

The Virginia Biological Farmer

The Newsletter of the Virginia Association for Biological Farming

April/May 1998

Volume 21, Number 2

Second Hometown Creamery Revival Processor Ready to Produce

by Vicki Dunaway

Rick and Helen Feete of Meadow Creek Dairy in Galax, farmer cooperators in the Hometown Creamery Revival, are ready to begin production of cheese. Inspired by other farmstead cheese plants, the Feetes have been planning the change for several years.

The processing facility was designed with the advice of W. J. Farley and Carroll Jones of VDACS Dairy Services. The Feetes put in months of work converting an old dairy building into a processing facility. One of the biggest jobs was to knock down concrete milking platforms and cart the rubble away. The ceiling had to be covered with washable panels, and then the entire interior of the building was painted with white epoxy paint. The Feetes found a latex epoxy paint at Sherwin-Williams that didn't have an excessively strong odor, and were well pleased with the results. The building is lighted by low-wattage compact fluorescent bulbs encased in shatterproof Lexan (a hard plastic) covers. The 10'x28' cheese room is furnished with a commercial scale on-demand gas hot-water heater, a stainless steel sink, a hand washing sink and a cheese vat. Cheese presses will be added soon. The vat was converted from a 150-gallon bulk milk tank by contracting for some stainless steel welding. Milk is routed directly from the milking parlor into the cheese room. Hot water flows through an outer jacket of the cheese vat to heat the milk to the appropriate temperatures for cheese production.

The other half of the processing building consists of three parts - an 8' x 12' walk-in cooler, which is cooled by a drop-in cooling unit; a staging area just outside the cooler which will provide cool, but not cold, temperatures for just-processed cheese; and an "extra" room, which may be used for waxing cheese and storing supplies. The facility passed inspection on December 23. The total cost of the renovation and equipment was less than \$10,000.

Since the dairy is operated on a seasonal basis, with cows being dried off on Christmas Eve, Helen and daughter Katy had only enough time to make a few batches of cheese in the new facility. These included a brick type (Trappist) cheese, feta and a not-so-successful attempt at provolone. Helen says it was a vast improvement over kitchen cheese processing. Because the

cheese is made from raw milk, it must age for sixty days before it can be sold. The sixty-day holding period ensures that sufficient acidity is produced within the cheese to kill pathogens; also any noxious organisms that might arise will be detectable in that period.

Rick Feete has studied dairy grazing for many years. His research and hard work resulted in lush green pastures during the 1997 summer drought, as well as the ability to keep their animals on pasture until mid-November in one of the colder regions of the state, through the practice of management-intensive grazing. Two teenagers, Katy and Jim, work on the farm as well. They took full responsibility for the daily chores while Rick and Helen went to visit Sweet Home Farm in Alabama in late September. The visit to Sweet Home provided the Feetes with much information and inspiration. There at least a dozen varieties of cheese are sold retail right at the farm. "Even chefs come to the farm and pay retail prices," Helen said.

Up to now the only market outlet for the milk produced by the 30-some Jersey cows at Meadow Creek Dairy has been through the regular wholesale channels, and that has become more and more "iffy" over the years for this small farm. Helen has been practicing cheesemaking for the family and plans to attend a week-long, intensive cheesemaking course in March 1998. The Feetes plan to market their cheese in several ways. Because they live in a remote area, it would be difficult to rely solely on an on-farm retail outlet, especially at first. They will begin with farmers' markets and festivals in order to establish face-to-face connections with customers. They are also considering mail-order marketing, particularly around the holidays. The Hometown Creamery Revival project is exploring other outlets such as existing CSAs and local tourist attractions.

Rick and Helen are happy to share their experience and expertiss. Best to contact them during the slow winter months. Address - Meadow Creek Dairy, Route 1, Box 537-C, Galax, VA 24333; e-mail cff@tcia.net

For more information about the Hometown Creamery Revival, please contact Vicki Dunaway, P.O. Box 186, Willis, VA 24380; (540) 789-7877; ladybug@swva.net.

