

**Hope Farm's Vegetable Box Delivery:
A pilot project to assess the feasibility of
direct marketing to Moncton residents**

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Introduction

Reiner Zimmerman, owner of Hope Farm, has been farming organically in St. Norbert, New Brunswick since 1990. He and his family moved here from Germany to begin his lifelong dream of being self-sufficient and working his own land.

The farm is in transition with animals and field crops having taken the lead over vegetables for the past few years. For the first time in several years, market gardens, consisting of a brook garden of about 2 acres and a forest garden of about 4 acres, were prepared for production with a mix of vegetable and green manure crops. These fields received applications of composted manure approximately 5 years ago, and were sown with winter rye last autumn. The green manure and rye act as a cover crop, helping to fix nitrogen and provide nutrients and organic matter to the soil (NSOGA 1998).

The soil in the market gardens at Hope Farm is sandy clay loam and the structure appears to be granular, as confirmed by a ribbon test I conducted in July 2006. The soil should drain moderately well, but will hold rain in the case of heavy rainfalls (FON 2006). Given these conditions, compost and green manure crops should be applied regularly to provide adequate nutrient, air, and moisture levels to the soil (COG 2004).

Reiner has managed a house garden of about a quarter acre for several years, and has recently built a small greenhouse. At present, he cares for livestock, including a dozen calves, half a dozen goats, two-dozen chickens, and a horse. His space for livestock is comprised of a barn, 3 newly fenced pastures each of about 10 acres, and 3 hayfields of about 20 acres each. Reiner also logs selectively an 80-acre forest for firewood and lumber.

There are a number of marketing approaches available to the organic farmer (ATTRA 2006). Reiner has toyed with the idea of selling direct to stores and restaurants in Moncton for the past few years. In the spring of 2006, he entered into discussions with Carrie Surette, a nutritionist and owner of Sequoia Natural Foods. Located in Moncton, NB, Sequoia offers locally produced organic meat and dried goods. Carrie was looking for an opportunity to provide fresh organic produce to her existing clientele.

The owners of Sequoia Natural Foods made a few early inquiries with a number of clients, who suggested they would indeed be interested in purchasing weekly produce boxes. Reiner and I agreed to informally partner with Sequoia to test-run the vegetable box delivery service. We offered to deliver vegetables and Sequoia agreed to coordinate orders and provide a pick-up point.

The present report describes the development of Hope Farm's Vegetable Box Delivery Pilot Program.

Purpose

The goal of the research project is to assess the feasibility of direct marketing to Moncton residents through a weekly vegetable box delivery service pilot project.

I believe the project is a simplified version of a Community Supported Agriculture (CSA) program. Customers did receive boxes on a weekly basis, but they were not asked to purchase “shares” of the crop for the entire summer.

Much has been written on the philosophy and practices regarding CSAs (BDA 2001, Heifer 2006, LifeCycles 2006, UMASS 2006). The investigation of a formal CSA in Moncton, including membership and budget requirements, remains beyond the scope of the research project.

Materials and Methods

I believe the project follows a participatory research approach (Chambers 1994, TGIA 2002), where the scope of the research was determined in cooperation with Hope Farm and Sequoia Foods. I will present here the various organizational components of the project as they relate to the four “Ps” of Marketing – Promotion, Place, Price and Product (CFBMC 1997).

Promotion

During our first meeting with Sequoia, the owner predicted that up to 50 people would be interested in the weekly box service. Indeed, simply speaking with her customers provided a list of interested candidates. Beyond discussing the project with her clients, Carrie posted a simple sign at the entrance of the store announcing the availability of local, organically grown produce. Reiner and I had designed a formal advertising campaign, but decided to follow Sequoia’s lead by asking them to announce the program to their customers.

