

C Farm

A Carrot Farm in the Intervale

Burlington, Vermont



Template Business Plan

Jane Doe

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Executive Summary

The following business plan will serve as an operating guide for C Farm. It contains a description of the farm, its operating goals, management and marketing strategies and a risk management assessment. It also contains financial data for the 2007 growing year.

C Farm is an sole proprietorship owned and operated by Jan Doe that will supply local markets and restaurants with certified organic carrots. The marketing strategy will also incorporate baby carrots and carrot juice as substantial components of the operation in year 2. This farm will be successful because of the demonstrated demand for locally grown carrots, as well as value-added carrot products.

The goals for C Farm's first year are to:

- Develop a cover crop management and rotation plan beneficial to future crops;
- Establish sustainable growing practices on a 5-acre plot using cover crops to increase soil health and productivity;
- Obtain organic certification;
- Convert a carrot winnowing machine to solar power;
- Develop and market a fresh carrot juice product;
- Sell at least 25,000 pounds of fresh carrots through wholesale channels; and
- Gross over \$30,000 with net owner wages of \$8,500.

These goals will be implemented over the course of the first operating year, using gained information and knowledge to work toward long-term goals of increased production and a sustainable farm both environmentally and financially. The farm manager will consult with other carrot growers in the intervale, such as Arethusa Collective Farm, and other growers in the area to develop management strategies that are efficient and sustainable. Determining which varieties are best adapted to our climate and produce reliably will take several years of trial and thorough record keeping. Jane is interested in identifying the best juicing carrot. She feels these are areas in which she excels; varietal mapping, crop analysis and record keeping are all things she has had experience with over the past four years.

C Farm will gross \$33,150 in its first year, the majority from the wholesaling of fresh carrots. The farm manager's net wages will amount to \$8,500 in year one. The major capital investment required in the first year is a baby carrot winnowing machine (\$2,000) and the materials for solar conversion of the machine (\$1,500). The farm has already invested in an industrial juicer (\$400). Other major expenses are growing and irrigation supplies, seed and part-time labor. The principle operator has committed \$5,000 cash to cover basic start up expenses.

Management Plan

Jane has worked on organic farms in Vermont for five years and feels that these experiences have taught her the basic skills necessary to operate a small-scale farm. Before that she spent time working on organic farms in Europe and worked at a retail juice café for two summers while in college.

For two years Jane has worked Blueriver Farm in Worchester, and this season she is acting as crew leader. At Blueriver she has seen ideas for whole farm efficiency in action. She has learned to use tractors and implements confidently and has developed a deeper understanding of crop management, irrigation, weed control, pest and disease management, and the importance of timing in dealing with all of these aspects of vegetable growing. Blueriver is a major carrot grower that sells into regional markets through Deep Root Cooperative, and Jane has learned a lot about growing carrots for wholesale from Blueriver's principal operator, Rob Rogers, a well respected Vermont root grower who has mentored her.

Jane has also met and spoken with many other growers in the area, several of whom focus primarily or solely on carrots and a few who have implemented successful value-added plans. These growers are a great resource, and she plans on consulting with them regularly. She has also been in contact with several extension offices with agents that have researched carrot pests and on farm ergonomics. Jane plans on continuing to talk to them. There are three larger organic carrot farms in New York that she has visited. One has a small juicing operation as well. In addition to whole carrots sold to local and regional markets, two of these farms sell organic baby carrots through wholesale accounts and also through their own web sites. They say their customers value their fresh products, which unlike industrially processed baby carrots, have not been soaked in chlorine to extend shelf-life. Jane also looks forward to attending NOFA workshops and a carrot festival in New York to further increase her network of support.

As the sole proprietor of C Farm, Jane will be doing the majority of the labor herself. She will be responsible for all of the marketing, deliveries, processing, and financial matters of the farm. She will also be responsible for most of the field work. She will require help at various times during the 2007 growing season: during periodic planting, thinning and harvest processes. She will receive volunteer help from several family members for these activities. She will also be doing all of her own juicing, using a \$400 industrial juicer that she purchased from a restaurant, and she will be sharing space at three farmers' markets in the region with a berry grower, making juice herself and selling it in 16 ounce jugs for \$5 each or 8 ounce jugs for \$3.50 each.