QUÉ PASA?

by Vicki Dunaway

In February it was my pleasure to attend the seventh annual Farming for the Future conference sponsored by the Pennsylvania Association for Sustainable Agriculture (PASA). The conference's attraction to me was its array of sessions on dairying and cooperative dairy marketing. During that two-day stretch I made many new contacts in the small-scale dairy industry, and met such luminaries as the owners of Egg Farm Dairy and Seven Stars yogurt, as well as Tracy Frisch, who is heading up another SARE-funded small-scale dairy project in New York.

During the first session, "Value-Added and On-Farm Processing of Dairy Products," Jonathan White of Egg Farm Dairy and David Griffith of Seven Stars described their operations. Jonathan is a cheese maker and marketer, who specializes in fine Old World-type mold-ripened cheeses and cultured butter. He decided to purchase milk selectively from "juggers" (dairies which bottle their own milk) to make his cheese because he felt his quality of life would be endangered if he were to try to be a dairyman as well. The motto of Egg Farm Dairy is, "Setting the Dairy Industry Back 100 Years," to a time when there were dairy processing plants "at every crossroads" in the Northeast, many making high-quality products. Jonathan is also a strong advocate of SNAIL, which is the International Slow Food Society (translated from Italian) – get more information from 1-888-SLOWFOOD (yes, that is an 8-character phone number).

The dairy has a strong market in New York City and is looking for more makers of wild-ripened cheese. This he is promoting through his Jonny Applecheese project, in which he trains cheesemakers in the process, helps them set up facilities, and then markets their products for them. Jonathan says it is important for value-adding farmers to have short-life, medium-life and long-life products, all of impeccable quality, in order to maintain control of price and demand. According to Jonathan, goat cheese is now commodity priced, falling off from a "myth" that goat cheese is healthier than cow cheese. He says goat cheese makers need to aim high. Egg Farm Dairy's Web page: www.creamery.com

It was surprising to see just how small-scale the processing plant for Seven Stars yogurt really is. David Griffith described the bio-dynamic yogurt business near suburban Philadelphia as a balance between production and processing. Seven Stars' processing plant was built with used equipment, with the aid of the local sanitarians. Some lessons that Seven Stars folks have learned include: if a distributor tells you, "I'll sell anything you can make," it should be translated as, "I'll sell anything I can sell;" the "quart yogurt world" is not the same as the "cup yogurt world;" and it is important for small-scale producers to find out what people want them to produce.

"Hey, Dad, the Cows are in the Corn" was the title of a session on grazing cows directly in the corn patch. Kim Sheeley and his son and niece described their method of treating the corn patch as just another pasture using controlled grazing by running electric fencing through the patch. A 3-foot path is mowed in the area where the fence is to go, and then the cows are allowed to harvest the corn and weeds themselves. Since corn matures at a time when grass pasture has slowed down, grazing corn has increased production on their farm, the Milky Way Dairy.

A group of dairy farmers from Massachusetts received funding from the USDA, the Farm Bureau, and a sustainable agriculture group, to help small farmers who were on the verge of going out of business because of low wholesale milk prices. Six farms milking a total of about 230 cows launched a new local milk brand (the title of their session was "Got Local Milk?") in September 1997 and have experienced excellent success. Their milk is picked up by a milk hauler and taken to a small processing plant, where it is kept separate from other milk and put into attractive, colorful cartons with the brand name "Our Family Farms of Western Massachusetts." Each half-gallon container features information on one of the farms (collect all six!) and describes the need for local foods and the promise of no rBST. The press took great interest in this project and consumer acceptance has been excellent despite a slightly higher price than other milk.

