

The Small Farm Enterprise and Marketing Workshop Series

SUMMER 2001



Sponsored by the University of Illinois at Urbana-Champaign, Cooperative Extension, Illinois Small Farm Task Force, Illinois Stewardship Alliance, Illinois Sustainable Agriculture Society, and Lake Land College.

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This series of workshops and seminars is sponsored by the University of Illinois at Urbana-Champaign, Cooperative Extension, the Illinois Small Farm Task Force, the Illinois Stewardship Alliance, the Illinois Sustainable Agriculture Society, and Lake Land College. This series is a product of the Small Farm Enterprise project, "*Assisting Farmers in Crisis*," a two-year grant funded by the United States Department of Agriculture's North Central Region Sustainable Agriculture Research and Education Program (NCR SARE). Additional funding to host these workshops and seminars was received from the United States Department of Agriculture's Risk Management Agency.

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We also wish to extend our grateful thanks to the farmers, University researchers, and Extension staff who shared their time and expertise with the workshop participants. Your knowledge and willingness to share made these workshops possible.

This resource guide is intended as a beginning, not an end. We hope that the information gathered here will spark interest in investigating these topics more thoroughly. We purposefully left room for you, as the workshop participant, to add your own materials as you continue your research.

*Small Farm Enterprise and Marketing Workshops
Summer 2001*

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Also available at:
www.sare.org/san/htdocs/pubs/



**SUSTAINABLE
AGRICULTURE
NETWORK**

Marketing Strategies for Farmers and Ranchers



CATTLE RANCHER PEGGY SECHRIST (IN PLAID SHIRT), AND HUSBAND, RICHARD, INTRODUCE NEW CUSTOMERS TO PASTURE-RAISED BEEF BY STAGING TASTINGS AT MARKETS AROUND THE AUSTIN, TEXAS, AREA. PHOTO BY JERRY DEWITT

RICHARD AND PEGGY SECHRIST RAISED BEEF ON PASTURE without chemicals for four years — selling it to restaurants, at farmers markets and to visitors at their Fredericksburg, Texas, ranch — before they improved their meat sales by pulling them under one roof.

In June 1999, they opened Homestead Healthy Food Store on the edge of their small town. There, they sell their organic beef, chicken and eggs—as well as organic produce raised by neighboring farmers in the Texas Hill Country west of Austin. Customers have responded, supporting the farmer-led venture with local dollars.

"We decided to be a really good source of high quality, very nutritious and very healthy food," says Peggy Sechrist. "That means locally grown food

without any synthetic residuals—and a good selection of those foods."

The Sechrists did not open the store and right away pile the shelves high with tempting treats. Instead, they set out meats in refrigerated cases and asked their customers, many of whom had been driving 90 miles to Austin health food stores, what else they wanted. The store now includes organic produce, cereal, pasta, juices, dairy products and even certified organic condiments, most purchased locally. Between August and September, store sales jumped by 30 percent, and the Sechrists expect the store to break even in the coming months.

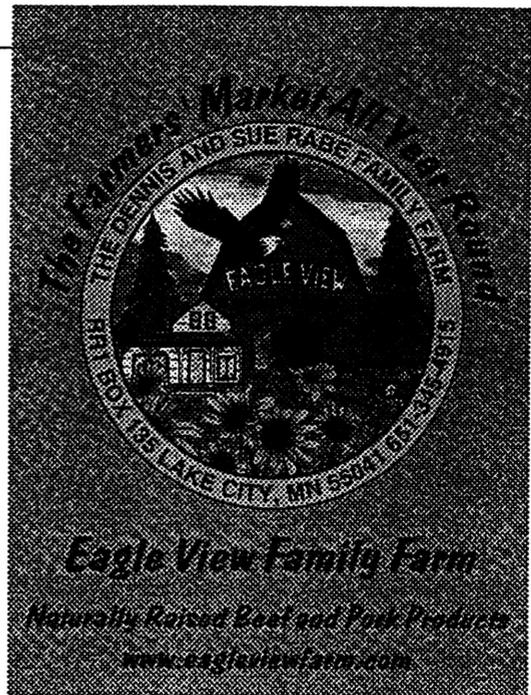
"We built our inventory based on what our customers told us," Sechrist says. "They can buy a nice

