

IMPROVE THE MARKETING OPPORTUNITIES FOR SMALL AND MEDIUM DAIRY FARMS IN MAINE

This project took a multi-phase approach that included practical business training and technical assistance for dairy producers, market research to identify value-added marketing opportunities in the state, case studies of three model farms, and preparation of educational materials and resources that will be used by the state in their ongoing programs to address the long-term sustainability and profitability of the dairy sector.

[Final Report - Dairy Farms for the Future](#)

[Business Planning Outline and Guide](#)

[Diversifying Farms to Expand Direct Opportunities for Milk Production](#)

[Value Added Opportunities for Maine Dairy Farms](#)

Case Studies

[Silvery Moon Creamery](#)

[Surf 'n Turf Compost](#)

[Grain Corn Pelletizer](#)

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OUTLINE OF THE PROBLEM

After the elimination of the Northeast Dairy Compact in 2002, Maine's dairy producers could no longer compete on the wholesale market with lower priced milk and milk products produced in the West. Maine's Dairy Industry needed to expand and improve efficiency and performance of new markets or face a permanent and catastrophic loss of farms and farm infrastructure.

Background

Maine milk sales were the top contributor to agricultural cash receipts in 2001, accounting for \$106 million of the total \$483 million. This was primarily due to the base price support sustained through the Northeast Dairy Compact and, in some measure, to an expanding market for organic milk.

The loss of the Northeast Dairy Compact dealt Maine's dairy industry a mighty blow in 2002, and by the spring of 2003, the stability of Maine's dairy sector painted a very different picture. According to the Maine Dairy Industry Association, in the first six months following the elimination of the Compact, Maine's dairy farmers lost 20 million dollars and 412 operations, managing over 150,000 acres of prime agricultural land in 14 counties, were critically threatened.

Marketing realities in the commodity dairy industry have created a situation that perpetually threatens the economic viability of dairy farms. The national pricing policy, which utilizes bulk sale prices of cheese, butter and dry milk powder to determine "farm gate" milk prices, puts bulk milk producers at risk. Just a small oversupply of cheese can cause the commodity prices to fall precipitously and severely depress the price of milk in Maine at the farm level. Meanwhile, retailers selling dairy products charge consumers prices that do not reflect the low "farm gate" prices.

ADDRESSING THE PROBLEM

Emerging Opportunities

While dairy farms have gone out, the number of cows statewide has remained relatively constant. Since 1996, 38,000 cows have produced an average 650 million pounds of milk per year. As Maine's dairy commodity market share diminishes, and the price per hundredweight (cwt) falls far below cost, Maine's dairy farmers have been exploring ways to modify their operations and diversify their markets to sustain long-term profitability.

Some producers have sought to reduce the cost of inputs by finding efficiencies in production. Others have been eager to improve the market value of their milk and milk products. And several, who have already become involved in value-added dairy production – and who have potential to increase their direct-market share – are eager to evaluate models of alternatives before they make permanent changes to their own infrastructure or resources. Because all of the above strategies require borrowing capital to adapt or install new processing equipment or infrastructure, Maine has spent the past 5 years assisting its farmers with business planning services. These services are offered one-on-one, in teams, and in multi-session courses where considerable time can be spent carefully matching each farm's assets and resource potential with proven production, diversification, marketing and processing alternatives.



Modeling Solutions

In 2003, a grant from the USDA Agricultural Marketing Service – Federal-State Marketing Improvement Program gave the Maine Department of Agriculture, Food and Rural Resources an opportunity to focus its existing business planning and technical assistance programs to serve Maine’s dairy farmers.

Project Goals

- *Identify new regional direct to consumer, wholesale and institutional markets for Maine milk and value-added milk products.*
- *Transition and diversify 2 dairy operations that can serve two regions.*
- *Develop regional strategies for milk distribution systems.*
- *Work to protect farmland.*

Project Objectives

- Conduct business planning - Farms for the Future & NxLevel “*Tilling the Soil*”
- Implement business plans on three farms. Continue to strengthen each model farm’s marketing research and development skills to improve dairy farm profitability in two regions.
- Research value-added dairy products and markets.
- Provide Maine dairy producers with research and user-friendly “How to” information for improving the production, processing and direct marketing of dairy products.
- Demonstrate new processing and marketing models for regional market distribution systems.
- Publish & distribute new dairy market research manual, resource guide & model farm case studies.

Summary

Dairy Farms for the Future was designed to assist a targeted group of dairy farmers with researching, developing and testing new market avenues. All of Maine’s dairy producers were given the opportunity to apply for technical assistance through Maine’s Farms for the Future Program.

In the fall of 2003, twelve dairy farms were accepted into Farms for the Future - Phase One. Each farm participant was given assistance with assembling a team of technical advisors that would undertake research and help them develop a plan for their specific diversification idea. In the fall of 2004, three family-owned dairy operations were awarded Farms for the Future - Phase Two grants to implement their business plans. Each of these farms received additional support in the form of grants to conduct in-depth market development research. In exchange for grant funds, each of these farms has signed a 5-year non-development agreement which protects their farmland and the public investment. The Department has written brief, user friendly case studies about these farms, conducted practical new research *Diversifying Farms to Expand Direct Markets for Milk Products*, developed and easy to read/use “how to” and resource manual “*Value-added Opportunities for Maine’s Dairy Farms* and updated it’s searchable, on-line *Food and Farms Resource Guide*.



This report, the resources listed above, and the Rules and Regulations of Maine’s Dairy Industry are now available on CD for all of Maine’s dairy producers to better understand “how to” go about diversifying their own product mix and customer base.

Public and Private Contributions to the Project

USDA Agricultural Marketing Service - Federal-State Market Improvement Program	\$ 47,787.94
State of Maine Department of Agriculture, Food and Rural Resources	\$ 153,052.17
Coastal Enterprises Inc., Program Administration – Farms for the Future Program	\$ 12,000.00
Smiling Hill Farm/Silvery Moon Creamery, Kay Ben Farm, Barker Farm	\$ 507,241.00

The above list does not include hours of in-kind match time and leadership provided by the following agencies and organizations:

Coastal Enterprises, Inc.; Maine Association of Soil and Water Conservation Districts; Maine Farmland Trust; Maine Dairy Industry Association; Maine Organic Farmers and Gardeners; University of Maine & Maine Agricultural Center; University of Maine Cooperative Extension; University of Maine Small Business Development Centers; USDA – Natural Resources Conservation Service; USDA – NRCS Heart of Maine Resource Conservation and Development Council; and the USDA – NRCS Time and Tide Resource Conservation and Development Council.

Results and Conclusions

Business Planning and Market Development

The technical support for business planning and market development was one of the most successful elements of this project. Each of the fifteen (15) Phase One farms benefited from looking closely at their resource potential - financial, physical and managerial - to analyze whether their farm was ready and they were capable of developing a new farm enterprise and product market.

Four of these 15 farms successfully competed for a \$25,000 grant to implement their plan. Each of these farms found that the development of the business plan improved their ability to access capital through loans, especially when the lender lacked experience with the proposed new farm enterprise. Through the planning processes these producers gained a new confidence that came in handy during Phase Two. All producers found that they had to make some adjustments in their plans when they encountered false assumptions or unexpected outcomes.

The three owner/operators of the Model Farms (see below) venture found that the most “meaningful” market research that could be done was that research that they did for themselves. Through this project, it became very clear that Maine’s Farms for the Future Program was not doing enough in terms of teaching techniques for market research, development and promotion. Based upon this project and the Model Farm experience, the Department is modifying the Farms for the Future Program to provide farmers with options and resources to undertake or to hire consultants to help them conduct much more extensive market research, development and promotion.



Whether commodity or niche market producer, many more of Maine’s farmers confess they hate the paperwork of developing a business plan, but they “love what they learned in the process.” Overall they praise the networking opportunities and mutual support that occurs in the NxLevel business planning course. Group activities in this course have helped to dispel some misinformation and close some information gaps about organic and conventional milk production. As milk producers pull together to sustain their way of life and farming, both groups realize that the development of value-added enterprises, such as the organic milk market, can benefit all.

Market Research

The need to conduct research and gather a profile of Maine’s value-added dairy enterprises was clear from the beginning of the project. At that time, a small number of farmers had already begun to investigate several opportunities, such as transitioning to organic milk production. In that case, the market proved early on that organic milk production could be a profitable option, especially when Hood H.P. LLC. entered the market in Maine and further boosted the price for organic milk.

Other dairy farms however were interested in processing fluid milk on the farm; making butter, cheese and ice cream; or diversifying livestock and livestock byproducts like compost, and they lacked concrete evidence of an emerging or stable market. The cheese market was especially problematic to characterize. Dairy value-added “entrepreneurs” who were experimenting with cheese recipes while testing markets and competing with cheese from other states and other countries, found it difficult to accurately define and capture their direct markets.

Through the research done for the Dairy Farms for the Future Project, Maine now offers:

Diversifying Farms to Expand Direct Markets for Milk Products is market research for many milk products including all types of cow, goat and sheep milk cheeses that might be produced in Maine.

Value-Added Opportunities for Maine’s Dairy Farms a “how to” guide and resource manual for developing and marketing value-added dairy products.

The Department also undertook an e-mail survey of 200 producers with retail stores to assess their interest in selling locally sourced, value-added dairy products in their stores. Despite a small number of respondents (24), the information provided the Department with a limited profile of the farm stores with a wide variety of products that are interested in buying and selling Maine value-added dairy products.

- Quality of product, consistent product availability and ease of placing orders and getting deliveries was most important.
- Price was moderately important.
- Apple farms seem to be leading the way in establishing diversified farm stores in Maine. Six of the stores that responded to the survey are apple producers who are interested in finding sources for bottled milk and value-added dairy products.



Model Farms

Three dairy farms received FSMIP funds to pay for the time and labor involved in researching and writing their business and marketing plans. All three farms conducted additional market research focused specifically on product improvement and market development.

The FSMIP model farm criteria were determined by a 16-member project Steering Committee that included personnel from the dairy industry, the University of Maine, Cooperative Extension and the USDA- NRCS. Once criteria were established announcements were sent to 400 dairy farms. More than 20 farms requested applications; fifteen of those farms entered Phase One business planning. Six completed business plans and applied for Phase Two plan implementation grants; four received Phase Two grants and three also received FSMIP grants. An appointed Review Panel selected the three model FSMIP farms. The panel was comprised of a conventional dairy farmer, a former legislator, a former Commissioner of Agriculture, a vice president of Farm Credit of Maine, and a small fruit and vegetable farmer.

Smiling Hill Farm established a 50/50 general partnership agreement with ***Silvery Moon Creamery*** and developed a line of prize-winning pasteurized, raw milk and aged cheeses. With the new brand of the Silvery Moon Creamery reaching new specialty food markets, Smiling Hill Farm is exploring ways to extend the market reach of the farm's bottled milk, butter and ice cream products. Smiling Hill Farm and Silvery Moon Creamery:

- Conducted market research to refine pricing and distribution costs for eleven (11) artisanal cheese products.
- Attended national trade group conferences such as offered this July by the American Cheese Society.
- Developed simple, environmentally-conscious packaging, logo and label.
- Developed and produced trade show display materials such as large-format photography and brochures.
- Expanded Silvery Moon Creamery name recognition and branding by distributing product sample packs.
- Developed printed and electronic press kits for website and conducted "Meet the Cheesemaker" events.
- Hosted numerous farm tours to tell their story, from business planning & market research to diversification and product distribution.

Kay Ben Farm diversified beyond milk by developing ***Benson Farm Earth Products*** a line of two soil amendments created from seafood residuals from Portland and dairy cow manure. Eddie and Becki Benson:

- Researched and developed packaging, logo and label design for two composted cow manure products - "Surf n'Turf" and "Super Soil"
- Researched and expanded wholesale, retail and direct target markets in Southern Maine.
- Formed a sales team to call and visit all nurseries and home & garden centers in five counties.



Kay Ben Farm and *Benson Farm Earth Products* also:

- Developed advertising strategies and promotional materials to attract landscaping businesses and home/garden owners.
- Attended a trade show involving home and garden products. Visited two major on-farm New England compost manufacturers.
- Distributed brochures, product samples and “trinkets” such as a magnet, pen or key chain to tradeshow and other wholesale contacts.

Barker Farm explored four diversification strategies for their farm, including organic milk production, beef marketing, rye grass seed production and corn pellet fuel manufacturing. David and Vick Barker:

- Attended meetings of Maine Organic Milk Producer’s and Maine Organic Farmers and Gardeners.
- Analyzed costs and benefits of transitioning to organic milk production.
- Met with other diversified dairy farmers who were processing, packaging and selling beef to wholesale and retail markets.
- Researched and developed their own local direct market for their beef.
- Undertook a field demonstration of the rye grass seed.
- Conducted extensive research into the corn pellet fuel manufacturing process, met with potential fuel buyers and developed a completely new business and marketing plan for this new enterprise.
- Applied for a SARE grant to continue research on the efficiency and environmental benefits of this alternative fuel.

All three model farms have created a new network of suppliers and consumers that support their farms.

Silvery Moon Creamery is now marketing high quality, cow’s milk cheeses in partnership with Smiling Hill Farm reaching Maine and New England markets. Smiling Hill Farm and Silvery Moon Creamery are seeking conventional and organic milk producers who want to process their own milk line at Smiling Hill Farm and sell some of the milk for new cheeses in the Creamery.

Kay Ben Farm through Benson Farm Earth Products is filling a void left by compost bagging operations and has built a wholesale market for bulk compost. They deliver to garden centers, landscapers, and home gardeners. They have also developed a large wholesale account with an intensive lettuce growing operation. Benson Farm Earth Products is also being paid to haul compost ingredients - leaves and lawn waste- from two municipalities, and seafood residuals – to the farm.

Barker Farm is raising and selling beef that is grown on their own grain. They discovered that their corn silage could also be used for pellets in wood stoves. They visited wood pellet manufacturers and found that a demand exists, and production is feasible for the farm. The Barkers have identified ten other regional dairy farms that would like to sell silage corn to the Barkers.



All three farms hosted on-farm tours and participated in meetings to share their stories of planning, research, trial and error with other producers. They are three real life examples of “how to” diversify a farm and expand direct markets in Maine.

Development of Educational Materials and Resources

This project included developing new materials for farmers, including an updated *Food and Farms Resource Directory* for value-added dairy operations, and a new Business Planning Guide and Outline workbook/template to help farmers write a complete business plan. These resources have already helped a number of farms, and with the development of the CD reference disk, will be readily accessible to many more farmers in the future. It is clear that the information age and the technology of the internet is not accessible to all of Maine’s agricultural community. Printed versions of these materials will be made available upon request. Future participants in Farms for the Future and NxLevel business planning courses will enable the Department to continue testing and improving both resources.

Partnerships

Projects like the Dairy Farms for the Future Project continue to improve Maine’s agricultural associations and agencies capacity to meet Maine’s farmers’ business planning and market development needs. Closer connections now exist between the traditional Small Business Development Centers, field-based specialists with Cooperative Extension, staff in USDA agencies and researchers at the University of Maine and Maine’s Agricultural Experiment Stations.

The Dairy Farms for the Future Project has provided an overall opportunity for many partners to combine and focus our technical assistance programs and research objectives to hone in on the needs of one industry. From this experience of piggybacking Farms for the Future and NxLevel, conducting a dairy products focus group, developing user-friendly resource materials and filling in key “missing pieces” of research, we see that we are on track with supporting the industry.

Other Events that Benefited the Project

The year that the Dairy Farms for the Future Project began, Governor John E. Baldacci issued a Dairy Relief Plan to provide short-, mid- and long-term assistance to Maine’s dairy farmers. A total of \$3,725,000 was distributed to Maine’s dairy farmers between April and September in 2003. Another \$1.3 million was used to guarantee any commercial bank’s deferral of up-to-12 months of principal and interest payments on loans to eligible farmers. And a Task Force studied and reported to the Governor on how best to bring stability and long-term competitiveness to Maine’s dairy industry. The Task Force recommendations asked for more assistance with market development, research on value-added production systems and tax reform.

The loss of the Northeast Dairy Compact made every farmer painfully aware of the risks of producing a single commodity. More dairy farms are now focused on closing the gap between their production costs and their milk checks. They are seeking information that will help them look at economies of scale. They are seeking ways to modify their operations and add value to their milk products. They are seeking assistance with identifying and expanding direct, niche, retail and wholesale markets in Maine.



The University of Maine is actively researching alternative agricultural marketing and processing. It has begun a multi-year research project to determine the effect of regional grocery store chains on wholesale outlets for value-added food products. In 2002 the University completed a FSMIP project that characterized the constraints and opportunities for farm food processors to access regional and other markets.

The Department and its many partners, particularly the Heart of Maine – NRCS Resource Conservation and Development Council and Coastal Enterprises, Inc., have demonstrated their ability to provide solutions, farm by farm. The NxLevel “Tilling the Soil” course has evolved from a single classroom and is now broadcast through the State’s new Asynchronous Transfer Mode distance learning facility to several other sites. In 2006 certain topics were taught on-line. Each mode – in the classroom, the ATM classroom or the virtual classroom - allows Maine’s agricultural producers to fit the course into their schedules and benefit from talking with, and learning from one another.

Farmers’ success through the Farms for the Future (FFF) has inspired others to enroll. To date 122 producers/farmers have gone through the Phase One – business planning and 62 have received implementation grants. According to program data, an average farm will increase net annual income by over \$34,000 within 3.4 years of the entering Phase One.

The Legislature and the Department of Agriculture, Food and Rural Resources have reviewed the successes of the Farms for the Future Program and the NxLevel – Tilling the Soil business planning course and have invested a total \$2,250,000 in these programs.

The Department’s Maine agricultural product branding and promotional campaign is connecting more Maine farmers with consumers. Market research in 2001 showed that 43 percent of consumers surveyed recognize the “*get real, get maine*” logo and the value of buying local products. Currently more than 400 producers utilize the “*get real, get maine*” promotional materials at farm stands, farmers markets and specialty food stores. The campaign continues to penetrate significant wholesale milk and milk product markets. Gifford's Ice Cream, Oakhurst Dairy and Borealis Breads, all large-scale producers, have integrated the campaign logo into their product packaging design. Many small and medium scale producers use the stick-on “*get real get maine*” label they purchase from the Department.

Farm Fresh Connection (FFC), a new nonprofit organization, provides market access for Maine produce to colleges, restaurants, hospitals and retail outlets in Maine. With more dairy farms able to provide a mix and steady supply of milk products, more efforts like FFC will evolve to serve milk products to regional institutional markets.

The following outline can be used to organize your business plan. Hopefully this will help minimize the time to organize the business plan and address the questions a banker wants to know.

A business, or strategic, plan helps you organize your business and establish goals and plans on paper, rather than in your head.

One of the real benefits of doing a business plan is the process of research and thinking about your business in a systematic way. Having the finished product in hand is certainly an important goal for some – especially those who will be taking the plan to a loan officer.

The act of planning helps you to think about your goals, products, markets, production practices and allows you to research new opportunities. It takes time now, but avoids costly, perhaps disastrous, mistakes later. The process of doing the plan can be used to set yearly goals and objectives to improve the business.

The business plan consists of a narrative and several financial spreadsheets. When you are through writing your first draft, you will have a collection of small essays on the various topics of the business plan. Then you will want to edit them into a smooth flowing narrative.

It typically takes several months to complete a good plan. Most of that time is spent in research and re-thinking your ideas and assumptions. So, make time to do the job properly. Those who do never regret the effort. And finally, be sure to keep detailed notes on your sources of information and the assumptions underlying your financial data.

Steps to completing the plan:

1. Gather the information for your Current Balance Sheets (listing of assets and liabilities).
2. Gather the information on historical financial performance for the past three years.
3. Describe your business, products and agricultural sector.
4. Describe who runs your business, their skills and experience.
5. Describe your vision, goals, and objectives.
6. Assess your resources for moving your business forward and what more you will need to meet your new goals, including market research, new equipment, personnel, or money.
7. Describe your current and future products. Figure out the costs to produce them.
8. Describe your current and future markets and target customers. Figure out what will encourage them to purchase your products.
9. Evaluate your competition and your competitive advantage.
10. Develop your advertising and promotional activities and put a cost to them.
11. Describe any production practices and the changes you will need/want to make, including costs.
- 12. Financially evaluate your ideas fully, making sure to focus on increased costs and increased income (partial budgets are useful here). Write out any assumptions you make!**
13. Test your ideas for risks or worst-case scenarios (Using computer spreadsheets is useful here). Again, write out any assumptions you use in the analysis.
14. Finalize a realistic new budget (cash flow) for the next three years, complete profit and loss statements for the next three years, and a projected balance sheet (hiring an accounting firm or someone who understands how to put these together for you is useful here).
15. Write a section on how you want to exit/leave/transfer the business in the future.
16. Fill in the sections on advisors, suppliers, production practices and other sections not completed yet.
17. Write the executive summary and then the cover letter.

Cover Letter

The purpose of the cover letter is to introduce yourself to the bank, explain very simply why the plan is being presented and what financing the farm needs.

If applying for a loan, state clearly:

- how much money you need,
- how you are going to use it, and
- how the money will make your business more profitable, thereby ensuring repayment.

Optionally, you can explain the type of business you are in, what is (are) your major product(s), who are your customers, and what do you think the future holds for your business and your industry?

Make it enthusiastic, professional, complete and concise.

We suggest you make it 2 pages or less.

THE COVER

Make it professional. It is the first thing the banker sees besides the cover letter.

Business Plan
Business Name

and

Graphic (Logo or Picture)

OWNERS

Business name: Farm Name
Address: Address Line 1
Address Line 2
City, ST 22222
Telephone: 222-333-4444
Fax: 111-222-3333
Email: xyz@example.com
Website Address (if available)

Confidentiality Statement

Example:

“This business plan has been submitted on a confidential basis solely for the benefit of bank personnel in connection with a loan request and is not for use by any other persons. Neither may it be reproduced, stored, or copied in any form. By accepting delivery of this plan, the recipient agrees to return this copy to the company at the address listed above if the recipient does not undertake to approve the loan. Do not fax, reproduce, or distribute without permission.”

You can get a number of sample confidentiality statements from SBDC counselors and tailor them to your needs. Make sure the ideas, financials and use of the plan is limited to those needing to review the document and also do not allow any photocopying without prior approval.

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Executive Summary

Write this last.

This is a summary of THE PLAN and your ideas (as opposed to a summary of THE FARM).

What are the highlights of your plan? Summarize each section in either one sentence or a short paragraph.

Again, write this last.

General Farm Business Description

Vision/Mission Statement

- Why are you farming? Explain your reason for being in farming and what you would like to see this business become in the long run.
- Ask yourself what are the principles/values that keep you wanting to farm.

Farm Business Description

- Name the farm.
- Describe the form of ownership. Are you a Sole Proprietor, Partnership, Corporation, Limited Liability Corporation (LLC), or other? Add your Federal ID tax number and SIC Code number.
- How many years has the farm been around, and how many years have you been farming?
- What type of farm are you? What products do you sell and what services do you offer? To whom do you sell your products/services?

Brief Sector Profile and Trends

- Describe your agricultural sector briefly. (For example, “organic dairy,” “wholesale berries,” “mixed vegetables,” “perennials,” etc.) Is it a growing, stable, or declining sector?
- What trends do you foresee in your sector, and how is your farm business poised to take advantage of them?
- If you are exploring a new enterprise, describe that sector, its trends, and why you feel it is a good enterprise to enter. If you are diversifying, describe why.
- What outside influences could impact your business and industry? Examples include: change in technology, government regulations, changing economy, and competition.

Goals

- List the goals you want to achieve to meet your long-term Vision/Mission for the farm.

The goals are a **series of outcome statements** describing what you want to reach in the next 1-5 years. They differ from a vision statement by degree of time. The vision is the long run outcome for the *whole* business, based on your values. The goals are shorter term for *parts* of the business, with monetary outcomes attached.

What do you want to change about your business? Do you want to...

- cut costs?
- increase efficiencies?
- expand the business in product and/or dollar sales?
- develop new products?
- developing new/expanded markets?

...By how much?

If you like, each statement can be a bullet stating the goal to be reached and the monetary value.

EXAMPLE

Our goals are to:

- *Reduce our syrup bottling time by at least 30% so that we can devote that time to expanding our taps, resulting in increased production for our new value-added products.*
- *Develop and launch at least one new value-added product per year for 3 years so that we can realize X dollars more profits for our syrup (and reduce our dependence on the bulk market).*
- *Develop and launch an Internet commerce site so we can shift X dollars of distribution costs to the consumer gift market (and reduce our distributor fees and our time on the road delivering).*
- *We also aim to increase our customer base by about 30% each year, generating X more dollars of sales, mostly via the website.*

Objectives

Objectives are the **step-by-step actions** needed to reach each goal. These also have outcomes for a short period of time. Bulleted objectives are best, with timeframes, costs, and outcome measurements.

- *“To reduce our syrup bottling time we need to purchase and install XXX...”*
- *“To develop value-added products, we need to purchase, test, XXX...”*

Growth and Exit Strategy

How would you like to exit or retire from the farm business? Would you like to “work ‘til you drop” and let the will take care of dispersal? Continue your growth and transfer a vibrant business to family members? (Describe those family members’ interest here.) Or, would you like to eventually sell the business?

The Marketing Plan

- The marketing plan outlines your **products** and **services**, your **customers**, **target markets** and **sales goals** for each of those markets.
- It also includes your **distribution** network, **promotion** and **advertising** plan, and an analysis of your **competition**.
- Be as specific as possible; give statistics, numbers and sources. The marketing plan will be the basis, later on, of the all-important sales projection.

Products and Services

Current Products and Services

- **List the products or services.** (Sales brochures, drawings, photos, and/or other bulky items belong in the Appendix).
- For each product describe the most important **features**. That is, what does the product do? What is special about it?
- Now, for each product describe its **benefits**. That is, what does the product do *for the customer*?
 - A small local dairy produces milk, butter, and yogurt. **Features** of these products might be “fresh,” “wholesome,” or “produced by a local family.” Each feature should have a corresponding **benefit**, such as “better taste,” “more nutritious,” “connection to neighbors,” or “brings back memories of traditional farms.”
 - Or, a **feature** of vegetables from a local farm might be “unusual varieties” and the **benefit** might be “appealing to those who like to try new flavors in their cooking”.
- Do you supply any **services beyond the sale** of the product? For example: delivery, follow-up, recycling of packaging, or refund policy.
- Describe your **pricing** structure. A table format is helpful, showing retail and wholesale prices.

Future Products and Services

List future products and services, anticipated pricing levels, features and benefits. If you are planning to jump into a new set of products or enterprise(s), then you need to have a section describing these new opportunities. Place any market research data into an appendix.

Keep good notes on sources of market data and assumptions.

The Market

In this section, your job is to show the reader that you:

- have real live customers, and
- are certain that your customers are satisfied and are likely to continue buying, or
- are certain that you will find enough new customers

- **If you are planning to expand or change what you are doing, how do you know that you have enough customers to support you? *Something* must have led you to be hopeful about your plans. Describe it here as well as general trends you see that support the expansion.**

Current Markets

- **List who** you currently sell to:
 - Customers directly from the farm?
 - Buying group members (such as CSAs)?
 - Processors (such as the bulk milk truck or a blueberry cooperative)?
 - Stores that retail your product as is (such as whole chickens or value added foods)?
 - Other farms or businesses that use your product as an ingredient (landscapers who use your plants or compost, bakers who use your fruit, weavers who use your fiber)?

- **How much** do you sell to each of your customers? (i.e. “We sell about 30% of our chickens direct to customers, about 30% at our farmers markets, and about 40% to our wholesale accounts.”)

Customer Profiles

Describe WHO are these customers and businesses. For many farmers in Maine, this section is comprised mostly of **background data** and **anecdotes from your own sales experience**.

WHY BOTHER? This information helps you determine whether the profile of your typical customer *actually matches* the profile of people in your sales area – which tells you how far you need to go to sell your product (i.e. hit a new farmers’ market, launch a website, add a store...). It also helps you decide where to advertise and helps you develop new products for this customer.

- **Background data** (such as demographics on your customers or general trends in your sector) will help prove your case – to yourself and to the reader. Demographics & customer profiles prove that you are tuned in to the needs of your customers. Describe (in general) the age, gender, income, philosophical values, and geographic location of your customers.

- **Anecdotes from your own experience:** might include positive comments from customers, stories about customers who drive out of their way to get your product, or customers who make a point of supporting local farmers in the face of more convenient choices.

Future Markets

- **Describe general trends you see in the market,** i.e. “Several chefs that we have talked to tell us that local foods are important to their customers.”
- List your market outlets and write profiles as above, thinking in terms of who you PLAN to sell to.

Distribution

Describe how your product gets (or will get) to these customers.

Sales Forecasts and Strategies

This section is critical if you are going to present it to funding sources.

1. What are your **sales forecasts** for the next 2-3 years, in quantities and/or percentages, for each market outlet?
 - “We expect to sell 20 CSA shares this year, 30 the following year, and 40 the following year.”
 - “We expect to host 30 school tours this fall and 50 next year.”
 - “We expect to sell X lbs. of apples this year via our u-pick orchard and X lbs. next year.”

You will likely find that these forecasts are similar to your overall goals for the farm business, and that this section backs up, in words, the data you’ll show in your financial projections. You may wish to do two forecasts:

- a) a "best guess", which is what you really expect based on your instinct, experience, and research, and
- b) a "worst case" low estimate that you are confident you can reach no matter what happens.

2. **Compare the forecast to your sales history,** explaining the major differences between past and projected sales. (i.e. “The growth in projected sales will come primarily from the new roadside location and expanded retail area of our farm store.”)

Promotion Plan

- How do you get the word out to customers in each market segment?
- How did you decide on each promotional strategy?
- If increasing your promotional efforts is a major goal, then make a table or bullet outline of your plan, listing specific tasks, dates, costs, and expected impact.