In response, the big companies in the area dropped their prices a week after "Our Family Farms" milk went on the market. Bad idea. It made for a "big boys versus small" story that only helped the family farm producers. (Ben & Jerry's experienced a similar boost when Pillsbury tried to run them off the freezer shelves.) For marketing, the farmers take turns setting up a table in grocery stores and other public places with the help of a "milk marketing kit" they put together, which contains bumper stickers, coasters and other items with their logo, as well as cups for samples. The processor pays only the farmgate price that other dairy farmers receive, so in order to give the farmers a higher return, they are paid for their marketing time, and receive dividends from sales. Returns of milk (spoilage) have only been about 2% on average, which is very low. The group expects to expand production and sales and perhaps to build their own processing plant.

Finally I attended a session on the Pennsylvania Dairy Network Partnership's Milk Marketing Initiative, in which farmers will be paid a premium milk price if they meet a set of environmental standards. The money for this will be raised by adding a few cents to the consumer price of certain dairy products, and the environmental standards will be explained on the cartons. Interestingly, the milk will not necessarily come from those farms, and the consumer will not receive milk that is any different from any other; it's just a means of supporting improved environmental awareness and practices on dairy farms. Sales are not yet underway, so the success of this effort remains to be seen.

For Grass Growers Only

by Vicki Dunaway

Here in Floyd County it seems that the only thing that grows naturally with any enthusiasm is grass. I'm talking quackgrass that won't quit. (Ha, fooled some of you who know Floyd.) Even in this horrid drought – we've had about three and a half inches of rain all summer, and that was all in one day, while we were at the farmers' market, of course – the quackgrass is still green and easily overtaking anything in its path. This year we decided to quit fighting it (except in the vegetable garden) and use it as a resource. We bought five dairy calves last spring and these guys are getting fat. I just love the sound of chomp, chomp, chomp, especially when compared to the never-ending drone of the sickle bar!

Last week I attended a conference of the Virginia Forage and Grasslands Council (VFGC) in Wytheville, the first of three scheduled in different regions of the state. I was required to join VFGC in order to participate in the conference, but it was well worth it. The high energy in that group reminds me of the early days of organic farming. They are on to something and they know it!

The Council has a lot of participation from Virginia Tech, Natural Resources Conservation Service and other agencies, as well as farmers who are not even close to organic. Some will worry about that but, as Jared Gellert pointed out in his article last issue ("Reflections on Rotational Grazing and the Greening of Virginia Tech"), "these people are our allies." They are becoming more sustainable by the minute, and I am *glad* to see my tax dollars going into the Council's programs! Not to go unnoticed is the fact that the conferences were sponsored by the Environmental Protection Agency, which apparently understands the benefits of grassland farming.

VFGC brought two speakers to Wytheville – R. J. Dalrymple from an Oklahoma pasture demonstration farm, and Ann Clark from the University of Guelph. Dalrymple described and showed slides of the Noble Foundation's work, including experimentation with fences, watering systems, forage production and grazing management. Their farming is done without large equipment – an all-terrain vehicle and a pickup truck are their only farm vehicles; they rent a spreader locally. Basic to the philosophy of the farm is a condensed (and easier to use) version of holistic management testing: "When we are tempted to buy an item, we ask ourselves – Is it really needed? Or, is it just a 'toy'? Will it cause a response in higher production, less cost per unit of production, greater convenience, improve efficiency, etc.?"

The title of Dr. Clark's talk was "Breaking the Rules" (of Conventional Wisdom). Specifically, she discussed breaking rules about the time to re-seed pasture, complexity of the sown mixture, distribution of water, and shape of paddocks. In brief, Dr. Clark is not necessarily in favor of

re-seeding pastures, but when it is done she recommends doing so in midseason rather than early season to prevent competition from faster-growing plants. Additionally, she has found that different species find different niches within the same pasture; she recommends re-seeding with a large number of species, which will naturally fill those niches and last much longer. The research pastures she observes were seeded with nine different species 13 years ago and still quite healthy, with only about 10% "weeds."

