Data collected: September–December, 2022

FINAL PROJECT REPORT

Prepared by the Survey Report Team,
Food Producers Forum, Inc.

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prepared by the Survey Report Team –

Food Producers Forum, Inc.

Dr. Atanu Sarkar

Dr. Nicholas Fairbridge

Dr. Michael Graham

Samantha Young

Dan Rubin

***Please contact foodproducersforum@gmail.com
before any proposed use or sharing of these contents.***

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Executive Summary

In 2022 Food Producers Forum, a non-profit society based in St. John's, Newfoundland and Labrador, gathered an interdisciplinary team made up of academics, agriculturists, environmentalists, government officials and young researchers to conduct an online survey of our province's farmers, gardeners, hunters, foragers and fishers.

The "Where's The Food?" Survey collected data for four months that included quantities and types of foods produced, methods of production, how food was shared, post-harvest waste, and opportunities for expansion and diversification, to help meet our need for healthy, local food.

This survey was launched online and collected responses from September to December, 2022. The survey results challenge the popular assumption that we have a very limited capacity in our province for local food production. These data reveal exactly the opposite.

The survey collected 742 complete responses from individuals living in 167 communities. A majority of these respondents live in incorporated municipalities and nearly half of the food they produced was grown and gathered within municipal boundaries. The survey confirmed 6.2 million pounds of plant and animal products were produced by survey participants. The bulk of that food came from 30 large commercial farms, but 440,000 pounds of food was grown or gathered from small-scale gardening, hunting, foraging and fishing.

In addition to these major findings, the survey collected detailed information about quantities and types of food being grown and gathered in our province, and identified the degree to which food growers are composting (more than 70%), using municipal water sources (68%) or have a greenhouse in operation (54%).

Challenges to food production were also identified in our survey. They included the rising cost of production, difficulty in finding customers and developing direct markets, limited access to land and lack of local abattoirs. There was much interest in greenhouses, root cellars, refrigerated storage, and composting. These responses from community food producers reveal a significant potential to increase food production at the community level, right across our province.

The survey indicated that almost 80% of community food production ends up in direct household consumption or is shared within families. Food preserving, a centuries-old cultural tradition in our province, is an important way to extend the harvest, by freezing, bottling and drying food.

This survey has demonstrated the persistence of local food production in multiple communities across the province. It revealed the ways in which food is being produced, stored and distributed, and identified major challenges that we are facing if it is our intention to expand and diversify local food production to address food security and community health.

Our provincial government could more clearly identify the direct link between diet and health and the value and importance of local food production and distribution to help improve health, and decrease health care costs in the future. Better support for food marketing and branding is needed.

The major implication of this study is that there is a significant opportunity to improve community sustainability, food security and community health while preserving rural character, by providing support and eliminating barriers to the local food production that was identified in our survey.

On the next page we list thirteen recommendations that emerged from our survey data.

Recommendations from this Survey

- We need ongoing, comprehensive, province-wide evaluation and support for both commercial and community-based food production.
- Provincial policies and programmes should be updated to validate and support home- and community-based food production, within municipal priorities.
- Provincial action is needed to eliminate, clarify or simplify municipal regulations and zoning requirements that are creating barriers to home and community food production.
- A patchwork of arbitrary local regulations should be replaced with standardized provincial guidelines for local food production based on standards of agricultural best practice.
- There is a need for more effective marketing and brand development focused on food quality and health to create appreciation and support for local food production.
- School-based and community education programs are needed to make people of all ages aware of the direct link between food quality and human health.
- There is a need for local abattoirs, cold storage options, composting centres, community pastures and approved facilities for food processing.
- Provincial networks to connect food producers and processors are needed.
- Sharing of resources, tools and knowledge can expand capacity for local food production and processing.
- A range of direct distribution systems is needed, including farmer's markets, online food hubs, community-supported agriculture and farm gate sales.
- Governments should eliminate taxes and penalties applied to non-commercial food distribution, and provide tax exemptions to encourage small volume barter and local food exchanges.
- Provincial programs should support local food production by making available public land including highway garden allotments, community pastures, and offering access to underutilized municipal spaces and Crown lands suitable for community gardens.
- Community-based training and mentorships in food production and processing skills are needed to retain traditional knowledge and support development of new technologies.

Background and Context

THE FOOD CRISIS

Across the province of Newfoundland and Labrador, a growing food crisis is emerging from rising food prices, lack of donations to food banks, and an established pattern of food waste:

[\[https://annualreport.foodfirstnl.ca/2022/food-security\]](https://annualreport.foodfirstnl.ca/2022/food-security)

These factors are making affordable, healthy food harder to access for Canadians in general, but in our province, this situation is exacerbated by loss of more than fifty percent of our cultivated farm land in the past 20 years:

[\[https://www.cbc.ca/news/canada/newfoundland-labrador/farmland-loss-stats-canada-obrien-farm-sylvan-charlebois-1.6674527#:~:text=37-.For%20the%20past%2020%20years%2C%20Newfoundland%20and%20Labrador%20has%20been,other%20province%20in%20the%20country.\]](https://www.cbc.ca/news/canada/newfoundland-labrador/farmland-loss-stats-canada-obrien-farm-sylvan-charlebois-1.6674527#:~:text=37-.For%20the%20past%2020%20years%2C%20Newfoundland%20and%20Labrador%20has%20been,other%20province%20in%20the%20country.)

Numbers of clients arriving at food banks in our province have increased by 44% since 2019, including many part time workers who have never applied for free food, while a third of these clients are children under eighteen, as confirmed by Jody Wall, Manager of Bridges to Hope, St. John's, during our May 2022 provincial conference, *Regeneration: Soil, Food, Community*.

Difficulty of applying for access to Crown land created by bureaucratic requirements has made it hard to re-establish family farms, even though there is significant potential for improving access to healthy food through a return to local production.

Foods distributed through the retail system, and via local food banks, are mostly processed foods, low in nutrient value, while fruit and vegetables shipped long distances are also losing nutritional value while in transit:

[\[https://www.linkedin.com/pulse/foodexperts-science-extending-shelf-life-foodexperts-bpcre\]](https://www.linkedin.com/pulse/foodexperts-science-extending-shelf-life-foodexperts-bpcre)

FOOD PRODUCERS FORUM

Food Producers Forum, Inc. (FPF) is a five-year old provincial non-profit, based in St. John's, Newfoundland and Labrador. Formed in 2019 to address the growing need for food security and food justice, FPF has been supporting production and gathering of local, healthy food. In just four years, we have registered with the province, gathered a strong, multicultural board of directors, found office space and have launched a series of grassroots projects to assess and address a need for healthy food across our province.

Food Producers Forum is addressing the challenge of food insecurity by developing innovative community-based approaches to local food production and distribution. But this still leaves the majority of our population vulnerable to rising costs and poor-quality food. The industrial food system is not effectively answering our need for affordable, healthy food.

We realized that neither the public nor the provincial government had any clear data of how much food is being produced at the community level. Previous provincial estimates of our level of food security seemed to be based on availability of land for commercial, large-scale production, and marketing figures from major grocery chains.

When Food Producers Forum organized an online conference, *Regeneration: Soil, Food, Community*, in May 2022, with 32 presenters across the province, presenting key aspects of our current food crisis, it became very clear that more reliable data about local food production was needed.