DENNIS AND SUE RABE OF LAKE CITY, MINN., RECEIVED A SARE PRODUCER GRANT TO HELP THEM PROMOTE THEIR BEEF AND PORK PRODUCTS TO ROCHESTER-AREA RESTAURANTS AND SUPERMARKETS.

selection of food for every meal of the day. We have had a healthy rate of growth, and it looks like it will be a profitable enterprise."

Good marketing is becoming a must for small agricultural enterprises to be successful. Rather than accepting non-negotiable prices offered by wholesalers, direct marketers put the power to turn a profit back in their own hands. Alternative marketing outlets offer direct connections to customers, providing them an opportunity to get fresh products and knowledge about how they've been grown. Like the Sechrists, producers can learn what their customers need.

The bottom line: Whether the product is beef or fresh-picked vegetables, selling products directly to consumers offers farmers a better price. This bulletin profiles successful direct marketers across the country and includes tips about how to start a number of alternative agricultural marketing enterprises. For more information, use the list of resources on pp. 19-20.



Marketing Strategies

Direct marketing strategies are numerous and varied. Before beginning to sell direct, identify markets with special needs that offer large enough volumes to provide profitable returns.

One of the most commonly recognized niche markets is the growing demand for organically grown foods. Range-fed beef and pastured poultry products also appear to have a growing popularity among consumers.

Consider selling at roadside stands and farmers markets, opening a pick-your-own operation, creating a subscription marketing service, offering on-farm entertainment, marketing long distance or marketing to restaurants. You can go it alone, or you can team up with others in a cooperative. Most farmers use a combination of marketing methods, finding that in marketing as well as in production, diversity helps provide stability and sustainability.

FARMERS MARKETS

Between 1996 and 1998, the number of U.S. farmers markets grew from 2,410 to 2,746, reflecting an increasing preference for farm-fresh produce. Many customers also prefer to buy produce from farmers they know and trust, especially the small family farmer who helps support communities. A group of Maine farmers market

customers responding to a 1999 survey indicated supporting local farmers was their second major reason for shopping there, behind product quality.

Farmers markets usually offer a secure, regular and flexible outlet where a vendor can sell a wide range of

Consumers' Most Important Reasons for Shopping at the Orono (Maine) Farmers Market

Reason	Percent
Quality of the products	72.5
Support local farmers	59.6
Friendly atmosphere	38.2
Health and food safety concerns	29.8
Convenience	13.5
Good price	10.7
Variety	8.4
Good service	5.0
Consistency	2.2

Source: Jolly, Desmond. 1999. "Home Made"—The Paradigms and Paradoxes of Changing Consumer Preferences: Implications for Direct Marketing. Presented Feb. 22, 1999, Agricultural Outlook Forum.

fresh produce, plants, value-added farm products and crafts. Beginning direct-marketers may want to start with farmers markets. To locate farmers markets in your area, go to www.ams.usda.gov/farmersmarkets/ or call USDA's Agricultural Marketing Service at (202) 720-8317.

Cass Peterson, who has direct-marketed vegetables and herbs for 16 years, sells at two farmers markets in the Washington, D.C., area. Peterson's stand attracts a large crowd of return customers. "We need regular customers who seem willing to accept an eclectic mix of produce so we can get to know their tastes and what to grow for them," she says.

Peterson can count on them to provide a reliable source of income no matter what is doing well in the fields. "Our customers are very loyal to our stand," she says. "We joke that if a drought wiped out every living thing on the farm, we could still sell rocks from the field."

Some vendors become known for having a wide range of the most popular vegetables, others for a specialty such as cut flower bouquets or truckloads of sweet corn. Selling at a farmers market may provide contacts to develop additional markets such as subscription sales (see p. 6) and selling to ethnic groups.