Contrary to *new* conventional wisdom about location of water within each paddock, Dr. Clark suggested that perhaps this is not always the ideal situation. She spoke of a woman who is able to manage 200 steers by herself by locating water centrally and bringing the cows in once a day for watering and checking for veterinary needs. (Once a day may not work in warmer climates.) Finally, she says paddocks need not be shaped with square corners, which prevent efficient clipping, allow animals to bunch up in corners, and cause non-uniform grazing and other problems.

Both speakers were excellent and also had much to offer in the generous unscheduled (networking) time at the conference as well. Proceedings of all of the conference speakers are available from the VFGC. (See below.)

The remainder of the conference day was devoted to allowing groups of graziers and interested parties get to know each other. We were sorted by geographic region, and spent several sessions in these small groups. At the end of the day we formed a plan of action – mostly to form local grazing groups which would meet for pasture walks, discussion groups, seminars, etc. Our own group (New River Grazers) set two dates in October.

Presumably the same format was followed in the other two conference sessions, one at Lynchburg and the other at Harrisonburg. The most exciting part of the whole conference was the optimism and enthusiasm we experienced. There were several farmers there who were obviously testing the water and who, by the end of the day, seemed at ease and eager to try this new concept. My only complaint? I'd be willing to bet the lunches didn't come from Virginia farms.

For information on New River Grazers (covering Montgomery and Floyd counties), contact Vicki at (540) 789-7877. Join us for a seminar on *Estimating Dry Matter and Forage Supply*, with Glenn Johnson at Virginia Tech, on **October 29** at 7:00 pm at the National Guard Armory in Christiansburg.

For information on the Carroll-Grayson Grazing Group, contact Rick Feete at 540-236-4955, or email at mcd@ls.net. Join us for a Pasture Walk at the Feete Dairy Farm, on October 9 from 5:00 pm until dark.

To get involved with one of the other local grazing groups, or to obtain information on the Virginia Forage and Grasslands Council (VFGC), contact: Harlan White, VFGC Treasurer, 2188 Keisters Branch Road, Blacksburg, VA 24060.

Hometown Creamery Revival - News

Dairy Processing Short Course to be Offered in July

Under the auspices of the Hometown Creamery Revival project, Virginia Tech's Food Science and Technology Department will offer a two-day short course on dairy processing July 8 and 9. Dr. Susan Duncan and Dr. Susan Sumner have developed the short course specifically to aid farmers interested in on-farm or small-scale dairy. The course will take place at the Food Science building at Virginia Tech in Blacksburg, and will be offered to the **first twenty applicants**.

Topics for the two-day course include: Production Practices Affecting Quality, Product Quality Issues, Basic Sanitation (with lab), Principles of Making Dairy Products, Dairy Processing laboratory, Microbiology (including preparation of media), Maintaining Mother Cultures, Uses for Second-Grade Cheeses, Packaging, Regulatory Issues, Scaling Up Issues, and Product Tasting and Evaluation. Several guest speakers will participate in the course, including someone from the Dairy Services Branch of Virginia Department of Agriculture and Consumer Services (VDACS), who will answer individual questions regarding Virginia state regulations.

Dr. Susan Duncan is an Associate Professor of Food Science at Virginia Tech. She currently teaches three food science courses, including two dairy products courses and coaches the Dairy Products Evaluation Team. Dr. Duncan also has research and extension responsibilities focusing on fluid milk quality issues and value-added dairy products.

Dr. Susan Sumner is an Associate Professor in Food Science and Technology, with a strong background in food safety. She has organized a number of workshops for meat, poultry, and dairy processors, distributors and regulators in the areas of food safety, sanitation, and HACCP (Hazard Analysis Critical Control Point) systems. She has conducted research on the control of microbes on fresh fruits, vegetables and dairy products.

