

# Vegetable Vancouver 2010: An Urban Farming Census

a place of mind



**FACULTY OF LAND AND FOOD SYSTEMS**  
Grounded in Science | Global in Scope

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## Introducing Vancouver's Urban Farms

	Land Tenure	Zoning and Land Type	Land (sq ft)	Model	People	Owner/Employee Weekly Hours	Volunteer Weekly Hours	Weeks of FT Operation
Farm One	Government Leased	RA	34138	Markets		125	60	28
Farm Two	Government Leased	RT - Unused Lawn	21780	CSA		312	50	32
Farm Three	Residential	RS - Yardspace	14520	CSA		160	0	28
Farm Four	Privately Donated	M1 - Parking Lot	14005	Markets, Restaurants		142	0	28
Farm Five	Residential, Rooftops	RS - Yardspace	9100	CSA, Markets, Construction		48	0	28
Farm Six	Residential	RS - Yardspace	3330	CSA, Markets		80	115	36
Farm Seven	Privately Donated	CD1 - Brown-field	2151	Markets, Restaurants, Retail		100	0	28
Farm Eight	Owned	RA	1800	Camps, CSA, Markets		130	95	24

= One Owner/Manager

= One Part Time Employee

= One Consistent Volunteer/Intern

Total Land Farmed = 2.31 acres

CSA = Community Sponsored Agriculture

RA: Agricultural; RT: Two Family Dwelling Districts; RS: One Family Dwelling District; M1: Industrial District; Comprehensive Development District

## An Urban Farming Census

Urban farms are entities that grow food for sale within urban areas and for urban residents using field based production methods. In 2010, 12 urban farms operated within the City of Vancouver and Richmond. In 2011, three more farms cultivated and harvested food for their communities.

Urban farmers are developing new organizational models to capture a growing market for local food and food education. All farms are within the first five years of operation. As such, their economic positions reflect the first steps of building robust organizations. Farmers are learning how to grow, market, and advocate for urban farming. This worksheet is a quantitative snapshot of eight urban farms during the 2010 season.

## Research Questions and Methods

This work was conducted under a Community Based Action Research paradigm: working with urban farmers to develop research questions to help them understand their industry and environment. Discussing financial matters is never trivial, and requires trust between participants. I worked alongside farmers in the field, in the kitchen, and in their communities to allow them to know me, and to get to know them. Through these interactions, a set of research questions was developed:

- Do urban farms produce enough revenue to provide farmers a living wage?
- What business models are most frequently used?
- Which urban farming models are the most economically successful?
- How do urban farmers understand their social and environmental contributions?

Urban farmers were asked to participate in semi-structured interviews focusing on generating quantitative data on the revenues and costs for urban farmers, and qualitative information on the environmental and social benefits and costs of urban farming. Not all urban farmers were interviewed during the busy summer growing season: three interviews are forthcoming, and one farmer was unreachable. Interviews lasted 2 - 3 hours, and took place in a space comfortable for the farmer (n=8).

## Revenue Models

**Markets:** Produce sold at Vancouver Farmers' or Pocket Markets.

**CSA:** Customers pay up front fee for weekly boxes of produce through the season.

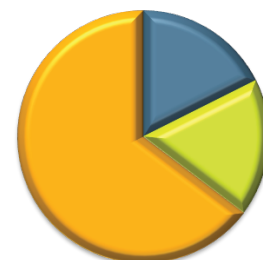
**Restaurants:** Produce sold to local restaurants.

**Construction:** Gardens are built for clients.

**Retail:** Produce sold to retail locations.

**Camps:** Farms host children's programming during the summer.

## Owner / Manager Farming Experience



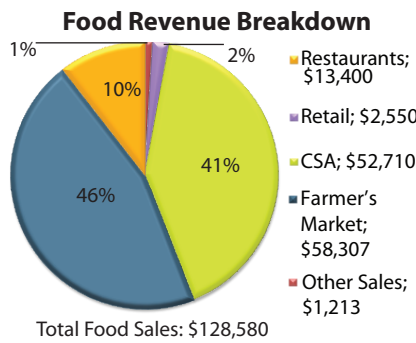
■ Grew-Up On A Farm; n=3

■ 5-10 Years Farming Experience; n=3

■ No - Some Gardening/Farming Experience; n=11

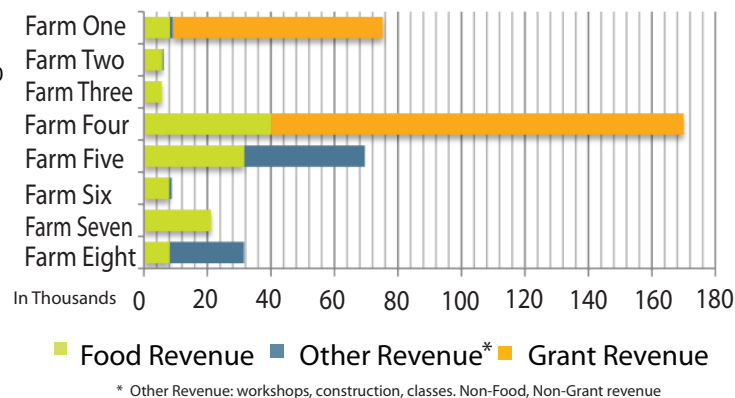
## Revenue and Costs

Vancouver's urban farms are in the first five years of operation. Owners are beginning to understand their input costs, potential markets, and growth potential. Below is the data on Vancouver Urban Farm revenue and costs. "Takeaway" boxes point to specific data and compares urban farms to traditional farms.