A group of Kansas produce farmers who wanted a direct outlet for their fruit and vegetables took a small grant from the SARE-supported Kansas Rural Center and opened a farmers market in the rural town of Peabody. Starting with 14 interested farm families, the group met monthly to organize a market that would attract people from the surrounding area. Each vendor pays \$20 per market, a fee that goes toward ads and signs.

The group held a community pig roast for 100 people to lure new supporters to the market.

"We wanted people to know how good things taste when they are grown on local farms by local people," says organizer Marilyn Jones, a Peabody farmer.

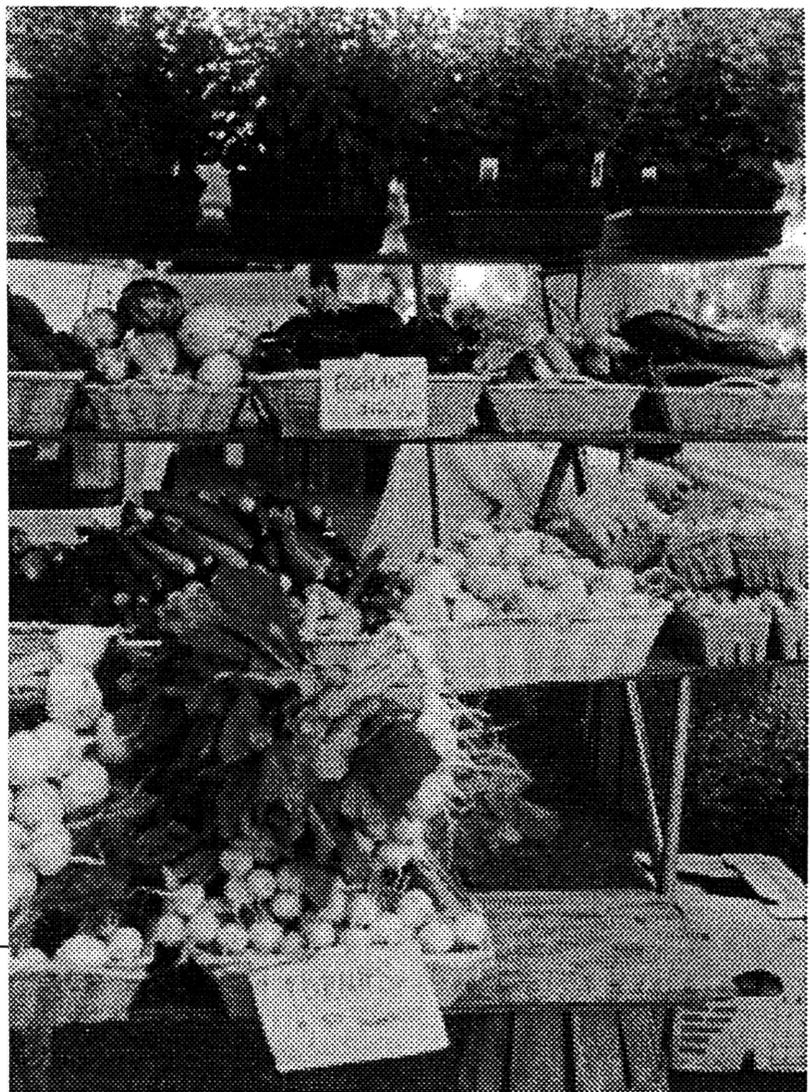
Most growers enjoy interacting with other farmers, and many say that cooperation is as important as competition. Expect to have slow days when you do not sell all that you bring, and be prepared to encounter hagglers. You may want to investigate gleaning possibilities; many food banks and homeless shelters will pick up extras directly from your stand or farm.

If you're interested in selling at farmers markets, keep in mind:

- Successful markets are located in busy or central places and are well-publicized.
- The more farmers and farm products at the market, the more customers.