Our provincial government has set a goal of doubling food production but without any data to determine actual quantities and types of food being produced by community producers (along with the commercial farms in our province) there was no solid basis for evaluating or tracking this,

[\[https://www.gov.nl.ca/thewayforward/action/increase-newfoundland-and-labradors-food-self-sufficiency-to-at-least-20-per-cent-by-2022/\]](https://www.gov.nl.ca/thewayforward/action/increase-newfoundland-and-labradors-food-self-sufficiency-to-at-least-20-per-cent-by-2022/)

[\[https://www.gov.nl.ca/releases/2022/ffa/1215n01/#:~:text=Newfoundland%20and%20Labrador%27s%20agriculture%20sector,by%20the%20end%20of%202022\]](https://www.gov.nl.ca/releases/2022/ffa/1215n01/#:~:text=Newfoundland%20and%20Labrador%27s%20agriculture%20sector,by%20the%20end%20of%202022)

In response to a lack of reliable data defining the level and variety of food production in our province, Food Producers Forum decided to undertake a survey of community food production.

Survey Methodology

THE SURVEY DESIGN TEAM

We recruited a wide range of academic and non-academic participants for the project team to design an online survey. Following our organization's operating principle of forming collaborative project teams with a range of skills and experience, and relying on inclusive, consensual, collaborative decision-making, we formed a survey design team that included farmers, food activists, researchers and students.

The Data Survey Team was led by Dr. Atanu Sarkar and Dr. Nic Fairbridge of Memorial University's Faculty of Medicine, and chaired by Food Producers Forum Chairperson Dan Rubin, each of whom has previous training and experience in qualitative research.

The team included Samantha Young (Executive Director, Food Producers Forum), Katie Temple (Executive Director, Western Environment Centre), Merv Wiseman (former President, NL Federation of Agriculture), Kimberly Orren (Fishing for Success), Debbie Wiseman (NL Social Justice Cooperative), Michael Graham (retired Agricultural Meteorologist, College of the North Atlantic), Crystal Anderson (Market Development Officer, Dept. of Fisheries, Forestry & Agriculture), and Emily Doyle (Student, Memorial University).

PILOT PHASE

Food Producers Forum began designing and fine-tuning this online survey, after we engaged two business students at Memorial University to undertake a series of initial phone interviews with farmers and fishers, to ask simple questions in order to elicit baseline information about food production. This process was not effective because few of those contacted had the time or wanted to engage in providing this information. We turned to online data collection as a more effective way to gather meaningful information.

This experience had shown us that eliciting trust and engagement would be critical to the success of the survey. If we were successful in spreading the word, we assumed we might be able to gather a few hundred responses from a selection of our province's growers, gardeners, hunters, foragers and fishers. Our goal was to put together a meaningful snapshot of what was being produced within each of the primary facets of local food production - farming, gardening, hunting, foraging and fishing - so we included sections about each of these aspects in our survey.

SURVEY DESIGN

Topics covered by this survey of provincial food producers were therefore quite broad. We were careful to focus on information that would be clear, informative and substantive throughout the survey. The survey included questions intended to gather meaningful information about these aspects:

- amounts and types of food grown by gardeners and farmers
- amounts and types of foraged foods
- amounts and types of foods hunted and fished
- production of animal products
- how food is being shared or distributed
- degree to which food is discarded or wasted
- specific methods of production
- specific equipment and technology in use (greenhouses, mechanical tools, etc.)
- issues, limitations, needs and opportunities for expanding production

We knew from our past research experiences that asking questions that will produce meaningful data is challenging. We wanted to collect quantitative and qualitative information that would allow us to define the current baseline for local production. We also wanted to generate specific recommendations for strategies and techniques that could support and expand community food production.

The questions we asked, and the categories that helped respondents move through the survey are presented in **Appendix One**. As you review these questions, please note that they were designed to be specific, easy to answer, while allowing each person completing the survey to choose the categories of production that would apply to them.

Although the survey was anonymous, we asked respondents to identify their nearest town; in this way we were able to confirm that survey responses were geographically comprehensive, coming from food producers in all parts of our province. Our survey gathered responses from 167 communities.

QUALTRICS SURVEY DESIGN

The online survey was designed using Memorial University's Qualtrics online software [<https://www.mun.ca/surveysolution/>]. The survey was organized to lead participants from section to section, while focusing on the specific type(s) of food production (gardening, farming, foraging, hunting, fishing) that applied to them, while identifying those who derive commercial income from the foods they grow or gather.

The survey was organized and administered by Food Producers Forum, with support from Dr. Sarkar and Dr. Fairbridge of Memorial's Faculty of Medicine along with volunteer members of our Survey Team. The survey identified participants geographically, by asking them to identify their nearest town. To ensure privacy, data access was limited to three team members: Nicolas Fairbridge, FPF Chairperson Dan Rubin and FPF Executive Director, Samantha Young.

SURVEY PROMOTION AND PUBLIC CONCERNS

This survey was reviewed and approved based on human science research criteria administered by Memorial University's Office of Research, to ensure privacy for participants, even though the survey was not a direct project of the university.

After the survey was launched, via an online link, we focused on promotion, to engage as many participants as possible. For this, we relied on the Food First NL newsletter, public service announcements on CBC, NTV, VOXM radio and print media, as well as posts on social media sites that included Backyard Farming and Homesteading (Facebook) and other online gardening sites. Radio and television interviews also added to our public visibility.

When the survey was profiled on social media, our survey team began seeing feedback indicating that some home producers and small-scale farmers were deeply suspicious of the survey, questioning whether it was a "government survey" and voicing concerns that any data they shared would lead to harassment or taxation of them as food producers by the government.

While not initially part of our project scope, the team discovered from these exchanges that, for many across the province, the perceived role of provincial and especially municipal government has been to impede and penalize home food production. Stories to support this view have been surfacing in recent news articles documenting ongoing conflicts between residents interested in local food production and municipalities banning or restricting this food production. Various municipal restrictions - removal orders, permits and licensing fees, and convoluted, outdated regulations - have been making home food production and starting a new farm exceedingly difficult.

This project received no financial support from university, government or industry but the project was supported by volunteer participation and in-kind support from members of the Faculty of Medicine at Memorial University as well as representatives from other organizations. We were lucky to have access to the system used by MUN for our survey data collection.

SURVEY RESPONSE

Between the launch of the survey in September, 2022 and the end of December, we received 742 complete survey responses from individuals living in 167 communities and also 43 incomplete responses. 43 responses were removed from the survey data because they came from non-residents.

Who responded and what did they produce?

- Survey respondents reported annual production of almost 6.2 million pounds of food.
- The bulk of the reported food (almost 5.8 million pounds) came from large-scale farm production.
- In addition, 440,000 pounds was produced by small-scale gardening, hunting, foraging & fishing.
- Our 742 survey respondents included an overlapping population of 689 farmers and gardeners, 650 foragers, 179 who raised livestock, 325 hunters and 500 who fished or gathered aquatic products.
- The survey identified 95 people who sold products commercially.
- The commercial producers consisted of 30 large scale and 65 small scale growers.
- Home food producers each grew or gathered an average of more than 500 pounds of food.
- Those who hunted, raised animals or fished produced an average of 375 pounds of food.