During the 2008 operating year Jane will receive very little income from C Farm. She will maintain her full-time position at Blueriver Farm in order to support herself. A portion of her savings and some family assistance will cover the start up expenses of C Farm, which she anticipates making back in the first year. A portion of her savings may also be re-invested in the business during the second year, though she intends the farm to cash flow on its own without cash injections from her personal account. The largest investments during the first operating year will be the certified organic seed stock, part-

time labor and the baby carrot winnowing machine, which she plans to buy secondhand. A battery powered machine, Jane plans to invest in converting the machine to solar power and will run the machine outside, under a tent in the field. The tent will be a temporary structure secured by cement blocks. The conversion process will require no specialized tools and should take about 30 hours. Jane also plans on experimenting with propagating some seed herself in the following years, which could eliminate the seed expense, and as already stated, she has purchased a used juicer, another major investment. She will also be contributing to farmers' market dues for the Burlington Saturday, Winooski Thursday and South End Farmers' Markets and sharing space with a berry grower. In the long term, Jane is interested in exploring growing carrots for seed to sell to local organic seed companies. With thoughtful management, C Farm will grow to a full 5 acres in 5 years and be ready for transition away from the Intervale Center's Farms Program by its sixth season. Jane's long term goal is to manage a large wholesale farm in northwest Vermont with this carrot business at its center.

Land Management Plan

C Farm will be certified organic, and Jane will focus on building and maintaining healthy soils. In the first year 2 acres of carrots will be planted and the remainder of land will stay in cover crop. C Farm workers will mow around the entire plot regularly, which will help with weed control, and Jane will follow any other land management protocols as articulated in the Intervale Center's land management plan.

SWOT Analysis

Strengths:

- Everyone loves carrots!
- Locally grown carrots are in demand year round and at several markets, many of which report running out of local carrots in November.
- School districts need more carrots.
- Fresh carrot juice is very popular and sells at a high profit margin.

Weakness:

- Most markets need a local supplier only after October, so I will have to store a large amount of product for several months.
- Because of the nature of carrots the farm will not see any income until July of 2007, so at the beginning of the first growing season Jane will rely on free labor (family and friends) during planting and thinning and into the harvest.
- Processing baby carrots is difficult and wasteful.
- The price of carrots is low, so the business will have to sell a lot to make money.

Opportunities:

- There is a definite need for more local organic carrots and carrot juice at health food stores and restaurants in the area.
- No local carrot juice suppliers.
- No local baby carrot suppliers.

Threats:

- Flooding is the biggest threat. Flooded carrots are at risk for rot; prolonged flooding would destroy a crop. Flooding can also affect the size and storability of the carrots.
- Other farmers that grow carrots – there are quite a few!
- Fresh juice laws – outside of a farmers’ market situation, where the juice will be served fresh, the business will need to flash pasteurize all juice. Even at farmers’ market, C Farm’s labels will carry specific recommendations for how to keep the juice fresh.
- What if baby carrots suddenly go out of style? Is investment in the winnowing machine necessary, or could the farm just sell early carrots as “babies”?

Risk Management Assessment

The biggest risk for C Farm will be flooding. This could cause problems in several ways, depending on the time of year the flooding occurs. Stunted growth, rot, contamination and loss of salable goods are all possibilities during a high flood year. C Farm will use an adaptation of a raised bed system to keep the carrots elevated slightly and encourage good drainage in the case of flood. From talking with other Intervale farmers who grow carrots, it seems that the serious flooding in the past had relatively minor effects on their crops. One farmer noted an increase in rot during flooding and a decrease in yields over that year. Another farmer noted decreased carrot size and some reduced yield. Aside from that, other risks C Farm will face are carrot diseases and pests, such as flea beetles, carrot root flies, parsley worms and tarnished plant bugs, and also theft and vandalism. Jane realizes that narrowing the business’s focus and only growing one crop may be a risk unto itself. But after consulting with several carrot growers, Jane feels that with proper rotation and cover cropping, disease and pest pressure will be significantly reduced.

There is an inherent risk in selling unpasteurized juice; however, Jane is confident from her experience working at a juice café that she can keep the equipment clean. Jane will keep herself informed about changes in fresh juice regulation and research unpasteurized wholesale options for year 2. She will also consult with the State, a lawyer and an insurance agent to ensure that she meets all requirements and have adequate insurance for sale of an unpasteurized product. The farm has purchased general farm and product liability (\$1 million) insurance from Farm Family Insurance.

Production and Products

In year 1, C Farm will have 2 acres in cultivation and will utilize a mix of early and storage varieties. In particular, Jane plans to grow yaya hybrids, boleros, parmexes and a mix of storage varieties in order to determine which type stores the best. Johnny’s seed catalogue estimates 30,000 pounds an acre yield. However, C Farm will aim for 20,000 pounds per acre, which will give the business more than enough for its estimated 25,000 pounds to be sold fresh through wholesale markets with plenty remaining to be turned into juice. 500 lbs of carrots will be winnowed in the first year for baby carrot product testing. These yield estimates are based on information gathered from other farmers and from The Owner-Built Homestead by Ken and Barbara Kern. They are low, but Jane

feels that she should be cautious in the first year as she gets used to intervale soils and equipment and refines her production plan. In year 2, she will have a better estimate and can plan accordingly, though she anticipate converting two and a half acres of production into at minimum 45,000 pounds of carrots.