Competitive Analysis

What products and other businesses compete with you? List your major competitors:

- Names and towns.
- Do they compete with you across the board, or just for certain products, or certain customers, or in certain locations?
- Compare your products/services with competition: What factors give you competitive advantages or disadvantages? For example: level of quality, or unique or proprietary features.
- Compare your prices with those of your competition. Are they higher, lower, the same? Why? How important is price as a competitive factor?

If you like, you can use the table called *Competitive Analysis* below to compare your farm with several of your most important competitors. You can customize this table to meet your unique situation.

- How do you think you stack up in customers' minds? How do your competitors stack up?

Sometimes it is hard to analyze our own weaknesses, and our competitors' strengths. Try to be honest. Better yet, get some disinterested strangers to assess you. This can be a real eye-opener.

Competitive Analysis

	Me	Competitor A	Competitor B	Competitor C	Importance to Customer
Convenience					
Price					
Quality					
Selection					
Service					
Reliability					
Stability					
Expertise					
Business Reputation					
Location					
Appearance					
Sales Methods					
Image					
Other					
Other					

Competitive Advantage

Write a summary paragraph explaining what you offer that your competitors don't, and why that is important to your customers.

The Management Plan

Current Management and Experience

- Who manages the farm and business on a day-to-day basis? (In most cases, this is the farm owners and family.)
- What experience do these people bring to the business? Any special or distinctive skills?

Other Personnel

Who are your other key employees?

- If you have key individuals who are jacks-of-all-trades, try to describe what they do and what they bring to the business. (Example: a brother who is a relief milker, tractor repairman, delivery driver, and field maintenance manager, or an apprentice who oversees the greenhouses and runs the farmstand.) How is he or she compensated?
- If you have positions that are filled by different people seasonally, describe the job itself and who generally does it. (Example: field picker, usually filled by local high school students.)
- Explain the pay structure for each position.
- If you have official written descriptions for each job or an employee handbook, you can attach them in the appendix if you choose.

Professional and Advisory Support

List who else works with you on an ongoing basis. For example:

- Attorney
- Bankers
- Bookkeepers
- Products consultants
- Accountants
- Resource conservation agents
- Insurance agents
- Other mentors and key advisors

The Production/Operational Plan

- *The key here is to explain the operations that are critical to the farm and any operations that may change in the future.*
- Explain the daily operation of the business, its location, equipment, people, processes, and surrounding environment.
- Describe why and how you will make changes in operations. If you are improving efficiency, how? If you are expanding production, how?

Location and Physical Resources

- Describe locations of production, sales, storage areas, and buildings.
- What are your business hours?
- Include a drawing or layout of your proposed facility if you are trying for an expansion loan.

Production Process

- How and where are your products/services produced?
Example: “We rotationally graze X cows on X acres of pasture. We also purchase hay once or twice per year and grain on a weekly basis. We move the cows to a new grass area every X hours. After the daily milking, milk is stored in a bulk tank...Because of the layout of our barn, we find that XXX is a challenge, and we have determined that we need to replace the current system with XXX to solve the problem...”etc.

Inventory (if applicable)

Do you keep any inventory? (Raw materials, supplies, finished goods?) If so, what is the rate of turnover and how does this compares to your industry averages?

Legal Issues

Describe the following as they impact your business:

- Licensing requirements
- Permits
- Health, workplace or environmental regulations, licenses
- Special regulations covering your industry or profession
- Zoning or building code requirements
- Insurance coverage
- Trademarks, copyrights, or patents (pending, existing, or purchased)

Suppliers

Who are your suppliers? (For example, grain, compost, other farmers providing raw materials, etc.)

- Names and locations
- Describe any problems you foresee (such as shortages, delivery issues, or fluctuating costs) and how you would overcome them.

Credit Policies, if applicable

Banks typically like to know how you handle receivables and payables. Do you have a large amount of outstanding receivables? Do you retail anything on consignment?

Risk Management

It is important to communicate to the reader (and especially a lender) that you have considered the potential risks to your business, and that you have a plan of action for them. **List your risks (market prices, weather, injury, etc.) and your management strategies to avoid/deal with them.** For example,

- Low or unstable prices
 - Drought or flood
 - Pests and pest control
 - Slow consumer acceptance, high shipping costs (of inputs or outputs), etc.
- Continuation of the business if key personnel are lost or incapacitated

Financial Information

Sources and Uses of Funds

Expansion or Startup Expenses: If you are planning a major expansion or startup with heavy up-front and capital expenses, this will help you budget the one-time costs associated with expansion.

Describe what you need for cash, either for capital improvements or operating expenses, and who would provide those funds. This is the place to show how you propose to use your loan funds.

Example:

Uses of Funds

Additional Orchard Land	\$57,000
New Apple Storage Facility	
Construction of room	\$13,000
Air control system	\$4,500
Other equipment	\$7,200
TOTAL:	\$81,700

Sources of Funds

Bank Loan 1	\$20,425
Bank Loan 2	\$35,775
In-kind labor*	\$9,500
Apple Storage Grant	\$5,000
Personal resources	\$11,000
Bank loan	
TOTAL:	\$81,700

Financial Information

Explain the following here, put the financials either here after the explanation or in the appendix.

Current Personal Balance Sheet

What you own vs. what you owe. This often includes the family house, furnishings, vehicles, stocks/bonds, credit card debt, personal loans, school loans, etc. Tell us what your equity is that you have available for collateral.

Household Income and Expenses Sheet

Do not include farm expenses. If you have no other income, then the household income amount is the same as “Owner’s Draw” (or equivalent) on the farm cash flow sheet. If there is another family business income, or off-farm employment, show how these incomes and the farm income all contribute to the family’s living expenses.

Farm Business Balance Sheet: Current

Again, what you owe vs. what you own, for your farmland, farm buildings, farm vehicles and equipment, and farm debt. Show what you have for collateral for a loan.

Cash Flow Projections

The cash flow projection is a forward look at your farm business checking account. For each item, determine **when you actually expect to receive cash** (for sales) or **when you will actually have to make a payment** (for expense items). For 3 years (you should be showing positive cash flow within 3 years). Only the first year needs to show monthly cash flow; the 2nd and 3rd year can show quarterly cash flow.

Your cash flow will show you whether your working capital is adequate. Clearly, if your cash on hand goes negative, you will need more. It will show when and how much you need to borrow.

Assumptions for Cash Flow Projections

Explain the major assumptions used to estimate farm business income and expenses. Remember that your sales projections should reflect the **Sales Forecast** in the **Marketing Plan**. You can list these as notes at the bottom of the spreadsheet or as a separate page following the spreadsheet. These assumptions reveal how you came to assign numbers to each item. See examples in section below.

Examples:

- “For delivery, we figured X gallons of fuel per year at \$2.20 per gallon.”

- “Because the pigs use approximately 25% of barn, we assigned 25 % of our electric bill to the pork operation.”
- “We determined our farm store gross sales based on the following formula:
Approximately 15 customers per day spending \$X and approximately 10 customers per day spending \$X, 6 days per week, for 10 weeks...”etc.

This might sound overwhelming but it is actually not so painful and will be invaluable later.

Profit and Loss: Historical and Projections

Profit and Loss Statement for 3 years minimum. In most farm businesses, this is simply an annual income/expense sheet for the farm business that also includes depreciation.

If you have a diversified set of enterprises, you may wish to condense the income and expense information for each enterprise rather than list the same detail that you do on the cash flow projections.

Sensitivity Analysis:

Enterprise budgets showing further detail, best-to-worst case scenarios, tests of your assumptions, etc. These will vary by enterprise. Test assumptions for the most likely variable that would impact that profitability (for example, price or quantity.)

Debt Schedule

A table showing in-depth debt payment information that the financial statements themselves do not usually provide. May include: To Whom Payable, Original Amount, Original Date, Present Balance, Interest Rate, Maturity Date, Monthly Payment, Securities, Current/Past Due

Appendix of Farm Specific Information

If you want to add some additional materials to your business plan to make it more complete and attractive to a Banker, add the following in appendixes.

- Brochures & advertising materials
- Blueprints & plans
- Maps & photos of location
- Magazine or other articles about your farm
- Detailed lists of equipment owned or to be purchased
- Copies of leases & contracts
- Cost estimates for proposed improvements.
- Letters of support from future customers
- Any other materials needed to support the assumptions in this plan

Dairy Farms for the Future:

**Diversifying farms to expand
direct markets for milk products**

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December, 2004

Inspiration and Process

In early 2003, at the height of a statewide discussion about the future of Maine's dairy industry, the Maine Department of Agriculture, Food, and Rural Resources was awarded a grant from the USDA's Federal State Market Improvement Program (FSMIP) to conduct a project entitled, "Dairy Farms for the Future: diversifying farms to expand direct markets for milk products in three regions of Maine." This project brought Federal, State and private efforts together to help diversify and strengthen Maine's dairy industry by:

- Identifying new regional direct-to-consumer, wholesale and institutional markets for Maine milk and value-added milk products.
- Transitioning and diversifying several dairy operations to better serve regional markets.
- Developing regional strategies for milk distribution system and farmland protection.

The Project's goal was to improve the marketing opportunities for small and medium sized dairy farms in Maine in order to maintain the profitability of those farms and keep agricultural lands productive.

This report, prepared by Kerri Sands of the Maine Farms Project of Coastal Enterprises, Inc., and Russell Libby of the Maine Organic Farmers and Gardeners Association, is a part of the research done for the *Dairy Farms for the Future* project.

The authors thank the Department for getting this project underway, and the many chefs, retailers, distributors, and farmers who helped provide information through interviews, a focus group meeting and a survey.

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About this report

This report is intended primarily as a guide for Maine farmers who are considering starting a value-added dairy enterprise. We will describe some value-added possibilities for dairy farmers, and how to assess whether these options might fit your farm. We started the process with a review of some options already being considered or implemented on Maine dairy farms, and conducted a focus group that included chefs, a cheese importer, a cheese retailer, and a food writer. From there, we developed a survey used in interviews with a number of specialty dairy purveyors (retailers, chef, distributors) around Maine, and a specialty distributor in the Boston area. We also pulled together production & market information from our collective experience with Maine producers, marketers, and dairy advisors. Conversations with farmers and with people interested in either producing or buying specialty dairy products were at the heart of this work.

How this report will help you if you're considering value-added dairy

We hope that this report will help you answer this set of key market questions:

1. Do you have a clear picture of your market situation?
2. Do you have a market that can absorb the milk from your current or projected herd size?
3. Does your herd size need to be bigger or smaller?
4. Where might additional customers be found?

How to find what you need in this report

- You'll find a **recent history of Maine value-added dairy** in Section 1.
- We'll highlight for you the **critical marketing issues** that we learned from our survey in Section 2.
- We'll help you figure out **your market situation** and match it with your farm type and production level in Section 3.
- For pricing and regulation information, see Section 4.
- You can find a comprehensive list of resources (people, publications) in the Resources section.
- If you want to read about the survey we did and the highlights of the interviews, you'll find that in Appendices A-F.

Section 1

New Dairy Opportunities for Maine: A Brief Overview

Twenty years ago, if you said you were going to be a dairy farmer, everyone knew what you meant. You were going to buy some cows, milk them, and sell the milk to a processor. Now, in 2004, there are more options, options about scale, about markets, even about which kind of animal to milk.

The dairy industry used to be very homogenous: almost everyone milked cows, herd sizes ranged up to 200 cows, and rarely beyond, and most on-farm processing took place in communities with limited delivery options. A few people were making butter; a few had started making cheese during the 1970's, mostly using goats.

Now Maine has about 375 dairy farmers who ship milk to processors, down from 949 in 1987. But, from a relative handful in 1987, there are now over a dozen cheesemakers, about a dozen farms processing fluid milk, and at least that many producing butter. Forty-eight different businesses are listed as processors. Sixty of the 375, and a few more of the specialty dairies, produce certified organic milk. These farms make everything from cultured butter to aged sheep's milk cheese, unhomogenized milk in glass bottles to ice cream. As national markets have consolidated, farmers have been trying to carve out marketing identities that give them some long-term security.

Some critical elements of the dairy industry have changed in recent years. Those changes influence farmers' choices about what is possible, both on the production and on the marketing side.

Production and Scale

Milk production has remained relatively steady. Maine total cow population is about 36,000 cows and Maine's dairy farmers continue to produce just over 50 million pounds of milk a month, down slightly from the peak production of a decade ago. Pressure to keep production costs low has led many farmers to try to spread those costs over more cows. That pressure is high in every part of the country, and will continue to influence production choices into the future.

For example, in 1987, the average farm milked about 60 cows, with the largest farms milking several hundred cows. Today much of Maine's milk is being produced on fewer, larger farms and the average farm milks 100 cows, with a few farms milking closer to a 1,000 cows. Even with this trend, Maine's farms continue to be smaller than those in other parts of the country. California's dairy farms for example, often have 5,000 cows per farm with one large operation housing 90,000 cows in 10 related buildings.

In the same time period, the cost of entry into commercial dairy production has dramatically increased. Every element of production costs, from building a dairy herd, to storing feed and purchasing or maintaining equipment, to paying property taxes, has escalated. Meanwhile, the price of milk remains low, often at levels similar to those in 1986.

Markets

Across the country, markets for milk have been consolidating over the past two decades. While milk was largely a regional product in the 1980's, now there are several companies (Dean Foods and Dairy Farmers of America's National Dairy Holdings) that control significant parts of the national market. These companies have processing capacity in many areas in the country, and often market under the brand of companies they have purchased. In Maine, the Grant's label is now owned by Garelick, which is in turn owned by Dean Foods. The other milk processing plants in Maine are Hood's, Houlton Farms and Oakhurst Dairy, with the latter two locally owned.

A relatively new regional market for organic milk developed in the mid-1990s, with several regional processors slowly developing their products as national brands. Two major competitors have emerged; Horizon, which is now a subsidiary of Dean Foods; and the CROPP Cooperative, which is processing under the Organic Valley label. Both purchase liquid milk from a significant number of Maine farmers. Horizon processes organic milk in Bangor at the Garelick plant. Another recent entry into the Northeast market is Hood, marketing under the Stonyfield Farms label in partnership with that company, which primarily makes yogurt.

The other important element in marketing, beyond the direct competition from both large and small processors already in the marketplace, is the increasing consolidation of the supermarket sector. Where Augusta, Maine, in 1978 had 11 different markets under 10 different owners, now there are six markets under 4 owners. The high degree of competition between these few large supermarket chains (in Maine, primarily Hannaford's, Shaw's, and Wal-Mart) has reduced and limited small producers access to these markets. Often there is a requirement that the producer/processor pay for shelf space (slotting fees) and/or provide discounts or advertising funds just to be in the store.

Value-added products

While organic milk is often considered to be the only value-added option for Maine's smaller dairies, many farmers are also considering whether value-added activities like bottling their milk, or making cheese, yogurt, or butter, are viable options. Doing value-added processing has become an even more important business decision for Maine's goat and sheep dairies, since currently there are no significant wholesale markets for their milk in Maine.

Over the past five years, Maine has seen a significant increase in cheese production, with new farmers doing on-farm processing and several people buying milk from other farmers to make cheese. The Maine Cheese Guild formed in 2003 and a growing number of dairy farmers have expressed interest in entering the cheese market in the near future.

The practice of bottling milk on farm has also expanded. To date, the market for farmer-processors, or in more regulatory terms, *producer-dealers*, has primarily been farm stores, farmstands, and sales through smaller retail establishments like natural food stores. Some farms have moved to glass bottles and a broader choice of volumes and milk flavors; others are offering the same in plastic jugs.

Maine is one of a few states that permit the sale of unpasteurized or *raw* milk, so long as the container is properly labeled. There is an emerging niche market for raw milk.

Other milk products like butter, yogurt, and ice cream are processed at various scales in the Maine, and in the northeast region. Until World War II, Maine had a significant butter market. Today a few companies - Houlton Farms Dairy and Kate's Butter - operate at a large enough scale to supply some of the larger markets and supermarket sector. The rest of Maine's butter is primarily sold from the farm. A large amount of the organic milk produced in Maine is currently shipped to New Hampshire to be processed at Stonyfield Farms for yogurt.

Section 2

What We Learned From the Survey: Key Marketing Issues for You to Consider

Our discussions with buyers, with farmers already doing value-added on their farm, and with regulators, identified three key issues that farmers have to deal with if they're going to build a successful business involving milk, cheese, butter, or other value-added products.

1. Tell your story to market your product. In our world of “anything from anywhere at anytime”, your cheese or milk or butter needs to have your farm's identity and story associated with it to capture some portion of the consumer base. That means you have to find ways to tell your story, sometimes over and over again, until you develop a base of loyal customers. A compelling story offers customers something unique about your farm – like producing organic milk, raising pure grass-fed animals, preserving a special or rare breed e.g. goats that graze in the woods or sheep with Spanish breeding. Every farm ultimately has to have a story attached to its products, often in a visual form.

2. Do it better, or do it differently. Every farmer entering the cheese market wants to make a soft cheese that turns over quickly so there are no holding costs -- you make it and then sell it right away. While that strategy works nicely if you have access to a retail market – at the farmer's market or your own farmstand--it is not as dependable in Maine's wholesale markets. Tapping and sustaining wholesale markets not only means producing a consistent quality and a consistent volume, it also means you have to produce something different and do it better than your competition.

For example, the wholesale buyers we interviewed felt that Maine already has a good supply of the basic soft goat cheese, chevre. When asked about other possibilities, they offered this example, which illustrates this issue. Three blue cheeses made in the U.S. have already achieved high quality and national recognition -- Great Hill Blue from Massachusetts, Maytag Blue from Iowa, and Point Reyes Farmstead Cheese's Original Blue from California. Any farm wanting to compete with these nationally known cheeses would have to “do it better”, in terms of product quality, or “do it differently” (for example, make it with a different milk blend, make it in different sizes, attach it to a particular historical region).

3. Make a real commitment to your market. Several buyers told stories about farmers developing a product, then ‘market-hopping’ from one place to another, or pulling the product half the year while they sold direct to consumers. Clear communication is always important, but it's even more important when both the buyer and the seller are trying to get to a comfortable relationship where you're

both making money. If the product is selling, but you're not making enough money, talk to the buyer about how you can each adjust prices and margins. If the product isn't selling, but it's something you'd like to keep doing, find out if there's a real reason for lack of sales--quality, price, packaging--that you can fix.

Ultimately the buyers (both at the wholesale and at the retail level) become 'co-producers'*. Their signals to you about what they want help to shape your production. Your signals to them about what is possible can help to shape their buying habits. (*The notion of 'co-producers' comes from Carlo Petrini of Slow Food.)

For more details about marketing and direct quotes from survey participants, see the Survey Results and General Comments sections in the Appendix.

Section 3

How Big Is a Local Market?

or, Calculating how many customers and products you need to sell all of your farm's milk.

Sometimes farmers express an interest in shifting from existing wholesale milk markets to selling their milk "at the farm." That can mean establishing a few wholesale outlets in the community, setting up a farmstand, or recreating the door-to-door milk route model. Here are some questions to help you figure out your local market.

First, is there a sufficient customer base to match the milk available, now and in the future?

According to the national average of 3.13 people per household, the 1,000 people in Table 1 represent about 320 households. Excluding butter, these 320 households would use about 1,100# worth of milk per day. Or, using households as the measure, 100 households would use 344 pounds of milk per day, excluding butter.

**Table 1.
Daily Dairy Product Consumption in the United States per 1,000 People**

Product	Number	Unit
All fluid milk products (includes yogurt & buttermilk)	263	quarts
+ Butter	12	pounds
+ Cheese (excluding 'American' and other processed cheese foods)	48	pounds

From the 2000 US Dept. of Agriculture's Agricultural Statistics Report.

Second, what mix of products do you want or need to produce?

All farms are not going to produce all products. Some (yogurt, for example) are easy to produce, but require specialized machinery to enter larger markets. Others, like cheese, have large market potentials, but require a significant amount of up-front capital to get started. For many farmers, a relatively easy starting point is the production of fluid milk, packaged in quart or half gallon containers.

Even though our research shows that the value-added dairy market is expanding, you will need a significant base of customers to support a mid-size dairy

operation that is milking 60 cows. Entering the specialty dairy market may in fact be easier for those farmers who are just starting, because the volume produced and required can be matched with the farm's initial customer base. (A note of caution: most wholesale buyers are reluctant to allow their farmers to develop a retail customer base that might take away milk "promised" to the wholesale buyer, now or in the future.)

Calculating Product Mix

By our rough calculations, a herd of about 20 Jerseys produces enough fluid milk each day for a customer base of about 1,400 people. Combined with a small cheese making operation, another 15 cows could supply the cheese for the community. Since the fluid milk market has shifted to primarily skim milk and low fat milks in recent years, a milking herd of 30 to 35 cows, combined with a cheese making operation to absorb seasonal surpluses and swings in production and consumption, would supply a customer base of about 1,400 people (just under 500 households). That means that a farmer with 35 cows, who is converting from wholesale to retail markets, will have to quickly identify 500 households of loyal customers requiring products on a continual basis. Because this scenario creates a significant marketing challenge, most farmers chose to switch from producing milk for a wholesale buyer, to finding a few wholesale outlets (independent retailers, natural food stores, farmstand) that they can supply.

Table 2. Relative Yields for Various Hundred-Weights of Milk Produced

Product	200#	400#	600#	800#	1,000#
Quarts of whole milk,	93	186	279	372	465
OR					
Quarts of skim milk +	89	179	268	357	447
Pounds of butter +	0	1	1	2	2
Quarts of buttermilk,	0	1	1	1	2
OR					
Quarts of yogurt,	93	186	279	372	465
OR					
Pounds of cheese,	20	40	60	80	100
OR					
Pounds of butter +	9	19	28	38	47
Quarts of buttermilk	7	15	22	30	37

Note: Two hundred (200) pounds of milk represents about 5 Jerseys on grass, with a minimal grain ration, or 2 high-producing Holsteins being fed heavily.

Table 2 can be used to calculate a combination of products. If for example, the customer base uses 100 quarts of milk and 40 pounds of cheese per day, then the farm needs to produce 600 pounds of milk. That is, 93 quarts of milk requires

approximately 200 pounds of milk, and 40 pounds of cheese requires 400 pounds of liquid milk. Depending upon the cows and their diets, this volume of liquid milk could be produced by 15 Jersey cows or 6-7 Holstein cows.

Value for Various Hundredweights of Milk Produced

If 100 pounds of milk is valued at:	200#	400#	600#	800#	1,000#
\$15	30.00	60.00	90.00	120.00	150.00
\$20	40.00	80.00	120.00	160.00	200.00
\$25	50.00	100.00	150.00	200.00	250.00
\$30	60.00	120.00	180.00	240.00	300.00
\$35	70.00	140.00	210.00	280.00	350.00
\$40	80.00	160.00	240.00	320.00	400.00

Direct Market Options

Or,

How to reach the 100 (or 200 or 300) families who will support your farm

First you have to contrast and compare the advantages and risks of various markets relative to your farm, your products and your time to sell your products. You may be very excited about working directly with consumers, and talking with them about your products, or you may prefer to spend time on your farm and let others do the marketing.

If you're thinking about direct marketing options, rather than taking a wholesale approach, farmers' markets can play a role in identifying a loyal group of customers. Just be sure to factor in the fact that most farmers' markets are open and available only two days per week, which will increase the daily and weekly swings in your product market.

Another option to consider is linking your production with the growing number of farms that operate as CSA's—Community Supported Agriculture farms. These farms build a loyal group of consumers who purchase a season's worth of produce up front, and then pick up their product once a week at the farm, or have it delivered. Almost 70 Maine farms are now operating as CSA's, and nearly one percent of Maine families are now getting their summer vegetables this way. Some are already adding products from other farms to their offerings; this outlet has become a natural link for farmers producing specialized dairy products like raw milk and cheeses. A few farmers in Maine are working towards CSA's that are centered on the dairy products they provide from their farms.

Another possibility worth investigating is linking with the growing number of farm stores—farmers who sell their own product year-round, and complement it with products from other farmers in the community. Typically, farm stores take more time to develop a loyal customer base. A handful of farm stores in Whitefield, New Sharon, and Turner have been successful. Some farmers grow their farmstands or their “from the farm” marketing into a large business, but the key ingredients—location and willingness to market—are the same as for the other direct market options.

Most farmers end up with a combination of markets, some closer to home, others further away, to absorb the seasonal ebbs and flows of both their production and their market options.

Section 4

Pricing and Regulatory Issues

Pricing

One of the quirks of marketing milk in Maine is the need to comply with the State's minimum pricing regulations. In some ways, this is also an advantage, because the wholesale price the farmer charges a retailer for fluid milk includes both the minimum price for the milk, and the minimum markup for processing the milk. While this assumes an efficient processing (and bottling?) plant at various economies of scale, it also helps to illustrate how to avoid a down-pricing pressure, or the feeling that the retail price should only be a small step above the price the farmer would get for selling his milk to a wholesaler.

For example, in August, 2004, quarts of milk have to meet a minimum wholesale price of \$.78 for whole milk, and \$.71 for skim, and must retail for at least \$.87 and \$.80, respectively. That might not seem like much, but it represents a wholesale price of \$36.27 per cwt. of milk (whole milk, quart containers), almost double the price paid to farmers for milk sold in bulk. The minimum retail price was \$40.45 for those farmers selling directly to consumers.

Please see the pricing section of the Survey Results for more information on specialty dairy prices in Maine.

Regulation

Farmers who sell milk are subject to a series of state and federal regulations regarding quality standards, packaging, labeling, and pricing. **Anyone entering into the specialty milk market needs to be ready to establish a good working relationship with the Maine Department of Agriculture and the State's milk inspectors.** They will visit your farm regularly, and help you to understand the regulatory requirements. They will also work with the State Milk Lab to gather samples for testing. Some critical rules enforced by the Maine Department of Agriculture (available on-line at <http://www.maine.gov/agriculture/ahi/ahisr.htm>, or by calling 287-3701):

Milk and Milk Products. Details the standards for processing milk in any situation, including on-farm processing. Maine is one of a few states that are reasonably accepting of raw milk sales. However, the milk is still subject to regular inspection and quality testing.

Law: Chapter 601: Milk and Milk Products (Heading: PL1999,c.362,@1(rpr)) (§2900-2910-A)
Rule: Chapter 329:Rules Governing Maine Milk and Milk Products

Cheese and Cheese Products. Producing cheese and other processed products on farm requires special handling and equipment. Most farmers pasteurize their milk, so they can sell fresh cheeses shortly after production. Cheeses aged more than 60 days can be made from milk which is heat-treated, rather than pasteurized. Again, the Department's milk inspectors are key to helping you establish a business that meets state and federal regulations.

Rule: Chapter 328: Rules Governing the Licensing and Inspection of Farm Cheese

Conclusion (And a few more key questions)

Each farm's situation is different. However, we know from seeing them at work that many Maine farmers have found their way to new markets and new businesses. The process of creating these businesses is often slow, and requires a big investment of time, and some investment of money, to get the business started.

Most farmers find it useful to put their ideas for a new venture down on paper. It's a lot less painful to identify pitfalls on paper than in real life. A business plan that includes sections on marketing and operations in addition to financial assessments is a common tool, and will be required if you are going to seek a loan or a grant. However you choose to put your thoughts down on paper, remember to write down all of your assumptions – i.e. “we're harvesting all our own feed” or “cost of fuel in 2004” or “with 10 hours/week help from my nephew”.

Here are three more key questions you should consider.

- **What's the current status of your physical system (equipment, distribution, etc.) and what improvements are required?** A bulk tank alone won't allow you to make and sell cheese or butter. Any value-added business will require some separation from your milking activities.
A sample checklist for start-up facilities:
 - Investment of \$25,000-\$50,000 in equipment & facility
 - A space perhaps the size of a 2-car garage
 - A visit from a state inspector
 - A HACCP Plan (Hazard Analysis Critical Control Points)
- **What are the labor requirements for your new venture?** Remember to add marketing labor on top of any new production labor.
A sample breakdown of labor for production of 20,000 lbs cow cheese per year, 25% retail from farm and 75% wholesale:
 - 60 hrs/week making cheese
 - 40 hrs/week packaging & UPS
 - 20 hrs/week at farmers markets
 - 20 hrs/week in additional sales and packing
- **How are you going to pay for all of this?** This will require putting together all of the elements of your strategy, and analyzing potential costs and revenues. Does the idea make economic sense for you?

The answers to these questions are beyond the scope of this report, but many resources are available to help (see the Resource section).

Please remember to contact the Maine Department of Agriculture's Division of Animal Health and Industry at 207-287-7631 early in the process so that a milk inspector can tell you what will be required to meet regulatory requirements. It's always better to know than to get ready to sell or ship and not have a product that can be licensed.

RESOURCES FOR MAINE FARMERS, CHEESEMAKERS, AND DAIRY PROCESSORS

The process for most farmers creating value-added dairy products (even those with some experience!) is to start with an idea or inspiration, then try to make it happen. Once you've had a little success, then you start to think about how you might approach the idea as a business.

We've organized some key resources for farmers considering on-farm processing in roughly that order: inspiration, experimentation, and nuts and bolts of business planning.

ORGANIZATIONS & PEOPLE

1. Maine Cheese Guild

The Maine Cheese Guild
c/o State of Maine Cheese Co.
461 Commercial Street
Rockport, ME 04846
Phone - 785-4431, please leave message
Email - info@mainecheeseguild.org
www.mainecheeseguild.org

Regular newsletter: *Cheese Pairings*, monthly meetings at member farms. Regular workshops, from beginner to advanced. Annual Maine Cheese Festival every fall.

The mission of the Maine Cheese Guild is to support and encourage the Maine cheesemaking community. This is accomplished through development of a collective voice to: promote Maine cheese and cheese makers, educate cheese makers and consumers, coordinate resources, and share the joy and art of regional cheeses.

2. Maine Organic Milk Producers

Contact: Mia Morrison
285-7085

3. Maine Dairy Industry Association

Contact: Julie Marie Bickford
725-7040 or 798-5544
mainedairy@aol.com

The Maine Dairy Industry Association gives Maine dairy farmers a voice in Augusta. They monitor the Legislature and advocate for dairy farmers, keeping their constituents informed of regulations and pricing policies pertaining to dairy.