We identified the following needs, challenges and opportunities for local food production:

- Farmers and community gardeners need easier access to land for agriculture.
- Community cold storage and root cellars are needed for local food preservation.
- Local, approved abattoirs for meat preparation are needed, right across our province.
- There is a need for better education about food quality and its relationship to health.
- There was interest in tool sharing and community farming, especially in rural areas.
- People want workshops, mentorships and online training in food production skills.

PUBLIC ENGAGEMENT

Once the survey data were gathered and basic analysis completed, a smaller report team was formed to begin summarizing the survey results for presentation to the public and government. This team was made up of Dr. Nicolas Fairbridge, Dr. Atanu Sarkar, Dr. Mike Graham, Dan Rubin and Samantha Young. We made plans to immediately share the general findings.

A Public Forum was held on March 18, 2022 at the Autism Society Greenhouse in St. John's. About 50 people, from diverse backgrounds and interests, attended this live, interactive event. The forum was video recorded for future sharing online.

In this Public Forum we shared the main findings from the survey and engaged in open ended dialogue to explore what the findings might mean, and how they could be used to inform action and policy. Those in attendance demonstrated a high level of interest and support for the survey and helped us define its implications for public policy to address food security and community health.

Quantitative Data

Food is being produced in communities in every part of Newfoundland and Labrador

Survey intake began in September, 2022 and closed at the end of December. 785 people responded to the survey, of which 742 were included in our data analysis. This reduction was because some of the 758 did not live in the province of Newfoundland and Labrador or indicated that they did not produce any food. We excluded from our data anyone who did not currently live in our province. While we received some incomplete surveys, if those participants chose to not answer particular questions or some were skipped, we still accepted their submissions as valid survey responses, and they were included in the 742.

We saw from these responses that people in rural areas source their food in a wide range of ways. Identified agricultural activities varied considerably and included 689 farmers and gardeners, 653 foragers, 179 who raise livestock, 325 hunters and 500 who fished or gathered aquatic products. We cannot determine how representative these responses are of the larger population or overall provincial community production but, within these 742 individuals, our survey tallied a total production of 6.16 million pounds, consisting of 5.92 million pounds of produce and 237,081 pounds of animal products.

Can we extrapolate a total level of provincial food production from our data?

Extrapolating from our data to the province as a whole is not simple or easy, because no comprehensive previous tally or estimate of community or household food activities exists at municipal or provincial levels. This limits any cross-validation or presentation of estimates without making certain assumptions, because there is a lack of community-food productions data available throughout the province.

We know that on the Facebook site, “Backyard Farming and Homesteading,” there are now more than 60,000 registered participants, so if a conservative estimate of 20% of these participants are food producers at some level, they would make up an estimated cohort of at least 12,000 backyard producers. But the true number of gardeners and foragers beyond these individuals could actually exceed 60,000. One of the principal researchers for this study has previously engaged with more than 2000 gardeners in workshops and talks, over the past decade. These data offer anecdotal evidence of a “return to the garden” that is taking place right across the province, along with the survey results shared in this report. There are thousands, but we do not know the total number.

We do have some data about wild foods. There are almost 28,000 moose tags issued to hunters across the island of Newfoundland, with even more across Labrador and more under the administration of the Nunatsiavut Government (2022-2023 Hunting and Trapping Guide, Government of NL, 2022). Those quotas suggest that more than 10% of local households are involved in hunting. The lack of tagging in the misnamed “Recreational” fishery means we do not have clear numbers for how many households are harvesting their own fish. A 2005 Statistics Canada survey has suggested that more than 25% of local residents are active anglers (*Gone Fishing: A profile of recreational fishing in Canada*, Statistics Canada, 2005).

Our sample size was significant, with 167 communities represented among respondents, approximately 750 total respondents taking part in a range of household and community-level food activities. However, we cannot determine whether our data is actually representative of the entire population.

If it were representative of the amount of food that the median or average home food producer is producing, then our data would verify a median yield of 154 pounds for an average of 545 pounds of produce per household; and for animal products, a median yield of 134 pounds and average animal product yield of 379 pounds. This tentative extrapolation would suggest that each household engaged in both produce and animal harvests collects somewhere between 288 pounds of food (median) to 924 pounds (average).

Based on the established number (223,253 private dwellings occupied by provincial residents) (Statistics Canada, 2021 Census), for every 1% of households engaged in food production provincially there would be an average of 2 million pounds of food produced or harvested collectively by these households.

If 5% of provincial households are involved in local food activities, there could be up to 10 million pounds of food harvested locally outside of commercial systems in our province

If 10% of households are engaged in local food harvesting, the provincial total could be as much as 20 million pounds. Given the current rough estimates available for the number of households engaged in fishing, hunting, and gardening, the “true” value of total community food production will likely reflect local food production by at least 10% of provincial households.

With the loss of more than half of our cultivated farmland in the past two decades, and elimination of over half of our registered farms in the past 50 years (according to Statistics Canada), we are left with about 500 remaining provincially-registered commercial farms in our province, with under 20,000 acres in crops, excluding Christmas trees (Census of Agriculture, 2021).

Commercial farms produce many orders of magnitude more than any single household, but with the looming collapse of our commercial agriculture sector, loss of farmland in the past 20 years along with evidence of a rapidly expanding revitalization of household production, the collective impact of dispersed household producers may be creating a significant and previously undocumented source of food throughout Newfoundland and Labrador. It could already be adding 20 million pounds of food per year to local food production, and possibilities for further growth.

Respondents told us they were growing and gathering food where they lived

This reflects the demographics of communities throughout Newfoundland and Labrador. Most respondents to the survey lived in incorporated municipalities (79.8%), or in unincorporated communities (5.5%), with remaining respondents located in other areas of the province (14.7%).

Food production was not exclusive to rural or unincorporated regions

Nearly half of the surveyed food production, (47.8%), reportedly took place within municipal boundaries. Most gardeners were growing food within residential zoning (84.8%) while 8.8% were using community gardens.

Rural respondents had a higher average yield of produce per respondent, but total municipal production was still 46.2% of the fruits and vegetables reported by survey respondents.

Rural respondents (those living in or near small towns) had a lower average reported yield of raised animal products per respondent than operations within municipal boundaries and municipal production tallied 58.1% of all raised animal production in the survey population.

The commercial activities of a small number of large producers included in the study contributed most of the production – some 5.7 million pounds – but community producers added 425,785 pounds generated outside of commercial systems within our survey’s 742 respondents.

Large commercial operations generate volume, while small operations add variety

Commercial Activities

	Respondents	Percent Engaged in Activity
Home or farm gate sales	49	68.1%
Online sales	24	33.3%
Farmer’s market	20	27.8%
Other (please specify)	17	23.6%
Restaurant sales	16	22.2%
Farm stand	11	15.3%
Retail distribution	10	13.9%
U-Pick	7	9.7%
Community supported agriculture (CSA) - annual subscription model	4	5.6%

This survey was not intended to capture or be representative of all commercial activities throughout the province. Response and representation among large-scale producers remained relatively low with only 30 registered farms participating out of about 500 operating in our province. Robust data already exists through collection by the national Census of Agriculture, commercial industry metrics and various reports on farm production.

The scale of commercial farms and their impact on global food systems cannot be understated. Our two largest producers generated 85% of all vegetable production reported in this study. However, the variety of produce from these two large commercial farms was limited. One producer focused entirely on a single berry crop, generating 50% of all produce tallied by this survey, but these berries are a non-staple specialty crop not commonly consumed by NL households that are sold wholesale to international markets. The second large producer in our survey was focused on growing potatoes, carrots and cauliflower/broccoli.