- A good manager is necessary to promote the market and enforce its rules.
- Make sure you don't run out of produce to sell to late-arriving customers.
- Colorful, layered displays of your products are enhanced by signs, packaging, even the clothes you wear.
- A diversity of produce displayed in an attractive manner will attract customers.
- Price in round numbers to speed sales and eliminate problems making change.
- Be as friendly as possible. A big draw of farmers markets is the chance for customers to talk to farmers about their operations.
- Don't deliberately or drastically undersell your fellow farmers.
- Get feedback from your customers. You can learn a lot about what they find desirable—and what to grow next season.
- Selling at a farmers market may provide contacts for other sales, such as special orders or subscriptions.

**AN OCTOBER HARVEST
AT THE WEEKLY TAKOMA
PARK, MD., FARMERS
MARKET, WHICH HAS
BECKONED CUSTOMERS
FOR CLOSE TO 20 YEARS.
PHOTO BY VALERIE
BERTON**



DRAWING FAMILIES TO THE FARM USUALLY RESULTS IN ON-FARM SALES. VISITORS TO THIS VEGETABLE FARM NEAR GAINESVILLE, FLA., ENJOY A STROLL AS PART OF A GROUP TOUR. PHOTO BY VALERIE BERTON

PICK-YOUR-OWN

Pick-your-own marketing turns the job of harvesting, packing and transporting your production over to the customer. While it can be a good way to offset labor costs, many farmers find it most profitable when paired with an on-farm tourism activity.

Earnie and Martha Bohner, who run a successful pick-your-own operation in the Missouri Ozarks, created a farm that draws visitors after beginning with no buildings, electricity or running water in 1983. Today, their 80-acre Persimmon Hill Berry Farm attracts carload after carload of customers.

They began with a long-term plan based on family goals and values. Within 10 years of purchasing the land, they were cultivating 3 acres of blueberries, 1 acre of blackberries, 2,000 hardwood logs for shiitake mushrooms and 120 apple trees. In addition to the products, they provide amenities: clean restrooms, a picnic table and shade trees — along with tidy field edges.

"We create a place where people can enjoy themselves," Earnie Bohner says. "People don't come all the way out here to get cheap food. They come because it's fun and the berries are absolutely fresh. As much as we can, we give them contact with 'the farmers.' The more we can do that, the more people go away with that memory."

Although the popularity of pick-your-own farming has declined since the 1970s and 1980s, it remains a great marketing option for small growers with a good client base. It reduces harvest labor needs and eliminates most post-harvest tasks such as grading, washing, packing, cooling and storing.

Before you proceed, however, consider what opening your farm to the public means. You need liability insurance, space for parking, ability to supervise customers, and, perhaps most important, a willingness to sacrifice your privacy. If you're not a "people person," pick-your-own likely is not for you.

The success of pick-your-own marketing is often in the details, such as:

- Having a phone with an answering machine that gives prices, conditions and operating hours
- Maintaining evening and weekend hours
- Creating a pleasant and educational setting for families, many with small children
- Providing ample parking, good roads and clean trails
- Supplying containers, even if customers are told to bring their own
- Displaying clear signs indicating rules, prices, hours, etc.