4. Maine Department of Agriculture, Food, and Rural Resources

28 State House Station
Deering Building (AMHI Complex)
Augusta, ME 04333-0028

Market and Production Development Division: Provides technical production and marketing assistance, financial assistance through grant and loan programs, special events, and public information.

Phone: 287-3491

Mary Ellen Johnston, Division Director, for overall marketing strategies
Mary.Ellen.Johnston@maine.gov

Stephanie R. Gilbert for policy development and farmland protection
Stephanie.Gilbert@maine.gov

John Harker for business development strategies, grants and loans
John.Harker@maine.gov

Deanne Herman for direct marketing possibilities
Deanne.Herman@maine.gov

Division of Animal Health and Industry

Dairy Inspection Program: State regulated and FDA certified inspection of dairy products, including milk, frozen desserts, and cheese

Phone: 287-7631

If you are producing a value-added dairy product, you need to be in touch with your milk inspector from the earliest stages to develop a facility that can be licensed. Call the above number to find out which inspector covers your area.

Jim Bartlett: jim.bartlett@state.me.us
Audrey Slattery: audrey.slattery@state.me.us
Glen Meheuren: glen.mehuren@state.me.us

Maine Milk Commission: A five-member consumer board that is established to oversee the milk industry in Maine and to support the viability of farms and the milk industry. Part of this responsibility is setting minimum milk prices.

Stan Millay, Executive Director: 287-7521, stan.millay@state.me.us

5. Maine Organic Farmers and Gardeners Association

PO Box 170
Unity, ME 04988
568-4142
Email: mofga@mofga.org
www.mofga.org

MOFGA has helped 16% of Maine dairy farms to convert to organic dairy production. Works with farmers interested in value-added processing. Offers workshops and educational programs on pasture management, livestock health, and a variety of issues related to successful farming.

Key contacts:

Russell Libby (co-author of this report), for help with ideas on value-added markets, contacts with other people interested in doing what you're doing.
rilibby@mofga.org

Diane Schivera for organic livestock and grass-based farming issues.
dianes@mofga.org

Mary Yurlina for organic certification questions.
yurlina@mofga.org

6. Maine Farms Project of Coastal Enterprises, Inc.

John Piotti, MFP Director
PO Box 188
Unity, Maine 04988
948-3335
jp@ceimaine.org

MFP's goal is to increase local food production as a way to build local self-reliance and effect lasting food system changes.

Key Programs & Contacts:

Farms for the Future: provides selected farms with a package of focused, individualized business services leading to development of an investment-grade business plan and the chance to obtain a grant (of up to \$25,000) to implement that plan.

Kerri Sands (co-author of this report): 772-5356 x 114, kcs@ceimaine.org

Image Building Concepts: IBC provides individual farms, farmers' markets, and farm organizations with professional assistance in the development of logos, brochures, labels, and other promotional materials designed to enhance a farm's image or help it access new markets.

Gabe McPhail: 322-9832, glm@ceimaine.org

7. University of Maine Cooperative Extension (UMCE)

UMCE is the major educational outreach program of the University of Maine, with offices statewide. Extension programs cover a wide range of topics related to sustainable agriculture, natural resources, families and youth development.

Dairy and Livestock Programs:

UMCE

Animal, Veterinary and Aquatic Sciences Office
332 Hitchner Hall, Orono, ME 04469-5735
Phone: 581-2787 or 1-800-287-7170 (in Maine)
E-mail: davidm@umext.maine.edu
www.umaine.edu/livestock/

The objectives of Extension's dairy and livestock programs are to help producers increase the profitability of their operations through improved nutrition, reproduction, genetics, health, management and marketing. Extension assists producers in adopting new technologies, such as computers, decision support tools, predictive models, testing strategies and integrated whole farm systems. They also help dairy and livestock producers identify problem areas that limit long-term productivity. Educational programs are helping people improve farm communications, form management teams, manage labor effectively, develop strategic plans and incorporate new management skills into their operations.

Key Contacts:

Gary Anderson (Orono) - Biotechnology, reproduction nutrient management, farm management
garya@umext.maine.edu

Dick Brzozowski (Cumberland County) - Dairy, sheep and goat management
rbrz@umext.maine.edu

Rick Kersbergen (Waldo County) - Dairy, crops nutrient management
richardk@umext.maine.edu

Donna Lamb (Piscataquis County) - Sheep, livestock and dairy management
dlamb@umext.maine.edu

Dave Marcinkowski (Orono) - Dairy, computers, reproduction and farm finances
davidm@umext.maine.edu

8. Maine Small Business Development Centers

Statewide and Administrative Offices at University of Southern Maine
PO Box 9300
Portland, ME 04104-9300
Located at 68 High Street, 2nd Floor
Info: 679-SBDC
State Office: 780-4420
www.mainesbdc.org
mainesbdc@usm.maine.edu

Call the above number to find your local counselor.

Maine SBDC's provide comprehensive business management assistance, training, resource and information services to Maine's micro, small and technology-based business communities.

9. Institute for Artisan Cheese at the University of Vermont – new as of Spring 2004.

Contact: Jody Farnham
<http://www.uvm.edu/viac> 200 Carrigan Building
University of Vermont
Burlington, VT 05405
Phone: 802-656-8300
jfarnham@uvm.edu

The Institute provides education, research, technical services, and public outreach for European-style cheesemaking. Workshops year-round.

<http://www.mainecheeseguild.org/guild.html> - **top PUBLICATIONS**

Start with these three...

"Questions You Should Ask Before Starting a New Dairy Processing Enterprise"

<http://www.cpdmp.cornell.edu/CPDMP/Pages/Publications/Pubs/dairypq.pdf>

The Small Dairy Resource Book from SARE

Out of print but free online at <http://www.sare.org/publications/dairyresource.htm>

This handbook has extensive commentary on many books, magazines, trade groups, equipment dealers, etc. The SARE website also offers master lists of publications on many dairy resources, from production to marketing to financing. www.sare.org/htdocs/pubs/

"You Can Make It, You Can Sell It, but Can You "Make It" Selling It?"

From the Center for Dairy Profitability at the University of Wisconsin.

<http://cdp.wisc.edu/pdf/onfarm.pdf>

This publication goes along with an Excel spreadsheet called **Farmstead Milk Processing**. You can find it on a list of several spreadsheets at:

<http://cdp.wisc.edu/Decision%20Making%20Tools.htm>

Scroll down to **FSTMILKP.XLS**

Read, "**You Can Make It...**" first, because it explains how to use the spreadsheet. Once you're on the spreadsheet, look at all the tabs - at the far right you will find "input" sheets. If it's all too

technically overwhelming, just consider all the categories of costs and figure out which ones apply to you and make your own spreadsheet.

Other good resources:

The Cost of Producing Milk in Maine: Results from the 2002 Dairy Cost of Production Survey, T.J. Dalton and L.A. Bragg. 2003.
<http://www.ume.maine.edu/rep/facstaff/publications/tb189.pdf>

The Specialty Cheese Market

Prepared for the North Central Initiative for Small Farm Profitability, by the Food Processing Center, Institute of Agriculture and Natural Resources, University of Nebraska-Lincoln
October 2001
Free online at <http://www.farmprofitability.org/cheese.htm>

Resource Packet: Adding Value With Small-Scale Food Processing and Specialty Dairy Products, compiled for 1996 and 1997 Farming for the Future Leadership Workshops. Available from Farming Alternatives Program, Department of Rural Sociology, Warren Hall, Cornell University, Ithaca, NY 14853; 607-255-9832 for \$5. Contains articles, conference materials, project plans, etc.

The Cheese Reporter. Weekly newsletter. 4210 E. Washington Ave, Madison, WI, 53704. 608-246-8430. www.cheesereporter.com

Cheese Market News. Weekly newspaper. PO Box 620244, Middleton, WI, 53562. 608-831-6002. ChMarkNews@aol.com

The Organic Decision: Transitioning to Organic Dairy Production, from the Dept. of Applied Economics and Management in the College of Agriculture and Life Sciences at Cornell. January 2002. \$12. Order form at <http://aem.cornell.edu/order/index.htm> or call Linda Putnam at 607/255-8429. Ask for EB 2002-02.

“Buttering Up Your Customers”

<http://www.farmprofitability.org/research/butterup/butterup.htm>

“Planning for Success: Uplands Cheese Company”

<http://www.farmprofitability.org/research/uplands/uplands.htm>

“Small Creameries: Wave of the Future”

<http://www.newfarm.org/features/0503/hendrens.shtml>

“Farmstead Milk Processing”. A spreadsheet from the Center for Dairy Profitability in Wisconsin; comes with instructions.

<http://cdp.wisc.edu/pdf/onfarm.pdf>

<http://www.wisc.edu/dairy-profit/>

<http://cdp.wisc.edu>

“Test Marketing Pasture-Produced Artisan Cheeses”

<http://wsare.usu.edu/projects/2002/MW00-010.pdf>

“The Marketing Potential of Conjugated Linoleic Acid (CLA) in Cheese: A market scan”

<http://www.agmrc.org/dairy/reports/clareport.pdf>

“Approaching Foodservice Establishments with Locally Grown Products”

<http://www.farmprofitability.org/research/grownlocal2/grownlocal2.htm>

“Attracting Customers with Locally Grown Products”

<http://www.foodmap.unl.edu/reports.asp?action=DSRPT&code=34>

“Seven Do’s and Don’ts of Value-Added Dairy Ventures”

<http://www.agmrc.org/dairy/articles/DHERDMgmt21302.htm>

"Market Analysis for Value-Added Dairy Opportunities for the Southern Massachusetts Dairy Industry"

http://www.state.ma.us/dfa/programs/agroenviro/grantreport_pilgrim.pdf

Cheese Market Research Project <http://www.idfa.org/mktg/cheesemarketreport.cfm>

Participants share the expense of acquiring syndicated retail and consumer panel data at a fraction of the cost of acquiring the information through the marketplace.

ARTICLES

Say Cheese, and New England Smiles, and Sources: Follow the Aroma

By MARIAN BURROS, June 23, 2004, ***New York Times***

Money and Magic in Cheese Making: Guilds promote art, science, and business

By Kara Lynne Dunn, June 2004, ***Farming: The Journal of Northeast Agriculture***

The Power of Cheese: “Maine Cheesemaking is on the cusp of becoming a full-fledged industry. So what are we waiting for?”

Portland Phoenix, November 7 - 13, 2003

Market Ripe For Cheese Makers

By MATT WICKENHEISER, ***Portland Press Herald***, September 28, 2003

APPENDIX A

Survey of Purveyors of Maine Specialty Dairy Spring-Summer 2004

About the survey:

This survey was designed based on ideas generated at a focus group of Maine chefs, food writers, and purveyors of cheese and specialty dairy products at Portland's Fore Street restaurant in March 2004. Input from farmers and farm support organizations was also considered. Face-to-face interviews, accompanied by a written survey, were conducted with purveyors from the following locales:

Portland, Belfast, Southwest Harbor, Brunswick, Freeport, Ellsworth, Bar Harbor, Orono, Castine, Rockport, Yarmouth, Bangor, Wiscasset, York, Oakland, Gardiner, and Boston.

The interviewees and focus group collectively were comprised of:

16 retailers
7 chefs
3 distributors

Interviews were conducted by Kerri Sands of the Maine Farms Project of Coastal Enterprises, Inc. and Russell Libby of Maine Organic Farmers and Gardeners Association. The interviews took place between March and July of 2004. All interviews but one were conducted in person; one was conducted by phone. All interviews used an informal conversational model.

A note from Kerri on the survey responses:

Because the questions are general and business situations are specific, some questions simply could not be answered using the given format. I allowed interviewees to give broad answers. Data processing then became a challenge but I have done my best to adjust by listing the total respondents for each question. Even though this is not the most scientific of studies, we feel that the information gathered is accurate and valuable. We are grateful to our interviewees for being so generous with their time.

APPENDIX B

BLANK SURVEY

A. About Your Business:

Business name (Optional) _____ Owner's name (Optional) _____
Name of person answering survey (if different) (Optional) _____
Business location _____ Years in business _____
Type of business (please check *one* which is your primary enterprise)

- | | |
|---|--|
| <input type="checkbox"/> Gourmet products retailer | <input type="checkbox"/> Distributor – Year-round, large-scale |
| <input type="checkbox"/> Cheese specialty store | <input type="checkbox"/> Distributor – Seasonal, small-scale |
| <input type="checkbox"/> Health food or natural foods store | <input type="checkbox"/> Supermarket |
| <input type="checkbox"/> Importer | <input type="checkbox"/> Farm store |
| <input type="checkbox"/> Exporter | <input type="checkbox"/> Gift store |
| | <input type="checkbox"/> Other _____ |

B. General Preferences for Maine Dairy Products

1. Which dairy products are the most popular (or fit your preferences best)?

- Products from a **single** Maine farm
 Products from a **group** of Maine farmers (i.e. Oakhurst or State of Maine Cheese Co.)

2. Please indicate whether you agree:

Organic products are important to our customers.	Yes	No	Somewhat
Grass- or pasture-based products are important to our customers.	Yes	No	Somewhat

3. Sections C and/or D do not apply to me, as **I have no interest in Maine milk and/or butter**

C. MILK

4. Please rank the following milk items in order of your (or your customers') preference:

- | | |
|---|--------------------------------------|
| <input type="checkbox"/> Whole milk | <input type="checkbox"/> Cream |
| <input type="checkbox"/> Reduced fat milk | <input type="checkbox"/> Half-n-half |
| <input type="checkbox"/> Skim milk | <input type="checkbox"/> Buttermilk |
| <input type="checkbox"/> Flavored milk | |

5. Please rank the following milk items in order of your (or your customers') preference:

- Pasteurized & Homogenized
 Creamline (pasteurized but non-homogenized)
 Raw (unpasteurized and non-homogenized)

6. Please rank the following SIZES of MILK in order of your (or your customers') preference:

- | | |
|--------------------------------------|---|
| <input type="checkbox"/> Gallon | <input type="checkbox"/> Single-serving |
| <input type="checkbox"/> Half gallon | <input type="checkbox"/> Other |
| <input type="checkbox"/> Quart | |

7. Which type of container do (or would) your customers prefer? Glass Plastic

Please estimate how much farm-identified milk you do (or would) purchase per week:

- Under 50 gallons. 50 – 200 gallons. Over 200 gallons.

Upper limit prices?

D. BUTTER

8. Please rank these butter **items** in order of your (or your customers') preference:

- Sweet Cream Salted Cultured Salted
- Sweet Cream Unsalted Cultured Unsalted

9. Please rank these butter **units** in order of your (or your customers') preference:

- 1-lb. block Tub
- 4 quarters Other _____
- Single quarters

10. Would you be interested in farm-identified butter? How much per week?

- Under 50 lbs. 50 – 200 lbs. Over 200 lbs.

11. Please estimate your upper limit price per lb. for farm-identified butter:

- Under \$3 \$5 and up
- \$3-\$4 No limit – whatever it costs
- \$4-\$5

12. Please indicate your interest in purchasing the following items from farm-identified sources:

- Sour cream: Under 20 lbs/week 20-50 lbs/week Over 50 lbs/week None
- Cottage cheese: Under 20 lbs/week 20-50 lbs/week Over 50 lbs/week None
- Crème fraiche: Under 20 lbs/week 20-50 lbs/week Over 50 lbs/week None
- Cream cheese: Under 20 lbs/week 20-50 lbs/week Over 50 lbs/week None

E. FARM PRODUCED CHEESES

12. Are you interested in Maine-produced cheeses that resemble the following items?

- Monterey Jack Cheddar Colby

13. Are you interested in Maine-produced cheeses with unique farmstead attributes? Yes No

- Soft cheeses No interest A little interest Strong interest I want it right now
- Hard/dry Italian No interest A little interest Strong interest I want it right now
- Mold-ripened No interest A little interest Strong interest I want it right now
- Sharp, old Cheddar type No interest A little interest Strong interest I want it right now
- Blues No interest A little interest Strong interest I want it right now
- Swiss No interest A little interest Strong interest I want it right now
- Provolone & Mozzarella No interest A little interest Strong interest I want it right now
- Muenster & Limburger No interest A little interest Strong interest I want it right now
- Gouda No interest A little interest Strong interest I want it right now

Other notes:

14. Please estimate how much farmstead cheese you do (or would like to) purchase per week:

PEAK SEASON (My peak season for cheese sales is Jan-Mar Apr-Jun Jul-Sep Oct-Dec)

- Soft cheeses Under 25 lbs 25-50 lbs 50-100 lbs Over 100 lbs
- Hard/dry Italian Under 25 lbs 25-50 lbs 50-100 lbs Over 100 lbs
- Mold-ripened Under 25 lbs 25-50 lbs 50-100 lbs Over 100 lbs
- Sharp, old Cheddar type Under 25 lbs 25-50 lbs 50-100 lbs Over 100 lbs
- Blues Under 25 lbs 25-50 lbs 50-100 lbs Over 100 lbs
- Swiss Under 25 lbs 25-50 lbs 50-100 lbs Over 100 lbs
- Provolone & Mozzarella Under 25 lbs 25-50 lbs 50-100 lbs Over 100 lbs

(Peak season continued)

Muenster & Limburger ___ Under 25 lbs ___ 25-50 lbs ___ 50-100 lbs ___ Over 100 lbs
 Gouda ___ Under 25 lbs ___ 25-50 lbs ___ 50-100 lbs ___ Over 100 lbs

OFF-PEAK SEASON

Soft cheeses ___ Under 25 lbs ___ 25-50 lbs ___ 50-100 lbs ___ Over 100 lbs
 Hard/dry Italian ___ Under 25 lbs ___ 25-50 lbs ___ 50-100 lbs ___ Over 100 lbs
 Mold-ripened ___ Under 25 lbs ___ 25-50 lbs ___ 50-100 lbs ___ Over 100 lbs
 Sharp, old Cheddar type ___ Under 25 lbs ___ 25-50 lbs ___ 50-100 lbs ___ Over 100 lbs
 Blues ___ Under 25 lbs ___ 25-50 lbs ___ 50-100 lbs ___ Over 100 lbs
 Swiss ___ Under 25 lbs ___ 25-50 lbs ___ 50-100 lbs ___ Over 100 lbs
 Provolone & Mozzarella ___ Under 25 lbs ___ 25-50 lbs ___ 50-100 lbs ___ Over 100 lbs
 Muenster & Limburger ___ Under 25 lbs ___ 25-50 lbs ___ 50-100 lbs ___ Over 100 lbs
 Gouda ___ Under 25 lbs ___ 25-50 lbs ___ 50-100 lbs ___ Over 100 lbs

15. Please estimate your upper limit price per lb. for farm-identified cheeses:

	<i>WHOLESALE</i>	<i>RETAIL Sale Price:</i>
Soft cheeses	\$ _____	\$ _____
Hard/dry Italian	\$ _____	\$ _____
Mold-ripened	\$ _____	\$ _____
Sharp old Cheddar type	\$ _____	\$ _____
Blues	\$ _____	\$ _____
Swiss	\$ _____	\$ _____
Provolone & Mozzarella	\$ _____	\$ _____
Muenster & Limburger	\$ _____	\$ _____
Gouda	\$ _____	\$ _____

16. Which type of rind would you prefer? Waxed Natural

17. For hard/aged cheeses, which size would you prefer?

___ 25-lb. wheel ___ 10# wheel ___ 5# wheel
 ___ Precut and vacuum-sealed 8 oz. wedges ___ Precut and vacuum-sealed 5 oz. wedges

18. Imagine that you are telling a Maine cheesemaker what you are looking for in a good farm-produced cheese. Please rate the importance of the following attributes:

1 = Very important 2 = Somewhat important 3 = Not important

- | | |
|--|--|
| <p>___ Complex flavor</p> <p>___ Closely resembles a popular cheese such as Cheddar, Parmesan, Mozzarella (circle or note which type)</p> <p>___ Affordable price</p> <p>___ Attractive or creative packaging</p> <p>___ Farm with an interesting story</p> <p>___ Cheese is very distinctive to specific farm (i.e. <i>terroir</i>)</p> <p>___ Your relationship with the farmer or cheesemaker</p> | <p>___ Cheese is <i>certified</i> as adhering to distinctive, traditional methods, or a limited geographical area of production</p> <p>___ Pasteurized</p> <p>___ Raw milk</p> |
|--|--|

APPENDIX C

SURVEY RESULTS, Tabulated

A. Type of Business

Which is your primary enterprise?

Gourmet products retailer	4
Gourmet products retailer and Cheese specialty store	4
Health or natural foods store	5
Distributor	2
Supermarket	1
Restaurant	2
Other – Gourmet products and health foods	1
Other – “specialty food store – seasonal”	1

B. General Preferences for Maine Dairy Products

1. Which dairy products are the most popular (or fit your preferences best)?

Products from a single Maine farm

Products from a group of Maine farmers

Single Maine farm	8
Group of Maine farmers	3
Both equal/no preference	3
No response or N/A	6

Comment:

- “We are seeing more and more demand for single-farm products. Not just from Maine, but also from VT, MA, and CA. More and more non-imported items are of very good quality.”

2. Please indicate whether you agree:

Organic products are important to our customers.

Yes	9
No	2
Somewhat	6
No response or N/A	3

Comments:

- “A great selling point – it will enhance value if it’s organic but will not detract if it’s not organic.”
- “Important to a small group of my customers.”
- “Very, very important.”

Grass- or pasture-based products are important to our customers.

Yes	5
No	7
Somewhat	4
No response or N/A	4

Comments:

- “Increasing awareness.”
- “They assume it goes with organic.”
- “Absolutely.”
- “They recognize the quality without necessarily having the knowledge about it.”
- “People notice when the color of the cream changes – they ask if the cows are out eating spring growth.”

C. MILK

4. Please rank the following milk items in order of your (or your customers’) preference.

Ranked as number **one** preference:

	Retailers (7 total)
Whole Milk	6
Reduced Fat Milk	-
Skim Milk	-
Flavored Milk	-
Cream	1
Half-n-half	-
Buttermilk	-

Comment:

- “Cecil’s chocolate quart is very popular.”

5. Please rank the following milk items in order of your (or your customers’) preference.

(Ranked as number one preference:)

	Retailers (7 total)
Pasteurized & Homogenized	2
Creamline	2
Raw	3

6. Please rank the following sizes of milk in order of your (or your customers’) preference.

(Ranked as number one preference:)

	Retailers (8 total)
Gallon	1
Half-gallon	5
Quart	2
Single-serving	-
Other	-

Comment:

- “Would like to see more gallons available.”

7. Which type of container do (or would) your customers prefer?

	Retailers (7 total)
Glass	7
Plastic	-

8. Please estimate how much farm-identified milk you do (or would) purchase per week?

(The choices were: “under 50 gallons”, “50-200 gallons”, or “over 200 gallons” but no one really answered this question using the categories.)

Local raw milk: <i>(White Orchard, Post Family Farm)</i>	<ul style="list-style-type: none"> • 4 half-gallons per week • 32 gallons per week • 16 cases of 6 half-gallons per week (total 96-100 half-gallons) all types
Local milk: <i>Smiling Hill, Morris Farm, Harris</i>	<ul style="list-style-type: none"> • just under 50 per week, but could do more • under 50 per week
Organic Valley	<ul style="list-style-type: none"> • 2 cases (48 half-gallons) per week of each of the 4 kinds • 66 whole; 16 skim half-gallons per week
Organic Cow	<ul style="list-style-type: none"> • 66 - 80 half gallons per week

9. What are your upper limit prices for farm-identified milk?

Local raw milk: <i>(White Orchard, Post Family Farm)</i>	<ul style="list-style-type: none"> • \$2.25 quart • \$2.95 chocolate quart • \$1.85 quart <p>-----</p> <ul style="list-style-type: none"> • \$3.50 half-gallon • \$3.50 half-gallon • \$2.75 half-gallon • \$2.75 half-gallon <p>-----</p> <ul style="list-style-type: none"> • \$4.10 gallon • \$4.25 gallon
Local milk: <i>Smiling Hill, Morris Farm, Harris</i>	<ul style="list-style-type: none"> • \$2.39 quart • \$3.49 half-gallon • \$4.99 gallon
Organic Valley	<ul style="list-style-type: none"> • \$3.19 half-gallon • \$3.59 half-gallon
Organic Cow	<ul style="list-style-type: none"> • \$2.89-\$2.99 half-gallon

Comments:

- *Retailer of Organic Cow:* “I’m currently underselling Shaw’s & Hannaford. People would balk at \$3.99.”
- *Retailer of White Orchard at \$3.50:* “Charging \$3.99 would have a significant impact on sales.”

D. BUTTER

10. Please rank the following butter items in order of your (or your customers') preference.

(Ranked as number one preference:)

	Retailers (11 total)	Restaurants/Distributor (4 total)
Sweet Cream Salted	6	
Sweet Cream Unsalted	0	1
Cultured Salted	1	
Cultured Unsalted	1	3
"Anything raw"	1	
"All types sell the same"	2	

Comment:

- One restaurant preferred a very high butterfat butter and is looking for a very high quality European style cultured butter from Maine.

11. Please rank the following butter units in order of your (or your customers') preference.

(Ranked as number one preference:)

	Retailers (12 total)	Restaurants/Distributor (4 total)
1-lb. block	6 (mostly specialty food stores)	3
4 quarters	5 (mostly health food stores)	
Single quarters	0	
Tub	1	
Other (ex: roll)		1

Comments:

- Most retailers mentioned that tubs would be fine if they were to carry a good local butter.
- Several retailers mentioned a "roll" of butter as another fairly popular unit, as in the Amish style or Vermont Butter and Cheese Cultured Butter style.
- All restaurants buy cases of 1-lb. blocks (36 lbs. per case)
- One distributor carries 8-oz. rolls and 1-lb. rolls. He mentioned that the 8-oz. rolls are more popular even though they are pricier per lb. when one does the math.

12. Would you be interested in farm-identified butter? How much per WEEK?

	Retailers (9 total)	Restaurants (3 total)
Under 50 lbs	6	1
50-200 lbs	0	2
Over 200 lbs	1	
Other (under 5 lbs.)	2*	

Comments:

- *2 retailers said they would sell well under 50 lbs. per week, more like 5 lbs. per week to start, then would see how business was
- 1 restaurant uses 30-50 lbs. per week
- 1 restaurant uses about 72 lbs. per week (2 cases)
- 1 restaurant uses about 108 lbs. per week (3 cases)

13. Please estimate your upper limit price per lb. for farm-identified butter.

	Retailers (10 total)
Under \$3	1
\$3-4	2
\$4-5	1
\$5 and up	4
No limit – whatever it costs	2

Comments:

- 2 stores carry a raw organic butter from Turner in wrapped 1-lb blocks for \$7.50-\$8 retail (they pay \$6 wholesale). It sells very well.
- One storeowner said that \$4-\$5 per lb. would be a steady, ongoing retail price but people would pay upwards of \$5 when buying the butter as a treat.
- One store manager said that they carry an Amish handcrafted roll of butter, which they cut at the counter. It is not certified organic. It sells for \$5.79/lb. They also said that *any butter from a local farm, salted or unsalted, would be very popular*. Their customers tend to be very loyal to particular items.
- One storeowner said, “I would love to have a Maine-made butter. It would really sell,” and also mentioned that the area would support premium pricing.
- Several gourmet/specialty food store owners who do not really carry “staples” said that they would be interested in carrying a local butter if it was very high quality or very unique (i.e. a French-style culture or made from goat’s milk...)
- All restaurants quoted prices between \$2 and \$3 per lb. for the cases of 36 1-lb. blocks (from Cabot and/or Vermont Butter and Cheese)
- 2 restaurants said that they buy a farmstead butter from Blue Hill for \$4.50 per lb. That price hurts, but they’re willing to pay it for a good product (and to support local farmers). However, that particular farmer can’t provide even one restaurant with the needed 35 lbs. per week.
- One restaurant would pay up to \$3/lb (wholesale price) for a really high-quality European style cultured butter from Maine.
- One restaurant owner said that they would love to be able to use local, organic, hormone-free butter, but that it’s just not viable for them to cook with it.

E. OTHER DAIRY PRODUCTS

14. Please indicate your interest in purchasing the following items from farm-identified sources:

Respondents: 9 retailers and 2 restaurants

	Under 20 lbs/week	20-50 lbs/week	Over 50 lbs/week
Sour cream	9	-	-
Cottage cheese	8	-	-
Crème fraiche	10	-	-
Cream cheese	8	-	-

Comments:

- Some restaurants make their own crème fraiche
- Some retailers would start with about 10 lbs/week of each and see how they do.

For more detailed information about potential for these products, please refer to the heading Sour Cream, Cottage Cheese, Crème Fraiche, Cream Cheese, Ricotta, and Yogurt in the GENERAL COMMENTS section.