The next 25 smaller producers (those producing over 1 ton or 2204 pounds) represented 12% of all vegetable production, and reported producing every type of fruit and vegetable identified by our survey (see [Figure One](#) for data) while commercial farmers also wrote in more options that we had not initially listed in the survey. The variety from smaller producers alone was considerable.

Commercial meat production was more varied with the top 7 producers (those producing over 1 ton or 2204 pounds) listing multiple species per producer, although the single largest rancher with one species represented over 50% of all animal products by weight. Otherwise, the top 7 producers representing 90% of all raised meat and animal products had representation across all species queried in this survey, although not all these top producers were commercial.

Some commercial foraging and related activities were documented. The scale of commercial foraging activities was limited but a range of activities and products were reported.

Our data reveals a broad and varied spectrum of commercial activities within the survey, ranging from large-scale commercial farms through less distinctly commercial activities blending with small-scale community and household production.

Commercial food activities were reported by 82 respondents, but the percentage of their total yield that they sold varied from 1% to 99%. Even large commercial growers or harvesters still often reported personal gardening, hunting or fishing activities that, to some degree, added to community-level non-commercial food. So separating “commercial” operators from non-commercial is not a very clear or easy distinction.

A large majority (73.2%) of survey respondents who are associated with commercial activities indicated they had not been captured in the latest Federal Census of Agriculture; these small-scale producers do not consider themselves “farmers” and therefore may not file T2042 Statement of Farming Activities nor participate in the AgriStability and AgriInvest programs, meaning they would not trigger Census inclusion.

Table 2 – Challenges Identified by Commercial Operations

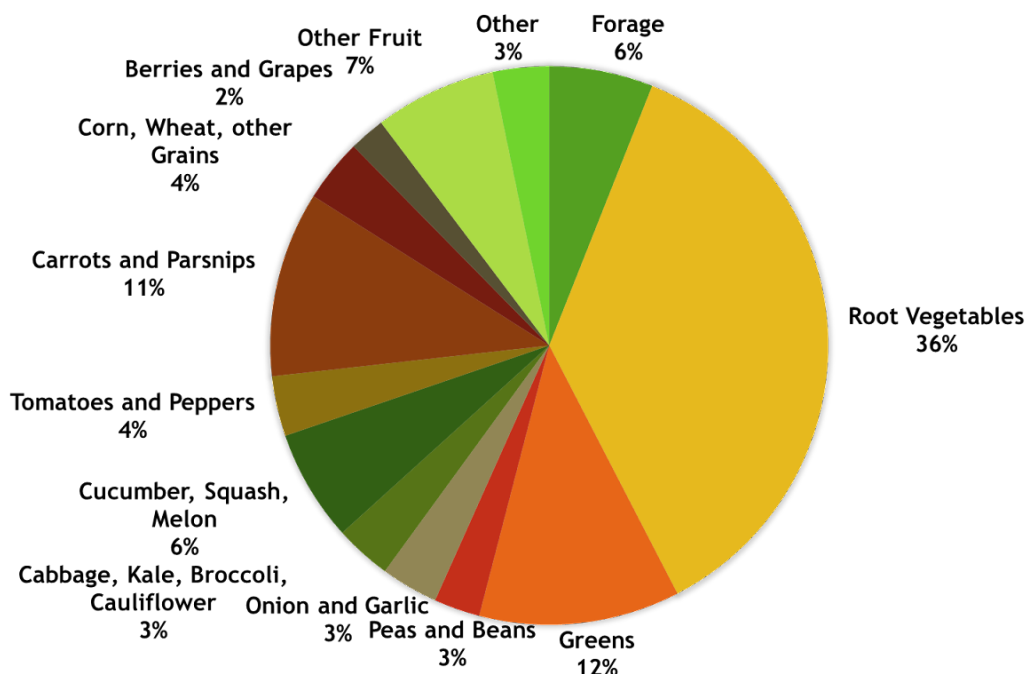
	Respondents	Percent Identifying Challenge
Cost of production	32	57.10%
Low prices	28	50.00%
Finding customers	21	37.50%
Marketing	17	30.40%
Cost of delivery	16	28.60%
Other	11	19.60%

Commercial producers identified significant barriers to accessing capital, obtaining land, recruiting personnel/employees, and gaining entry to retail systems (See Table 2. above.) Both commercial and non-commercial producers told us that restrictive regulations, legislation, and municipal zoning and bylaws are interfering with local food production. Some producers also have personal concerns that include long hours and the need for mental health support.

Those participating in the federal Census were assumed by our survey to be “commercial,” while data from the remaining producers were reviewed and a subjective decision made whether to designate them as “commercial,” based on the total volume of production reported and percentage of production they reported as “community” production, if they also reported secondary commercial activities.

Community food production is productive and extensive

Figure One – Community-based food production contributed 321,233 pounds to non-commercial fruit and vegetable from 665 respondents



Our survey catalogued 425,791 pounds of food produced in 2022 by respondents within “community production” (outside of dedicated commercial operations). These foods were produced by 689 respondents who cultivate gardens, but who also include 653 foragers, 179 who raise livestock, 325 hunters and 500 who derive food from fishing.

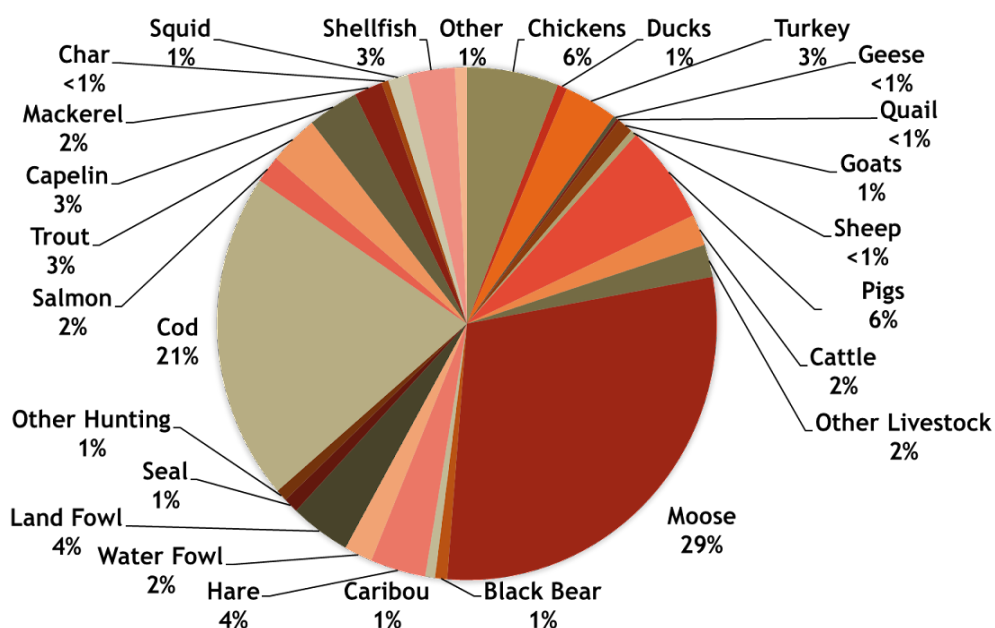
Among respondents cultivating or collecting food, the average yield per person was 545 pounds. This value is skewed because a small number of non-commercial gardeners are producing significant quantities, but half of those growing and collecting plants report producing more than 154 pounds. Those involved in hunting, fishing and raising livestock averaged 379 pounds of animal products, skewed upward by those with very large moose or livestock harvests, but with more than half reporting at least 134 pounds produced. These median values suggest that the standard or expected yield for a household in Newfoundland and Labrador, able to harvest residential crops and local animal products, could exceed 300 pounds of food.