C Farm will sell carrots by the bunch and by the 2 and 10 pound bag at farmers’ markets and in 25 pound bags wholesale. Rubber bands, 2 and 10 pound bags and 25 pound bags will be ordered in bulk. Jane estimates she will need 600 10 and 25 pound bags, which will cost about \$180; remaining bags and rubber bands will cost an additional \$100. Circular three color printed paper labels for bags sold wholesale will cost approximately \$50 from ULine (\$41 per case of 1000). Jane’s husband, a designer at JDK Design, will provide logo and label design support for free.

For juice containers, Jane will need 16 ounce and 8 ounce clear PLA biodegradable jugs which cost approximately \$140 per case of 200. Circular three color printed paper labels for the jugs will cost approximately \$130 from ULine (\$41 per case of 1000), and Jane will apply the labels herself. Again, her husband will help with design.

In clear bags and containers, C Farm’s products will appear clean and fresh. The logo design is friendly and fun – a bunny holding a carrot! – and will appeal to both young and old.

Capital Investments

The following capital investments will be made through a combination of cash investments from the owner and cash flow in season. Each of these items should last several years with minimal expenses for upkeep. Please see the budget for year 2 upkeep projections.

Drip Irrigation	\$2,000 (Y1)	\$2,000 (Y2)
Industrial Juicer	\$400 (Y1)	
Baby Carrot Winnowing Machine	\$2,000 (Y1)	
Solar Conversion	\$1,500 (Y1)	
Total Anticipated Investment	\$7,900 (Y1)	\$2,000 (Y2)

Description of Markets

C Farm will market fresh carrots primarily to health food stores in Burlington and in Lamoille County. There has also been interest expressed by restaurants in Burlington. Jane spoke with Healthy Eating; they sell about 2,000 pounds per week. Healthy Eating’s current carrot grower supplies them until late September. C Farm plans on renting cold storage space in the Intervale Center warehouse and enter this market in October. Jane spoke with the space’s manager; she anticipates 4 pallets of space at \$120 per pallet for 5 months storage. Jane also spoke with Burlington Market where they sold about 50,000 pounds of organic carrots last year of which local growers provided 10,000 pounds. This does not include grated carrots for their salad bar. It appears there is plenty of room for another supplier, and they expressed interest in carrots for late fall and early winter. Burlington Market also expressed interest in fresh juice, which sold very well for

them this year, as well as baby carrots. Jane will continue to explore the food safety and flash pasteurization requirements in relation to wholesaling fresh carrot juice; however, her plan is not contingent on wholesaling carrot juice at this time. John's Natural Foods in Montpelier and Moonshine Café and Natural Foods in Janesville have also expressed interest in buying carrots. Stone's Restaurant expressed an interest in both carrot juice and fresh carrots past October. The Burlington and South Burlington School Districts are interested in whole carrots and baby carrots for their year round salad bars, as is the University of Vermont and Fletcher Allen Healthcare, at price points well below the estimates Jane received from Healthy Eating and Burlington Market. However, C Farm plans to sell 10,000 pounds of carrots at \$0.40/pound to institutional markets.

Over the first few years of operation C Farm will be building and studying its seed stock, selecting varieties by their hardiness, size and flavor. Jane will concentrate on which varieties lend themselves well for juicing, for "baby"ing and for storing.

Marketing Plan

The purpose of C Farm is to provide locally grown certified organic carrots to local consumers and to increase productivity each year in order to provide carrot juice and baby carrots to local wholesale and farmers' markets at quantities that make the farm financially sustainable. Jane, the principle operator, hopes to develop a farm that is beneficial to the consumers, the environment and the local economy and is financially successful. The farm's year 1 target is to gross \$33,150; about half (\$15,750) will come from the sale of carrots to "boutique" wholesale and farmers' markets in 2, 10 and 25 pound bags at a rate of \$1.05/lb. The farm will make \$12,800 from the sale of fresh juice at farmers' markets. The farm will attend three farmers' markets – Burlington Saturday, Winooski and South End – and over 20 weeks average the sale of 100 containers per week at these markets. In addition, Jane anticipated \$4,000 in sales to institutional markets.

This winter, Jane will conduct additional research into the size, traffic and demographics of area farmers' markets in order to ensure that her products are properly placed and priced advantageously.