F. FARMSTEAD AND ARTISANAL CHEESES

15. Are you interested in Maine made cheeses that resemble the following items?

Monterey Jack	2
Cheddar	8
Colby	3
No, I'm not interested	5

CHEESE VARIETIES

16. Are you interested in Maine-produced cheeses with unique farmstead attributes?

Respondents: 14 retailers, 2 restaurants, 1 distributor

	No interest	A little interest	Strong interest	I want it right now
Soft (tub)	4	2	4	2
Hard/dry Italian	-	5	5	1
Mold-ripened	1	4	7	2
Sharp, aged Cheddar types	2	1	7	2
Blues	1	5	6	1
Swiss	3	4	3	-
Provolone/Mozz	2	2	1	-
Muenster/Limb	3	4	2	-
Gouda	3	4	3	1
Fresh Mozzarella	-	-	4	4
ALL types Maine cheese			3	

"A little interest"

#1: Two-way tie: blues, hard Italian
 #2: Two-way tie: gouda, muenster/limburger, Swiss, mold-ripened
 #3: Two-way tie: soft, provolone
 #4: Cheddar-types

"Strong interest"

#1: Two-way tie: mold-ripened, cheddar-types
 #2: Blues
 #3: Hard Italian
 #4: Two-way tie: soft, fresh mozzarella
 #5: Two-way tie: Swiss, gouda
 #6: Muenster/Limburger
 #7: Provolone

"I want it right now"

#1: Fresh mozzarella
 #2: Three-way tie: soft, mold-ripened, cheddar-types
 #3: Three-way tie: Hard Italian, blues, gouda

CHEESE VOLUMES

17. Please estimate how much farmstead/artisanal cheese you do (or would like to) purchase per WEEK:

Respondents: 13 retailers, 2 restaurants, 1 distributor

	Under 25 lbs	25-50 lbs.	50-100 lbs.	Over 100 lbs.
Soft (tub)	7			3
Hard/dry Italian	7		2	
Mold-ripened	7	1	1	2
Sharp, aged Cheddar types	5		3	1
Blues	8		1	2
Swiss	7	2		
Provolone/Mozz	9			
Muenster/Limb	9			
Gouda	7	1	1	
Fresh Mozzarella	7			1

Other comments on volume, by cheese type:

Hard/dry Italian	<ul style="list-style-type: none"> • Retailer: 15 wheels of Mainechecho per season (summer)
Mold-ripened	<ul style="list-style-type: none"> • 6-8 lbs/week of a sheep version • Distributor: 250 lbs/week of St. Andre • Distributor: 250 lbs/week of Brie • Restaurant: 3-4 rounds from Maine per season (summer)
Sharp, aged Cheddar types	<ul style="list-style-type: none"> • 4-5 lbs/week • Retailer: goes through 4 or 5 40-lb. wheels of Cabot's Extra Sharp cheddar per week in the summer • Retailer: 1 wheel per week of hard aged goat cheese
Blues	<ul style="list-style-type: none"> • 5 lbs. of Stilton/week • Restaurant: 10 lbs/week of stinky blue • Restaurant: 3-4 wheels (7-10 lbs. each) per season (summer)
Fresh Mozzarella	<ul style="list-style-type: none"> • Distributor: 250 lbs/week of fresh mozz from NJ
For all types	<ul style="list-style-type: none"> • Retailer: Approx 10-20 lbs/week of all Maine types • Restaurant: 30 wheels of all types for a whole season

CHEESE PRICING

18. Please estimate your upper limit price per lb. for farm-identified cheeses:

	RETAIL	WHOLESALE
Soft (tub)	<ul style="list-style-type: none"> • \$5/tub • \$3/tub ----- • \$10/lb ----- • \$24/lb. for aged goat 	<ul style="list-style-type: none"> • \$3/tub cow • \$7/tub goat/sheep ----- • \$6/lb • \$6/lb • 5-oz. Boursin (France) \$3.75 (equals \$11.25/lb)
Hard/dry Italian	<ul style="list-style-type: none"> • \$17/lb • \$15/lb • \$13/lb • \$6-8/lb • 5-oz. organic Romano wedge \$4.49 (equals \$13.47/lb) • 5-oz. organic Parmesan wedge \$4.15 (equals \$12.45/lb) 	<ul style="list-style-type: none"> • \$4.50/lb (Italy) • \$5.50/lb (Italy) • \$8/lb
Mold-ripened	<ul style="list-style-type: none"> • \$7.50-\$11/lb • \$15/lb • \$7-9/lb • \$12/lb • \$7/lb 	<ul style="list-style-type: none"> • \$12/lb • \$8/lb • \$7.25/lb • 8-oz. French Camembert \$3.20 (equals \$6.40/lb) • 1-kilo French Brie 60% \$10.50-15 (equals \$4.70-6.80/lb) • St. Andre \$8.35/lb
Sharp, aged Cheddar types	<ul style="list-style-type: none"> • \$10/lb • \$6.85/lb • \$8/lb • \$9.30/lb raw Cabernet smoked Cheddar from CA • 8-oz. organic Cheddar wedge \$3.89 (equals \$7.78/lb) • 8-oz. wedge 210-day Cheddar (raw) \$2.99 (equals \$5.98/lb) • 8-oz. wedge 60-day Cheddar \$2.79 (equals \$5.58/lb) • 8-oz. wedge 90-day Cheddar \$2.89 (equals \$5.78/lb) • \$8.10-8.30/lb maple and garlic, VT 	<ul style="list-style-type: none"> • \$5/lb • \$5.50-6/lb • \$8/lb • \$8/lb and higher • \$12 • \$8/lb Europe • \$4-6/lb USA • \$8.50/lb Quebec • \$5/lb Ontario • \$7.95/lb British farmhouse
Blues	<ul style="list-style-type: none"> • \$10/lb creamy • \$28/lb Roquefort types • \$15/lb • \$13/lb • \$6/lb • \$15/lb raw Irish farmstead • \$14.50/lb Great Hill • \$16/lb Maytag 	<ul style="list-style-type: none"> • \$9/lb • \$8/lb • \$6/lb • \$6.50/lb • \$9/lb • \$9/lb • "high upper limit" • \$11/lb Spanish raw cow

		<ul style="list-style-type: none"> • \$10.50/lb Berkshire • \$8.50/lb Great Hill • \$9/lb Maytag • \$9.25/lb Point Reyes • \$11.90lb Roquefort (France)
Swiss (Including Gruyere, Emmental, Jarlsberg)	<ul style="list-style-type: none"> • \$8-10/lb • \$12/lb • \$11/lb • \$15/lb epouisse (sp?) • 8-oz. raw Swiss wedge \$3.75 	<ul style="list-style-type: none"> • \$6/lb • \$6.50/lb • \$9/lb
Provolone/ Mozz	<ul style="list-style-type: none"> • \$11/lb • \$9/lb • 8-oz. organic wedge \$4.19 	<ul style="list-style-type: none"> • \$5.50/lb • \$9/lb
Muenster/ Limburger	<ul style="list-style-type: none"> • \$9 - \$16/lb Morbier, Chimay (sp?) • \$11/lb • 8-oz. organic wedge \$4.19 	<ul style="list-style-type: none"> • \$9/lb • \$9/lb • \$6.50/lb
Gouda	<ul style="list-style-type: none"> • \$10-13/lb • \$10/lb • \$11/lb • \$5/lb smoked • ½-lb. wedge \$7 - \$7.50 	<ul style="list-style-type: none"> • \$6.50/lb
Fresh Mozzarella	<ul style="list-style-type: none"> • \$7 for 3 golf-ball sized chunks 	<ul style="list-style-type: none"> • 7-oz. Buffalo (Italy) \$5.90 (equals \$12.98/lb)
For all types	<ul style="list-style-type: none"> • "Gourmet prices" • \$5-7.60 per ½ lb (which equals \$10-\$15.20/lb) • \$8-12/lb • \$33/lb upper limit • "If you have to ask, then you can't afford it." 	<ul style="list-style-type: none"> • \$6/lb

OTHER CHEESE FEATURES

19. Which type of rind would you prefer?

	Retailers (13 total)
Waxed	-
Natural	4
"No preference" or "Depends on cheese type"	9

Comments:

- *Retailer: Wax is a pain to cut and flecks of it stick to knives and slicers.*
- *Retailer: Wax is appropriate to halt the aging process when a cheese is where it needs to be. (One cheesemaker later disagreed with this perception.)*
- *Retailer: Wax is a turn-off.*

20. Which size would you prefer?

	14 Retailers, 1 Distributor, 1 Restaurant (16 total)
25-lb wheel	1
10-lb wheel	3
5-lb wheel	4
Cut & wrapped 5-oz	3
Cut & wrapped 8-oz	3
"Depends on cheese" or "No preference"	3

Comments:

- *Retailer: Between 3 and 8 lbs is a good size*
- *Retailer: Very big wheels*
- *Distributor: Generally smaller wheels are easier to sell*
- *Retailer: Most artisan cheeses have a shorter shelf life. The precut and wrapped wedges are not necessarily the image we want, but they're more convenient.*
- *Retailer: Would try all the sizes (this was said more than once by retailers)*
- *Retailer: Precut is so much easier to deal with and also includes product info*
- *Retailer: A 40-lb wheel is the max we can handle*

MAINE ARTISANAL/FARMSTEAD CHEESE ATTRIBUTES

21. “Imagine that you are telling a Maine cheesemaker what you are looking for in a good farm-produced cheese. Please rate the importance of the following attributes.”

Shaded boxes indicate the most-often selected answer (i.e. the “winner”)

	VERY important	SOMEWHAT important	NOT important	Total respondents
Complex flavor	9	2	3	14
Closely resembles a popular cheese	3	2	12	17
Affordable price	3	7	4	14
Attractive or creative packaging	8	2	6	16
Farm with an interesting story	6	7	2	15
Cheese is very distinctive to specific farm (i.e. <i>terroir</i>)	6	3	3	12
Your relationship with the farmer or cheesemaker	9	6	0	15
Cheese is <i>certified</i> as adhering to distinctive, traditional methods	2	5	6	13
Pasteurized	2	2	4	8
Raw	6	3	0	9

CHEESE ATTRIBUTES: RANK-ORDERING BY IMPORTANCE LEVEL

Very Important:

1. **Complex Flavor** and **Relationship with Farmer**
2. **Packaging**
3. **Interesting Farm Story** and ***Terroir*** and **Raw**
4. **Resembles Popular Cheese** and **Price**
5. **Certified traditional** and **Pasteurized**

Somewhat Important:

1. **Interesting Farm Story** and **Price**
2. **Relationship with Farmer**
3. **Certified traditional**
4. **Raw** and ***Terroir***
5. **Complex flavor**, **Resembles Popular Cheese**, **Packaging**, and **Pasteurized**

Not Important:

1. **Resembles Popular Cheese** (by a landslide)
2. **Packaging** and **Certified traditional**
3. **Price** and **Pasteurized**
4. **Complex Flavor** and ***Terroir***
5. **Interesting Farm Story**
6. **Raw** and **Relationship with Farmer**

COMMENTS on cheese attributes:

Complex flavor:

- “This is assumed”

- Their customers are not as willing to go out on a limb
- “It must be something significant.”

Affordable price:

- “It’s a balance between value, taste, and price.”
- Price of a cheese must match its “peer group” – more important the price itself

Cheese distinctive to farm (*Terroir*):

- “This is less important than the final product. We are a long way from these distinct subtleties. Let’s make the stuff first.”
- “Maybe for people who have been to Europe”; most of their customers want a “good, basic, raw, organic cheese they’ll probably use for everything”
- “*Terroir* should be important...the US doesn’t look at this the same way other countries do.”

Relationship with farmer or cheesemaker:

- We often visit farms that supply us.

Certified as adhering to distinctive, traditional methods:

- 3 people from restaurants all had comments along the line that IF such a system existed and had become an important marketing tool, then it would be important to have the certification. But until then, the product really speaks for itself. They also think that this level of geographical distinction might be a stretch in Maine at this point.
- “It takes a long time to develop these traditions.”
- Keeps product out of a gray area, but that depends on the standards themselves.

APPENDIX D

SURVEY RESULTS, General Comments

Interviewees discuss how they use dairy items, what they would like to see, problems they've encountered, etc.

Pricing

- *Retailer:* noted that Brie and Camembert are the best selling soft cheeses he has, and also the least expensive, and also have a very good margin – which all fits together nicely.
- *Restaurant:* would be interested in local **sour cream, cottage cheese, crème fraiche,** and **cream cheese**, and would pay “a little bit more” than the standard prices, for higher quality items.
- *Retailer:* “I have \$5.99-fish and \$60-fish. We have both types of customers.”
- *Retailer:* Price is always an issue.
- Some retailers are more sympathetic to helping Maine farmers, others wish they could but cannot lower their margins to allow a Maine cheese of lower quality to compete with its European counterpart (even when it's understood that a Maine cheese is not the same thing as a European cheese). In general, price *itself* is not an issue, as long as the price is *appropriate* for the cheese.

Business Issues

- *Retailer:* noted that a farmer began selling homemade cheese at a farmer's market, just a few blocks from the specialty store where the farmer's same homemade cheese sold for about 30% more. The storeowner stopped carrying it because he adamantly wanted to avoid his customers' perception that he was ripping them off.
- *Retailer:* Concerned for small dairy farmers and cheesemakers - that they get caught up in what they're doing, and don't get out and market.
- *Retailer:* Would be better for storeowners like himself if farmers were more aggressive at selling.
- *Distributor:* Since restaurants' needs are always changing, and since they don't place orders more than a day ahead of time, it's difficult to nail down anything as specific as, say, “40 per week.” It might be 40 per week, one week, and then 100 the next. When a farmer develops a new product, they will buy a handful (10-20 units) and share it with a few select customers – they generally know who is more adventurous or who is really looking for unique things.
- *Retailer:* Only a few farmers actually call him weekly to check in; none of these are in Maine.
- *Retailer:* Last year he found a great cow mozzarella from VT but the distribution and reliability was terrible.
- *Distributor:* considered dealing with a fresh cow milk mozzarella maker in VT, but concluded that he would have had to put in a lot of effort for ostensibly little return. It would have cost him more money, and the logistics would have been difficult, and additionally, he questioned the quality of the product. He has to satisfy very picky customers.
- *Retailer:* “For me, infrastructure is just about as important as quality and variety.”
- *Retailer:* Number one concern is that farmers learn better business skills. He feels that they don't even return phone calls, let alone treat a request or order with any sort of priority. When he gets no response from a farmer he feels like the message is, “I don't care” or “I don't really want you to sell my cheese.”

- *Retailer:* Concern about farmers filling orders neatly. He has seen some very dirty orders packed with Coke bottles full of frozen water (as ice packs).
- *Retailer:* He'd like to see them break out of the farmer's market mentality and look ahead at the business calendar.
- *Retailer:* Loves the Maine cheeses she's tried, but the farmers don't come around. She has no time to hunt down vendors; they don't have someone who just does purchasing.
- *Retailer:* It's important for farmers/cheesemakers to introduce their products to public in person – at wine tastings, etc. This has to do with charming farm stories and food with a face as much as giving the public an opportunity to taste the cheese.
- *Distributor:* Would be interested in more farmstead cheeses (and butters) if:
 - The farmer puts effort into making the **relationship** work
 - The product is always **available**; sporadic supply is not good for developing and maintaining business
 - The farm did not have huge expectations and was able to work on a **small scale**, since this is a small company with a limited number of outlets. No one is going to be able to sell his or her product via this company alone, and make it.
 - If the farm were already on his distribution route, or willing to meet him somewhere. Having a farm ship products to him is not an option.
- *Distributor:* a little bit flexible on **packaging**, but life is so much easier if product is packed in cases – though he knows this involves extra cost.
- *Retailer:* Top three reasons she doesn't have much cheese from Maine:
 1. Never been approached
 2. Concerned about shelf life – hard time moving certain items (like curds) within 14 days
 3. Availability
- *Retailer:* incentives to sample out product would be helpful. They sample almost everything they sell, and it's nice when the producer includes a bonus sample unit at a reduced price.
- *Retailer:* does not have time to spend on the phone making calls to 8 or 9 farmers, especially in summer, and especially when he might be ordering only one cheese per farm. A group price list, with seasonality for different types, would be incredibly helpful.
- *Retailer:* Sells a lot of imported cheese because:
 1. European cheesemakers "have it down"
 2. Market is for imported products – wine, fish, caviar, etc.
 3. Why compete with another local store that focuses exclusively on Maine-made products?

General Attitudes Towards Local Dairy Products

- *Restaurant:* "Give me something unique, local, and high-quality, and I'll build my menu around it."
- *Retailer:* Why would anyone associate hard cheeses and Gouda and blues with Maine? Doesn't everyone want those cheeses from Europe?
- *Retailer:* interested in anything local.
- *Retailer:* We couldn't survive if we carried only local foods.
- *Retailer:* finds that demand for **local** cheese is growing. As in demand for local vs. "affordable" or "European."
- *Distributor:* "There's so much cheese around; there has to be something distinctive about it."
- *Retailer:* If a product said "Maine" on it, that would be good, but *terroir* seems to be important in every country except the US. Customers do not come in and say, "I want wine that's from Napa Valley only." Actually, her customers eat whatever she recommends.

- *Distributor:* It's important to his chefs to be able to say "local", "varietal", or "regional". If they can "put the name of the cheese guy" or a cheese description on their menu, that adds value for them.
- *Retailer:* "I'd love to get rid of the Organic Valley line, because it's really not that good."
- *Retailer:* "It's important to keep up relationships with local producers as places like Wild Oats and Shaw's move in down the street."
- *Retailer:* Our customers are likely to "just need some Brie and it's OK if it's Maine".

Organic/Grass-Based

- *Restaurant:* More and more customers are aware of growth hormone issues.
- *Retailer:* Cheeses made with vegetable rennet are hard to find and often use GMO ingredients. There is a very high demand for non-GMO vegetable rennet cheeses, or for certified organic vegetable rennet cheeses.
- *Retailer:* Certified organic is the surest sell.
- *Retailer:* Neighborly Farms organic cheese is doing well here.

Raw Products

- *Retailer:* Tons and tons of people ask for raw milk and she can't get any (the nearest local raw milk producer won't deliver to her.)
- *Retailer:* Largely credits the new book, "The Maker's Diet," which emphasizes whole unprocessed foods, for the surge of interest in raw dairy products.
- *Retailer:* The biggest deal is that it's RAW. After that it doesn't matter what the product is, someone will want it.
- *Retailer:* There's a local group that meets to discuss the benefits of raw foods; they inform other people. They are also interested in local products. Raw product customer base is growing but still limited.
- *Retailer:* Raw milk has a short shelf life.
- *Retailer:* Most customers express interest in more raw cheeses but they have to keep pasteurized in stock for the customers that do ask about it.

Mold-ripened cheeses

- *Distributor:* As for types of local farmstead cheese, he is most interested in carrying the mold-ripened and blue cheeses, because "that's where you're more likely to find the interesting stuff."
- *Distributor:* Definitely room for local producers to get into Bries and Camemberts, BUT they MUST be doing something unique.
- *Distributor:* A good example of a unique soft-ripened cheese is the Olde Chatham Shepherding Co.'s "Shepherd's Wheel", which is straight sheep's milk. They also do a wheel that's a blend of sheep's and cow's milk. Both have the same exterior. 3 or 4-oz size.
- *Distributor:* The mold-ripened cheeses are very time sensitive: they may have a 90-120 day *total* shelf life, but there's a window *within* that when they are at their best. He deals with this by essentially buying limited quantities at a time – he doesn't keep a lot on the shelf.
- *Distributor:* He gets his mold-ripened cheeses from the same 2 or 3 sources, with whom he stays in close contact, and they know his standards. He usually picks up these cheeses himself, so he does the sniff and squeeze test.

Provolone cheeses

- *Distributor:* A mild Provolone is just not that exciting and he wouldn't put a lot of effort into finding one. They are generic.

Soft cheeses

- *Restaurant:* already gets Sunset Acres soft & semi-aged goat cheeses, because Bob's smaller amounts meet their needs: cheese plates, salad toppings, a quesadilla appetizer.
- *Restaurant:* he gets a **plain inexpensive goat cheese** in 1-gallon tubs, and uses it as a grilled sandwich filling.
- *Restaurant:* Not very interested in soft, fresh "tub" cheeses unless they are very distinctive.
- *Retailer:* Wants to see more Maine soft cow cheeses.

Blue cheeses

- *Restaurant:* They melt it with butter and serve it over steak. They grab big hunks of it and crumble it on everything. The stinkier, the better.
- *Distributor:* Definitely always a demand for blues.
- *Distributor:* Would be looking specifically for goat and sheep blues; there are already quite a few good cow's milk blues. It used to be that there was just Maytag blue, which for 7 or 8 years was the best American farmstead blue available, but now there are Great Hill (MA) and Point Reyes (CA). All three are the same basic recipe.
- *Distributor:* The market for blues is not necessarily covered. But *stylistically*, a new blue cheese maker must do something different. Really, why would a New England farmer want to make a farmstead blue when they already have Great Hill to compete against?

Fresh Mozzarella

- *Restaurant:* They would love to have some local fresh mozzarella, for little tomato & olive oil & basil salads.
- *Retailer:* Nerf's mozzarella flew off the shelves.
- *Distributor:* A good fresh mozzarella, he would definitely consider.
- *Distributor:* Certainly there is a market for it.
- *Distributor:* More and more people are asking for domestic mozzarella.
- *Restaurant:* Knows of a woman in Dallas who makes fresh mozzarella, and fresh whey cheeses, makes a daily delivery run to local stores and restaurants. The next day she picks up the unused/unsold day-old mozzarella, gives the stores credit for it, and takes the cheese back to turn it into tortes (sp?), pastries, etc.
- *Retailer:* Why not fresh Maine mozzarella to go along with the fresh Maine tomatoes in August? Currently she gets cow's milk mozzarella from CT, and buffalo mozzarella from Europe and Vermont.

Hard or dry Italian cheeses

- *Distributor:* Selling less and less Parmesan Reggiano, primarily due to trade and currency issues. When it costs him \$10/lb and his customers don't want to pay more than \$11-\$11.50/lb, it's not worth it.
- *Distributor:* Most of his dairy items are strictly premium, i.e. he won't be selling a Pecorino for \$3/lb – he simply can't compete. Many of the hard/dry Italian types fall into this category.

Cheddar cheeses

- *Distributor:* Trade & currency issue is a problem for him. He can't charge \$14.50/lb for an English cheddar. Especially when he can get Shelburne Farms (VT) cheddar for \$7-ish/lb, and it's very high quality.

Sour Cream, Cottage Cheese, Crème Fraiche, Cream Cheese, Ricotta, and Yogurt

- *Restaurant:* Would use **cream cheeses** to set out with bagels at breakfast, and to put in pasta sauces. All of these items in amounts less than 20 lbs. per week. Would use **ricotta** as pasta filling; would want it in 5-lb. tubs.
- *Retailer:* They would be interested in a **low fat organic cottage cheese** – many cancer patients are requesting it to use in place of ricotta.
- *Retailer:* The Olde Chatham **sheep's milk yogurt** flies off their shelves.
- *Retailer:* They would really, really like some **local feta in bulk** (sheep).
- *Distributor:* No sour cream, cottage cheese, or cream cheese. Deliveries are too far between to handle anything so fresh. Might consider a **local cream cheese** if it could hold quality.
- *Retailer:* A **local goat or sheep yogurt** would be very popular. The Redwood Hill goat yogurt and Olde Chatham sheep yogurt do very well. Many of their customers are experimenting with different diets.
- *Distributor:* Carries a **very high-end cow's milk ricotta** from a large dairy in CT. They call it "hand-packed" ricotta – during the production process the high-fat top layer is scooped off and packed in a container with holes to drain. That's how it's sold. He moves over 120 lbs/week of this. He knows of no one who is doing this more locally.
- *Retailer:* Would be interested in **crème fraiche in retail sizes**.
- *Retailer:* Would consider local **crème fraiche** and other very fresh items *if* the quality was high and especially if the farmer or cheesemaker could take responsibility for restocking.

Restaurant Cheese Plates

One restaurant's ideal Maine cheese plate would be "Pick 3 cheeses for \$9, or 5 for \$15." They would have a choice of 6 or so cheeses:

- a mild Manchego
- a stronger sheep cheese
- a "soft, gooey, stinky, smelly" cow cheese that oozes out once you cut the rind
- an herbed mild goat cheese – buttons are nice and easy
- something hard & aged – doesn't matter if it's a true Cheddar or not; most people don't know anyway
- something else that's very unique
- would also be interested in having a hard/dry Italian style and a mold-ripened

Another restaurant's cheese plate choices:

- Would use "anything that was local and interesting"
- Currently gets Eric Rector's Camembert, Vermont Shepherd's Putney Tomme and Timson (like a dark yellow Camembert), Berkshire Blue and Great Hill Blue (MA), York Hill Capriano, Seal Cove fresh & slightly aged goat cheeses. Has recently expanded his cheese board to encompass New England instead of just Maine, in order to get some more variety on the board.

- Is specifically looking for washed rind and soft-ripened local cheeses; also looking for very aged cheeses – beyond 3 months, nice and creamy and soft.
- Not very interested in soft, fresh “tub” cheeses unless they are very distinctive
- Not really interested in hard aged Cheddar types, smear-rinds, or goudas
- Very interested in fresh mozzarella

A third restaurant owner: Currently missing in his cheese plate (which serves all Maine cheese) is **blue**, and **hard**. He has tended to focus on goat cheeses because they have more consistent high quality and are a bit better developed here in Maine.

Cheese Sizes

- *Restaurant:* 5- and 10-lb. wheels are best for the cheese plates. A 25-lb. wheel would be good for items like cheese melts and dips.
- *Retailer:* Smaller-size wheels work best for his store. There is a magical surface-area-to-volume ratio for each type of cheese, i.e. for a Stilton, a 15 ½ - 16 lb. wheel is best.
- *Distributor:* Generally, smaller wheels are easier to sell. There’s more hesitation (from his specialty stores and restaurants) over a large wheel if it’s a new product.
- *Distributor:* Lots of restaurants in the Boston area with good cheese programs buy from Formaggio Kitchen (Cambridge)– the advantage is that they can get smaller amounts. Formaggio Kitchen cuts and sends out cheese for probably 100 restaurants, every single day. If this distributor has anything delicate, he doesn’t like to cut it. “How it comes in is how it goes out.” This is true for soft-ripened cheeses, goat logs, 2-oz buttons packed in crates, etc.
- *Distributor:* An ideal size for his customers is 1-5 lbs all the way down to 4 oz; packed in crates. Packaging quality is very important.

Milk

- *Retailer:* Whole milk is by far the most popular.
- *Retailer:* Reduced fat and skim are “on the decline”.

Where should farmers focus?

- **Distributor:**

“Anything sheep and goat”

- People are always asking for goat cheddar and goat Brie.
- A familiar cheese, made with a different milk.
- If someone could produce a blue-rinded log of sheep’s milk cheese, it would be stellar. However, this is very time-sensitive.
- Also, sheep and goat milk yogurt are getting much more popular than ever.

Cow

- “More esoteric or obscure breeds”
- For example, people feel that milk from Jerseys or Brown Swiss makes a more fully-flavored cheese. Since the fat globules are larger, they are not as easy to work with. These products would indeed be able to command a premium if they went to high-end customers. Such customers might not be aware of the molecular science involved, but they would be aware that the product was “cool”.

- *Retailer:* Would like to see more sheep’s cheese (preferably soft) from Maine.
- *Retailer:* “Enough with the Maine goat cheese.” Wants to see more:
 - Cow: soft, mold-ripened

- Cow: blue
- Goat cheese that's *different*
- Cow: fresh mozzarella
- *Retailer:* goat milk cheddar and hard Greek cheddar
- *Retailer:* Would like to be able to offer the following cheeses from Maine:
 - soft, "bloomy rind" cheeses such as Camembert and Brie
 - soft, ricotta-like cheeses
 - hard cheeses (such as Cheddars and other English)
 - blue
 - mozzarella

APPENDIX E

Conversation with a major New England cheese distributor July 2004

Primary customers: about 70 high-end independent restaurants and hotels, mostly in the Boston area.

Non-cheese items they carry

- Mascarpone, cream cheese, a little fromage blanc
- A very high-end cow's milk ricotta from a large dairy in CT. They call it "hand-packed" ricotta – during the production process the high-fat top layer is scooped off and packed in a container with holes to drain. That's how it's sold. They move over 120 lbs/week of this. They know of no one who is doing this more locally.

Hard/dry Italian types:

- Selling less and less Parmesan Reggiano, primarily due to trade and currency issues. When it costs them \$10/lb and their customers don't want to pay more than \$11-\$11.50/lb, it's not worth it.
- Selling a little bit of very old Asiago
- Most of their dairy items are strictly premium, i.e. they won't be selling a Pecorino for \$3/lb – they simply can't compete. Many of the hard/dry Italian types fall into this category.

Mold-ripened:

- Definitely room for local producers to get into Bries and Camemberts, BUT they MUST be doing something unique.
- A good example is the Olde Chatham Shepherding Co.'s "Shepherd's Wheel", which is straight sheep's milk. They also do a wheel that's a blend of sheep's and cow's milk. Both have the same exterior. 3 or 4-oz size.
- A consistent supply is essential.
- Also, the mold-ripened cheeses are very time sensitive: they may have a 90-120 day *total* shelf life, but there's a window *within* that when they are at their best. They deal with this by essentially buying limited quantities at a time – they don't keep a lot on the shelf.
- They get their mold-ripened cheeses from the same 2 or 3 sources, who they stay in close contact with, and who know their standards.
- They usually pick up these cheeses themselves, so they do a sniff and squeeze test.
- **Q:** If a local farmer were to get into soft-ripened cheeses for a company like this one, what would be an ideal scale of production?
A: Since restaurants' needs are always changing, and since they don't place orders more than a day ahead of time, it's difficult to nail down anything as specific as, say, "40 per week." It might be 40 one week, and

then 100 the next. When a farmer develops a new product, the distributor will get a handful (10-20 units) and share them with a few select customers – they generally know who is more adventurous or who is really looking for unique things. Additionally they'll leave an “also available” message as part of their answering machine greeting for those who are calling in with orders.

Aged/Cheddar Types:

- There's definitely a market for *some*. They don't do tons of this type. Maybe they could do more.
- Again, the trade & currency issue is a problem for them. They can't charge \$14.50/lb for an English cheddar. Especially when they can get Shelburne Farms (VT) cheddar for \$7-ish/lb, and it's very high quality.

Blues:

- Definitely always a demand for blues.
- Specifically goat and sheep blues; there are already quite a few good cow's milk blues. It used to be that there was just Maytag blue, which for 7 or 8 years was the best American farmstead blue available, but now there are Great Hill (MA) and Point Reyes (CA). All three of these cheeses are the same basic recipe – cow's milk and the “Roquefort penicillum” (sp?). Great Hill Blue is probably the cheese they sell the most of, about three or four 6-lb wheels per day, 6 days per week.
- Other examples of good farmstead blues:
Blythedale, Stilton-like
Jasper Hill (Bayley Hazen), also Stilton-like
- **Q:** Is the the market for farmstead blues pretty much covered by Great Hill, Point Reyes, and Maytag?
A: No, not necessarily covered. But *stylistically*, a new blue cheese maker must do something different. Really, why would a New England farmer want to make a farmstead blue when they already have Great Hill to compete against?