Fruit and vegetable production from non-commercial activities included success with every type of identified crop while participants continued to write in additional crops being grown across our province (Figure 1). Root vegetables were the largest component within non-commercial yields.

Written comments from respondents suggested potatoes were the primary root crop but turnips and beets were also mentioned regularly. Participants reported rhubarb as the primary crop represented by “Other”. The forage category is an amalgamation of all wild-harvested foods and represents nearly twenty thousand pounds of fruits, berries, mushrooms, saps and fiddleheads collected. Seaweed forage was excluded from Figure 1 and is considered within the soil additives and amendments in a later section.

Community harvesting of animal products contributed a significant amount of food

Figure Two – Production contributed 104,580 pounds of non-commercial animal products from 547 respondents



Community animal harvests were quite varied among these hunting, fishing and homesteading activities (Figure Two), resulting in over one hundred thousand pounds of food tallied from all queried types and categories. Moose (29%) and cod (21%) each represent significant portions of household production. Between the three broad categories, hunting and fishing each represent approximately 40% of total yields while homesteading animal husbandry contributes 20%.

If we ask how the province might significantly increase community-food yields, we should note that hunting and fishing activities are both limited by external factors such as population management of wild stock and other regulatory practices. Doubling or tripling moose tags may not be sustainable or widely supported. However, given how few municipalities currently allow the raising of animals, the yields of raised meats, eggs and other products could be scaled up significantly if conditions and resources allowed, and appropriate standards were applied.

Community-level production included some commercial output. Small-scale residential producers estimated that 5.8% of all produce and 9.6% of all animal products ended in sales or barter (Table 3), and over 16% of all yields were shared with family or friends, and another ~2.3% of produce and 5.2% of animal products were donated to food banks or similar programs. Household production appears to benefit more than just the immediate household involved in productions.

Community food distribution combines sharing, bartering and food sales

Table 3 – Where community food ended up

	Percent of Produce Yields	Percent of Animal Product Yields
Sold or bartered	5.8%	9.6%
Consumed by household	73.1%	65.6%
Shared with community	16.2%	16.8%
Donated	2.3%	5.2%
Wasted, lost, composted	2.6%	2.9%

Food preserving is a valid and valuable way that food is being saved and utilized

Table 4 – Food preserving activities

	Respondents	Percent Engaged in Activity
I freeze food	478	81.0%
I bottle vegetables, fruits, sauces	383	64.9%
I pickle various goods	334	56.6%
I dry or desiccate food	170	28.8%
I bottle meats or fish	155	26.3%
I brew beer, wines, vinegar, and kombucha	122	20.7%
I create cheeses or yogurts	23	3.9%
Other (please specify):	18	3.1%
I do not preserve food	50	8.5%

Some community food also went through secondary processing that preserved, stored it, or added value to basic, initial small-scale home production. Fewer than 1 in 10 respondents were *not* preserving food in some way (Table 4). Many respondents indicated that they preserved and processed food in multiple ways; most were freezing, bottling fruits/vegetables/sauces, or pickling. Some smoked or dried their foods, some brewed and some bottled meats; very few created cheeses or yogurts. Two-thirds of all gardeners were saving and replanting seeds and spuds to produce at least some of their annual crops.

Production methods included a variety of techniques to extend the growing year

A large majority of our community crop producers used raised bed gardens (76.4%) and open garden plots (62%), often in combination. Methods of horticultural production (See Table 5) highlight the prevalence of greenhouses or hoop house structures (53.9%) along with the common use of row covers and cold frames (20.8%). These strategies for season extension are needed in our challenging climate.

Other preservation techniques were less common, but they do demonstrate experience with a wide variety of production methods and strategies practiced throughout the province.

Table 5 – Common production methods used by gardeners

	Respondents	Percent Using Method
Raised bed gardening	434	76.4%
Open garden plot or row crops	352	62.0%
Greenhouse or hoop house	306	53.9%
Row cover or cold frame	118	20.8%
No dig, no till	66	11.6%
Hydroponics	51	9.0%
Microgreens	50	8.8%
Other (please specify)	48	8.5%
Permaculture	40	7.0%
Regenerative agriculture	36	6.3%
Irrigation	34	6.0%
Aquaponics	5	0.9%

Garden tools and techniques are important to both commercial and home growers.**Table 6 – Common equipment used by gardeners**

	Respondents	Percent Using Equipment
Freezer	431	81.6%
Mower	352	66.7%
Greenhouse	323	61.2%
Sprayer or Spreader	170	32.2%
Rototiller	156	29.5%
Cold storage	132	25.0%
Tractor	81	15.3%
Wash table	67	12.7%
Hoop house	66	12.5%
Drip irrigation	62	11.7%
Chipper or Mulcher	59	11.2%
Mechanical Weeder	31	5.9%
Other (please specify)	26	4.9%

Various handheld tools and small mechanical spreaders and weeders were utilized by survey respondents. Very few respondents indicate use of robotics or specialized spatial harvesters, but multiple respondents indicated they used animals as part of regenerative practice as weeders (goats), mowers (sheep), and for insect pest control (chickens/ducks) or they engaged horses in traditional farmstead support roles.

Composting and waste utilization are key aspects of local food production systems

The majority of respondents indicated that they actively compost their organic wastes. Most operate personal domestic compost tumblers (55.3%) or piles (41.7%) but very few indicated access to composting services (1.5% to 2%). Over one-third of all respondents supplemented their compost production by harvesting seaweeds, fish waste, or other natural products, to increase soil volume and add essential nutrients.

Table 7 – Composting among gardeners

	Respondents	Percent Composting
Enclosed or tumbler compost bin	326	55.3%
Open bin or compost pile	246	41.7%
Collect seaweeds, fish waste, or other wild products for composting	202	34.2%
Vermicomposting	47	8.0%
Through a compost pickup program or service	12	2.0%
Large-scale compost operation	9	1.5%
I do not compost	90	15.3%

Water for irrigation comes mainly from municipal sources and groundwater

Community producers relied primarily on municipal water sources with 68.1% of respondents using municipal water in homesteading activities. Many producers supplemented municipal water with well water, while some relied on water from untreated sources such as rainwater collection (29.4% of respondents), local wells (29.2%) and other sources (~11.5% from ponds or streams).

Table 8 – Water sources accessed by gardeners

	Respondents	Percent Using Water Source
Municipal water line	403	68.1%
Rain water collection	174	29.4%
Local well	173	29.2%
Pond or stream	52	8.8%
Other (please specify)	16	2.7%

Sources of soil amendments included natural materials and commercial sources.

Our survey data revealed a robust use of soil amendments and fertilizers (Table 9). Natural sources were common, ranging from composts to seaweed, manures and leaves. Chemical fertilizers and herbicides were used by a relative minority of small-scale and residential producers.