The restaurant market is largely untapped by urban farmers.

## Urban Farming Revenue



## Revenue Takeaway

- \$128,580 of food was produced on 2.31 acres at an average of \$55,552/acre.
- BC vegetable farms generate \$17,565/acre for non-grain crops.<sup>1</sup>
- Diverse revenue streams support food sales.

## Costs Takeaway

- Generally low costs.
- High labour costs tied to organizational missions to maximize employment.
- Unlike rural farmers, land rent is minimal due to donation.
- The average farm in British Columbia incurs \$.88 in costs for every dollar in revenue.<sup>2</sup>
- Urban farmers incur \$.51 in costs for every dollar in revenue.

## Selected Urban Farming Operating Costs

	Fuel/ Vehicle Maintenance	Overhead	Paid Labor	Seeds & Plants	Soil Amendments	Tools	Total
<b>Farm One</b>	\$ -	\$ 5,089	\$ 26,926	\$ -	\$ -	\$ 435	\$ 35,528
<b>Farm Two</b>	\$ 40	\$ 26	\$ -	\$ 232	\$ 99	\$ -	\$ 456
<b>Farm Three</b>	\$ -	\$ -	\$ -	\$ 400	\$ 1,000	\$ 300	\$ 1,700
<b>Farm Four</b>	\$ 1,000	\$ -	\$ 150,000	\$ 1,000	\$ 1,000	\$ -	\$ 153,042
<b>Farm Five</b>	\$ -	\$ 13,920	\$ 10,000	\$ 400	\$ 1,000	\$ 300	\$ 25,620
<b>Farm Six</b>	\$ 2,186	\$ 2,874	\$ -	\$ 1,408	\$ -	\$ 152	\$ 6,620
<b>Farm Seven</b>	\$ -	\$ -	\$ 3,411	\$ 2,570	\$ 910	\$ -	\$ 6,891
<b>Farm Eight</b>	\$ -	\$ -	\$ 18,000	\$ -	\$ -	\$ -	\$ 18,000

	Retained Earnings <sup>†</sup>	Weekly Owner Hours	Total Season Hours	Hourly Return to Owners
<b>Farm One</b>	Non-Profit Status			
<b>Farm Two</b>	\$ 5,534	312	9984	\$ 0.55
<b>Farm Three</b>	\$ 3,637	160	4480	\$ 0.81
<b>Farm Four</b>	Non-Profit			
<b>Farm Five</b>	\$ 43,980	48	1344	\$ 32.72
<b>Farm Six</b>	\$ 1,517	80	2880	\$ 0.53
<b>Farm Seven</b>	\$ 14,262	50	1400	\$ 10.19
<b>Farm Eight</b>	\$ 13,540	80	1920	\$ 7.05

## Retained Earnings Takeaway

- Urban farmers are still learning how to build their businesses.
- Farm Five derives much of her business through non-food revenue, while Farm Seven has a single high profit crop.
- Average wage for urban farm employees fluctuates between \$12 - \$20 an hour.
- Average net farm income in BC is \$16,839 or \$8.77 /hr. compared with an average of \$13,745 or \$8.64/hr. for urban farm owners<sup>2</sup>.

<sup>†</sup> Retained Earnings = Total Revenue - Operating Costs - Capital Expenses

## Conclusions

Even as urban farmers build new markets and systems of production, many find work in other endeavors during the year to support their farming. Revenue derived directly from the land is low, though this is comparable to traditional farms. It is clear that there is room for tremendous growth. BC boasts roughly \$60M in sales in farmer's markets.<sup>3</sup> Vancouverites in particular demand local, fresh, produce. Urban farmers have ready consumers, but simple distribution markets must be established. Comparatively low restaurant sales could be due to a possible lack of farmer time or difficulty building relationships with chefs. Profitability will increase dramatically as farmers become more adept at their tasks; many farmers are inefficient with their time. For many, farming is a labour of love. The environmental connection and lifestyle drew many farmers into the industry. Hourly wages may not be an appropriate method to understand the worth of an urban farming job. However, financial sustainability will require urban farmers to build robust markets and develop labour saving strategies.

This winter, I will collect data on the 2011 season, I look forward to this continued work alongside the urban farmers, city officials, and academics to help make that happen.

**Special thanks** to Vancouver's urban farmers for both the community they build and the food they grow; to my faculty advisors, Dr. Andrew Riseman and Prof. Daniel Roher, for their guidance and support in developing and carrying out this work; to the Urban Farmer's Network for their role connecting, sharing, and discussing the future of urban farming.

Marc sits on the executive board for one of the urban farms and is a regular volunteer with two other organizations. This research was funded by the Foundation for International Exchange between Canada and the United States of America (Fulbright).

### Citations

1. Agriculture and Agri-Food Canada. "Canadian Horticulture Sector - Vegetable Sector"
2. Farm Financial Survey 2009. Agriculture and Agri-Food Canada. Catalogue # 21F0008XWE.
3. Retail Sales of Certified Organic Food Products in Canada, in 2006. Organic Agriculture Centre of Canada. 2007. [http://oacc.info/Docs/RetailSalesOrganic\\_Canada2006.pdf](http://oacc.info/Docs/RetailSalesOrganic_Canada2006.pdf)