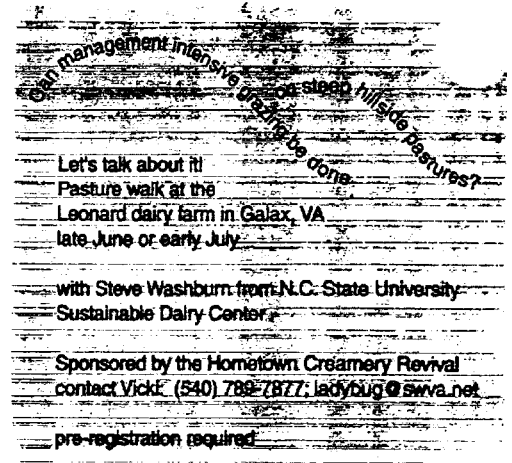
The Hometown Creamery Revival (HCR) project is funded by USDA Sustainable Agriculture Research and Education, with a goal of bringing five participating small dairies (three cow and two goat) into production of cheese or other products. VABF administers this project. The dairy processing short course was included as part of the grant proposal because of a lack of such courses in the Southeastern region of the US. Development of the short course is intended for education of the participating farmers, as well as part of the project's outreach function.

The short course will be offered again in the future, but fees will be higher, since this first time the funding is subsidized by the HCR project. 1998 course fees are \$50 per person, \$40 for paid-up VABF members, and, as stated, is limited to 20 participants. The fee is refundable up until July 1, and thereafter if someone fills the spot

from a waiting list. This fee includes two lunches. A course manual will be provided to each participant.

To register for the short course, send check or money order to: HCR/VABF, P.O. Box 186, Willis, VA 24380. For more information, contact Vicki Dunaway at (540) 789-7877 (not late at night, please!) or by e-mail at ladybug@swva.net.

Vicki Dunaway



The Creamery Connection - a new HCR publication

Every industry needs its voice, and giving small-scale dairying and dairy processing a voice is one of the main goals of the Hometown Creamery Revival. We've found that there are lots of publications for the dairy industry, but few which focus on the scale we are working on. And so, *The Creamery Connection* is born.

The Creamery Connection, edited by Vicki Dunaway, will address small-scale dairying in its many facets, from pasture to product. In each issue there will be a section that focuses on the animal, including grazing and feed, as well as animal health. We'll also talk about milk, as well as about facilities, equipment, production, processing, packaging, marketing, legal issues and food safety. We will not focus on one type of product, but will include information, recipes and a forum for discussing any dairy foods or issues that interest our readers. Articles will be gleaned from other publications, written from personal interviews and submitted by guest writers.

The Creamery Connection is beginning as a bimonthly (every other month) publication, roughly 8-12 pages long. We envision its expansion to at least 16-20 pages and eventually becoming monthly, once subscriptions and interest justify this. The *Connection* is a subscription-only publication -- no membership required -- and costs \$18 a year. To subscribe or receive a sample issue (\$3) send your name and address plus check or money order to *The Creamery Connection*, P.O. Box 186, Willis, VA 24380. For more information, write to this address or contact me by e-mail: ladybug@swva.net.

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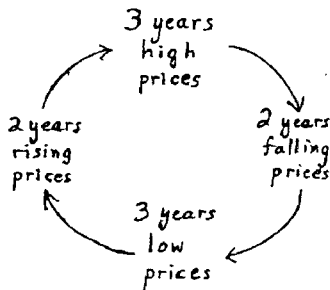
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Allan Nation a Hit at VSAC

An ordinary person walking into Allan Nation's talk at Natural Bridge on Friday morning probably would have thought he was a stand-up comedian. Mr. Nation was at his prime - showing us our human foibles and cajoling us into laughing at them. But the message of his talk was quite serious.