Place

Sequoia had already been identified as the drop-off location; now we had to make a decision on how to bring the produce to market. We agreed to look into purchasing re-usable boxes. We researched several companies via Internet and telephone to identify potential box suppliers. We considered wooden boxes, handcrafted by Wooden-Boxes.com in Calgary, or produced locally by St. Thomas Hardwood Mill. We also looked into plastic crates, such as blueberry boxes from Ropak Packaging located in Springhill, Nova Scotia. I have included a list of potential suppliers in **Appendix A**.

These options for boxes proved to be too expensive for a trial project. Wooden boxes cost approximately \$30 per unit. Ordering plastic crates required too large a minimum order – 1 pallet consisting of 130 boxes at about \$9 per unit. We decided then to use cardboard boxes, lined with waxed paper to protect them from humidity. We received the flattened recycled boxes at no cost from Maurice Girouard, a neighbouring certified organic farmer.

Product

Reiner had already decided in early spring what varieties of vegetables he wanted to grow. He based his decision on crops he had harvested in the garden the previous year, and on those vegetables with which he was most familiar. Because of the transitional state of the farm and lack of access to a heated greenhouse, we knew that options for an early and extended crop were limited. Therefore, we had decided from the beginning that customers would not have the option to choose varieties so that everyone would receive the same vegetables in a given week.

We decided to deliver boxes to Sequoia on Saturday mornings to coincide with market day in Moncton. Sequoia coordinated the orders, asking customers to pre-pay for the boxes one week before delivery. We agreed to deliver the appropriate number of boxes on Saturday at 10 am and customers were asked to pick them up before noon.

Price

Because of the exploratory nature of the project, we decided to keep the price of the boxes low. I conducted research from CSA programs in Canada, which revealed prices for weekly organic food boxes ranging from \$10 to \$35. Not knowing what to expect in terms of quantity, variety and quality, we were not ready to charge market value. We agreed then on a weekly price of \$10 per box.

As the weeks went by, I surveyed flyers from local grocery stores for prices of organic and conventional produce to get a sense of how the box compared with the market value of a collection of similar produce.

Customer Survey

Evaluating the effectiveness of a pilot project is an important component in the successful development and delivery of a community-based program (CBSM 2006). Through discussion with Sequoia, we decided to conduct a survey at the end of the project to gauge the satisfaction of customers with regard to the vegetable boxes. The qualitative survey is not statistically meaningful, but is meant to help provide an assessment of the effectiveness of the program. A copy of the survey is included in **Appendix B**. Questions were based on various components of the program, including quality, variety, price and packaging.

Results and Discussion

We began deliveries on July 08 and continued for a 6 week period ending August 12, 2006. Over the summer, a total of 81 boxes were delivered to 45 individuals, with an average of 13 boxes per week. **Table 1** provides a summary of the summer's activities, including the number of boxes delivered and produce offered for each week.

Table 1 – Summary of Hope Farm weekly vegetable box deliveries, including number of boxes and vegetable varieties for each week.

Date <i># of boxes</i>	July 08 <i>10</i>	July 15 <i>16</i>	July 22 <i>14</i>	July 29 <i>15</i>	Aug 05 <i>15</i>	Aug 12 <i>11</i>
Beets	1 bundle greens	1 bundle greens		2 roots		3 roots
Carrots	1 bundle	1 bundle				1 bundle
Cucumbers					1 fruit	
Kohlrabi						1 head
Lettuce – Summertime	1 head					
Lettuce – Tango	1 head	1 head				
Lettuce - Brunia		1 head	1 head	1 head	1 head	1 head
Lettuce – Remington			1 head	1 head	1 head	1 head
Lettuce – Lolla Rossa			1 head	1 head		
Peas		1 bag	1 bag			
Radishes - Red		1 bundle	1 bundle		1 bundle	
Radishes – White	1 root	1 root	1 root	1 root		

Lessons Learned

At the start of the program, we asked customers to pay for the following week's order when picking up their box. In the end, only about half of the orders were pre-ordered, mainly because customers were not necessarily ready to make a purchase every week. Therefore, Sequoia sent weekly reminders to all potential customers, asking them to come by the store to pay for their box before Saturday and outlining the varieties expected for that week in an email message.