The Benefits

C Farm will provide organic carrots to consumers in Burlington and in Lamoille County. The benefits will be:

- An extended availability of local organic carrots for consumers.
- Fewer carrots shipped in from California and China.
- Burlington restaurants and grocers promoting "eat local" ideals will have a source for larger amounts of fresh carrots.
- Fresh, unpasteurized carrot juice available locally.
- Increased diversity at the Intervale to include a value-added business that sells carrot juice and baby carrots.
- School children enjoying the baby carrots they're accustomed to in local form.

My Target Customer

- Burlington area shoppers at health food stores.
- Lamoille county health food store shoppers.
- Chefs at Burlington restaurants participating in the Vermont Fresh Network.
- Thirsty farmers' market patrons.
- School districts and institutions.

My Positioning

C Farm will be one of many farms at the Intervale growing organic carrots. What will separate this farm is that it will supply carrots primarily to wholesale accounts, meeting demands of consumers in the Burlington and Lamoille county area for more local carrots. Jane will also own and operate the farm's carrot juice press, supplying a value-added product to local farmers' markets. Though a lot of prepared food is offered at the three markets the farm will attend, there is no one currently focused on beverages.

There are a few other local growers who Jane will be competing with in the storage carrot market, but the supply has not come close to meeting the demand. Indirect competition for C Farm's carrots will be organic and conventional carrots trucked in from California and China. C Farm will emphasize the locally grown value of its carrots, as well as its quality fresh juice. In year 2 the farm will may also expand into the marketing of whole carrots and baby carrots to restaurants and upscale "boutique" grocers.

Pricing

C Farm plans on setting a price for all accounts with some flexibility allowed. Local carrot growers Jane has spoken with have noted an increase in price per pound received over the past several years. Jane was unable to find a price index for organic carrots documenting previous years. The conventional carrot price index however was available and showed a fairly steady price over the past several years, last year being particularly strong. Jane has based my revenue figures on an average price of \$1.05 per pound for carrots, far above conventional wholesale pricing but in line with the pricing research she has done.

Carrot juice sells at a premium, about 30 cents per ounce. C Farm will sell 8 ounce containers at market for \$3.50 each and 16 ounce containers for \$5.00. These prices are based on the following estimates:

For 8 Ounce Jugs

Containers: \$.70 each

Carrots: \$1.05 (It is estimated that 1 pound of carrots makes 8 ounces of juice)

Fees: $\$162.50/200 = \$.09$ per container

= BASELINE \$1.84 – PRICED AT \$3.50

For 16 Ounce Jugs

Containers: \$.70 each

Carrots: \$2.10

Fees: \$.09

= BASELINE \$2.89 – PRICED AT \$5.00

This pricing is slightly more expensive than one would pay for pasteurized carrot juice at a grocery store and is comparable to kombucha and other popular drinks. Baby carrots also sell at a premium, or 20% above the wholesale price for whole organic carrots. Because this is an untapped market, the farm remains conservative and anticipates an average price of \$1.15 per pound. In year 2, C Farm will sell baby carrots in 2 pound bags at \$2.30 each wholesale, allowing for a retail price of \$2.99 per 2 pound bag. C Farm will sell bags for \$3.00 at the farmers' market.

Second Year Plans

C Farm will be very active in its second year of operation. In addition to the cover crop, fieldwork, wholesale accounts and farmers' market presence maintained in the first year, the farm will also be winnowing carrots into babies and bagging them for sale. This will add significantly to the labor hours spent on the farm. Jane will spend some time in the first year converting the carrot winnowing machine to solar power, ensuring that it is ready to go by the beginning of the second year. She may choose to hire a part-time helper to run and maintain this machine or to go to market to sell juice. She will also explore the possibility of growing or buying beets, greens, ginger or other commonly juiced vegetables to add to the juicing business and explore options for the sale of unpasteurized juice to markets and restaurants.

Long Term Goals

Jane Doe, C Farm's principle operator, plans to take full advantage of her experience as an incubator in order to avoid undercapitalization in the short term and develop a long term business strategy that will allow her to farm full-time. She is interested in engaging with the Vermont Farm Viability program in years 3 or 4 and transitioning onto rented land outside of the intervale within 6 years. In ten years, C Farm will be a diversified wholesale organic vegetable farm with 35-40 acres in production. The carrot operation will remain at its core, though C Farm will also produce beets, tomatoes and a variety of cruciferous vegetables. Jane imagines this farm will be located on rented land in northwestern Vermont and will serve the same or similar markets to the ones she establishes while at the intervale. She may also grow produce for regional wholesale markets or invest in pasteurization technology in order to make her juice line more widely available.