Fresh Mozzarella:

- Certainly there is a market for it.
- They sell “the real deal” – buffalo milk mozzarella from Italy.
- More and more people are asking for domestic mozzarella. Why? It's important to their chefs to be able to say “local”, “varietal”, or “regional”. If chefs can “put the name of the cheese guy” or a cheese description on their menu, that adds value for them.
- They considered dealing with a fresh cow milk mozzarella maker in VT, but concluded that they would have had to put in a lot of effort for ostensibly little return. It would have cost them more money, and the logistics would have been difficult, and additionally, they questioned the quality of the product. They have to satisfy very picky customers.

- Current mozzarella sales: 130-140 boxes per week. Each box contains 3 kilos, or 6.6 lbs, which comes in the form of twelve 250g (9-oz.) balls.

General Cheese Comments:

- Lots of restaurants in the Boston area with good cheese programs buy from Formaggio Kitchen (Cambridge)– the advantage is that they can get smaller amounts. Formaggio Kitchen cuts and sends out cheese for probably 100 restaurants, every single day. If this distributor has anything delicate, they don't like to cut it. How it comes in is how it goes out. This is true for soft-ripened cheeses, goat logs, 2-oz buttons packed in crates, etc.
- An ideal size for their customers is 1-5 lbs all the way down to 4 oz; again, packed in crates. Packaging quality is very important.

APPENDIX F

Maine Cheese & Value-Added Dairy Focus Group

Portland, ME

March 2004

Present:

Russell Libby, MOFGA

Kerri Sands & Mort Mather, Maine Farms Project of Coastal Enterprises, Inc.

Nancy Jenkins, Food writer and gourmet store proprietor, Rockport

Kris Horton, K. Horton Specialty Foods, Portland

Dick Rogers, formerly of Rogers International imports, Portland

Josh DeGroot, chef at Newcastle Inn, Newcastle

Sam Hayward, chef/owner of Fore Street, Portland

Ken Thomas, sous chef at Fore Street, Portland

Question 1: What's missing on the value-added dairy products scene, from your perspectives?

Condensed answer:

Blue cheese, cultured cream products, affordable butter, Maine versions of the specialty European cheeses, other high-end niche cheeses, farmer-identified liquid milk, a bulk fresh young Maine cheese product.

Individual comments:

1. Affordable, high-quality butter from Maine. Our restaurant uses both a special butter with 83% butterfat, and a standard butter. Right now they order from Vermont Butter and Cheese Co., at \$2/lb wholesale. They go through about 3 cases per week; a case contains 30-36 lbs of butter. Currently the lowest price they can find in Maine is \$4.50/lb. That price was for an excellent butter from Ken-Rose farm in Blue Hill, distributed by Bob Bowen of Sunset Acres Farm. They use butter for the table, for pastry & cooking, and for resale. They would love to buy giant blocks of butter, put them on a marble slab, and cut off chunks as required – put a stamp on them for resale, etc. Would pay up to \$3/lb (wholesale price) for a really high-quality European style cultured butter from Maine. Butter churned from cultured cream, they say, is more interesting and complex.

2. A wet, heavy, fragile, quick-turnaround, hard-to-transport, non-sophisticated cheese item. Something that would use a lot of milk and be hard to move great distances, therefore forcing production and marketing down to a local scale. Perhaps a spreadable cheese product that will go with bagels, or some other product with mass appeal, not “some skinny little wedge that you pay a special price for”. Perhaps even cheese curds – consumers can also use them in omelets, on grilled sandwiches, etc.

3. More unpasteurized milk products. There's something very unique about this product. Cheeses from unpasteurized milk often fall into the categories of farm cheese, farmstead cheese, and farmhouse cheese. An example of how this cottage industry in Europe has taken a turn for the worse is found in Parmesan Reggiano – farmers started switching to a new breed of cow that produced a much higher volume of milk, but the milk had low proteins and resulted in no distinct cheese profile.

4. Very authentic cheeses that are “uneconomic” to produce have taken off at places like Wild Oats. For example, cheeses from breeds of cows that are unique to Maine.

5. Would like to be able to offer the following cheeses from Maine:

soft, “bloomy rind” cheeses such as Camembert and Brie

soft, ricotta-like cheeses

hard cheeses (such as Cheddars and other English)

blue

mozzarella

6. Vermont is 5 years ahead of us in terms of high quality in artisan cheese.

Particular qualities of VT cheese:

- With a few more years of practice, cheesemakers have a more balanced salt level (salty is good for some cheeses, too salty is not good for any)
- *Terroir* is #1 attribute
- Overall craftsmanship
- *Some* unique and interesting quality
- Consistency of quality over time

7. Memories of a cheese from Deer Isle called “Stonington Granite”. It had a bloomy rind and was almost syrupy when ripe. Delicious.

8. Hahn's End has a soft, small rind cheese with a washed-rind aroma. An orange tube shape. It sells out as soon as it comes in.

(Several people at the meeting voted the above-mentioned Hahn's End cheese as one of the best examples of current Maine cheeses, and representative of the potential of Maine cheeses. Also noteworthy was the Capriano coming from several farms, including York Hill.)

9. Currently missing in the restaurant's cheese plate (which serves all Maine cheese) is blue, and hard. The focus has been on goat cheeses because they have more consistent high quality and are a bit better developed here. There's no good reason that Maine couldn't produce a good cheddar.

10. Why not Maine Brie and Camembert instead of Maine cheddar? Those cheeses have a shorter turnaround, and sell in high volumes.

11. Warning about calling cheeses after their regions of origin, when they weren't actually made there. [Someone asked, if you don't call it "Brie", will people still buy it? The answer was "Oh, yes."]

12. If they could find a good crème fraiche with 46% butterfat, they would pay a fortune for it. They currently get a ricotta from CT, which they are very happy with.

Question 2: What makes a distinctive cheese?

1. Assuming an acceptable level of quality and consistency (i.e. not "streaky", all parts of cheese taste the same), then complexity. Being able to tell what the cow was eating, where it was grazing, what time of year the cow was milked and when the cheese was made, what it was aged on/in, etc. All of that should come through in the complexity of the flavor. The exception to this is a good farmstead cheese, where the desirable characteristic is mouth feel - to go with jam on a muffin.

2. Cheese is so much like wine in terms of the complexity of the experience that's available to you. Texture is so much more important than we give it credit for, and noted the "little crystals of protein that crunch in your mouth" in one of the cheeses we tasted together.

3. A full-bodied flavor. A lot of Mainers are looking for a well-produced cheddar. For example, "the wife prefers good old Cabot cheddar" to most of the fancy cheeses presented at restaurants.

4. Why not persuade the state to allow sales of younger cheeses made from unpasteurized milk, as long as the cheeses passed a strict bacteria test? Raw Brie and Camembert are totally different products, and not necessarily more septic. Examples exist where pasteurized, homogenized milk had more bacteria in it than raw unpasteurized milk.

5. Several folks agreed that the terroir aspect is the most important. When people think of Maine, they think of "cleanliness, purity, transparent wholesomeness." How do those attributes get into cheese? Rather than getting pine or blueberry or other classic Maine flavors into the cheese, could there be a focus on the flavors from clover, ryegrass, salty marsh grasses? Also, the importance of story: retailers are always trying to get farmers to tell them something about themselves and their farm. Retailers and chefs can sell anything with a story. Cows with names, farmers with families.

Other Notes

1. Customers from gourmet shops don't blink at paying \$27/lb.
2. The exchange rate for the Euro has changed, and now many gourmet food shops that previously retailed European cheeses for say, \$6, will have to charge \$9. This change should affect the Maine cheese market favorably. Also, international companies have been buying each other up in order to avoid the costs of importing and exporting.
3. There are two ways for the US to get European-quality cheeses.
 1. Wealthy individuals invest their own money in the equipment and hire the Old World experts to come over and teach them how to make cheese.
 2. The US needs to build up its own traditions. Remember that the cheeses coming out of Spain and France have a history of 300-400 years. Maine doesn't have that.
4. We need a massive public education campaign to teach consumers about raw dairy products.
5. In the last five years, there has been an incredible rise in interest about distinctive Maine cheeses. At the Portland Public Market, both locals and tourists know the European cheeses – but want it from Maine! Many customers would buy the Maine versions of specialty cheeses if they existed. “Price tag is absurdly not an issue.” People want to support Maine farmers.
6. The limiting factors farmers mention are aging space, transportation, and start-up cost (to acquire or switch mechanization). How about the European Aging House model, where farmers make original cheeses and sell them to aging houses, who then take over the aging process. The burden is then off the farmers to turnaround their cheeses for a quick sale. Aging houses specialize in different types – blue, cheddar, etc. How about aging cheese right at the Portland Public Market.
7. All present noted an excitement about what Pineland could produce for cheese. Why? Because “they have the money.” They are going to be “another Shelburne Farms”. Some are concerned that they are focusing on building their herd, not necessarily utilizing their existing resources to the best of their ability. Perhaps they could build facilities and teach other farmers how to make cheese.
8. Why not an A.O.C. for Maine?
9. Praise for a model from Dallas, TX – Paula Lambert. She makes fresh mozzarella, and fresh whey cheeses, makes a daily delivery run to local stores and restaurants. The next day she picks up the day-old mozzarella, gives the stores credit, and takes the cheese back to turn it into torts, pastries, etc.

10. What about the farmers' market model?

11. Maine roads are a problem for distribution. The original idea behind the Portland Public Market was to provide vending space for farmers, but getting product from farm to market turned out to be a major problem for most Maine farmers.

12. The specialty market for dairy products will not:

- Employ a lot of people
- Use a lot of milk
- Satisfy a large amount of customers

13. Why not fresh Maine mozzarella to go along with the fresh Maine tomatoes in August? Currently cow's milk mozzarella comes from CT, and buffalo mozzarella from Europe and Vermont.

Value-Added Opportunities for Maine Dairy Farms

Economic development through on-farm diversification and
production

Compiled, Edited and Written By: Amy Seeboth and John Harker
Maine Department of Agriculture, Food and Rural Resources

January, 2005

Forward

This report is the result of work accomplished under a Federal-State Marketing Improvement Program (FSMIP) grant to explore new marketing channels for the state's dairy farmers. The project has been conducted in cooperation with the Maine Department of Agriculture, the University of Maine, Coastal Enterprises, Inc., Farms for the Future, the Maine Organic Farmers and Gardener's Association, the Maine Small Business Development Centers, the Maine Agricultural Center, and the University of Maine Cooperative Extension.

This paper is in part a compiled and edited version of work done by ATTRA National Sustainable Agriculture Service and The Agricultural Marketing Research Center. These works were very well done and our project management team felt that editing, updating and making these publications more regional to our needs was preferable to a whole new rewrite of another publication. While this publication is always a work in progress, we hope it serves a purpose to help some additional farmers evaluate the opportunities presented in this work.

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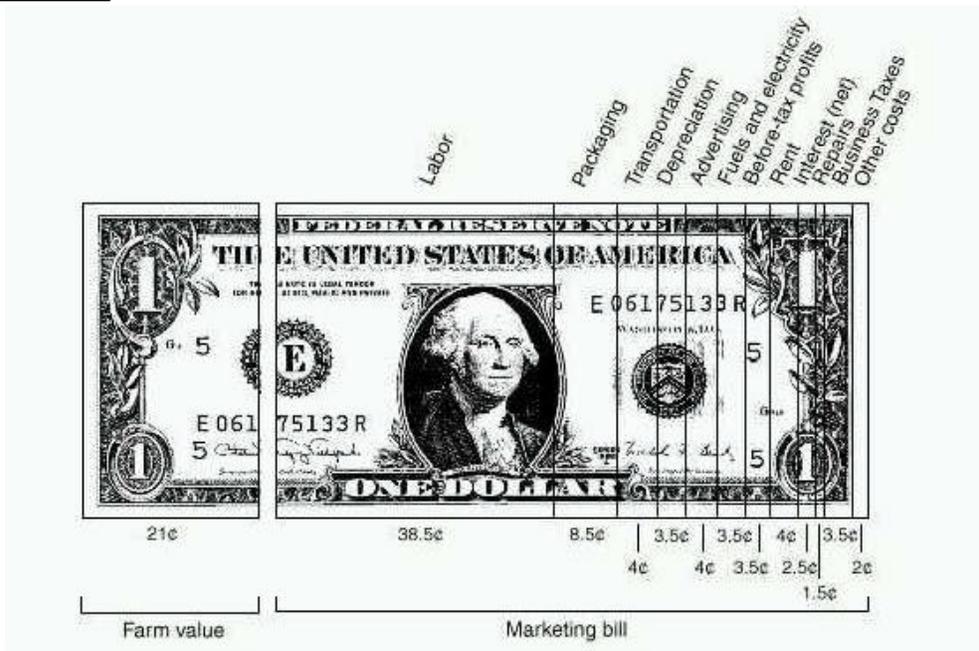
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Introduction

“We are seeing more and more demand for single-farm products. ...More and more non-imported items are of very good quality.” –*Maine Food Retailer, 2004*

Dairying in Maine and the Northeast has been a major farming activity for centuries. Farmers typically would sell many types of products off the farm, including cheese, butter as well as milk. Only in the last 50 years have dairy farms become specialized into selling one commodity, milk, leaving value-added products to the food processing industry. Of each dollar that we pay for food in the United States only 19 cents goes to the food producers. The rest goes to processors, marketers, and distributors.¹ By completing these additional steps themselves, farms gain access to the extra 81cents per food dollar spent.



The Food Dollar, USDA ERS, 2004

The dairy industry is changing to reflect this economic disparity within the food system. Milk prices have not increased much over the past twenty years, while at the very same time, operational expenses have increased dramatically. This places pressure on farms to increase herd size to offset production costs. The average herd size in Maine is now approximately 100 head while in the late 1980's, the average was closer to 60 head. At the same time, commodity farms overall have been on the decline in Maine.²

A growing number of Maine farms have been seeking ways to remain profitable while not necessarily increasing herd size. The state has witnessed a growing segment of Maine farms turning to alternative dairy markets, such as: raising sheep and goat milk, becoming organically certified, on-farm processing and catering to other niche markets. In Maine there are now 358 dairy farms, 60 are organic, eleven are dairies, and at least three farms are producing sheep milk. At least eleven dairy processors specialize in selling non-

pasteurized milk. Fluid milk can be bottled on-farm, certified organic, sold unpasteurized, be made into cheese, yogurt, ice cream, butter and any other number of products. These products can then be marketed in additional ways that further increase monetary value. In addition, farmers are looking for complimentary enterprises such as beef, other crops, and even energy crops.

Many factors predict a good future for value-added dairy enterprises in the Maine. Maine agriculture currently is growing quickly; this is assisted by increased consumer purchases of value-added products, customers are often willing to pay a premium for value-added dairy products, close proximity to population centers (allowing for easier direct marketing), and a large local food market relative to the value of farm sales. If Maine farms were able to capture just 10% of Maine consumers' food expenditures, farm income would increase by \$180 million annually.³

Nationally, trends also highlight benefits for value-added production. There has been an increased consumer demand for specialty and artisan foods, an increase in attention to food in general, a larger disposable income, and finally, consumers are interested in, and willing to pay more for niche products highlighting their beliefs.⁴

Of course, developing your farm to include a value-added enterprise does not happen overnight; it is a slow process that will require capital and time. You will need to understand new markets, legal and regulatory issues, and be able to commit additional labor and management. This guide is intended to assist you through the process of deciding if such a venture is correct for you, and then will walk you through the steps involved in putting your ideas into action.

How to use this guide

Estimate the amount of work and time your enterprise may entail:

a) Product source:

What type of farm setup, herd size do you have?

b) Processing: What type of product do you want to produce & how elaborate of a system will it require?

c) Marketing: How will your processed product need to be marketed -market research, sourcing customers, delivery, and pricing)?

d) Business Planning: How comfortable are you with business planning, organizing?

Developing a business enterprise is no simple task: especially not a value-added dairy business where you may become your own producer, processor, marketing specialist, and business manager. For those willing to undertake such a project, it can be a lot of work, but also a highly fulfilling way to make a comfortable income.

Some questions to consider:

1. Do you have support of your family and friends for this venture?
2. Do any family members or friends have skills that could be utilized in your venture (such as financing, cooking, or marketing skills)?
3. Could you find a business partner who is interested in doing part of the venture on his or her own?
4. Have you considered becoming the processor only, not the grower, and buy-in your raw product?
5. After carefully reviewing the following information, have you completed more in-depth and targeted research and developed a formal business plan?

This guide does not cover all eventual scenarios presented in a value-added dairy enterprise. It covers many *possibilities*, and it is up to you to create your ideal enterprise in combination with your resources. This guide does not attempt to make assertions about how your enterprise will function: it is a starting point for creating a value-added dairy enterprise. For more information to help prepare you for this endeavor, visit the Maine Department of

Agriculture's online Resource Guide. This guide links to over 2,000 resources relating to agricultural enterprises. Simply enter your search criteria and a resource list tailored to your needs will immediately be reported back to you. The Maine Department of Agriculture's Resource Guide is available at:

http://www.foodandfarms.com/connect/resource_search.asp.

General Resources

Farming for Profit and Sustainability Toolkit. Natural Resources Conservation Service, USDA.

www.nrcs.usda.gov/technical/RESS/altenterprise/toolkit.html

Online resource directory with 2,300 pages of reference material, all downloadable in pdf. Valuable resource for any alternative agricultural enterprise.

Food Entrepreneur Resources, Penn State. January 2006.

<http://foodsafety.psu.edu/processor/resources.htm>

Website contains a lot of useful information on small-scale food entrepreneurship in the Northeast.

From Kitchen to Market: Selling Your Gourmet Food Specialty.

By Stephen F. Hall. Dearborn Trade Publisher. June, 2005.

Useful primer in marketing food: includes information on packaging, labeling, pricing, storage, shipping, advertising, and selling value-added food products.

Growing Your Own Specialty Food Business – From Farm to Kitchen to Market

By Patricia Maue, et al. Publication of the NYS Small Business Development Center, Ulster County Community College, Stone Ridge, NY. 1995.

Maine New Farms, University of Maine Cooperative Extension

www.umaine.edu/umext/MaineNewFarm/welcome.htm

A website for small-scale agriculture entrepreneurs to look for information on crop and livestock enterprises.

Making it on the Farm: Increasing Sustainability Through Value-Added Processing and Marketing

Southern Sustainable Agriculture Working Group Publications. 1996, PO Box 324, Elkins, Arkansas 72727. \$12

New England Small Food Processors Project

For more information contact your county Extension Office or visit:

<http://www.umext.maine.edu/topics/hazard.htm>

The New England Small Food Processors Project includes four fact sheets, a video tape and a notebook to introduce the concept of Hazard Analysis Critical Control Point (HACCP) to small-scale food processors throughout the region, including how to set up a HACCP plan. For more information on these and other food safety programs or information, please contact your county Extension office.

Online Support for New England Food Entrepreneurs. New England Extension Food Safety Consortium.

University of Maine Cooperative Extension?
Mahmoud El Begearmi Ph.D. ?
Extension Professor, Nutrition and Food Safety
Family Living Office?
5717 Corbett Hall, Orono, ME 04469-5717?
Phone: (207) 581-3445
FAX: (207) 581-4430?
Email: mahmoud@umext.maine.edu
Website: www.umass.edu/nefe/index.html

As an outreach program of the New England land-grant universities, Cooperative Extension compiled this website as a resource for small food processing operations in New England. Some of the resource links included in this website in information on business planning, training opportunities, and regulations.

Taste of Success: Resources for Maine's Value Added Food Producers and Community Grocers

Go to: <http://www.mainesbdc.org/>, and follow links to “Taste of Success” information, or contact:

Maine Small Business Development Center
State Office
96 Falmouth Street
P.O. Box 9300
Portland, ME 04104-9300
Phone: (207) 780-4420
Email: mainesbdc@usm.maine.edu

The Taste of Success is part of a larger project designed to offer targeted services that will help boost the productivity of Maine's growing food industry. This is a collaborative project of the Maine Small Business Development Centers, Maine Center for Women Work and Community, and the Maine Gourmet and Specialty Foods Association.

Ways to Add Value to Farm Milk

By Mark Stephenson. Cornell Program on Dairy Markets & Policy,
Cornell University. May 2000

http://hortmgt.aem.cornell.edu/pdf/smart_marketing/stephenson5-00.PDF

Publication of Cornell, walks potential value-added dairy farmers through the initial decision making process.

Questions You Should Answer Before Starting a New Dairy Processing Enterprise

By Brian M. Henehan , Department of Agricultural, Resource, and Managerial Economics, (ARME) Cornell University

<http://www.cpdmp.cornell.edu/CPDMP/Pages/publications/Pubs/dairypq.pdf>

This article supplies a useful set of questions, crucial to the beginning stages of developing a value-added enterprise.

Planning Your New Value-Added Farm Enterprise

Developing a business plan is an important first step in creating a new enterprise. Business plans typically include a marketing plan, production, financial, staffing and management plan. Your plan will be used to gain access to financing, partners, and for the family to plan.

By developing a business plan, you will be able to think about what you want to develop, who your customers will be, how you want to position yourself in the market, and how much it will cost you to start the enterprise. You will also be able to test your financial assumptions to determine the extent of the risk you and your family will be taking on with the new enterprise.

A sample plan outline is included on the CD to help you organize your plan. You can also find sample plans through your local Cooperative Extension Office and your Small Business Development Centers. Currently, the Maine Department of Agriculture has a business planning course, "Tilling the soil of opportunity", and a business planning technical assistance program, "Maine Farms For The Future", available to help you as well.

Resources

Farm Business Planning Template, Business Counseling and Loans, Maine Department of Agriculture , Food and Rural Resources

Contact: John Harker, Division of Market and Production Development, 28 State House Station, Augusta, ME 04333 287-7620. Email: John.Harker@maine.gov

Maine Cooperative Extension Small Business Specialist

University of Maine Cooperative Extension
Business and Community Development Office
5741 Libby Hall, Room 106, Orono, ME 04469-5741
Phone: (207) 581-3167 or 1-800-287-0274 (in Maine)
FAX: (207) 581-1387
E-mail: jimm@umext.maine.edu

<http://www.umext.maine.edu/topics/home.htm>

Maine Small Business Development Centers

A number of offices in each county provide business planning assistance and templates. Go to: <http://www.mainesbdc.org/> for further information on a regional office near you.

Heart of Maine RC&D “Tilling the Soil of Opportunity” Nxlevel Business Planning Courses

Business planning classes held each year for agricultural and food processing small businesses. Contact: Tessa Burpee, 368-4433. Email: tburpee@qwi.net.

Building a Sustainable Business: A Guide to Developing a Business Plan for Farms and Rural Businesses.

The Minnesota Institute for Sustainable Agriculture. Saint Paul, MN. 2002. 280pp.

A guide especially designed to help alternative agriculture entrepreneurs work through the planning process and begin to develop a business plan.

You Can Make It, You Can Sell It, but Can You "Make It" Selling It?

By Gary Frank. UW Madison Center for Dairy Profitability. April 2000.

<http://cdp.wisc.edu/pdf/onfarm.pdf>

This article guides future dairy product producers through planning his or her future ventures. It includes useful links to organizational spreadsheets.

Finding The Right Value-Added Enterprise For Your Farm

Raw Product Sourcing

If you do not already dairy farm, you have a number of raw product sources to consider before deciding on an end product; different types of milk are more successful at particular types of processing. You should also carefully consider what type of infrastructure and animal qualities you enjoy working with. Cows, for example, produce large amounts of milk, but cannot be easily transported to visit a vet, while nearly the opposite is true of sheep.

Remember, becoming a value-added dairy producer can require knowing two systems very well: animal husbandry and the processing of milk. Each, on its own, can constitute a full time position. You should know your farming system thoroughly before engaging in and relying upon processing the milk for income.

A successful Maine value-added dairy processor advises: “Join the Cheese Guild. Get to know (and visit) other cheesemakers in Maine. Start small. Don't quit your day job too soon. Be sure of your market before you invest heavily. Be sure you enjoy taking care of your animals (milking happens twice a day) or if you don't plan to milk animals, be sure of your milk source. Put the word out about what you are planning -- so much equipment is just lying around in old barns and could be had for a song. Use Uncle Henry's.”

Dairy Cattle

Dairy cattle are, by far, the most common domestic milk-producing animal in the United States. Similarly, the dairy products of these animals account for the vast majority of dairy products consumed in the United States. This is good news for processors of dairy cattle milk: in the next few years, overall demand for dairy products is expected to grow at a slightly faster pace than the US population.⁵ Fluid milk consumption on the other hand, has been shrinking, and this trend is expected to continue.⁶

Because dairy cattle milk is highly available, it is ideal for making products such as cheese and butter that require high inputs. It is also processed into just about any dairy product one can imagine. For more information on quantities of raw milk needed per processed product, see Table 1. If you are not interested in processing your own milk, finding processors, both large and small, for dairy cattle milk is relatively simple in most areas of Maine.

Dairy cattle can produce anywhere from 4-10 gallons of milk per day, depending upon the breed and lifestyle. They require a strict milking schedule of twice per day, usually at twelve-hour intervals, some larger farms milk three times per day. Lactations generally last 9-10 months, and birthing is most often staggered so that a herd produces milk year round, although seasonal milking has begun to receive attention as a marketing niche.

There are six major breeds of dairy cattle common to the United States. Holsteins, the most common, produce the greatest quantity of milk but have a low percentage of milk-fat. Jersey's, Guernsey's and Brown Swiss are the next most common breeds, and produce less milk, but it on average, have a higher milk fat content than Holsteins.

The wholesale price of dairy cattle milk varies from day to day. For current prices in Maine and information about the State's minimum price regulations, contact the Maine Milk Commission, at:

Stanley Millay
Executive Director ?
28 State House Station
Augusta, ME 04333?
Phone: (207)-287-7521?
E-mail: stan.millay@maine.gov
Or visit their website, at: <http://www.maine.gov/agriculture/mmc>

Table 1: Milk processing projections per pounds of fluid milk

Milk Per Day (lbs) <i>Yields:</i>	200*	400	600	800	1000
Quarts of whole milk	93	186	279	372	465
Quarts of skim milk,	89	179	268	357	447
Pounds of Butter	0	1	1	2	2
Quarts of buttermilk	0	1	1	1	2
Quarts of yogurt	93	186	279	372	465
Pounds of cheese	20	40	60	80	100
Pounds of butter	9	19	28	38	47
& quarts of buttermilk	7	15	22	30	37

*200# represents about five Jerseys on grass, with minimal grain, or two high-producing Holsteins being fed heavily. The chart can be used as a combination, e.g. the customer base uses 100 quarts of milk per day, and 40 pounds of cheese; total milk needed is 600#, representing 15 Jerseys or 6-7 Holsteins.⁷

Resources

Cattle Breeds

Oklahoma State University Board of Regents. 1996.

<http://www.ansi.okstate.edu/breeds/cattle/>.

Comprehensive online listing of cattle breeds.

The Cost of Producing Milk in Maine: Results from the 2002 Dairy Cost of Production Survey

By T.J. Dalton and L.A. Bragg. University of Maine Cooperative Extension. 2003.

<http://www.umaine.edu/rep/publications/tb189.pdf>

Dairy Farm Sustainability Checksheet

By Ann Wells and Ron Morrow. ATTRA National Sustainable Agriculture Service. National Center for Appropriate Technology. March 2001.

<http://www.attra.org/attra-pub/PDF/dairychecksheet.pdf>

To receive a printed copy, contact ATTRA at 1-800-346-9140

Dairy Goats

Goat milk products, although in strong demand within a niche market, are still relatively uncommon in the United States. In recent years, the industry has witnessed gradual growth, attributed to the health and specialty nature of goats' milk and milk products. The milk is credited with containing many nutrients not found in dairy cow's milk, and as being easier for many people on a special diet to digest.

Goat milk is processed most commonly into cheese (frequently soft cheese) and also into yogurt, ice cream, fudge/chocolate, and sold in its fluid form. It can also be processed into body care products such as soaps and lotions, which is a particularly good option for dairies not interested in grade A certification.

Goats produce more milk than sheep and less than cows, averaging $\frac{1}{2}$ to $\frac{3}{4}$ gallons each day. They are often milked twice a day, and are kept on a seasonal schedule. They can be milked once/day for a bit less production, or three times/day to increase production. Goats also can be stagger-bred to milk year round. Lactations generally last around 8-10 months. Milking twice per day, seasonally, is often the most cost efficient system.

There currently are six common breeds of dairy goats in the United States, and each is known for particular milk compositions and qualities. It is important to consider these factors in your goat in accordance with your end desires. The most common dairy goat breed in the United States is the Nubian. Nubian's have a large amount of solids in their milk, and thus are best for cheese.

Much like sheep, goat dairies comprise such a small fraction of the United States dairy industry that little statistical information is available regarding wholesale market prices. To explore information on goat dairies such as current bulk price standards, or availability of processing areas, you should inquire with other goat dairies in Maine.

Resources

American Dairy Goat Association

209 West Main St., PO Box 865
Spindale, NC 28160
Phone: 828-286-3801
Fax: 828-287-0476
Email: info@adga.org
<http://www.adga.org>

Goat Breeds

Oklahoma State University Board of Regents. 1996.
Website: <http://www.ansi.okstate.edu/breeds/goats/>
Comprehensive online listing of goat breeds

Goats: Sustainable Production Overview

By Linda Coffey, Margo Hale, and Ann Wells. ATTRA National Sustainable Agriculture Service. National Center for Appropriate Technology. August 2004.
<http://attra.ncat.org/attra-pub/PDF/goatoverview.pdf>
Provides fundamental information relevant to all goats, especially about feeding, reproduction, and health
To receive a printed copy, contact ATTRA at 1-800-346-9140

Heart of Maine & Southern Maine Dairy Goat Associations

Jennifer Mellett
4 Dusty Acres
Biddeford, Me 04005
Phone: 207-283-4098
Email: JenMellett@aol.com

Maryland Small Ruminant Page.