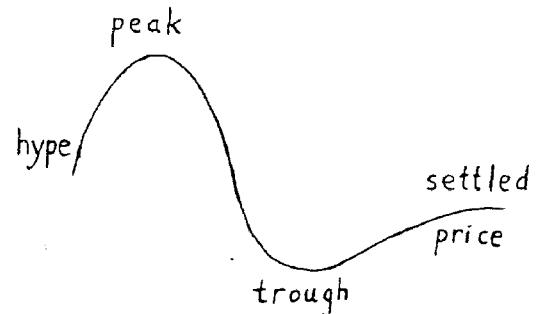
Allan Nation is owner/editor of *Stockman Grass Farmer*, the only publication dedicated to grass farming in the U.S. At a time when "conventional" farmers are riding the roller coasters of the livestock and dairy markets, perhaps doing well five years out of ten, grass farmers are able to flourish. The reason, Mr. Nation says, is that the commodity markets set the price, there is nothing that can be done about it, and that only those who can control their costs in the lowest price years can make a profit ten years out of ten. This is known as a "price based costing system." One must be in the bottom one-third as far as costs to sell in the commodity market for a profit every year. Beef cattle farmers who do not recognize and play the "cattle cycle" are susceptible to losses with normal market fluctuations. The cattle cycle generally follows these trends:



This happens because farmers react to the market rather than planning for it. When prices are rising, many cattle are sent for slaughter, which causes a glut and falling prices. When prices are low, farmers hold onto their cattle, causing scarcity, and prices subsequently rise. The trick is to figure out the median price and keep costs below that, resulting in a profit every year, no matter what the market. Costs can be kept low by grass farming. The beauty of selling on the commodity market, Mr. Nation says, is that the market can absorb a great increase in a farmer's production without being affected, and that everything can be sold at some price.

For direct marketers, the situation is different. Direct marketing is a "cost-based pricing system." The price can be controlled, but there is no guarantee that the product can be sold at all. The farmer must primarily be a marketer and must dominate a niche to be most profitable. In direct marketing one must be aware

of the "hype cycle," which follows the introduction of a new product, livestock breed, etc.



The entrepreneur is the one who comes in at the beginning of the hype cycle. Many others join in at the peak and cause a drop in price because of a glut in the market. Most tend to get out of the business in the trough period, before a more reasonable settled price comes into being. Each new thing, Mr Nation said, has only one hype cycle.

Some secrets of successful direct marketing include:

- own the customer
- dominate a niche - the product should be as different as possible from a commodity
- get there first
- let the customer fund growth
- put profit first
- grow your own customers
- start expensive, price levels will fall
- maintain scarcity - act like you don't need to sell
- read one marketing book a week
- have one tactic or product that works and build around it - add ancillary products to a centerpiece.

Those attending Allan nation's talk might have expected more about grazing management than marketing. He did offer many tips for keeping costs low. The number one decision, he said, was when to calve. For dairy cows one should plan for peak milk to coincide with peak grass. Beef cattle need lush grass to fatten calves and for lactation. If lactation takes place over the summer and calves are weaned in early fall, both cow and calf can benefit from the lush cool-season grasses to fatten them before winter.

Mr. Nation recommended planting an alfalfa-fescue pasture, which tends to tolerate drought because the alfalfa is deep-rooted. Canadians have had excellent results with annual ryegrass planted in spring. It stays green during the summer and has been tested at 80% TDN. The plant doesn't go to seed the first year. Other high-energy plants include clover, brassicas, and forage type corn.

Several trends are emerging which may guide choice of animals. There is a "hot" market for "green" veal (a.k.a. pastured or rose veal), which is really more like baby beef, the animal is slaughtered at 350 pounds. Dairy steers can be used for this purpose. Mr Nation says "lean" is not that marketable for beef because people really do prefer the marbling, but he suggests that a short Angus will fatten and marble well on grass, and that a Jersey-Angus cross will yield beef with yellow fat, which has been shown to be desirable for health.