Table 9 – Soil amendments frequently applied by gardeners

	Respondents	Percent Using Additive
Compost	370	68.0%
Seaweed and kelp	248	47.3%
Aged composted manure	211	41.0%
Leaves	206	40.2%
Commercial fertilizers	144	28.7%
Compost teas	110	24.4%
Peat	112	23.3%
Lime	114	22.5%
Fish waste or capelin	87	17.9%
Other (please specify)	17	17.5%
Woodchips	71	15.4%
Raw manure	61	13.0%
Herbicides	18	4.1%

Qualitative Findings

Our team asked four questions to better understand these challenges to growing food:

- (1) biggest challenges to home food production;
- (2) innovations needed for animal production,
- (3) innovations, tools and facilities needed to grow more food
- (4) types of training that people need or want.

Responses to these four questions are reported in this section.

What are the biggest challenges for your household when it comes to growing, raising or storing local food?

Most commonly identified were the need for cold storage facilities (root cellars, refrigerated storage); growing space/access to Crown land; access to soil amendments; time for work required for producing food; pest and weed control; weather/short growing season; water for irrigation; costs of production; labour; municipal regulations; knowledge and age/health. The major challenges identified are summarized in the table below:

Table 10 – Biggest Challenges for Home Food Production

Cold Storage	104
Space for food production	60
Time/timing	48
Pests/disease	44
Soil Amendments access/quality	30
Weather/Short Season	25
Costs, expenses	15
Land Access	15
Labour	13
Municipal regulations/support	13
Water/Irrigation	13
Weed Control	13
Age/Health	9
Knowledge	8
Greenhouse Cost and Design	5
Light/heat	5
Processing/preservation vegetables/fruit	5
Equipment/tools	4
Sharing/cooperation/marketing	4
Seeds/Plants	3
Shade	3
Wind	3
Clearing	2

What innovations, tools, equipment or facilities could help transform and expand small-scale production of animal products if they were to become more widely used in Newfoundland and Labrador?

The survey hoped to reveal supports that are needed to allow more people to be able to keep animals for food production. We found that these challenges included the need for regional abattoirs; access to equipment; a lack of supportive regulations from municipal and provincial governments, as well as the cost of equipment needed to support animal husbandry. We also identified a need for better use of waste materials, and a need for education in specific skills to deal with livestock.

Table 11 - Biggest Challenges for Animal Production

Abattoirs/butchers needed	20
Regulation/inspections	13
Equipment access/tool rental	10
Fishery access/designation/regulation	5
Workshops/training	5
Community pasture/community gardens	4
Storage/cooler/root cellar/freezer	4
Better use of waste/biproducts	3
Land/space	3
Marketing options/farmgate sales/local outlets	3
Poultry processing/labour	3
Working space/hanging/seasoning meat	3
Local businesses/directory of sources	2
Feed prices	2
Grants/funding	2
Labour	2
Pheasant farms/goat farms	2
Vegan/vegetarian/reduce animal consumption	2
Acceptance of farm smells	1
Advanced technology	1
Education/public attitudes	1
Fencing	1
Food preserving facility	1
Veterinarian/cost	1

What innovations, tools, equipment or facilities could help transform and expand small-scale growing or harvests if they were to become more widely used in Newfoundland and Labrador?

The innovations that respondents wanted to see included shared tools and facilities and transportation to and from growing areas. The next most common identified needs were for shared greenhouses, community grow spaces and food forests. There was also some interest in tool sharing programs.

In these responses, collective, shared and community innovations seemed to come up often. These responses resonate strongly with the ideas of shared community production of local food.

Table 12 – Innovations to Support Small-scale Growing and Harvest

Equipment/tool access	55
Greenhouse/passive solar structures	43
Community gardens/pastures/greenhouse/food forest	33
Training - workshops/mentorships/courses	30
Cold storage/root cellar	24
Composting/mulch sources	22
Land access	17
Soil/amendments (local source)	17
Raised beds/container gardening/protection	13
Hydroponics	12
Marketing/distribution/farmer's markets/exchanges	10
Financial support/grants/loans	9
Policies/regulations	8
Cooperative marketing/sharing	7
Research/information sharing	5
Row cover/plastic coverings	5
Tools/tool rentals/tool shed	5
Labour/cooperative work	4
Water/irrigation systems	4
Better use of waste materials/fish by-products	3
Plants, seeds, seedlings	3
Abattoir	2
Electrical/fuel costs subsidy	2
Fencing	2
Heating systems	2
Mushrooms	2
Vertical growing	2
Links with other producers	1
Mycorrhizae	1
Pest/disease control	1

What types of training could help you produce or gather more food?

The final question that we asked focused on educational opportunities and programs, including training, mentorships, workshops and online courses. In terms of specific areas of learning, soil health was highest ranked with foraging and wild plant identification the next most desired. People also showed interest in learning about food preparation and preservation, pest control and hydroponics.

Table 13 - Types of Training Identified by Food Producers

General seminar/workshops	65
Soil fertility/soil health/fertilization	24
Foraging/plant identification	18
Webinars/online courses/Facebook	16
Mentorships	12
Pest control	10
Mushroom growing/identification	9
Community gardens	7
Cooking/food preparation/preserving	7
Hunting	5
Organic growing	5
Traditional knowledge/farming	5
Crop selection	4
Root cellar/food storage	4
Weather	4
Composting	3
Hydroponics	3
Permaculture	3
Expert to consult	2
Fermenting	2
Greenhouse construction	2
Weeds/weed control	2
Cheese making	1
Extending the growing season	1
Fruit production	1
Garden visits/tours	1
Indoor growing	1
Irrigation	1
Local information	1
Plant nutrition	1
Raised beds/protection	1
Supplies	1
Television series	1

Summary of qualitative findings

WE IDENTIFIED ISSUES AND CHALLENGES LIMITING COMMUNITY FOOD PRODUCTION

The barriers that emerged most often from the comments in our survey were:

- lack of space for growing.
- lack of cold storage;
- lack of local abattoirs for meat production;
- lack of time.

These four challenges are related to various other issues that were identified in our survey, that are listed in the tables above.

THERE IS A NEED FOR EDUCATIONAL PROGRAMS

Respondents were clear that they need access to locally-focused educational opportunities, along with better support in policies related to food production at the community level, set by municipal, provincial and federal governments.

THERE IS STRONG INTEREST IN COMMUNITY-BASED SOLUTIONS

Frequent mention of tool sharing, shared production space and access to tools, soil amendments and agricultural and food processing knowledge indicates a high level of interest from survey respondents in a return to community-based production of local foods.

Recommendations

- We need ongoing, comprehensive, province-wide evaluation and support for both commercial and community-based food production.
- Provincial policies and programmes should be updated to validate and support home- and community-based food production, within municipal priorities.
- Provincial action is needed to eliminate, clarify or simplify municipal regulations and zoning requirements that are creating barriers to home and community food production.
- A patchwork of arbitrary local regulations should be replaced with standardized provincial guidelines for local food production based on standards of agricultural best practice.
- There is a need for more effective marketing and brand development focused on food quality and health to create appreciation and support for local food production.
- School-based and community education programs are needed to make people of all ages aware of the direct link between food quality and human health.
- There is a need for local abattoirs, cold storage options, composting centres, community pastures and approved facilities for food processing.
- Provincial networks to connect food producers and processors are needed.
- Sharing of resources, tools and knowledge can expand capacity for local food production and processing.
- A range of direct distribution systems is needed, including farmer's markets, online food hubs, community-supported agriculture and farm gate sales.
- Governments should eliminate taxes and penalties applied to non-commercial food distribution, and provide tax exemptions to encourage small volume barter and local food exchanges.
- Provincial programs should support local food production by making available public land including highway garden allotments, community pastures, and offering access to underutilized municipal spaces and Crown lands suitable for community gardens.
- Community-based training and mentorships in food production and processing skills are needed to retain traditional knowledge and support development of new technologies.