Susan Schoenian, Sheep and Goat Specialist at the Western Maryland Research & Education Center, University of Maryland Cooperative Extension
Website: <http://www.sheepandgoat.com/>

SheepGoatMarketing.info

This website is a joint project between the University of Maryland and Cornell University
Website: <http://sheepgoatmarketing.info/>
Email: nesgmp@cornell.edu
Includes, among other resources, a list of sheep and goat processors in Northeast, funding sources, and a directory of producers.

Small Ruminant Dairy Project

Carol Delaney
UVM Center for Sustainable Agriculture
63 Carrigan Drive
Burlington, VT 05405

Phone: (802) 656-0915

Email: Carol.Delaney@uvm.edu

Website: <http://www.uvm.edu/sustainableagriculture/smallrumi.html>

Dairy Sheep

Sheep dairies comprise a very young, emerging industry in the United States. Due to its youth, the risk associated with sheep dairy business can be rather high, but so can be the growth potential. The market for sheep dairy products in the United States is highest on either coast, and can also be found in ethnic niche markets.⁸ The United States alone imported over \$184,178,000 sheep milk cheese in 2004,⁹ and currently the United States is home to roughly only 100 sheep dairies. Nationally, there is large growth potential for the sheep dairy industry.

Sheep milk is naturally homogenized, meaning solids do not separate to the top, and also has a very high milk solid content. Because of these factors, it is uncommon to consume the milk in its fluid form. More commonly, sheep milk is frozen until enough accumulates to sell in bulk, or make into cheese. The milk is primarily known for the cheeses it produces. It is occasionally also processed into yogurt and ice cream.

Dairy sheep breeds can produce between 1-2 quarts of milk a day (or ¼ to ½ gallon), much less than is produced by other types of dairy animals. Because sheep have strong breeding characteristics, milking seasonally is very typical, although it can be done year-round to increase profits on larger farms. The average number of lambings is 1.5 per year in milking flocks, and lactations often last from 90-160 days. Sheep are most often milked once per day, but can be milked twice per day.

Having quality dairy breed sheep can be an important factor in the success of your venture. The East Friesian breed is the most common breed of dairy sheep in the United States, and there currently is a large enough population in the US to maintain successful breeding. If you already have other breeds, breeding your ewes with a high quality dairy ram can work well.

Much like goats, sheep dairies comprise such a small fraction of the United States dairy industry that little statistical information is available regarding wholesale market prices. To explore information on goat dairies such as current bulk price standards, or availability of processing areas, you should inquire with other sheep dairies in Maine.

Resources

Dairy Sheep

Agricultural Marketing Research Center, USDA. By Malinda Miller. August, 2005.

<http://www.agmrc.org/agmrc/commodity/livestock/lamb/Dairy+Sheep.htm>

General resource on all information relating to dairy sheep, and marketing information in particular.

Dairy Sheep

By Linda Coffey. ATTRA National Sustainable Agriculture Service. National Center for Appropriate Technology. January, 2001.

<http://attra.ncat.org/attra-pub/PDF/dairysheep.pdf>

Useful primer on all aspects of dairy sheep management.

To receive a printed copy, contact ATTRA at 1-800-346-9140

Dairy Sheep Association of North America

Carol Delaney
University of Vermont
200B Terrill Hall
570 Main St.
Burlington, VT 05405
Phone: 802-656-0915
Email: Carol.Delaney@dsana.org , info@dsana.org
Website: www.dsana.org

Dairy Sheep Listserve

Yahoo. <http://groups.yahoo.com/group/dairysheep>

Economics of Sheep Milk

University of Wisconsin Cooperative Extension
http://www.uwex.edu/ces/animalscience/sheep/Publications_and_Proceedings/Dairy_manage_list.htm

Includes sample dairy sheep budget, information on economics, business management, and general advise.

Maine Sheep Breeders Association

Hetty Richardson, President
Phone: 207-626-5913
Email: meadow4@prexar.com
Website: <http://mainesheepbreeders.org/>

Maryland Small Ruminant Page

Susan Schoenian, Sheep and Goat Specialist at the Western Maryland Research & Education Center, University of Maryland Cooperative Extension

Website: <http://www.sheepandgoat.com/>

Sheep Breeds

Oklahoma State University Board of Regents, 1996

Website: <http://www.ansi.okstate.edu/breeds/sheep/>

Comprehensive online listing of sheep breeds

SheepGoat Marketing Info

Website: <http://sheepgoatmarketing.info/>

Email: nesgmp@cornell.edu

Joint project between the University of Maryland and Cornell

University that includes among other resources, a list of sheep and goat processors in Northeast, funding sources, and a directory of producers.

Small Ruminant Dairy Project

Carol Delaney, UVM Center for Sustainable Agriculture

63 Carrigan Drive

Burlington, VT 05405

Phone: (802) 656-0915

Email: Carol.Delaney@uvm.edu

Website: <http://www.uvm.edu/sustainableagriculture/smallrumi.html>

Beef Cattle

Raising beef as a value-added product can happen in conjunction with a dairy operation, or independent of one. Over four million bull calves are born each year in the dairy industry¹⁰. Raising these calves into beef can be a relatively easy and cost efficient way of bringing more money to a dairy farm.

In the current, conventional market, about half the value of cattle is incurred after it leaves the farm and is added primarily through handling and marketing fees. This leaves the profit for the farmer or rancher relatively small. By raising cattle on farm through low-cost methods (such as grazing), and marketing the product his or herself, a farmer has opportunity to increase profit by 50%. One farmer in Wisconsin reports that when delivering a hormone, chemical free steer to the market, he would be paid \$800, but when direct marketing the same animal, he makes \$2,000, minus the \$400 slaughter fee¹¹.

Keys to raising the value of beef include utilizing niche and direct markets. Particular niche markets for beef include lean meat, organic, grass fed, local, and “farm fresh” labels.

Although dairy breeds are less efficient in developing meat than beef breeds of cattle, the meat is competitive in other ways. Most dairy meat, but Jersey meat in particular, can marble better than some beef breeds and a notable flavor develops from pasture-raised beef, which can be capitalized upon in marketing¹². Because dairy beef is often a leaner meat than typical beef breeds, it also can benefit from the growing trend toward low-fat foods.

Value-added dairy farmers raising beef will likely need to find slaughterhouses willing to accommodate small-scale farming. Large centers generally do not discriminate between farm products. Meat must be slaughtered at a USDA inspected facility for interstate trade.

For a list of inspected slaughterhouses in Maine, you can contact your county extension office or visit the link below.

Resources

List of State and Federally Inspected Slaughter Facilities in Maine

University of Maine Cooperative Extension

<http://www.umaine.edu/livestock/slaughter.htm>

Alternative Beef Marketing

By Richard Earles and Anne Fanatico. ATTRA National Sustainable Agriculture Service. National Center for Appropriate Technology. May 2000. <http://attra.ncat.org/attra-pub/beefmark.html>

*This publication explores marketing alternatives for small-scale cattle ranchers who would like to add value to the beef they produce.
To receive a printed copy, contact ATTRA at 1-800-346-9140*

Beef Farm Sustainability Checklist

By Ron Morrow. ATTRA National Sustainable Agriculture Service.
National Center for Appropriate Technology.

<http://attra.ncat.org/attra-pub/beefchek.html>

Assessment tool to help plan a whole farm in which beef production is a major enterprise. Management of animals, forage, soil, watershed, marketing, economics and goal-setting are addressed in the 200 questions.

To receive a printed copy, contact ATTRA at 1-800-346-9140

Cattle Breeds

Oklahoma State University Board of Regents, 1996

Website: <http://www.ansi.okstate.edu/breeds/cattle/>

Comprehensive online listing of cattle breeds

Dairy Beef

By Anne Fanatico. ATTRA National Sustainable Agriculture Service.
National Center for Appropriate Technology. April 2000.

<http://attra.ncat.org/attra-pub/dairybeef.html>

To receive a printed copy, contact ATTRA at 1-800-346-9140

Salad Bar Beef

By Joel Salatin. Polyface Publishers. 1995. 368pp.

Essays on raising beef on grass and marketing the product.

Sustainable beef production

ATTRA National Sustainable Agriculture Service. 1999. National
Center for Appropriate Technology. 2006.

<http://attra.ncat.org/attra-pub/PDF/sustbeef.pdf>

Overview of sustainable beef production and management.

To receive a printed copy, contact ATTRA at 1-800-346-9140

Buying-In Product to Resell, Establishing a Cooperative

If considering dairy processing, but not currently farming, buying-in raw product from area farms to process it yourself is an option to consider. This is a relatively typical system, but developing such an arrangement is unique to each endeavor.

Milk could be sourced directly from farms in your area. To accomplish this, you will need to locate farms not currently in contracts, or with flexible contracts, and you will need to resolve transportation issues. You could also contract through a larger private distributor/processor already working in your area (such as Horizon Dairy). There is also a potential that a small dairy cooperative already exists in your area, and is willing to work with you to transport fluid milk.

One alternative is to organize a cooperative yourself. This producer owned business is democratically controlled and operated. They vary in size from small (several farms), to large (one cooperative in the Northeast, Dairylea Cooperative, Inc., has 2,400 farm members). Cooperatives can help control fluctuating dairy prices, provide financial stability and start-up funding for processing center, and they may also appeal to niche groups as a marketing device.

Resources

CROPP study maps paths to small-scale co-op marketing success

Center for Integrated Agriculture Systems. University of Wisconsin, Madison. October 1995.

http://www.cias.wisc.edu/archives/1995/10/01/cropp_study_maps_paths_to_smallscale_coop_marketing_success/index.php

To receive a print copy, contact:

Center for Integrated Agriculture Systems

University of Wisconsin, Madison

College of Agricultural and Life Sciences

1535 Observatory Drive

Madison, WI 53706

Phone: (608) 262-5200

Cooperatives – a list of related publications

ATTRA National Sustainable Agriculture Service.

Website: <http://www.attra.org/marketing.html#cooperatives>

To receive a printed copy, contact ATTRA at 1-800-346-9140

How to start a cooperative

By Galen Rapp. Rural Business and Cooperative Development Center,
USDA. September 2005.

<http://www.rurdev.usda.gov/rbs/pub/cir4514.pdf>

*Four-page article outlining general benefits and organization of
cooperatives.*

Value-Adding to Raw Milk - Options

Below are a few of the most common methods United States dairy farms employ to add value to their raw products. Many of the below value-adding methods can be used in tandem to create an ideal business meeting your needs.

Resources

Adding Value With Small-Scale Food Processing and Specialty Dairy Products, A Resource Packet.

Farming Alternatives Program, Department of Rural Sociology
Warren Hall, Cornell University
Ithaca, NY 14853
Phone: 607-255-9832
Complied for 1996 and 1997 Farming for the Future Leadership Workshops. Contains articles, conference materials, project plans, etc.
Cost: \$5.

Beth Calder, PhD

Extension Food Science Specialist
5735 Hitchner Hall, Rm #232
Orono, ME. 04469-5735
Tel. (207) 581-2791
Fax: (207) 581-1636
Email: beth.calder@umit.maine.edu or
bcalder@umext.maine.edu
Outreach for the Department of Food Science and Human Nutrition at the University of Maine.

Small Scale Food Entrepreneurship: A Technical Guide for Food Ventures

Cornell University, Northeast Center for Food Entrepreneurship at the New York State Food Venture Center
<http://www.nysaes.cornell.edu/necfe/pubs/booklet.html#toc4>
This soft-cover guide contains the information for start-up food processing businesses. It is 108 pages long and bound. The cost for this book is \$15.00. The table of contents and order form are available at the above website.

Small Dairy Resource Book, Sustainable Agriculture Research and Education

Vicki Dunaway, Sustainable Agriculture Network, 2000
<http://www.sare.org/publications/dairyresource.htm>

An annotated bibliography of books, periodicals, videos, and other materials on farmstead dairy processing.

UW Maine Dairy Processing Plant

University of Maine, Orono

Contact Extension Agent Beth Calder (contact information is above) for more information.

Currently the facilities are very limited, but are growing to meet the demands of the value-added industry. There is a pilot plant that has been acquiring new equipment, and they hope to be teaching cheese-making (and possibly other value-added product) workshops in the near future.

Butter

In 2004, U.S. butter production increased 1 percent from 2003, reaching 1.25 billion pounds. Per capita butter consumption was about 4.2 pounds in 2004¹³. According to the Agriculture Marketing Service, Maine should expect a 19.61% increase in spending on butter and margarine between 2003 and 2008.¹⁴

Maine currently has several butter production operations, with a couple, Kate's Butter and Houlton Farms Dairy, producing enough butter to supply larger markets. In a 2004 survey, Maine food retailers, distributors and restaurants reported that sweet cream salted butter is their preferred butter product. Six retailers and one restaurant (out of 12 respondents) reported that they would be interested in selling under 50 pounds of farm-identified butter/week. Furthermore, one retailer reported great success at selling a raw organic Maine butter for \$7.50-\$8.00/lb.¹⁵

Because butter requires a large quantity of milk fat for production, cow milk is the most typical milk used for its production. Dairy cattle breeds producing high-fat content milk, such as Jersey or Guernsey's, are a particularly good choice for butter production. Butter, however, is not limited to dairy cattle milk, and sheep or goat milk may be used as well.

Butter production is often done in combination with a producing a non-fat product to utilize the leftover milk. Often, in commercial plants, the milk is converted to non-fat dry milk. On a small operation you may want to consider coupling butter production with a cheese-making operation, bottling and selling non-fat milk, or selling the leftover milk to another production facility.

Resources

Butter and Cheese Making

By V. Cheke and A. Sheppard. Alpha Books Publisher. January 1985.

"Buttering up your customers" Direct-Market Dairy Products Keep Profits on the Farm

By Martin Kleinschmit and Rebecca S. Kilde. North Central Initiative for Small Farm Profitability.

<http://www.farmprofitability.org/research/butterup/butterup.htm>

A case study of a group of grass-based dairy farms in Minnesota who decided to set their price by producing, marketing and distributing butter and cheese themselves. To request a print copy, you may contact Center for Applied Rural Innovation and Food Processing Center, University of Nebraska, 58 H. C. Filley Hall, Lincoln, NE 68583-0947

Making Cheese, Butter & Yogurt

By Phyllis Hobson. Storey Publishing, LLC. January 8, 1983. 32 pp.
Quick, practical guide to making small-scale cheese, butter and yogurt.

Making Homemade Cheese and Butter

By Phyllis Hobson. Garden Way Publishers. January, 1975. 45pp.

Cheese

In 2004 the United States produced 8.8 billion pounds of cheese. Demand for this cheese is on the rise: in the course of 52 weeks ending in May 2004, specialty and artisan cheese sales increased by 13% in the United States, topping at a value of \$1.4 billion¹⁶.

In Maine, there is a very strong demand for locally produced, quality, fresh mozzarella, soft cheese, mold-ripened cheese, cheddars, hard Italian, blues, and gouda. Buyers for a Maine restaurant recently explained, “Give me something unique, local, and high-quality, and I’ll build my menu around it.”¹⁷ Be careful to not produce a cheese that is already in surplus, or made better elsewhere. A specialty food retailer in Maine warned against a current market saturation of soft goat cheese.

Cheesemaking apprenticeships

WWOF (world-wide opportunities on working farms.

<http://www.woof.org/>),

MOFGA (Maine Organic Farmers and Gardeners Association,

www.mofga.org)

ATTRA (National Sustainable Agriculture Information Service, Internship & Apprentice Listings,

<http://www.attrainternships.ncat.org/>)

Qualities most sought after in Maine-made cheese, include:

1. Complex Flavor and Relationship with Farmer
2. Packaging
3. Interesting Farm Story and *Terroir* (flavor of the land) and Raw
4. Certified traditional and Pasteurized¹⁸

Cheese is readily made from the milk of cattle, goats or sheep, although different cheese types match better with specific milk types. Most cheeses require a long aging period, and unpasteurized cheese must be aged for a minimum of 30 days before sale. Some common cheeses that may be sold “fresh” (unaged) when pasteurized, include farmers cheese, cream cheese, mild cheddar, and mozzarella.

Cheese making is a fairly complicated process requiring much practice, specialized equipment, and a skilled sense of chemistry. Before developing a cheese making enterprise, you might consider apprenticing at an existent cheese making business, and/or taking coursework in cheese making. Some of the most common organizations to apprentice through are listed to the left, while available courses are listed below.

Resources

Building a Specialty Cheese Plant

Prepared by: The Food Processing Center. University of Nebraska – Lincoln. 143 Filley Hall Lincoln, Nebraska 68583-0928. 2002
http://www.foodmap.unl.edu/report_files/Specialty_Cheese_Plant.pdf
This study evaluates true costs of developing a specialty cheese processing plant in the Nebraska, and contains useful information

representative of the United States at large. Includes overview of equipment suppliers.

Cheese Making for Beginners

David B. Fankhauser, Ph.D. Professor of Biology and Chemistry. U.C. Clermont College. Batavia OH 45103. FANKHADB@UC.EDU
http://biology.clc.uc.edu/fankhauser/Cheese/Cheese_course/Cheese_course.htm

A free & in-depth cheese-making lesson online. Covers many varieties of cheese, and links to other interesting cheesemaking sites.

Cornish Workshops

PO Box 114. Cornish Flat, NH 03746
Phone: 603-542-8635
Offer cheesemaking classes at irregular schedule.

The Maine Cheese Guild

c/o State of Maine Cheese Co.
461 Commercial Street
Rockport, ME 04846
Phone: 207-785-4431, please leave a message
Website: <http://www.mainecheeseguild.org>

In 2003, the Maine Cheese Guild was initiated to serve as a gathering place and resources for those interested in the cheese industry of the state. It features monthly meetings, an annual conference, group support, and a resource directory for cheese equipment, courses, and issues. The Guild is an invaluable resource for anyone considering cheese making in Maine.

Market Ripe for Cheese Makers

By Matt Wickenheiser, Portland Press Herald. September, 28, 2003.
Portland Phoenix article on growing cheese industry in Maine.

The Power of Cheese

By Andy King. Portland Phoenix. November 7-13, 2003.
<http://www.portlandphoenix.com/food/dining/documents/03300040.asp>
Portland Phoenix article on growing cheese industry in Maine.

The Specialty Cheese Market

The North Central Initiative for Small Farm Profitability Food Processing Center, Institute of Agriculture and Natural Resources
143 Filley Hall East Campus
Lincoln, NE 68583-0928
402/472-2832

<http://www.farmprofitability.org/cheese.htm>

This report is intended to be an overview of the specialty cheese market and the marketing of its products. The report also attempts to uncover some of the opportunities and barriers associated with entering the specialty cheese market.

Value-Added Specialty Cheese Processing: Feasibility Study for Maine

By Dr. Joseph, Thomas College, Lewiston Maine, 1996

<http://www2.thomas.edu/faculty/joseph/cheese%20processing.pdf>

Research on dairy industry outlook in Maine as of 1996. Focuses on value-added dairy options, particularly Specialty Cheese Processing. Includes in-depth cost estimates, recipes, and valuable contact information.

Vermont Institute for Artisan Cheese.

University of Vermont. Burlington, VT 05405.

802-656-8300. www.uvm.edu/~viac/

The Vermont Institute for Artisan Cheese (VIAC) at the University of Vermont is the country's first comprehensive center devoted to artisan cheese. The institute connects cheesemakers with UVM cheese experts and dairy scientists as well as with internationally recognized experts. The center also offers cheesemaking courses.

World Cheese Exchange Database.

http://www.cdr.wisc.edu/applications/specialty_cheese/cheese_database.shtml

This comprehensive database funded by the Wisconsin Milk Marketing Board, includes information on over 1400 cheeses. The database is searchable by cheese name or nationality.

Ice Cream

In 2004, 1.5 billion gallons of ice cream, frozen yogurt, and sherbet were produced. Per capita consumption of these frozen desserts was about 22 quarts. Ice cream sales grew 24 percent between 1998 and 2003, and 93 percent of US households say they consume ice cream.¹⁹ According to the Agriculture Marketing Service, ice cream consumption in Maine is expected to increase by 7.78% between 2003 to 2008.²⁰ Ice cream provides a steadily growing market for dairy producers.

Ice cream is most commonly made with dairy cattle milk, although it can be made from both goat and sheep milk as well. Ice cream production requires high amounts of cream or milk fat, and so Jersey or Brown Swiss dairy cattle breeds work particularly well for this purpose.

Ice cream producers will have excess milk (generally non-fat milk that remains after the cream has been skimmed) that can be used to produce a non-fat product, such as cheese, yogurt, or fluid milk.

Ice cream production can be done on both a small scale and a large scale. There are several examples of successful mid to large-scale examples of locally produced ice cream in Maine, perhaps most notably, is Giffords Ice Cream.

Resources

Ice Cream Making

Anne Ingram
University of Guelph, Department of Food Science
Building 038
Guelph, Ontario N1G 2W1
Phone: 519-824-4120 X 52280
Email: ingram@uoguelph.ca
Website: <http://www.foodsci.uoguelph.ca/dairyedu/icecream.html>
Offers information on ice cream formulations, ingredients, shelf life and equipment requirements.

Ice Cream Short Course

Penn State University, Department of Food Science
111 Borland Laboratory
University Park, Pa. 16802
Phone: 814-865-7535
Email: IceCream@psu.edu
Website: http://www.creamery.psu.edu/short_course.html

This seven-day university short course, the oldest of its kind, covers everything from ingredients, to equipment and freezing.

Making Ice Cream and Frozen Yogurt

By Maggie Oster. Storey Publishing LLC. January 1995. 32pp.

National Ice Cream Retailers Association

1028 West Devon Ave.
Elk Grove Village, IL 60007
Phone: 847-301-7500
Website: <http://www.nicyra.org/>

This association serves retailers in the ice cream and frozen dessert business. Members receive monthly information on business related topics such as industry trends, labeling information and tax tips. They also hold an annual convention.

On-Farm Bottling/Glass Bottles

On-farm bottling is one of the most basic methods you can employ to increase the value of your milk. In Maine, a 6.13% increase in spending on milk and cream is expected to occur between 2003 and 2008, according to the Agricultural Marketing Service.²¹ Although milk consumption overall is currently on the decline, popularity of whole milk at specialty food stores in Maine remains great.²²

Increasingly farms have been returning to the old-fashioned returnable glass bottles. Such a system appeals to customers because they are assured of a quality product, they know where the milk was produced, and have a chance to be environmentally proactive by returning the reusable glass bottle.²³ Some consumers even claim that storing milk in glass is healthier and retains flavor better than do plastic bottles.

In Maine, glass bottles are preferred by far to other form of packaging amongst specialty food retailers, where 100% (or seven out of seven) of the retailers said customers favored this packaging to other forms.²⁴ The most desirable sized container amongst these retailers was ½ gallon.

For convenience purposes, you may want to consider on-farm bottling in plastic containers. Advantages of plastic containers include less initial costs and less concern over potential bottle returns. A bulk plastic container provider is likely located relatively near your farm, and therefore this bottling method would require less long-term storage at your farm than glass bottles which likely will need to be ordered in large quantity from out of state and stored until use.

On farm bottling is relatively easy, requiring only that you have enough on-farm refrigeration to store your product, that you source your own packaging, and that you have an efficient and regulation bottling and delivery system.

Organic

Organic is one of the largest niche markets in the United States today, and is on the rise. The Natural Marketing Institute reports that sales of organic foods reached \$7.8 billion in 2000, a 20-percent increase over sales in 1999.²⁵ 75% of Maine small-scale food purchasers surveyed reported that organic products were important to their customers.²⁶ Key selling points to organic consumers include health and nutrition, taste, environment, and availability.²⁷

Federal organic standards went into effect in October 2002. Certified organic means that agricultural products have been grown and processed according to the federal organic certification standards. For dairy farms, organic means raising livestock without synthetic pesticides or herbicides, no genetic modification, no added hormones or antibiotics, and only using organic feed.

In Maine, the local certifier is the Maine Organic Farmers and Gardeners Association (MOFGA). For a small fee they will send an agent to your farm to assure compliance with the federal standards. MOFGA agents are also available at any time to help you with questions or concerns you may have about transitioning to organic. To seek more information, contact MOFGA.

Organic certification presents some challenges. If you are not already organic, there will likely need to be a transition phase of at least 36 months before your farm can be certified. The cost of your feed also is likely to increase. Organic, however, has been known to increase the health of your animals (and thus cut-back of vet bills), and increase your profits.

Organic can be used in conjunction with any other processed dairy product to increase the overall value of the product. It also works well with dairy cattle, goats or sheep, although it may be easier to maintain a smaller herd under organic standards, than a large one.

Resources

CROPP

To learn more about CROPP (Organic Valley) visit:
<http://www.farmers.coop/> Or call: 1-888-809-9297
A large bulk organic dairy processor in Maine

Enterprise Budgets and Production Costs for Organic Production

ATTRA National Sustainable Agriculture Service. National Center for Appropriate Technology. 2004.
<http://www.attra.org/attra-pub/PDF/enterprisebudgets.pdf>

This resource list contains Internet-based sources of enterprise budgets and production cost information for organic production of horticultural and agronomic crops and for organic livestock enterprises.

Guide to ATTRA's Organic Publications .

ATTRA National Sustainable Agriculture Service. National Center for Appropriate Technology. 2006

<http://www.attra.org/attra-pub/PDF/organicpubslist.pdf>

To serve a growing organic agriculture field, ATTRA offers an annotated listing of the numerous ATTRA titles relating specifically to certified organic agriculture. The list includes publications on organic rules and compliance, farm inputs, soil, and pest management, as well as publications related to specific horticultural and field crops and organic livestock production. The list also includes ATTRA publications on marketing organic products and on the business of organic production. ATTRA also offers several Spanish-language publications on organic agriculture that appear on this list.

To receive a printed copy, contact ATTRA at 1-800-346-9140

Horizon Dairy

To learn more about Horizon Dairy, visit:

<http://www.horizonorganic.com/site/forfarmers/index.html> Or call:
1-888-648-8377

A large bulk organic dairy processor in Maine

Maine Organic Farmer and Gardener

PO Box 170
257 Crosby Brook Road
Unity, ME 04988
Phone: (207) 568-4142
Fax: (207) 568-4141
Email: mofga@mofga.org
<http://www.mofga.org/>

Recent growth patterns in the US Organic Foods Market.

Carolyn Dimitri, and Catherine Greene. Economic Research Service, USDA. September, 2002.

<http://www.ers.usda.gov/publications/aib777/>

This report summarizes growth patterns in the U.S. organic sector in recent years, by market category, and describes various research, regulatory, and other ongoing programs on organic agriculture in the U.S. Department of Agriculture.

National Organic Program

Agriculture Marketing Service, United States Department of
Agriculture

<http://www.ams.usda.gov/nop/indexNet.htm>

Website explains the US National Organic Standards

Northeast Organic Dairy Producers Alliance

c/o NOFA-VT?

P.O. Box 697

Richmond, Vermont 05477

Email: info@organicmilk.org

Website: <http://www.nodpa.com/index.html>

Transitioning to Organic

Sustainable Agriculture Research and Education, United States
Department of Agriculture. 2006.

<http://www.sare.org/publications/organic/index.htm>

*This online publication describes the many steps of making the
transition to organic.*

Yahoo- Organic dairy list

<http://groups.yahoo.com/group/Odairy/>

*Odairy is a electronic mailing group formed to allow organic dairy
producers to interact by email. ODAIRY was created by NODPA
(Northeast Organic Dairy Producers Alliance) in 2002.*

Rotational Grazing/Grass-based

Nine out of twenty small-scale Maine food purchasers claimed that grass or pasture-based products are important to their customers. They cited lack of education as being a primary reason for it not being more popular. They explained that some customers assume it implicit in the definition of “organic,” although it is not.²⁸

A successful grass-fed dairy is one in which animals exist out of doors on carefully managed forage for the warmer months of the year, and consume this forage as a primary source of their diet. Most grass-based dairies supplement their animals’ diet with grain and minerals, and this is often done at milking time when animals are all brought into one location.

Grass-fed dairy can be a good way to lower farm costs, but it requires additional work and a thorough understanding of forage management. This management system can be appealing to customers interested in animal welfare, environmental issues, and flavor. By feeding your animals on grass they often are healthier²⁹ and produce a richer-flavored milk.

The herd is regularly “rotated” through areas of forage to help monitor and maintain the quality and growth of the crop. Monitoring your forage will require a complex understanding of forage as a crop in and of itself. Below are a number of resources that can help start you on this endeavor.

Resources

Dairy grazing can provide good financial returns.

UW-Madison, Center for Integrated Agriculture Systems. 2004.
http://www.cias.wisc.edu/archives/2000/01/04/dairy_grazing_can_provide_good_financial_return/index.php

The Economics of Grass Based Dairying

By Tim Johnson, ATTRA National Sustainable Agriculture Service.
National Center for Appropriate Technology. March 2002.
<http://www.attra.org/attra-pub/ecodairy.html>
To receive a printed copy, contact ATTRA at 1-800-346-9140

Grazing Networks for Livestock Managers

ATTRA National Sustainable Agriculture Service. National Center for Appropriate Technology. 2006
<http://www.attra.org/attra-pub/summaries/grazingnetworks.html>
To receive a printed copy, contact ATTRA at 1-800-346-9140

Grass Farmers

By Allan Nation. Green Bark Press. 1993. 192 p.

Meeting the Nutritional Needs of Ruminants on Pasture

By Ron Morrow. ATTRA National Sustainable Agriculture Service. National Center for Appropriate Technology. June 1998.

<http://www.attra.org/attra-pub/summaries/ruminant.html>

To receive a printed copy, contact ATTRA at 1-800-346-9140

Rotational Grazing

By Alice E. Beetz. ATTRA National Sustainable Agriculture Service. National Center for Appropriate Technology. November 1994.

<http://www.attra.org/attra-pub/summaries/rotategr.html>

To receive a printed copy, contact ATTRA at 1-800-346-9140

The Stockman Grass Farmer

P.O. Box 2300

? Ridgeland, MS

39158-2300

Phone: ? (601) 853-1861

<http://www.stockmangrassfarmer.net/>

Published monthly. \$28/1 year; \$50/2 years.