Nation introduced the concept of the "holon," a self-managed unit of a whole. Holons on a typical farm include livestock, land and equipment. Other enterprises, such as crafts or market gardens, would be additional holons. Each manager should be in charge of one holon and each activity should be separately evaluated for its return. Equipment, for example, is the highest-priced part of a farm and usually never pays for itself unless one is a custom contractor. Therefore, if the equipment holon results in continual losses, the farmer should look at renting equipment or hiring custom operators. He quoted one successful farmer as saying he "never invests in things that rust, rot or depreciate." Holons should be complementary. True diversification means getting into something that works on an opposite cycle from what you are already in.

Most important is to have an "unreasonable advantage," such as the ability to produce during a season when others can't, or to raise animals on pasture rather than in confinement. It is up to the individual farmer to determine what this advantage is and to use it. It is time, Allan Nation says, to stop the "progress" that has led to farmers pocketing only 10 cents of the agricultural dollar instead of 90.

— Vicki Dunaway

RESOURCES

ATTRA - Appropriate Technology Transfer for Rural Areas - is a national sustainable agriculture information service designed for use by commercial farmers. ATTRA also offers technical assistance and information free of charge to Extension agents, agricultural support groups, researchers, educators, and agribusiness. The ATTRA Project is operated by the National Center for Appropriate Technology under a grant from USDA.

ATTRA specializes in responding to specific sustainable practices or enterprise questions. The staff researches the question, summarizes the findings in writing, and compiles supporting literature as appropriate to accompany the report. The caller receives all of this information by mail.

In addition to providing customized research, ATTRA offers three types of standard materials:

1. Information Package, a 5-20 page topic review, including enclosures, bibliographies, and supply sources
 2. Current Topic: a shorter, more focused review
 3. Resource List, designed to facilitate networking.
- It includes: internships, apprenticeships and sustainable curricula; sustainable agriculture organizations and publications; university programs and contacts; and videos, slides and tapes on sustainable agriculture

Information Packages and Current Topics cover the areas of fruit and nut crops, vegetable crops, other crops, farming systems, livestock, marketing, and soils. A sampling of the lists include: Organic Blueberry Production, Organic Greenhouse Vegetable Production, Alternative Field Crops, Alternative Nematode Control, Planning a Small Agricultural Enterprise, Sustainable Chicken Production, On-Farm Cheese Processing, Marketing, Organic Certification, and Non-conventional Soil Amendments

ATTRA is best able to assist with long-term farm planning questions. Packages, Topics and Resource Lists can be ordered and questions posed to ATTRA by calling their toll-free number: 1-800-346-9140 or visiting their new web site: <http://www.attra.org>

Community Agriculture Project, Wilson College Center for Sustainable Living, 1015 Philadelphia Ave., Chambersburg, PA 17201. Has a video (\$10) and other information on starting CSA's. A CSA Handbook is coming soon.

This is the time to order seeds and supplies! Some interesting catalogues to check out:

Fedco Seeds 1998 catalogue, which includes **Moose Tubers** and **Organic Growers Supply**. Order deadline Friday March 20; contact Fedco Seeds, PO Box 520, Waterville, ME 04903-0520.

Snow Pond Farm Supply, RR 2, Box 4075, Belgrade, ME 04917-9441. tel. 800-768-9998. Amendments, soil monitoring tools, and much more.

Southern Exposure Seed Exchange, P.O. Box 170, Earlysville, VA 22936. 1998 Heirloom vegetable varieties. Catalogue \$2.00.

Garden Medicinals and Culinaries, P.O. Box 320, Earlysville, VA 22936. Catalogue & resource guide \$1.00.

Shepherd's Garden Seeds, 30 Irene Street, Torrington, CT 06790-6658; tel. 860-482-3638. Great number of vegetable varieties.

Walter K. Morss & Son, RFD 2, Boxford, MA 01921. tel. 978-352-2633. Northern, cold-tolerant small fruit varieties - strawberry, raspberry, blueberry, grape.