FARMS STANDS, ROADSIDE MARKETS AND ON-FARM SALES

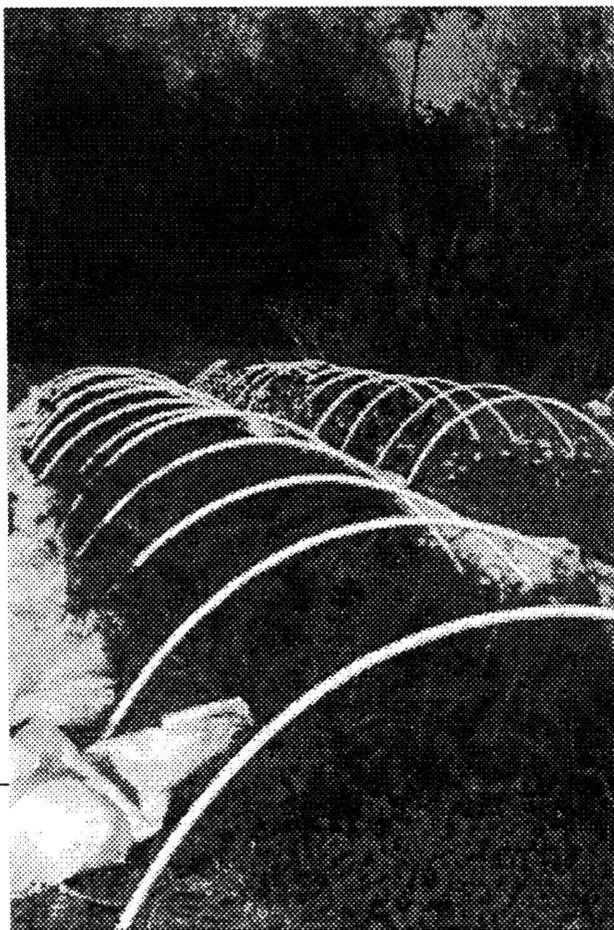
While many people enjoy harvesting their own fruits and vegetables, others prefer a quicker, more convenient way to buy fresh produce. At Persimmon Hill Farm, the checkout station also functions as a place to display and sell pre-harvested fresh produce, along with the farm's many value-added products and accessories such as cookbooks and berry cobbler baking dishes

Converting part of a barn for on-farm sales on specific days also draws customers. By locating a farm store right on the farm, producers can interact more with customers, learning their preferences and gaining their support.

"It creates closer communication with the customer and, in our case, has created a 'friends of the farm' group," says Skip Glover, an organic vegetable farmer in Douglasville, Ga., who receives high prices for such specialty crops as edible soybeans. "It allows folks to be more a part of their local farm."

If you're interested in setting up a farm stand, consider:

- From building materials to permits, establishing a stand can prove expensive.
- Stands are sometimes most successful when they feature only one or two high-demand items such as fresh-picked sweet corn, early watermelons or pumpkins.
- Location is very important; busy roadways or other



well-trafficked areas are almost essential. Consider, however, the traffic speed and how to give motorists a heads-up to slow down. You also will need to provide parking. Contact your state Department of Agriculture to find out whether you can set up a stand along state roads.

- More elaborate roadside stands and small seasonal markets often prove successful for direct marketers. They commonly feature a wide variety of retail products along with those actually produced on the farm.
- Check your local extension office for information about how to construct sales stands, small market buildings and produce displays.
- State Departments of Agriculture and Departments of Highways may be able to provide tourism signs.

ENTERTAINMENT FARMING AND AGRI-TOURISM

Pairing farms with entertainment can draw families—and their recreational dollars. Seasonal festivals, hayrides, petting zoos, on-farm classes and workshops bring more potential customers to your farm. Another option for recreational farming is leasing wooded land or marginal cropland for hunting, fishing or hiking.

You can weave farm entertainment events with regional tourism efforts. The Archway Regional Tourism Association (ARTA) in eastern Kentucky links local

farmers with Natural Bridge State Park. For small farmers looking for alternatives to tobacco, agri-tourism in this region—known for its scenic resorts and parks—has been a godsend.

Growers sell at a farmers market inside the park each summer as part of the Mountain Market Festival. Widely publicized by ARTA, the event features chef presentations and live music. Every farmer who participates sells out.

"We wanted to help the agri-tourism organization become self-sustaining, and it has done that," says Karen Armstrong-Cummings, who works with area farmers as a staff member of the Commodity Growers Cooperative. The cooperative received a SARE grant in 1997 to help it build markets for local farm products.

Tree growers have helped spawn popular "Christmas in the Mountains" weekends. Participants receive coupons for a Christmas tree from a local farm and a gift from a local craftperson or artist.