Pastures: Sustainable Management

By Alice E. Beetz and Lee Rinhart. ATTRA National Sustainable Agriculture Service. National Center for Appropriate Technology. 2006

<http://www.attra.org/attra-pub/summaries/sustpast.html>

To receive a printed copy, contact ATTRA at 1-800-346-9140

Why Grassfed Is Best

By Jo Robinson. Vashon Island Press. 2000.

Seasonal Dairying

Seasonal dairying, although not traditional in to the United States, is becoming more popular.³⁰ It is generally used in conjunction with a grass-fed herd, as it matches the natural breeding cycle of cattle to the availability of nutrient-rich forage. All cows are dried off during the few months where production costs are highest (usually the winter). Seasonal dairying affords farmers a break and can be one method of cutting back farm costs.

To successfully seasonal dairy, breeding must occur in a brief window of 6-8 weeks for the entire herd so that production is cohesive and timely. Additionally, a concern to keep in mind is customer loyalty, which may waver if your product disappears for several months of the year. One possible way to overcome this challenge could be to couple with a produce CSA for summer marketing (see CSA information below).

Resources

Grass-based and seasonal dairying

By Alice E. Beetz. ATTRA National Sustainable Agriculture Service.
National Center for Appropriate Technology. December, 1998.

<http://www.attra.org/attra-pub/gbdairy.html>

To receive a printed copy, contact ATTRA at 1-800-346-9140

Seasonal grass dairying said to be a way for Midwest to compete with California.

Anon. 1998. Stockman Grass Farmer. March. p. 18.

Unpasteurized Milk

Maine is one of 28 states in the United States currently permitting the sale of unpasteurized (or raw) milk. In recent years, there has been increased discussion of possible health benefits offered by milk not pasteurized. Although a controversial issue, some individuals and groups claim that because the milk was not heated, more nutrients are left in unpasteurized milk making it easier for many people to digest and offer a number of other benefits including a more flavorful taste.

Five out of seven Maine specialty food retailers surveyed in 2004, reported that unpasteurized or unhomogenized (creamline) milk were preferred over pasteurized & homogenized milk, which was preferred by only two retailers. Said one retailer, “The biggest deal is that it’s RAW. After that it doesn’t matter what the product is, someone will want it.”³¹

If producing unpasteurized milk for sale in Maine, you must be prepared to meet stringent regulatory standards and pass regular tests monitoring unhealthy bacteria in your milk. If done correctly in compliance with Maine State regulations, unpasteurized milk can be healthy food, and a lucrative market for Maine farmers, ½ gallon glass bottled milk can typically sell for \$5.00 (that includes a \$2.00 bottle return).

Unpasteurized milk is most often marketed in conjunction with on-farm bottling and organic, and can also be grass-fed and seasonal.

An additional consideration is that unpasteurized milk has a relatively short shelf life (approximately one-week). Assure that your market and delivery system is able to handle this rate of turnover.

Resources

NOFA Massachusetts Campaign for Raw Milk

Cyndy Gray
Manchester-by-the-Sea, MA
Phone: (978) 526 7440
Email: justdairy@adelphia.net
Website: <http://www.nofamass.org/programs/rawmilk/index.php#links>

Real Milk.com

www.realmilk.com/
Website of Weston A. Price Foundation national campaign for legalizing raw milk across the United States. Includes listing of raw milk sources in Maine.

Rise seen in sale of raw milk: Sale of unhomogenized, unpasteurized milk lawful in Pa., some other states

By Jennifer Gish, The Associated Press

Sunday, December 05, 2004

<http://www.post-gazette.com/pg/04340/421877.stm>

Yogurt

Yogurt production is on the incline, growing 8% between 2003 and 2004. Per capita consumption in the United States was 7.4 pounds in 2002³².

Yogurt appeals to niche health and nutrition markets for a number of reasons. It must contain *Lactobacillus bulgaricus* and *Streptococcus thermophilus* in order to be called yogurt. Both are probiotics known to aid in digestive health. They also help break down lactose in the milk, making it digestible to lactose intolerant individuals. Providing further appeal for health conscious buyers is yogurts' ability to be low fat and fat free, but still supply a flavorful source of calcium.³³

Beyond health factors, variety is also a big seller in the yogurt market. Not only is drinkable yogurt a growing trend, so are yogurts made of sheep and goat milk. Providing flavors in yogurts such as vanilla, maple, or fruits can be an additional plus.

Yogurt is a fairly simple method of processing fluid milk. It requires relatively low amounts of start-up equipment and supplies, and the principle of yogurt production is itself simpler than other dairy processing methods.

Resources

Making Cheese, Butter & Yogurt

By Phyllis Hobson. Storey Publishing, LLC. January 8, 1983. 32 pp.
Quick, practical guide to making small-scale cheese, butter and yogurt.

National Yogurt Association

2000 Corporate Ridge, Suite 1000
McLean, VA 22101.
Website: <http://www.aboutyogurt.com/>
The National Yogurt Association (NYA) is the national non-profit trade organization representing the manufacturers and marketers of live and active culture yogurt products as well as suppliers to the yogurt industry.

Yogurt Making

By Anne Ingram. University of Guelph, Department of Food Science
Building 038, Guelph, Ontario N1G 2W1
Phone: 519-824-4120 X 52280
Email: ingram@uoguelph.ca
Website: <http://www.foodsci.uoguelph.ca/dairyedu/yogurt.html>

Offers information on yogurt formulations, ingredients, and equipment needed.

Yogurt Making Illustrated

By David B. Fankhauser, Ph.D.

U.C. Clermont College, Batavia OH 45103

Email: fankhadb@uc.edu Website:

http://biology.clc.uc.edu/fankhauser/cheese/yogurt_making/YOGURT2000.htm

A free and in-depth yogurt-making lesson offered online by a biology and chemistry professor at the University of Ohio.

Other processing Ideas

Again, adding value to a raw product is a very creative venture. You should consider the wide array of products available in the market; this publication only begins to touch upon some of those options. Later, in the Marketing sections, you will see that marketing avenues themselves may present ideas about what type of products may sell.

Some additional options to consider that are not mentioned in greater depth in this publication, include: body care products, sour cream, dried non-fat milk, chocolate/fudge, and flavored milk.

Marketing Your Product

Research Your Customer

Before investing capital in your value-added enterprise, do some work to discover who will purchase your product. Nationally, there is a growing demand for convenient, ethnic and unique foods, organic and natural foods, and value (low prices)³⁴. Interest in “safe food” (which can translate into local products) is also on the rise³⁵.

Understanding customers is imperative to marketing. With the product you intend to produce in mind, you should research the following questions:

- 1) In the area that I hope to market, are there already similar products for sale?
 - a. Are there different similar products (competitors)?
 - b. What prices are they selling for?
 - c. Are any selling better than the others? Why?
 - d. How much is selling?
 - e. How can I make my product stand out, or better?
- 2) Ask proactively whether there are ANY related products that a potential customer is hoping to find. Perhaps these can ultimately fit into your production plan.
- 3) Who buys similar products, what are their needs, income, what price are they willing to pay, where are they located?
- 4) What do potential customers value: health, organics, natural, hormone-free, local products, etc.?
- 5) What is the size of this potential customer base- could it support your operation?
- 6) How hard or easy would it be to draw attention to your product?
- 7) What is your proximity to major population centers/and or how far are customers willing to travel to purchase your product?
- 8) What is the longevity of this market, is it consistent?

These questions should be researched thoroughly, some resources that will be helpful in this endeavor include, The University of Maine Cooperative Extension, The Department of Agriculture, Division of Market and Production Development, USDA ERS, private market trends research companies, and stores or people you hope to market to,

Some of the most typical methods employed in researching customers include surveys, interviews, and focus groups. Surveys should be concise and ask targeted questions regarding customer preferences in relation to your product. Interviews are basically a verbal survey and can be formal or on the spur of the moment. Focus groups are group-based interviews where a whole group is brought together to discuss your questions together. Focus groups often offer unique insight to group behavior in reference to your product, and can be fun for participants.

Target areas you plan to market at when acquiring research participants. It is important to keep accurate records of findings, and ask consistent questions. This will ultimately help assure that you have made accurate assessments of your profit potential.

To explore the size of your local market, view the publication, *Dairy Farms for the Future*, by Kerri Sands and Russell Libby. In this article, you will find a thorough explanation of how to calculate the size of customer base you will need to support your operation. For example, they discern that a 30-35 head dairy cattle operation could provide roughly enough fluid milk and cheese to feed about 1400 people, or 500 households.

Their study, completed in 2004, also provides detailed information on the specific needs of retailers, restaurants, and food distributors in Maine. Additional information on packing preferences and prices is also included.

After you have developed a market approach and product, if possible, test market your product. To do this, distribute a small amount of your product to the areas and people you believe would be potential customers. Register responses of these individuals and keep careful records to determine if your original plan will likely play out in reality. It is not always possible to create a small quantity of your product for a test market, but if you are able, it can be a great, relatively painless, way of learning about your products' true marketability.

Resources

12 Simple Steps to a Winning Marketing Plan

By Geraldine A. Larkin, 1992. Probus Publishing Co., Chicago, IL.

APHIS- Center for Emerging Issues

Natural Resources Research Center
Building B? 2150 Centre Avenue?
Fort Collins, CO 80526-8117?
Phone: (970) 494-7001
Website: <http://www.aphis.usda.gov/vs/ceah/cei/>

Dairy Farms for the Future: Diversifying farms to expand direct markets for milk products.

By Kerry Sands and Russell Libby. December, 2004.
This publication is available in print through The Maine Department of Agriculture, Division of Market and Production Development, and electronically on the Value-Added Dairy compact-disc developed by the Maine Department of Agriculture, Division of Market and Production Development, Division of Market and Production Development
28 State House Station , Augusta, ME 04333
Phone: (207) 287-3491

Direct Marketing

By Katherine Adam, Radhika Balasubrahmanyam, and Holly Born.
ATTRA National Sustainable Agriculture Service. National Center for
Appropriate Technology. November 1999. [http://www.attra.org/attra-
pub/summaries/directmkt.html](http://www.attra.org/attra-pub/summaries/directmkt.html)

*Includes demographic information and a good checklist helpful in
preparing a Marketing Plan.*

To receive a printed copy, contact ATTRA at 1-800-346-9140

Economic Research Service

United States Department of Agriculture, <http://www.ers.usda.gov/>
Data on US food consumption and production by commodity

Emerging Markets for Family Farms

By Kelly O'Neill. 1997. Center for Rural Affairs, ? Walthill,
Nebraska. 62 p.

Evaluating a Rural Enterprise

ATTRA National Sustainable Agriculture Service. National Center for
Appropriate Technology. Available for \$7 from: CRAPO Box 406
Walthill, NE 68067-0406. Phone: 402-846-5428.

Maine Demographic and Consumption Profile

Agriculture Marketing Service, United States Department of
Agriculture, 2006

[http://www.ams.usda.gov/statesummaries/ME/MSA/MSA.pdf/Maine.p
df](http://www.ams.usda.gov/statesummaries/ME/MSA/MSA.pdf/Maine.pdf)

Maine State Marketing Profile

Agriculture Marketing Service, United States Department of
Agriculture, 2006

<http://www.ams.usda.gov/statesummaries/ME/MEhome.htm>

Market Planning for Value-Added Agriculture Products - 2001 - Direct Marketing Resource Guide.

By Lynda Brushett and Gregory Franklin.
University of New Hampshire, Cooperative Extension
131 Main Street, 16 Nesmith Hall
University of New Hampshire
Durham, New Hampshire 03824
<http://ceinfo.unh.edu/pubs.htm>

\$13.75 plus \$5.00 s/h for one copy.

This publication is a market planning workbook, and compilation of special topic articles. Topics include practical market research, pricing, break-even analysis, product differentiation and direct-to-consumer markets. Worksheets and organizers make this publication a useful tool. 3-ring binder. 50 pp.

National Agriculture Statistics Service

United States Department of Agriculture

<http://www.nass.usda.gov/>

Search agricultural data by state

Southern New England Farmer Research Group Network

275 Jackson St. ? Belchertown, MA 01007

Phone: 413-323-4531

Fax: 413-323 -9594

Email: info@smallfarm.org

Website: <http://www.smallfarm.org/frgn/index.htm>

Provides resources for farmers to test their ideas, current recommendations and alternative practices on their own farms. NESFI is a collaborator, facilitating farmer projects, meetings, and demonstrations.

Finding The Right Market Channels For Your Products

Below are market channels you may use to distribute your new product. Review these options carefully and consider that a variety of strategies are presented below, both traditional, and newer, more alternative outlets as well. Consider the size and capacity of your business, and the reality of which strategies will work best for you.

Conventional market models do not always meet the needs of specialty farm enterprises or small farms very well. Markets are very tight and, even if able to supply enough product to meet demands, small farms generally cannot afford the initial costs of being competitive. Fortunately, there is a plethora of alternative and innovative models that farmers may engage in.

Resources

Direct Farm to Consumer Marketing: A Profitable Alternative for Family Farm Operations

By, G.H. Sullivan et al. 1981. Purdue University Extension Service, West Lafayette, IN 47907.

Direct Marketing

By Katherine Adam, Radhika Balasubrahmanyam, and Holly Born. ATTRA National Sustainable Agriculture Service. National Center for Appropriate Technology. November 1999. <http://www.attra.org/attra-pub/summaries/directmkt.html>

To receive a printed copy, contact ATTRA at 1-800-346-9140

Direct Marketing Resource Guide

By David Chaney, Gail Feenstra and Jeri Ohmart. Sustainable Agriculture Research and Education. 2004. <http://www.sare.org/publications/dmrg.htm>

Dynamic Farmers' Marketing

By Jeff Ishee. Bittersweet Farmstead. 1997.

Farm Direct Marketing Digest

P.O. Box 4612 Pasco, WA 99302
Phone: 509-547-5538

Fax: 509-547-5563

Farmer Direct Marketing

Agriculture Marketing Service. USDA. 2006.
<http://www.ams.usda.gov/directmarketing/>
Links to many resources on direct marketing.

A Guide To Successful Direct Marketing

By Charles R. Hall and Jeff L. Johnson. Texas Agricultural Extension Service, Texas A&M University, College Station, Texas. 1992.

The Legal Guide for Direct Farm Marketing

By Neil D. Hamilton. Sustainable Research and Education, USDA. 1999.

Marketing Channel Research and Development

Agriculture Marketing Service (AMS), USDA
<http://www.ams.usda.gov/tmd/MSB/publications.htm#MarketingChannel>
List of related AMS publications

Wholesale through Restaurants/Institutions

The number of Americans eating away from home is on the rise.³⁶ This trend has increased the demand for food at restaurants and other institutions (such as universities and even medical settings). Furthermore, many restaurants and some institutions now highlight high quality, fresh foods, on their menu and are willing to pay a premium to purchase these items from near-by farms. Value-added dairy enterprises can capitalize on these trends by selling direct to restaurants or institutions.

In the conventional restaurant and institution systems, there is generally little room for small-scale producers. Most restaurants now have centralized purchasing and are contracted with large-scale distributors. Small-scale producers may have better luck seeking out independently operated restaurants or institutions as potential customers. If you can provide a product regularly at comparable or higher quality, and comparable price to their current product, then you may have a market.

To approach a restaurant or institution, you should come prepared with a list of potential products, realistic quantities you can provide, and pricing. Developing a personal relationship with the chef or head purchaser proves to be one of the main factors in developing a business relationship with a restaurant or institution.³⁷ Often, when speaking with a chef or buyer, he or she will already have an idea of what type of product you could potentially provide him or her with, which can in turn give you ideas on what product to produce.

One of the most difficult elements of selling to a restaurant or institution is providing a large enough quantity to meet their needs, while still receiving the price you need. Some ways to maneuver this situation, is to develop a product that can be produced in higher qualities. Butter, although being a profitable product, can rarely be produced quick enough on a small farm operation to serve all the needs of even the smallest restaurant or institution, whereas farm processed fluid milk could be possibly be produced in enough quantity.

Another challenge can be the occasionally sporadic needs of a buyer. A Massachusetts-based distributor explained, "Since restaurants' needs are always changing, and since they don't place orders more than a day ahead of time, it's difficult to nail down anything as specific as, say "40 per week." It might be 40 per week, one week, and then 100 the next. When a farmer develops a new product, they will buy a handful (10-20 units) and share it with a few select customers."³⁸

Both dilemmas can be curtailed by good, clear communication. Be thorough in explaining your needs to a restaurant, and listening, in turn, to their specific needs. With clear communication you are opening the doors of negotiation and are likely to find some solution that works for you both.

Resources: Wholesale to Institutions

Innovative marketing for small farmers: Local schools as customers

Agriculture Marketing Service, USDA. February 2000.
<http://www.ams.usda.gov/tmd/MSB/PDFpubList/InnovativeMarketing.pdf>

How local farmers and school food providers are building alliances

Agriculture Marketing Service, USDA. December, 2000.
<http://www.ams.usda.gov/tmd/MSB/PDFpubList/localfarmsandschool.pdf>

New markets for producers: Selling to colleges

UW Madison Center for Integrated Agricultural Systems. February 1999.
http://www.cias.wisc.edu/archives/1999/02/02/new_markets_for_producers_selling_to_colleges/index.php

Resources for wholesaling

Agriculture Marketing Service, USDA. 2006.
<http://www.ams.usda.gov/tmd/MSB/publications.htm#Wholesale>

Selling to Institutions: An Iowa Farmer's Guide

By Robert Luedeman and Neil D. Hamilton. Drake University Agricultural Law Center. January 2003.
www.iowafoodpolicy.org/selling.pdf

Resources: Wholesale to Restaurants

Selling to Restaurants

By Janet Bachmann, ATTRA National Sustainable Agriculture Service. National Center for Appropriate Technology. August, 2004.
<http://www.attra.org/attra-pub/PDF/sellingtorestaurants.pdf>
To receive a printed copy, contact ATTRA at 1-800-346-9140

Get real get maine.

Maine Department of Agriculture
Division of Market and Product Development
28 State House Station
Augusta, ME 04333
Phone: (207) 287-3491

Email: getrealgetmaine@maine.gov

<http://www.getrealmaine.com/>

Provides listing of restaurants currently using some products from local farms.

Retail through specialty stores

For many small-scale Maine dairy farms, marketing to specialty or natural food stores assures good prices, continual business, local deliveries, and regular turnover. Managers at small stores often are more willing to work with the needs of farmers to make their customers happy, than large retailers may be. Still, marketing through stores of any sort require regular deliveries and commitments.

Maine has numerous specialty and natural food stores. You should approach the store managers to discuss the possibility of marketing your product through their store. Most managers will be able to inform you immediately whether your product will do well at their store. Each store is also likely to have its own set of admittance standards and expectations, including a trial period, and perhaps a promotional period where you will have to offer a discount on your product.

Resources: Retail through specialty stores

How to Get Your Product Into Supermarkets

By Stephen F. Hall. Dearborn Financial Publishing; 2nd edition. June, 1996.

New markets for producers: Selling to retail stores

UW Madison Center for Integrated Agriculture Systems. February 1999.
http://www.cias.wisc.edu/archives/1999/02/01/new_markets_for_producers_selling_to_retail_stores/index.php

Working with retail buyers

By Laurie S.Z. Greenberg. UW Madison Center for Integrated Agriculture Systems. August 2004.
<http://www.cias.wisc.edu/pdf/retail.pdf>

Community Supported Agriculture (CSA)

Although numerous variations exist on a CSA system, the basic principle is a customer pre-pays a farmer in winter or early spring for a regular supply of product throughout that growing season. CSA's currently are on the rise in the United States, as more farms discover this to be a profitable marketing method that meets their needs. Approximately 70 Maine farms currently utilize a CSA marketing structure.

Elements of a successful CSA include providing a diverse array of products, providing quality products, maintaining punctuality and reliability, easy access, and good personal relations between producer and customer.

A typical CSA share in Maine averages in cost from \$300 - \$400 and feeds approximately four people fresh food (primarily produce) over five months through weekly deliveries, although great variation exists in share costs and quantity. Sometime CSA members are responsible for picking-up their prepackaged "share" at a predetermined location, other times farmers drop off, and, in some CSA's, the share is mailed to customers.

Dairy and beef products are less common in CSA's than is produce, although there are several examples of successful meat CSA's in Maine. Dairy and meat operations are discovering that it is lucrative to couple with produce CSA's, ultimately providing customers a wider variety of foods throughout the year. Although many CSA customers may not want a large quantity of milk or meat each week, they do appreciate regularly acquiring a smaller quantity with their produce CSA.

For a comprehensive listing of Maine CSA's, visit: www.getrealgetmaine.com,

Maine Department of Agriculture
Division of Market and Product Development
28 State House Station
Augusta, ME 04333
Phone: (207) 287-3491
Email: getrealgetmaine@maine.gov

Resources

CSA email networking list

To subscribe, send a message to: listproc@prairienet.org. In the body of the message, type: subscribe csa-1, followed by your first name and your last name.

Community Supported Agriculture

By Katherine Adam. ATTRA National Sustainable Agriculture Service.
National Center for Appropriate Technology. February 2002.
<http://attra.ncat.org/attra-pub/csa.html>

To receive a printed copy, contact ATTRA at 1-800-346-9140

CSA 2001: An Evolving Platform for Ecological and Economical Agricultural Marketing and Production

By Warren Lizzio and Daniel A. Lass. Department of Resource Economics, University of Massachusetts. August, 2005.

http://www.nesawg.org/pdf/CSA_2001_report.pdf

This research paper analyzes information reported from CSA farms across the Northeast US over four survey years. The research focuses on how various farm and demographic characteristics affect farm viability or "success" (23 pages)

Sharing the Harvest: A Guide to Community Supported Agriculture

Elizabeth Henderson and Robyn Van En. Chelsea Green Publishing, White River Junction, VT. 1999.

Internet/mail order

Internet and mail order businesses are relatively new, and have been on the rise, offering opportunity for small-scale processors. Internet users share many qualities with direct market customers: both groups tend to consist of older, have higher educations, and above-average incomes.³⁹

Internet or mail order businesses may be set up through a number of venues, including catalogs and websites, or joining an existing program, such as “Signature Maine Products.”

Due to the generally perishable nature of dairy or meat products, any orders must be sent via 2-day air, which can become quite expensive. Similarly, setting up the money exchange system (particularly an internet store) requires a large amount of management skills.

Resources

E-Commerce in Agriculture

Economic Research Service, USDA. August 2002.
<http://www.ers.usda.gov/topics/view.asp?T=104222>

How to Direct Market Farm Products on the Internet

By Jennifer -Claire V. Klotz, Agriculture Marketing Service. USDA.
December 2002.
<http://www.ams.usda.gov/tmd/MSB/PDFpubList/InternetMarketing.pdf>
This publication is designed to help small/medium-sized agricultural producers better develop Internet-based sales transactions by recommending effective methods for reaching and retaining customers.

Signature Maine Products

4 Scamman St
Suite 19-351?
Saco, Maine 04072?
Phone - 207-284-1344?
Fax - 207-283-8670?
Email: info@ShopMaine.com
<http://www.madeinmaine.com/>

Farm store/farm stand

Farm stores and stands are relatively simple marketing avenues. They can be as straightforward as a table on the side of a road, or as elaborate as a formal store with electricity and running water. In Maine, over 560 farms currently utilize some form of farm stand or store.

When selling from a farm stand or farm store, location and access are critical elements for success. Your farm should be located within 30 minutes from a population center large enough to sustain your sales. A farm stand should be located in an area that has high traffic flow, is visible, and makes for an easy stop. You should also have parking areas available, and should consider providing access to restroom facilities.

Advertising is also a critical element of these marketing strategies. Clear, well-placed signage will help draw your initial customers, and continually provide access to new customers. Look into local codes before placing signs, as many communities have rules regarding such signs.

An additional market base you should consider is food stamp recipients. The state of Maine may be able to provide your farm stand or store with a free EBT machine so that you may swipe and accept food stamp cards. The machines require access to a landline phone. For this program, the usual monthly usage fee has been waived for Maine farms. Contact Deanne Herman to check the programs availability, call 1-877-823-4369 for an application to be authorized to accept food stamp sales. Any questions about filling out the application or the authorization process should be directed to Debbie Crosby at the USDA Food and Nutrition Service office in Augusta (207-622-8255).

Resources

Facilities For Roadside Markets

Northeast Regional Agricultural Engineering Service (NRAES)
Cornell University Ithaca, NY 14853-5701
This Booklet is available for \$5.50

Farmers' Markets

In the mid-seventies, there were fewer than 300 markets in the United States. In just two decades, this number grew to more than 2,400 farmers' markets, with approximately 1 million people visiting them each week.⁴⁰ Farmers' markets are a relatively simple to participate in, and they generally provide reliable access to a steady customer base. In Maine there are at least 65 farmers' markets, and an indoor market, Portland Public Market, was recently established in downtown Portland.

Farmers' markets are a fairly autonomous marketing system, with each market designing its own set of criteria and standards for participation. Most markets have membership fees, which can range widely in value, and the pay system for these fees varies equally greatly. Occasionally, markets have limited space, and so have waitlists for participation. You should contact each farmers' market you are interested in for more information about their requirements, and a vendor application form. Contact information for Maine farmers' markets can be found below.

Before joining a market, ask other participants about their perceptions of the market. Ask whether there are consistent customers and what products may be already be sold at the market. Avoiding a market if it carries too many products similar to yours may be a wise idea, as this may create unnecessary competition, and perhaps decrease the selling potential of your product.

You may also want to consider accepting food stamps at your farmers' market to increase customer base. For more information, see the "Food Stamp Information" in the Farm Store/Farm Stand section of this publication.

Resources

Bridging the Technology Divide: a guide to accepting food stamps at farmers' markets

By Lucinda Megill. Agriculture Marketing Service. USDA.
<http://www.ams.usda.gov/tmd/MSB/PDFpubList/BridgingtheTechnologicalDivide.pdf>

Establishing and Operating A Farmers' Market: A Manual for Sponsors, Boards of Directors, and Managers of Farmers' Markets

By R.P. Jenkins. University of Tennessee Agricultural Extension Service. 1991.

The Maine Federation of Farmers Markets

<http://www.snakeroot.net/mffm/>

A volunteer website providing information about the Farmers' Markets of Maine.

State Farmers' Market Representative

Deanne Herman
Maine Department of Agriculture? Marketing & Products
Development
28 State House Station
Augusta, ME 04333
Phone: (207) 287-7561 Fax: (207) 287-5576
? E-mail: deanne.herman@maine.gov
Website: www.getrealgetmaine.com
Provides a list of Farmers' Markets and contact information for each market.

U.S. Farmers Market- 2000, A study of emerging trends

By Time Payne. United States Department of Agriculture. May 2002.
<http://www.ams.usda.gov/directmarketing/FarmMark.pdf>

Marketing Placement

After producing a raw product and processing it into a final product, the next step is market placement. It can be argued that marketing is perhaps more important to a successful agricultural enterprise than is production. In the end, if without consistent buyers you have no business.

Key issues to consider in your marketing strategy include:

1. Make a true commitment to your market. You must be very consistent to your consumers: answer phone calls and keep a clear communication, provide product on a regular basis (year-round), and remain patient. It may take a while to develop a customer base, but be patient, find out if there is a way to increase product appeal within that market. Do not quickly jump from market to market.
2. Differentiate your product by doing it better, or different. In today's competitive market, you need to have a product that has a purpose unique unto itself. This will help limit competition and draw natural attention to what you are selling.
3. Market your product. Give your product personal meaning to each customer by having it tell a story. Make it special by relating it to your farm, or raising it in a particular way that will attract the attention of your customers.⁴¹

This section, combined with the information you learned about your customers in the previous section, will help you construct a marketing plan. Such a plan is very useful to keep you on budget in your new enterprise. Appropriate market planning is critical; be careful to spend enough money and effort on marketing so that it works, but not spend too much unnecessarily.

Promotion and Publicity

In the evaluation phase of your marketing plan, you learned a lot about your potential customer that will now assist you in promoting that product to him or her. Promotional strategies include advertising, pricing, packaging and labeling. Each is further discussed below.

Advertising

The following are all advertising strategies that can be employed to draw attention to your product.

Business Cards – Are a relatively inexpensive way, and very tactful way, of spreading information. Include your farm name (and logo if possible), phone number, farm location, website if you have one, and product.

Catalog- Catalogs may be very economical if you produce a number of products, develop a catalog with other related businesses, or seek inclusion in a catalog already in production that reaches your targeted customer base.

Direct Mail- This works well with a regular customer base. It can arrive in the form of entertaining and informative newsletter, coupons or event notices.

Educational Materials – Part of your advertising strategy should include educating customers about your product and its importance. Do not assume that everyone understands your product and its implications. Educating customers about your products' importance is likely to develop customer loyalty. In addition to informing customers through your packaging or conversation, you should consider developing other educational materials to provide for customers.

Farm logo/motto – A logo is a small, catchy image that represents your product to your potential customers. It should appear on everything you do and serves to build a memory of your product.

Host events – Events are relatively inexpensive and bring your customer base to you. In fall you can host hayrides or costume parties. In spring have an animal visitation day, winter can feature cross country skiing. The possibilities are endless.

Local Paper/news – Highlight your farm through throwing events or producing new food and call your local news sources and have them publicly announce the events for free. Invite a reporter or editor over for a food tasting. Provide the press with plenty of notice, have good photo opportunities and return phone calls.

Newsletter – Many farms utilize newsletters to keep customers involved and informed about your farm and production. They can be distributed either via your website, email or

in print through the mail. Make the newsletter entertaining and include a map to your farm.

Paid advertising- Advertisements can appear online, in newspapers, newsletters or magazines, television, or radio. Keep carefully track of expenditures and be sure you are targeting the correct crowd. Ask customers where they heard about your product. If sales do not increase due to paid advertisements, re-evaluate the quantity of ads (maybe you need more) and your methods of reaching your desired audience. This can usually cost between 4-10% of your total sales.⁴²

Promotion- Serves to invite customers to purchase from you, provides purchasing incentive, draws attention to your product. This can be accomplished through a number of methods, including at-store sales, coupons printable off of your website, or coupons printed in related newsletters, newspapers or magazines.