Appendix One: Survey Questions

Where's the Food?

A Community Survey

Privacy and Consent

This survey of food producers has been developed and distributed by Food Producers Forum, an independent provincial non-profit association.

Purpose of Study: We aim to engage as many Newfoundlanders and Labradorians as possible, including home and community gardeners, along with small-scale food producers, foragers, hunters and fishers to build a clear picture of the quantity and variety of local food we grow and gather in our province.

In order to decide whether you wish to participate in this research study, you should understand enough about its risks and benefits to be able to make an informed decision. Please take time to read this carefully and to understand the information given to you. Feel free to contact the team (foodproducersforum@gmail.com), if you have any questions about the study or would like more information before you participate. It is entirely up to you to decide whether to take part in this research. If you choose not to take part in this research or if you decide to withdraw from the research once it has started, there will be no negative consequences for you, now or in the future.

Who is leading this survey? Samantha Young and Dan Rubin, with the Food Producers Forum, in consultation with Dr. Nicholas Fairbridge, a memorial-affiliated researcher who is offering volunteer support and guidance to the study.

What we are asking you to do: We are asking you to complete an anonymous, online survey about your food production activities. We will ask how much food you produce and if you have a log it may be good to have on hand while completing this survey.

Length of Time: This survey will take up to 30 minutes if you are deeply involved in food production, or as little as 10 minutes for an interested person who is not directly producing or harvesting food.

Withdrawal from the Study: You are free to skip any question you do not wish to answer. You can close the browser at any time to end your participation. Because the survey is anonymous, once collected, your data cannot be removed. All responses are anonymous and not personally identifiable.

Possible Benefits: By participating you may learn more about local food production. You will be helping us rebuild the food system in our province. We are relying on your answers to understand where our food is coming from, and where to go from here.

Possible Risks: Your participation is anonymous and the information collected is not intended to be personally sensitive so your participation should pose little or no risk. If this survey creates any sense of anxiety or concern regarding food security, we can offer online resources and connect you with local programs and resources so you can act on your concerns:
<https://foodproducersforum.com/our-partners/>

Confidentiality: This survey will not request identifiable personal information. Confidentiality cannot be completely guaranteed if your household food productions activities are unique. We will make every effort to group data to minimize potential for a participant to be identified. Any public information related to this data will be reported in summary or as grouped information

Anonymity: Every reasonable effort will be made to ensure your anonymity. Information will be collected anonymously and we will not ask for your name or personal information, except for your general location and food production activities in which you are involved. Some homesteading activity with unique animals may limit anonymity if reporting their activities from small communities. Data will be reported only in aggregate and if smaller communities have limited participants where unique activities are indicated, data will be amalgamated and reported only by regions or clusters of communities.

Use, Access, Ownership, and Storage of Data: Food Producers Forum will make the summary of this study public to help expand and diversify local, sustainable food production. Only the three identified research team leaders will have access to the raw data and that data will not be disclosed to any other group or individual. This information will not be used for political purposes or financial gain. Information will be electronically stored and protected from unauthorized access on password-protected files on the Memorial University servers, with restricted access. Data will be kept for a minimum of five years, as required by Memorial University's policy on Integrity in Scholarly Research.

Third-Party Data Collection and/or Storage: Data collected in this project will be hosted and/or stored electronically by Qualtrics, subject to their privacy policy, and to relevant laws of the country in which their servers are located. Therefore, anonymity and confidentiality of data may not be guaranteed in the rare instance, for example, that government agencies obtain a court order compelling the provider to grant access to specific data stored on their servers. If you have questions or concerns about how your data will be collected or stored, please contact the researcher and/or visit the Qualtrics website for more information. The privacy and security policy of the third-party host for data collection and storage can be found at: (<https://www.qualtrics.com/privacy-statement/>)

Reporting of Results: Results of this survey will be made public by Food Producers Forum (<https://foodproducersforum.com>) through broadcast media, in print and online. This may also generate scholarly reports or articles to be published or presented at academic conferences, journals, or in public reports. Only summary information will be reported and no direct quotes or detailed responses will be shared.

Questions: You are welcome to ask questions before, during or after your participation in this research. Please contact: foodproducersforum@gmail.com

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research, such as the way you have been treated or your rights as a participant, you may contact the Chairperson of the ICEHR at icehr@mun.ca or by telephone at 709-864-2861.

Consent: By completing this survey, you agree that:

- You have read the information about the research.
- You have been advised that you may ask questions about this study and receive answers prior to continuing.
- You are satisfied that any questions you had have been addressed.
- You understand what the study is about and what you will be doing.
- You understand that you are free to withdraw participation from the study by closing your browser window or navigating away from this page, without having to give a reason and that doing so will not affect you now or in the future.
- You understand that this data is being collected anonymously and therefore your data cannot be removed once you submit this survey.

By participating in this online survey, you do not give up your legal rights and do not release the researchers from their professional responsibilities. To continue through the survey, please use the arrows below to begin. Consent is implied through participation in the survey.

Eligibility

Do you live in Newfoundland and Labrador?

Yes, primary residence

Yes, secondary or seasonal residence

No, not a resident

If Excluded:

Thank you for showing interest in our survey. At this time we are only collecting information from full-time residents of Newfoundland and Labrador.

SURVEY QUESTIONS

Community Demographics

We welcome you to consider and answer all questions but you can skip any questions that you do not wish to answer.

Do you live in a:

- Municipality
- Non-incorporated Community Rural Area
- Other

What community do you live in or what is the closest community?

Do you currently grow fruits, vegetables or mushrooms? Please select all that apply:

- No, and I do not plan to
- No, but I hope to soon
- I grow food for household consumption
- I grow food that I sell or trade
- I grow food that I donate to friends, family, a food bank or families in need

Do you currently collect wild products such as berries, mushrooms, tree sap, seaweed or sea salt? Please select all that apply:

- No, and I do not plan to
- No, but I hope to soon
- I collect wild products for household consumption
- I collect wild products that I sell or trade
- I collect wild products that I donate to friends, family, a food bank or families in need

Do you currently raise livestock for eggs, meat, milk, fur, wool or other products? Please select all that apply:

- No, and I do not plan to
- No, but I hope to soon
- I keep livestock as companions/rescue animals
- I keep livestock for household production/consumption
- I keep livestock for products that I sell or trade
- I keep livestock for products that I donate to friends, family, a food bank or families in need

Do you currently hunt or trap as a source of food or other products?

- No, and I do not plan to
- No, but I hope to soon
- I hunt or trap for household consumption
- I hunt or trap for products that I sell or trade
- I hunt or trap for products that I donate to friends, family, a food bank or families in need

Do you currently fish for food or gather seaweed, shellfish, or other marine/aquatic products for your own use? (Non-commercial fisheries)

No, and I do not plan to

No, but I hope to soon

I fish or gather for household consumption

I fish or gather for products that I also sell or trade

I fish or gather for products that I donate to friends, family, a food bank or families in need

We will next ask a series of questions on how much food (weight) you produce.