The transitional state of the farm motivated us to seed more than would be expected for harvest. With the heavy rains in mid-June and again in early July, many plants remained water-logged or did not germinate at all in the clay soil. Lettuce transplants, for example, took well, but simply did not grow to market quality. The summer squash and cucumber crops were weakened by an infestation of cucumber beetles (ACORN 2006), and were doubly damaged because of the poor soil conditions in the market gardens.

Even the recent amendments of winter rye and additional applications of crab meal during seeding and transplanting were unsuccessful at providing adequate growing conditions. In fact, over 80% of the produce listed in Table 1 were not harvested from the market gardens but rather from the house garden, which had received regular inputs of compost over the past few years.

To make up some of the lost production, we added beans and salad mix in weeks 5 and 6 from Gilles Martin of Richibucto Village. We decided to donate heads of lettuce to a food bank in Bouctouche and a woman's shelter in Moncton.

Customer Survey

Surveys were sent by email to all 45 customers who participated at least once during the summer. Carrie from Sequoia agreed to conduct follow-up phone calls to encourage participants to respond. The survey began after the final box was delivered and ran from August 27 to September 26, 2006.

A total of six people responded to the customer survey, representing only 13% of participants. Ideally, we could have included a hard copy of the questionnaire with the last delivery. Unfortunately, we did not know for certain when the last delivery was to occur, and we were too busy harvesting to put together the text for the survey.

Survey results were summarized manually, and are presented here along the themes of the survey, namely quality, variety, price and packaging.

Quality

In general, people were very satisfied with the quality of the produce. Here are some of the comments:

Amazing, I have enjoyed them much.

Fantastic, fresh and crisp.

Great quality, tasted great.

I was never disappointed in quality.

Very good, stayed fresh long.

Quantity and Varieties

Most respondents (80 %) agreed that a wider variety would have been nice. All agreed that there was too much lettuce, although one person thought that the variety of lettuce was a nice touch. Another explained that there were too many white radishes. Varieties that were most appreciated include:

radishes, cucumbers, beet greens, carrots and beans.

Suggestions made by respondents for future varieties include:

kale, Swiss chard, spinach, collards, corn, sweet potatoes, tomatoes, potatoes, yellow and green beans, winter squash, onions and berries in season.

Several of these varieties had been seeded, but as explained earlier did not grow to market quality. Succession planting to provide more varieties and extend the season (COG 2004) will make important contributions to a successful program.

Price

Everyone agreed that the price was ok, with one person stating that the price should have been \$20 from the beginning. All are in favour of paying more in the future if more quantities and varieties are provided. As producers and retailers, Hope Farm and Sequoia Foods feel that for the first couple of weeks, the \$10 price was probably appropriate. But as the season progressed and better quality produce was offered, the \$10 mark was probably too low. The review of flyers seems to support this point of view.

Packaging and drop-off location

All respondents agreed that Sequoia Natural Food Store was an ideal place to pick-up their box. One person suggested the Dieppe Farmer's Market as a possible second location. The cardboard box was adequate for everyone. Two people commented that they liked the re-usable aspect of the box.

Conclusion

There appears to be a consistent market for the delivery of organics in Moncton. Over the course of the summer, a total of 45 people participated in Hope Farm's Vegetable Box Delivery program, with an average of 13 people per week ordering boxes. A survey conducted with participants reveal that people were very satisfied with the quality of the service and are willing to pay more for a wider variety of produce.

With a focused marketing campaign and the addition of one or two more drop-off points, the total number of customers could easily increase. However, I recommend not increasing the number of boxes until field conditions improve and a succession planting system is in place. More varieties and a longer season will be important to keep customers satisfied.