Road Signs- These signs should be placed at least ½ mile from where you want them to stop, this will allow enough time for motorists to think about stopping. Signs should be clearly printed and large enough to read. They should be unique and contain references to the product you are selling. You should check into area codes about signage, as you may have to comply with city ordinances in your sign placement and size.

Signs- Should be well-kept, concise, and contain a logo and/or image. Signs are very important to farm stands and farmers markets, and often serve to both to inform customers and to provide a welcoming or unique theme that draws attention to your product.

Website – Websites may be a good way to reach larger audiences than you directly have access to. With a website you can network easily within niche audiences by linking to select sites. Websites should be updated frequently and be checked often to assure they are in good working order. Be sure to include your web address on everything, and look for ways to make it appear higher on search engines. Be sure to make your site interesting and creative. See web marketing below for more information on web development.

Word-of-Mouth- An estimated 80% of sales is from returning customers.⁴³ Reward these customers with high quality, sales, and good service, and they will reward you with free advertising.

Packaging

Many small processing operations claim that packaging is one of the most costly elements of their operation.⁴⁴ Having good packaging is also very important and can make a significant difference in your business. Do careful research before deciding what packing will attract customers. Re-evaluate your packaging if it doesn't seem to be working as well as you hope.

Packaging should be attractive, unique, and functional. Depending upon your clientele, you may want it to be elaborate and expensive, or simple and less costly. By exploring different packing methods, you may even add more value to your product.

Labeling

Labeling is of concern both to the advertising portion of your enterprise, and also to the regulatory and legal elements. Label your product to differentiate it, and make it appeal to the customer base you researched in the Evaluation section. The label is where you can make claims about how your product has been raised.

Before claiming anything on your packaging, though, you should be sure that it is a legally recognized claim. Below are some examples of claims you may want to make on your product, and the ensuing requirements set forth by the government to validate those claims.

FSIS Approvable Claims:
Raised Without Added Hormones, Raised Without Antibiotics, Not Fed Animal By-Products, Free Range, Free Roaming, Grass Fed, Corn Fed, Grain Fed, Certified Organic (By Certifying Entity).
FSIS Unapprovable Claims:
Antibiotic Free, hormone Free, Residue Free, Residue Tested, Naturally Raised, Naturally Grown, Drug Free, Chemical Free, Organic, Organically Raised.

Source: USDA FSIS Approvable Claims

<[http://www.fsis.usda.gov/Regulations & Policies/labeling_policies/index.asp](http://www.fsis.usda.gov/Regulations_&Policies/labeling_policies/index.asp)>, March 28, 2006

To make a claim, you must file an “Animal Production Claim” with the Labeling Review Branch of the USDA. To do this, submit a label application, a prepared label including the claim in question, and an Operational Protocol (OP). The OP is a detailed explanation of the conditions under which the animals are raised. For more information on labeling requirements and submitting an “Animal Production Claim”, contact the Labeling and Additives Policy Division of the FSIS.

Depending upon the size of your operation, there are many different avenues you may take in printing labels for your product. For a very small-scale project or operation, printing your own labels on a computer printer could be sufficient. You can purchase precut or full sheets of label stickers at any office supply store.

Most meat packers require that you bring prepared labels with the animals when you deliver them. Appendix C is a copy of the USDA information you must include on your labels, you may download this and edit in a graphic program to create your own label. You should converse with your slaughterhouse about other labeling requirements they may have, you will need to obtain their inspection number to include on your labels before printing.

For a larger or very regular enterprise, you will likely have to hire a professional label printing company. These will often help you prepare a design and you may have to provide them with specific graphic files.

If you are selling your product in a retail setting that uses electronic scanning, you will also need to obtain a UPC code, which you can do on-line through a number of vendors.

Pricing

When considering your price you have a lot of freedom, but do not under-price. Many small-scale producers tend to do this. One farmer in Minnesota explained that a good rule of thumb was to price high enough so that some customers walk away from your stand at the farmers' market.⁴⁵

You should develop a price with production and handling costs defining the lower end of your range, and the upper limit should be defined by what your customers are willing to pay. By reviewing the research you completed to determine your market potential, you should be able to discern what the competition charges and the price that your customers are willing to pay for your product.

You should also carefully evaluate business records and financial plans you have created to understand the amount you realistically need to earn to make a profit. Below is a calculation you can use to determine what price you should charge to break even in your enterprise.

Resources

Food Packaging

Agricultural Marketing Resource Center. 2005.

<http://www.agmrc.org/agmrc/markets/Food/food+packaging.htm>

Links to food packaging resources.

Labeling Issues

Agricultural Marketing Resource Center. 2005.

<http://www.agmrc.org/agmrc/markets/Food/food+labeling+issues.htm>

Links to resources dealing with product labeling issues.

Labels: Linking Consumers and Producers

Free monthly electronic newsletter from the Institute for Agriculture and Trade Policy that provides news, events and resources related to the labeling of products for environmental, social and regional

sustainability. To subscribe, send e-mail to: majordomo@igc.apc.org.
Leave subject blank. In body, type subscribe label-news.

Packaging Suppliers

New York State Food Venture Center, Cornell University
http://foodsafety.cas.psu.edu/processor/Packaging_Suppliers.pdf
*Comprehensive list of United States packaging suppliers that can meet
the needs of small-scale food manufacture.*

Producer Price Index US Dept. of Labor, Bureau of Labor Statistics

<http://www.bls.gov/ppi/home.htm>
*Includes average price per commodity, organized by industry and
product*

Regulations

To process food, you must comply with state and federal regulations. If operating on a very small scale, you may only need to comply with the Home Food Manufacturing regulations. Producing on any larger of a scale, and you will have to comply with the Maine Milk and Milk Processing regulations, which includes operating in a commercial kitchen. Rather than spending the capitol in constructing such a kitchen yourself, you may first want to explore the option of renting a commercial kitchen or finding a food incubation project in your area. Many such resources are listed below.

Becoming a food processor in Maine takes time. There are many regulations to comply with, some of the most notable being the construction of an on-farm processing area, which may cost upward of \$100,000, and need to meet rigorous maintenance requirements. This processing center will, among other qualities, need to include stainless steel equipment (specific equipment varies based upon your enterprise, see Equipment section for more details), must be closed off from other areas of the building, and be used only for its intended use, must have flowing, clean water, and nearby access to washing facilities. Furthermore, you will have to comply with strict labeling standards (see The Marketing Section for more information on labeling).

Before committing to becoming a food processor, you should read and understand the following regulations.

To produce and process milk in any situation:

Chapter 329: Rules Governing Maine Milk and Milk Products

Chapter 345: Home Food Manufacturing

Chapter 601: Milk and Milk Products

Cheese and Cheese Products:

Chapter 328: Rules Governing the Licensing and Inspection of Farm Cheese

These files are all available for download at

<http://www.maine.gov/sos/cec/rules/01/chaps01.htm>

Or, for print versions, contact The APA Office:

APA Office

Maine's Administrative Procedure Act

Division of Elections and Commissions

101 State House Station, Augusta, ME 04333-0101

PHONE (207) 624-7650

FAX (207) 287-6545

Be in contact with your local inspector as soon as possible in the planning stages of your processing enterprise. They can help you plan your facilities to assure that they are in compliance with State regulations. Maine currently has two inspectors:

Jim Bartlett: jim.bartlett@stae.me.us
Audrey Slattery: audrey.slattery@state.me.us
Phone: 287-7631

Resources

Establishing a Share-Use Commercial Kitchen

Bob Horn
Next Level Training Network
University of Colorado at Denver
Campus Box 128, PO Box 173364
Denver, CO 80217-3364
800-873-9378 (cost is \$58 plus \$4 s&h)
(303) 556-6651 FAX

Food Processing Incubators and Commercial Kitchens

Penn State, Food Entrepreneur Resources. January 2006.
<http://foodsafety.cas.psu.edu/processor/resources.htm#Inc>
*Links to resources on starting commercial kitchens and incubators;
also includes contact information for functioning kitchens.*

Maine Small Co-Packers and Commercial Kitchens

New York State Agriculture Experimentation Station. Cornell
University Listing. August, 2005.
<http://www.nysaes.cornell.edu/necfe/CoPackerKitchen/me.html>

USDA Food Safety and Inspection Service

<http://www.fsis.usda.gov/>
Meat and Poultry Hotline
Phone: 1-888-674-6854
Email: mph hotline.fsis@usda.gov
USDA Animal and Plant Health Inspection Service
Phone: 1-866-536-7593

Financing

Financing your operation is critical to its success. Using available cash to finance capital expenditures is NOT the way to fund a project. Nor is searching for grants. It is better to plan out your financial needs ahead, find sources of funds for long term depreciable capital expenditures, and save your available cash for daily operating needs.

Probably the first step you need to take is to find a bank willing to work with you. The Maine Department of agriculture has a pamphlet entitled: "Finding Funds for Farming", that outlines banks willing to do agricultural financing in Maine. The booklet can also be found posted at www.maine.gov/agriculture/mpd/farmland.

Other programs listed below sometimes have funds and funding sources for projects. However, do not depend on grants for starting or continuing your enterprise. It is better to build a business on sound business plans which can cash flow loan payments over the life of the equipment or building upgrades.

Government Grants and Funding Sources:

Appropriate Technology Transfer for Rural Areas. National Center for Appropriate Technology. USDA

This site contains lists of loans, grants and disbursements organized by categories such as: Small Business and Entrepreneurs, Agriculture Programs, Food Systems & Nutrition and Health (among others).

<http://attra.ncat.org/guide/index.html>

The Cooperative State Research, Education and Extension Service (CSREES)

<http://www.csrees.usda.gov/>

CSREES has many funding opportunities. A complete list may be viewed at <http://www.csrees.usda.gov/fo/funding.cfm>.

Federal State Marketing Improvement Program

<http://www.ams.usda.gov/tmd/fsmip.htm>

The Federal-State Marketing Improvement Program (FSMIP) provides matching funds to State Departments of Agriculture and other State agencies for 20-30 projects per year, on average. These funds have been used by States to conduct marketing studies or assist in developing innovative approaches to the marketing of agricultural products.

The Food Nutrition Service USDA

The Food Nutrition Service (FNS) at USDA has been known to provide limited funds to support nutrition projects in low-income area, grant solicitations are available at:

<http://www.fns.usda.gov/fns/grants.htm>

Marketing Services Branch, AMS USDA

MSB provides funds to research and technical assistance partners through a cooperative agreement by which all money passes from the USDA to a state department of agriculture,

local or tribal governments, land-grant educational institution, or nonprofit organization. MSB contributes an average of \$30,000 to each cooperative agreement for collaborative research or technical assistance activities.

http://attra.ncat.org/guide/a_m/msb.html

Value-Added Agriculture Product Market Development Grants

<http://www.rurdev.usda.gov/rbs/coops/vadg.htm>

Value-Added Agricultural Product Market Development Grants (VADG) was authorized by the Agriculture Risk Protection Act of 2000 and has two primary objectives. The first is to encourage independent producers of agricultural commodities to furthered refine these products increasing their value to end users. The second objective is to establish an Information resource center to collect, disseminate, coordinate, and provide information on value-added processing to independent producers and processors.

Sustainable Agriculture Research and Education (SARE)

The Sustainable Agriculture Research and Education has 3 grant programs: research and education grants, professional grants and producer grants. For more information visit

<http://www.sare.org/grants/index.htm>

Equipment and Supplies

Equipment and supplies are one of the most variable elements of a dairy processing enterprise. The equipment you will need depends upon the product being manufactured, and the amounts in which you manufacture it. As mentioned above, developing a cheese processing facility may cost upward of \$100,000. Before committing to that cost it may be wise to first working at an operation that is similar to the one you plan to start.

Two valuable resources that can help you better understand your specific equipment and supply needs are your state dairy inspectors and the members of the Maine Cheese Guild. More information, by product, can also be found in the Value-Added Product section above.

The following is a list of dairy processing equipment and supply sellers that meet the needs of small dairy processing facilities:

Company Contact Information	Description
APV/Invensys 5100 River Road Schiller Park, IL 60176 (952) 927-4912 www.apv.invensys.com	A supplier of large scale food processing equipment.
C. van 't Riet Dairy Technology 70 Treasure Lake DuBois, PA 15801 (814) 591 6979 www.schuller.us/	A manufacturer of dairy equipment especially for pasteurizing and cheese making on the farm.
Caprine Supply P.O. Box Y DeSoto, KS 66018 1-800-646-7736 http://www.caprinesupply.com/	Carries a large selection of small-scale cheese making equipment, cultures and rennet's.
Dairy Connection www.dairyconnection.com	A supplier for commercial specialty & small cheese manufacturers. Carries products including cultures, coagulants, flavor enzymes (lipase), and other ingredients and services needed to make cheeses and fermented milks.
Damrow Equipment Company 196 Western Avenue Fond du Lac, WI 54936 (920) 922-1500 www.damrow.com	A supplier with complete dairy processing services and products available. Damrow can plan and supply equipment for all or any part of you cheese manufacturing operation from milk reception to packaging.

<p><u>Fromagex</u> Rimouski, Québec, CANADA 1-8666-437-6624 www.fromagex.com</p>	<p>This Canadian-based company carries products needed for a common cheese factory: from the small scale cheesemaker to the cheese plant.</p>
<p>Giles Dairy Service 351 W 900 North Springville, Utah 84663 801-372-1371 http://www.gilesdairyservice.com/</p>	<p>Carry a wide-range of dairy equipment.</p>
<p>Glengarry Cheesemaking Supply PO Box 92 Massena, NY, 13662 1-888-816-0903 http://glengarrycheesemaking.on.ca/</p>	<p>A source of equipment, supplies and accessories for making cheese, including molds and other ingredients for self sufficiency and commercial cheesemaking establishments.</p>
<p>Goodnature Products Inc. 149 Bud Mill Drive Buffalo, NY 14206 800-875-3381 http://www.goodnature.com</p>	<p>Supplier of a wide variety of pasteurizers.</p>
<p>Hamby Dairy Supply 2402 S.W. Water St. Maysville, MO 64469 (816) 449-1314 www.hambydairysource.com</p>	<p>Carries cow, goat and sheep milking equipment and processing supplies.</p>
<p>International Machinery Exchange 214 N. Main Deerfield, WI 53531 (608) 764-5481 www.imexchange.com</p>	<p>Provider of a full line of machinery for any type of cheese product.</p>
<p>JayBee Precision Inc PO Box 231 Bristol, New Hampshire 03222-0231 603-744-6644 www.jaybeeprecision.com</p>	<p>Jaybee's sell 'THE VAT', which is a 7 to 15 gallon pasteurizer and cheese vat built in the U.S.A. There is also a 22 to 30 gallon version available.</p>
<p>Kusel Equipment Company 820 West Street Watertown, WI 53094 (920) 2612-4112 www.kuselequipment.com</p>	<p>Custom designs and manufactures for unique application and requirements.</p>

<p>Leener's Brew Work 10216 Northfield Road Northfield Ohio 44067 1-800-543-3697 http://www.leeners.com/</p>	<p>Supplies for a variety of dairy processing and sausage making equipment and supplies.</p>
<p>New England Cheesemaking Supply Co. P.O. Box 85 Ashfield, MA 01330 (413) 628-3808 www.cheesemaking.com</p>	<p>A New England company supplying cheesemaking equipment, ingredients, information and advice.</p>
<p>Nunsuch www.nunsuch.org</p>	<p>Supplier of Microprocess pasteurizer.</p>
<p>Paris Farmers Union P.O. Box D South Paris, Maine 04281 207-743-8976 http://www.parisfarmersunion.net/</p>	<p>A Maine-based, regional retailer carrying dairy equipment.</p>
<p>Scherping Systems P.O. Box 10 Winstead, MN 55395 (320) 485-4401 www.scherpingsystems.com</p>	<p>A supplier of equipment for the dairy and food industry.</p>
<p>Shier Equipment Company 14459 S. 65th W. Avenue Sapulpa, Oklahoma 74066 (918) 321-3151 www.schiercompany.com</p>	<p>A buyer and seller of used dairy processing equipment</p>
<p>Stoelting Co. 502 Highway 67 Kiel, WI 53042 (920) 894-7029 www.stoelting.com</p>	<p>A diversified manufacturer of food service, cleaning, cheesemaking, and process equipment</p>
<p>Ullmer's Dairy Equipment Inc. 8628 Brown County Line Road Pulaski, WI 54162 (920) 822-8266</p>	<p>A supplier of equipment for the dairy industry.</p>
<p>Uncle Henry's 525 Eastern Ave. Augusta, Maine, 04330 (207) 623-1411 http://www.unclehenrys.com/</p>	<p>Occasionally contains ads for used dairy processing equipment in the Northeast.</p>

W.M. Sprinkman Co. 4334 Courtney Street/P.O. Box 390 Franksville, WI 53126 (262)835-2390 www.sprinkman.com	A provider of custom design, development, and installations for the food, dairy, beverage and pharmaceutical industries. They carry many different product lines.
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Resources

Dairy Processing Equipment

By Barbara and Steve Smith. Northeast Organic Farming Association of NY, Inc. 2001.

<http://nofany.org/offandf/01articles/dairyprocessing.pdf>

Elements of Food Processing, Methods and Equipment

Ohio State University

<http://class.fst.ohio-state.edu/FST401/Information/Elements-Food-Processing.html>

Includes good overview of technical aspects of dairy processing.

Contains links to images of specific processing equipment.

Livestock equipment and supplies in Maine

Maine Cooperative Extension

<http://www.umaine.edu/livestock/supplies.htm>

Includes a broad list of suppliers for most aspects of livestock management.

Maine State Dairy Inspectors

Jim Bartlett: jim.bartlett@stae.me.us

Audrey Slattery: audrey.slattery@state.me.us

Phone: 287-7631

The Maine Cheese Guild

c/o State of Maine Cheese Co.

461 Commerical Street

Rockport, ME 04846

Phone: 207-785-4431, please leave a message

Website: <http://www.mainecheeseguild.org>

Selection and Purchase of Used Food Processing Equipment

By Kent D. Rausch and Donald B. Erickson. Kansas State University.

December, 1996.

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Silvery Moon Creamery at Smiling Hill Farm
Jennifer Betancourt, Cheesemaker & Co-Owner of Silvery Moon Creamery
Warren Knight, Co-Owner of Smiling Hill Farm and Silvery Moon Creamery
781 County Road
Westbrook, ME 04092

Farm Description:

Smiling Hill Farm, Inc. (SHF) has operated continuously under the Knight family's ownership since the 1700's. Until the mid 1990's Smiling Hill Farm sold fluid milk to Oakhurst Dairy in Portland, Maine. To make the farm more economically viable, in 1996 SHF became a producer/vendor and installed a small USDA Grade A milk processing facility to bottle and sell milk directly to the general public. Within six months the value-added on-farm processing allowed the business to reap the margin between the wholesale uniform milk price for raw milk and the retail price paid by the customer.

According to Warren Knight, several unanticipated challenges came along with the benefit of direct sales. It became critically important to balance production with consumption. Direct market sales limited the shelf life of pasteurized milk to less than 14 days and the sale of milk fluctuated greatly depending upon tourism, season, weather and the overall economy. Unlike a large processor which has many venues for disposal of milk assets, small dairies do not have the option to ship an overage to a milk powder plant or cheese plant hundreds of miles away. For a while Warren sold excess raw milk to a broker at the Uniform Milk Price; a price that was on average below the farm's actual cost of production.

Jennifer Betancourt, a graduate of Cornell University's Animal Science program, was developing a recipe for a camembert-style cheese in her home kitchen in Portland. Jennifer was using with Smiling Hill Farm's milk. When she was pleased with the results she approached the farm about making cheese. She began to make cheese at the farm when the processing line was not in use, working as late as 1 a.m. and starting as early as 4 a.m. In the first 6 months just under 5,000 pounds of fresh and aged pasteurized cheese was produced. Jennifer sold \$13,000 in cheese with and built an inventory of approximately 1,300 pounds of aged cheese. Both Jennifer and Warren saw a new opportunity and applied to Farms for the Future Program in 2003 developed a 50/50 general partnership agreement and business plan for Silvery Moon Creamery.

Farm Mission and Goals:

Silvery Moon Creamery's mission is to produce unique, quality cow's milk cheeses with milk from Smiling Hill Farm. The Creamery will provide Smiling Hill Farm with a higher source of revenue for a portion of their milk. The cheese company and product line will increase Smiling Hill Farm's market reach; bringing a more specialized dairy product to consumers in Maine and the Northeast.

Phase One: Exploring the Goals

When Jennifer had initially approached Smiling Hill Farm she had a cheese business plan. While the original plan was inspiring, it lacked the numbers and hard facts to really support her dream. Phase One enabled both partners to see if artisan cheesemaking could really be made a viable business at Smiling Hill Farm. A cheese consultant helped develop the cheese facility layout, and provided assistance in terms of pricing and product mixes. Two business consultants reviewed her proposed financial analysis and asked important and challenging questions. While Jennifer ended up changing her plan and slightly increasing the volume of production in order to increase profitability, she held onto her goal, to keep the product handcrafted and the process of creating it enjoyable.

Phase Two: Implementing Change

Silvery Moon Creamery at Smiling Hill Farm received a \$25,000 Farms for the Future grant, which was matched with farm income and investments and a \$151,500 loan to renovate an existing barn to give the creamery a “real space” with two additional areas to age cheeses at different temperatures and humidities, additional equipment (a large vat, draining tables, sinks, aging racks) and provide some start-up capital to manage the expanded cheese production.

Silvery Moon Creamery also received a \$15,000 Federal-State Market Improvement grant to conduct market research in local wholesale, retail and direct markets. Jennifer worked with consultants to design the Creamery’s label, brochure and packaging design, and commissioned some professional photography. She expanded and updated the website to tell consumers the story of Silvery Moon Creamery and its award winning cheeses. She added a web sales section so that people can order online. She conducted in-store research at half a dozen establishments and test marketed the Creamery’s eleven cheese products at farmers’ markets. She worked to increase the product’s branding and name recognition; offering over 40 “Meet the Cheesemaker” events at specialty food shops, natural food stores, and gourmet wine and cheese shops.

Spending time with potential customers at markets, events and wine tastings is absolutely integral Silvery Moon Creamery’s marketing strategy. Through this research, Jennifer has learned that there is a significant demand for yogurt and fresh products as well as longer aged- and bloomy rind cheeses.

Reaping the Benefits:

Thanks to Smiling Hill Farm, Farms for the Future and FSMIP, Jennifer no longer has to make the cheese in the bottling plant by the light of the silvery moon! The new cheese facility will allow Jennifer and her staff of three to make, age, package and ship the cheese from a single location. It will allow the company to increase production, efficiency and volume to meet their growing market demand. By expanding the product line to include a greater inventory of aged cheeses, the Creamery will add more value to

excess fluid milk. Smiling Hill Farm currently bottles milk for three other small dairy farms. With the cheesemaker and the cheesemaking equipment no longer located in the bottling plant, Smiling Hill Farm can consider processing milk for several other farms.

Smiling Hill Farm is dedicated to educating their customers about the role and benefit of small sustainable agriculture in suburban settings. Silvery Moon Creamery offers cheesemaking workshops and other educational opportunities. Jennifer and Warren have shared their lessons learned with members of the Maine Cheese Guild and dairy farmers involved in the Farms for the Future Program. They have lead over 20 tours of the creamery providing valuable insight to other dairy producers interested in cheesemaking. Smiling Hill Farm and Silvery Moon Creamery have also held an Open Creamery Day as part of the Maine Cheese Guild's Third Annual Maine Cheese Festival. Through Open Creamery Day, Open Farm Day, and various other special events, the farm is able to invite people to visit the farm, see where their food comes, and put a face and a story to all of the quality products the farm produces.

Kay-Ben Farm – Benson Farm Earth Products
Eddie and Becki Benson
64 Plummer Rd
Gorham, ME 04038

Farm Description:

The Kay-Ben Farm has been owned and operated by the Benson family for three generations. Located in Gorham, the farm is home to 150 head of Holstein dairy cows. This purebred registered herd is made up of animals that rank among the top in the country for milk production. In 1995, the Benson's started a compost business to offset the rising cost of dairy farming. Owned by Eddie Benson, Benson Farm Earth Products is a business that recycles seafood residuals from Portland's waterfront with cow manure from the farm. The product is a soil enhancer that is primarily sold wholesale to local greenhouses.

Farm Mission/Goals:

After ten years of production, the Bensons were looking to increase their market share. At that point, they were only reaching ten percent of the demand with bulk sales. They wanted to expand their facility and create a marketing plan that would outline the ways in which they could expand to reach the retail market.

Phase One: Exploring the Goals

Eddie and Becki applied to Phase One in 2004 with several goals already in mind. To efficiently produce more compost, they wanted to construct a building for their finished product. This would keep it from mixing with rocks, dirt and weed seeds, while also blocking it from the rain. The building would also provide shelter for a bagging machine that they wanted to purchase in order to meet the growing retail demand.

At that point in the marketplace, one yard of compost sold for \$15 and compost that was sold in 40lb bags at six dollars per bag increased to value to nearly \$120 per yard. This price increase, coupled with a steadily increasing demand, was projected to generate double the income of the prior year.

The Bensons also saw that the need to expand their marketing plan. With a changed target market, they would need to find a new means for attracting customers. They wanted to create a logo and design for the bags, create a brochure and purchase promotional materials like magnets and pens to hand out at trade shows. They wanted to interview a wide range of new retail customers, including nurseries, home & garden shops, and landscapers. They attended a compost summit in March, 2005 to learn more about making and marketing compost.

Phase Two: Implementing Change

The Benson's received a \$25,000 Farms for the Future grant and a \$15,000 FSMIP grant in 2005. Shortly thereafter, several incidents lead to their decision to refocus on their wholesale accounts.

The loader used for mixing the compost piles broke down in the early spring of 2005. Increased production would be impossible without a new loader, so Eddie and Becki would need to delay construction in order to replace it. Also, a dump truck accident left them with only one truck to make deliveries. They would need to either replace it or fix it in order to meet the growing the demand for their product. Finally, with the loss of three employees, the Bensons knew that their labor force was not strong enough to sustain the expansion that they had planned.

Eddie and Becki also discovered that the bagged market was nearly saturated. Their current wholesale accounts were local greenhouses that sold most of their compost in bags. Being one of the only wholesalers with a bulk product, Eddie and Becki realized that they were reaching a niche market and had little competition. They chose not to purchase the bagger. To offset the loss in bagged compost sales, they decided to increase their price from \$15 to \$20 per yard and added a delivery fee based on customer location and the amount purchased.

Matching their \$25,000 Farms for the Future grant with \$75,000, they purchased a new loader that will carry over two times as much product as the old one. This will make the production process much more efficient. Piles of compost can be mixed twice as fast now. Also, the loader is large enough to make the piles taller. This will decrease the amount of surface material, meaning that the piles will be able to shed excess water faster after a rain or snow shower. They refurbished the dump truck, and bought a third truck to make it possible for three deliveries to run at once. Finally, they constructed a temporary sawdust storage building. This building will be used in the future to house finished compost and a bagger. Their \$15,000 FSMIP grant paid for the labor that went into the research and development of both the retail and wholesale marketing plans. They completed this along with their business plan, and designed a website and logo.

Reaping the Benefits:

The business and marketing planning helped better prepare the Bensons to increase their sales. As a result, they doubled their wholesale accounts to 30. By purchasing a third dump truck and building the shelter, Benson Farm Earth Products is now well equipped to sustain more production in the future.

Dave and Vicki Barker
Barker Farm, Inc.
9 Barker Rd
Leeds, ME 04263

Farm Description:

Dave and Vicki Barker are the fifth generation owners of Barker Farm in Leeds. On average, the farm ships 17,500 lbs of class I milk from its 100 cow dairy herd to Agrimark each year. It also provides services to local farmers such as: manure spreading, grass and corn harvesting and equipment repair. When they retire, Dave and Vicki hope to keep Barker Farm in business by passing it onto their sons, Ben and Duncan. (I'm not sure if the projected profit, equity line etc belong here, but perhaps more could be included about the operations of the farm)

Farm Mission and Goals:

In 2004, the Barkers were looking to increase their dairy herd size and to diversify production in order to generate extra income. This would reduce the risk involved in small dairy farming and would enable them to take steps further in creating a retirement account. It would also prepare them layout an estate plan that would enable them to transfer the ownership of the farm to their.

Before applying to Farms for the Future, the Barkers were considering to move to sons beef production and corn silage pellet production. They were also interested in increasing their custom services to area farmers.

Phase One: Exploring the Goals

In 2004, the Barkers applied for Phase One and received business planning assistance. They did beef market research, and found that beef production would be most profitable if sales were made locally. In order to raise beef, they would need to build a barn in which to house them. They also researched grain production and found that they would save \$56 per ton by purchasing land to grow their own. This land would not only allow them to produce their own feed, but would also sustain the creation of a beef herd and the expansion of the dairy herd.

Finally, the Barkers discovered that their corn silage could also be used for pellets in wood stoves. They visited wood pellet manufacturers and found that a demand exists, and production is feasible for the farm.

Phase Two: Implementing Change

In 2005, the Barker's received the Farms for the Future grant to purchase land and build a shelter for their beef. Their total cost, \$141,000, was shared with a USDA-NRCS grant.

The \$85,000 land purchase enabled the Barkers to begin their corn silage pellet production. It also provided space for additional dairy cows and for the beef herd. The Barker farm completed construction of a \$56,000 barn and have began beef production and sales.

Reaping the Benefits:

By producing their own feed, the Barkers have reduced costs and are closer to their goal of maximizing income. Their herd expansion has helped them to improve labor and equipment efficiency, which has also saved them in production costs. Their beef sales will boost their income and give them more assets to pass to their children.

The land for the corn silage pellet production has also allowed the Barkers to begin their wood stove heating pellet business. They have continued to refine the pellets, and are using a SARE grant to do research on the effectiveness of this alternative heating method and renewable energy project.

By expanding and diversifying, the Barkers are closer to maximizing income for their retirement account. They have outlined an estate plan and now have a large dairy, beef farm, and wood stove pellet business to split between their two sons in the future.