The coupons were a strong draw, Armstrong-Cummings says, bringing people from as far away as Louisville.

The partnership, which includes Extension agents, farmers, craftsmen and parks officials, helped the Commodity Growers Corporation create a statewide agri-tourism award to recognize projects that bring together farmers and tourism. The first \$500 award went to Owensboro orchardist Billy Reid, whose apple festival brings 20,000 people to the city.

If you're interested in entertainment farming or agri-tourism, keep in mind:

- Agri-tourism ends farmer isolation and offers the opportunity to make new friends and build stronger links to the community.
- Some disadvantages could include interference with main farm activities, potential low financial return and high liability risk.
- In the tourist business, you are never really off duty. Holidays likely mean a full workday. Be prepared for late-night calls.
- Social skills and a scenic, clean, attractive farm are crucial for success in agri-tourism and can overcome a location that is less than ideal.
- Call tour bus companies and your local or regional tourism and convention bureau for information on attracting tour buses to your farm.
- State Departments of Agriculture often offer assistance in setting up farm festivals and similar activities. State tourism bureaus also can offer a wealth of ideas and information.



"People don't come all the way out here to get cheap food. They come because it's fun and the berries are absolutely fresh."

*Earnie Bohner
Lampe, Mo., farmer*

"We want our customers to be more sensitive to the farm situation. The more they understand the connection of family farms to healthy communities, the better for us and farmers everywhere."

*Molly Bartlett
Hiram, Ohio, farmer*



SUBSCRIPTION MARKETING AND CSA FARMS

The concepts of subscription marketing and community supported agriculture (CSA) are still new to most farmers and consumers. However, since CSA first premiered in the U.S. in the late 1980s, it has revolutionized thinking about how farmers and consumers can participate in a local food system based on mutual trust.

Subscription marketing describes any of a variety of arrangements in which the farmer agrees to deliver a certain quantity of produce to the consumer on a regular basis throughout the season for a set price. CSA is a more organized and defined form of subscription marketing in which consumer-members invest in the farm operation by paying up-front for the harvest. They share in many of the risks of crop failure, but also share the bounty of a good year. Many CSA farms ask members to commit time and labor to the operation. This not only lowers costs, but also allows members to learn more about what it really means to grow food.

Ohio farmer Molly Bartlett, who has run a CSA operation for seven years, expanded community participation with an enterprising mix of projects involving her non-farming neighbors. She publishes a weekly newsletter to generate interest in the harvest, along with a recipe sheet. When members expressed interest in preserving foods harvested from the farm, she started an on-farm canning center with the aid of a SARE grant. Bartlett has offered sessions on making dilly beans, herbal vinegar, canned tomatoes and beer.

Underlying all this effort is Bartlett's desire to help people understand more about farming and her deep sense of community. "We want our customers to be more sensitive to the farm situation," she says. "The more

they understand the connection of family farms to healthy communities, the better for us and farmers everywhere."

Connecting neighbors to the farm dovetails nicely with Bartlett's need to keep her 70-acre certified organic farm profitable. "I think CSA can be more profitable than farmers markets," she says. "They not only allow farmers to stay on the farm, but also give shareholders a chance to participate in the production of their food."

No two CSA farms are alike. Most supply all the produce. They also might provide other items, such as flowers, berries, nuts, eggs, meat, grains or honey. Farmers may ask members to come to the farm to pick up their shares, or they might deliver them to centrally located distribution sites. Some CSA farmers provide shares in bags; others let members choose from bulk displays. Families run some CSA farms, while some team with other producers to supply additional goods.

Like Bartlett, many CSA farmers produce weekly or biweekly newsletters describing the current harvest and featuring recipe ideas. Others reach out electronically through list servers or Internet sites.

Terrafirma Farm, a 99-acre certified organic farm whose CSA serves 380 members at 24 drop-off sites in the San Francisco Bay area, uses a web site, www.terrafirmafarm.com, to tell current and potential members all about their CSA. A look at the web site will give you answers to questions such as "What do I get?" and "How do I join?"