Are you more comfortable working in Pounds or Kilograms

Pounds

Kilograms

Fruits, Vegetables and Mushrooms Gardening and Other Plant Harvests

We want to know the types of fruits, vegetables and mushrooms you grow.

Please estimate the amount of each crop you grew or harvested in 2022

(Fresh, in Pounds/Kilograms):

Root vegetables

Greens

Peas, beans

Onions, garlic, shallots

Cabbage, kale, broccoli, cauliflower

Cucumber, squash, melons

Tomatoes, peppers

Carrots, parsnips

Corn, wheat, other grains

Berries, grapes

Other fruit

Nuts

Herbs

Mushrooms

Flowers

Other

Total

We want to know what wild products you gathered.

Please estimate the amount of each that you harvested in 2022 in pounds/kilograms:

Berries

Other fruit

Greens

Nuts

Herbs

Mushrooms

Tree sap (in gallons)

Flowers

Sea salt

Seaweeds

Other

Total

Food products you grow or gather - what percentage is:

Used by your own household
 Shared or swapped with family, friends & neighbours
 Donated to a food bank or those in need
 Sold to others Lost, discarded, or waste composted
 Total

Vegetable Production - Growing Crops and Production Methods**Which of the following methods describes how you grow food? Please select all that apply:**

Open garden plot or row crops Raised bed gardening
 No dig, no till
 Permaculture
 Regenerative agriculture Greenhouse or hoop house
 Row cover or cold frame Hydroponics Aquaponics Microgreens
 Irrigation
 Other (please specify)

Where do you grow food? Please select all that apply:

In my home, yard or accessory buildings - Residential Zone
 On property I own or lease - Rural, Agricultural, Other Zone
 In a community garden or allotment
 Somewhere else: (please specify)

What resources do you use in growing food? Please select all that apply:

Seaweed and kelp
 Raw manure
 Aged composted manure Fish waste or capelin
 Peat
 Compost
 Compost teas
 Leaves
 Wood chips
 Commercial fertilizers Herbicides
 Pesticides
 Lime
 Other (please specify)

How often do you use each of these resources?

Never
 Occasionally
 Frequently

How often do you share or rent garden or farm equipment from others?

Never
 Rarely
 Once per season or year
 Regularly throughout a season or year

How often do you share or rent garden or farm equipment to others?

- Never
- Never but I could if someone asked
- Rarely
- Once per season / year
- Regularly throughout a season / year

Do you own / use: (Please select all that apply.)

- Tractor
- Mower
- Rototiller
- Mechanical Weeder Chipper or Mulcher
- Sprayer or Spreader
- Wash table
- Cold storage
- Freezer
- Greenhouse
- Hoop house
- Drip irrigation
- Other

Would you consider allowing others to grow on your land, if you had capacity and space?

- I do not have the capacity or space
- I would not be interested
- I might allow others to do so

What innovations, tools, equipment or facilities could help transform and expand small-scale growing or harvests if they were to become more widely used in Newfoundland and Labrador?

Livestock, Hunting and Fishing

Please indicate the weight of meat after processing, harvested from animals you raised in 2022:

- Chickens
- Ducks
- Turkeys
- Geese
- Quail
- Goats
- Sheep
- Pigs
- Cattle
- Horses
- Emu, Ostrich
- Llama, Alpaca
- Fur-bearing Animals
- Other
- Total

Please indicate the weight of meat you hunted and harvested, after processing, in 2022:

Moose
 Black Bear
 Woodland Caribou
 Rabbit, Hare
 Ducks, Turrs, other Waterfowl
 Grouse, other Land Fowl
 Seal
 Small fur-bearing animals
 Other (please specify)
 Total

Please indicate the weight of fish or marine/aquatic products, after processing, that you harvested in 2022:

Cod
 Salmon
 Trout
 Capelin
 Mackerel
 Char
 Squid
 Lobster
 Crab
 Shrimp
 Shellfish
 Sea Cucumber, sea urchin
 Other (please specify)
 Total

Please identify the amount of other animal products that you harvested in 2022:

Eggs (dozen)
 Milk (gallons)
 Honey (pounds)
 Wool / Hides (pounds)
 Other (please specify product and unit of measure)
 Total

From the animal products you harvest, what percentage (%) is:

Used by your own household
 Shared or swapped with family, friends & neighbours
 Donated to a food bank or those in need
 Sold to others
 Lost, discarded, or waste composted
 Total

Do you butcher your own meat or rely on a local abattoir? Please select all that may apply:

I butcher and process myself
 I use a certified butcher or abattoir
 I do not butcher my animals
 Other (please specify)

Is finding a butcher for meat a challenge or issue for you?

No / Yes

What innovations, tools, equipment or facilities could help transform and expand small-scale production of animal products if they were to become more widely used in Newfoundland and Labrador?

Commercial Food Distribution

How do you sell food? Please select all that may apply:

Home or farm gate sales
U-Pick
Farmer's Market
Farm Stand
Community supported agriculture (CSA) - annual subscription
Online sales Restaurant sales
Retail distribution Other (please specify)

What are the main challenges for you as a commercial producer in selling your food? Please select all that may apply:

Low prices
Finding customers
Marketing
Cost of delivery
Cost of production
Other

Are you aware of the NL GROWN food map for local food distribution?

No / Yes

Did you participate in the 2021 Census of Agriculture through Statistics Canada?

No / Yes

Sustainable Food Practices

Do you currently have access to a root cellar?

No
I have a root cellar but do not use it
I have access to a root cellar and use it for winter storage

Do you save and replant your own seeds/spuds?

No
No, but I hope to soon
Partially, only certain crops
Yes, whenever possible

Do you bottle, pickle, ferment or otherwise preserve food?**Please select all that apply:**

- I do not preserve food
- I bottle vegetables, fruits, sauces
- I bottle meats or fish
- I pickle various goods
- I brew beers, wines, vinegar, kombucha I create cheeses or yogurt
- I dry or desiccate food
- I freeze food
- Other (please specify):

Please indicate if and how you compost. Please select all that apply:

- I do not compost
- Enclosed or tumbler compost bin
- Open bin or compost pile
- Large-scale compost operation
- Vermicomposting
- Collect seaweeds, fish waste, or other wild products for composting
- Through a compost pickup program or service

Where does your water come from? Please select all that apply:

- Municipal water line
- Rainwater collection
- Local well
- Pond or stream
- Other (please specify)

What are the biggest challenges for your household when it comes to growing, raising or storing local food?**Training and Skills****What are your main sources of training and skills when it comes to food production?
Please select all that apply:**

- Trial and error
- Books
- Magazines or almanacs
- Local community groups
- Family members
- Other food producers, neighbours, mentors
- Workshops or training programs
- Websites (Wikipedia, YouTube, Podcasts, Guides, etc.)
- Online training (Facebook groups, forums, etc.)
- Other (please specify)

Do you have formal training in agriculture or food production?

- No
- Yes (please indicate the type of program)

What types of training could help you produce or gather more food?

For More Information

Thank you for completing this survey!

Your information will help us build a more complete picture of how food is being grown and gathered in our province.

Food Producers Forum is a provincial non-profit organization dedicated to expanding food production to provide more healthy, local food. It is one of nine current projects focused on food production, food distribution and food justice.

To find out more about our activities, please visit our website: **www.foodproducersforum.com**

Our email address is **foodproducersforum@gmail.com**