Calendar of Important Activities

Included is this general timeline to assist the farm manager during the implementation of this business plan and help assess progress in the first year.

February & March

- Complete research of varieties
- Finalize planting schedule
- Order seeds and supplies
- Research irrigation options
- Purchase irrigation supplies
- Talk to farmers' market managers & finalize farmers' market research
- Purchase winnowing machine and solar conversion kit
- Attend meetings to secure adequate rental storage space and wash station access
- Register business
- Purchase liability insurance
- Repair juicer
- Talk to lawyer & state about food safety regulations
- Talk to NOFA about organic certification process
- Attend cash flow/business management course

April & May

- Enroll in farmers' markets
- Complete soil testing & enact amendment strategy as necessary
- Complete first, second and third plantings
- Seed rye cover
- Begin solar conversion of winnowing machine
- Pilot run juicer
- Schedule NOFA certification inspection
- Attend equipment training
- Meet with Arethusa farmers for lunch

June, July & August

- Hire part-time farm laborer
- Begin harvest of early varieties
- Begin engaging wholesale markets
- Continue planting schedule
- Attend farmers' markets with juice

September

- Continue wholesale and farmers' markets
- Rent winter storage space
- Complete final planting
- Complete organic certification (if not already completed)
- Complete solar conversion
- Trial baby carrots at farmers' market

October & November

Begin utilizing winter storage space

Continue wholesale and farmers' markets

Seed second rye planting

Conduct research into the sale of unpasteurized juices

Conduct research into expanding vegetables for juices (grown or purchased in from other intervale farms)

December & January

Sell off wholesale stock

Discontinue lease on winter storage facilities

Talk to accountant

File taxes

Create balance sheet

Submit to Intervale Center self-evaluation and farm report forms

Analyze pricing for year 2, particularly baby and juice pricing

Plan for bulk order and seed order

Take a vacation

C Farm Budget - Two Year Budget		
*In an actual plan, the closer you can get to true numbers, the better. These are very rough estimates.		
Cash at Beginning of Year	5,000.00	2,991.25
Revenue	Year 1	Year 2
Carrots – fresh & wholesale "boutique" and farmers' markets (15K/20K lbs at \$1.05/lb)	15,750.00	21,000.00
Fresh, unpasteurized carrot juice (2,000/4,000 16 oz. jugs; 800/0 8 oz. jugs)	12,800.00	15,000.00
Carrots - fresh & wholesale - institutional markets (10K/15K at \$.40/lb)	4,000.00	6,000.00
Baby carrots (600/8,700 lbs at \$1.15/lb)	603.75	10,005.00
TOTAL	33,153.75	52,005.00
Expenses		
Growing supplies and drip irrigation	3,000.00	4,000.00
16 lbs carrot seed	2,000.00	2,000.00
Rye cover seed	400.00	400.00
Soil Amendments	1,000.00	1,000.00
Sales supplies	1,000.00	1,000.00
Farmers' market & juicing supplies & containers	1,200.00	2,000.00
Vehicle insurance	600.00	650.00
Vehicle operations and repair	1,000.00	1,000.00
Equipment purchase and repair	1,400.00	1,400.00
Industrial juicer	400.00	100.00
Baby carrot winnowing machine	2,000.00	500.00
Solar conversion	1,500.00	0.00
Cold Storage Rental	1,500.00	1,875.00
Farmers' market fees	162.50	325.00
Employee labor – part time	2,000.00	9,000.00
Business liability insurance	1,500.00	1,750.00
Other Fees (IC, Organic Certification, Accountant)	1,000.00	2,000.00
Total non-farmer expenses	21,662.50	29,000.00
Net farmer wages	8,500.00	20,000.00
Total expenses	30,162.50	49,000.00
Net cash end of year	2,991.25	5,996.25

C Farm Labor Estimate					
	Winter	Spring	Summer	Fall	TOTAL
Jane (Principle Operator)					
Administrative	25	15	15	25	320
Fieldwork	0	80	60	120	1040
Volunteer 1	0	40	0	40	320
Volunteer 1	0	40	0	40	320
Accountant	1	0	0	1	8
TOTALS	80	525	165	690	2008
			Annual total estimate =	2008	
			Just fieldwork =	1680	
			Hours per acre in carrots =	669.3333	
			For Principle Operator =	1360	
Each seasonal estimate is PER MONTH, not PER SEASON					

	Farmer Wages/Hour	Pay
In Year 1:	6.25	8,500.00
In Year 2 (same labor est.):	14.71	20,000.00

*Farmer wage calculated from total PO operator estimate of 1,360 hours.