Orders were taken directly from the storeowners. Sequoia agreed that taking orders was not too much work. For fifteen boxes, it is probably realistic to ask them to offer that service again. But for the program to grow, it would be important to have someone dedicated to coordinate weekly orders.

There seems to be room for the program to adopt more of a CSA model, by offering seasonal shares at a discounted rate to those who are looking for fresh produce throughout the summer. If all customers were interested in a box every week, it would be possible to standardize the number of boxes, thus largely simplifying the taking of orders..

In terms of price, I would recommend charging \$15 to \$20 per week, especially if two or three additional varieties are produced. It is also highly recommended to assess the expenses incurred from inputs over the summer, to ensure that costs are recovered at this price range.

Overall, the project was successful in identifying a potential core of committed customers. The economic benefits remain to be seen, as the low price of the boxes and small number of customers did not provide an appropriate scenario to assess the economic viability of direct marketing. That said, a weekly box service, whether organized directly through Sequoia or broadened to adopt an exhaustive CSA model, is a great way to ensure a stable source of income for Hope Farm and will help Reiner realize his dream of working his land.

Acknowledgements

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TGIA 2002. *On-Farm Research Guide*. The Garden Institute of Alberta, Edmonton, AB.

UMASS 2006. *Community Supported Agriculture*. University of Massachusetts Extension Program. Amherst, MA

Appendix A - List of Suppliers

Sequoia Natural Food Store

Carrie Surette
132 Weldon Street
Moncton, NB E1C 5W2
Tel: 506-386-8518

Wooden-Boxes.com

Bill Sveinson
#1, 977 - 41st Avenue NE
Calgary, AB T2E 6Y8
Tel: (866) 430-3951
Email: billsveinson@wooden-boxes.com

St. Thomas Hardwood Mill

Robert
Tel: 506-743-6561

Ropak Corporation

Springhill, NS
Tel: 902-597-3787
Web: www.ropakcorp.com

Ferme Maurice Girouard

P.O. Box 4013 Place Champlain
Dieppe, NB E1A 6E7
Tel: 506-856-0172
Email: mgirouar@nbnet.nb.ca

Les jardins de la Prairie - Organic Farm

Gilles Martin
737 La Prairie
Richibouctou Village, NB E4W 1G5
Tel: 506-523-1316
Email: martingilles@hotmail.com

Appendix B - Vegetable Box Delivery Survey

Hope Farm, who has provided you with weekly vegetables boxes over the summer, is participating in the New Brunswick Organic Farming Apprenticeship Program, coordinated by the Falls Brook Centre. For more information on the program, please visit their website at www.fallsbrookcentre.ca.

Part of the apprenticeship program is an on-farm research project. At Hope Farm, the project involved assessing the feasibility of running a weekly vegetable box program. This year was a trial run to get a sense of the demand for organic vegetables, and to prepare the farm for production of weekly boxes.

Now that the delivery of boxes is complete for this year, Hope Farm would like to know what you thought of the service. Kindly answer the questions below and drop off the completed questionnaire at Sequoia before August 31.

If you would prefer to answer the questions over the phone or in person, then please call Serge LaRoche at 382-3133 or send a message to monsieurserge@hotmail.com.

Thanks again for taking part in this summer's vegetable box delivery program. We look forward to offering fresh organic produce again next year!

1. Overall, have you enjoyed the quality of the vegetables offered in the boxes? Please explain.
2. Did you find the variety of produce to your liking?
3. Which vegetable did you mostly eat first?
4. What sat in the bottom of your fridge crisper?
5. What other vegetable(s) would you like to have received?
6. Was the price OK for the quantity provided? Would you be willing to pay more for a wider variety or larger quantity of produce?
7. Did you mind picking the boxes up at Sequoia on Saturday morning? Is there a better time or location for you?
8. Were the reusable cardboard boxes sufficient for strength and convenience of handling?
9. What is your approximate annual household income (optional question, for statistical purposes only)?

Thanks!