"For city-dwellers, CSA provides a connection with nature, a convenient, safe and reliable source for healthy, high-quality vegetables," says Valerie Engelman, Terrafirma Farm CSA coordinator. "For us, it provides a

buffer from rapidly fluctuating market prices while providing a secure source of income."

When evaluating subscription marketing as an option for your farm, consider:

- Your location. Can you find enough members? Can they drive to your farm?
- Your tolerance for hosting members on your farm.
- Your willingness to sponsor events on the farm, publish a newsletter and provide other services that customers demand.
- Your resources for distributing produce to drop-off sites or at your farm.

CSA informational resources abound. See p. 20.

COOPERATIVE MARKETING

Some direct marketers go it alone, but many find that profitability comes through working with others.

Terry and LaRhea Pepper grew their first crop of organic cotton near O'Donnell, Texas, in 1991, contracting with a single buyer to purchase the entire crop. Later that season, the buyer reneged, and they found themselves with bales of raw cotton and no buyer. Scrambling for an alternative, the Peppers decided to try converting the raw product into denim. LaRhea Pepper, who had majored in fashion merchandising in college, contacted companies interested in finished fabrics and secured a new buyer.

"We realized, then and there, that security and profitability depended on our assuming responsibility for processing and marketing our cotton," La Rhea Pepper says. "We don't rely on anyone else."

The Peppers joined forces with other organic and transitional cotton growers to form the Texas Organic Cotton Marketing Cooperative. Through the co-op, they shared marketing expenses and risks, then dealt with buyers as a team.

"We were realistic," LaRhea Pepper says. "We realized we couldn't deliver a consistent supply as the only producer."

When the cooperative was formed in 1991, it brought together 40 farm families who sought to market their organic and transitional cotton. The cotton co-op sells raw, baled cotton or an array of processed products such as personal hygiene aids and a diversity of fabrics through their web site, www.organicctexas.com.

As more members of the co-op were drawn into marketing decisions, they also saw the need to create new products, expand markets and promote themselves. They diversified the product line to include chambray, flannel, twill and knits. Lower grade, shorter staple cot-

ton, not suited to clothing, is used to make blankets and throws. Most recently, an "Organic Essentials" division was created to manufacture facial pads, cotton balls and tampons. The co-op board continues to look for other opportunities to add value to their cotton, and for partners in the industry who are willing to share the cost and risk.

At first, it was difficult for farmers who had been independent all their lives to make decisions together. "When a group decides to work together, people need to be willing to sacrifice their individual rights," LaRhea Pepper says. "Most growers shy away from marketing and processing, preferring to sell raw cotton rather than get involved in more complex aspects of the industry. That attitude was hard to change."

The benefits of marketing agricultural products with others also appealed to Janie Burns of Nampa, Idaho, who raises 30 ewes, 40 lambs, 70 chickens and assorted vegetables on 10 acres. A relatively small farmer, she is a large-scale promoter of local food systems. Burns used a SARE grant to investigate whether a growers' cooperative would help area farmers become more efficient and profitable while offering their community access to fresh, sustainably grown vegetables.

"We went to every list of people involved in direct marketing," Burns recalls. They surveyed 150 people within the Boise/Twin Falls area, which shares a similar climate and crops, about their interest and production capabilities. Then, they identified markets, such as restaurants, natural food stores, a cafeteria, a hospital and a school, to learn their interests, habits and constraints.

A workshop with representatives from successful co-ops developed in other regions—including the Georgia

OPPOSITE: WHEN WARD SINCLAIR AND CASS PETERSON LEFT WASHINGTON, D.C., TO START FARMING, THEY MADE THEIR FIRST VEGETABLE SALES AS SUBSCRIPTIONS TO WASHINGTON POST EMPLOYEES. TODAY, FLICKERVILLE MOUNTAIN FARM'S MAIN MONEY-MAKER IS FARMERS' MARKETS. PHOTO BY VALERIE BERTON

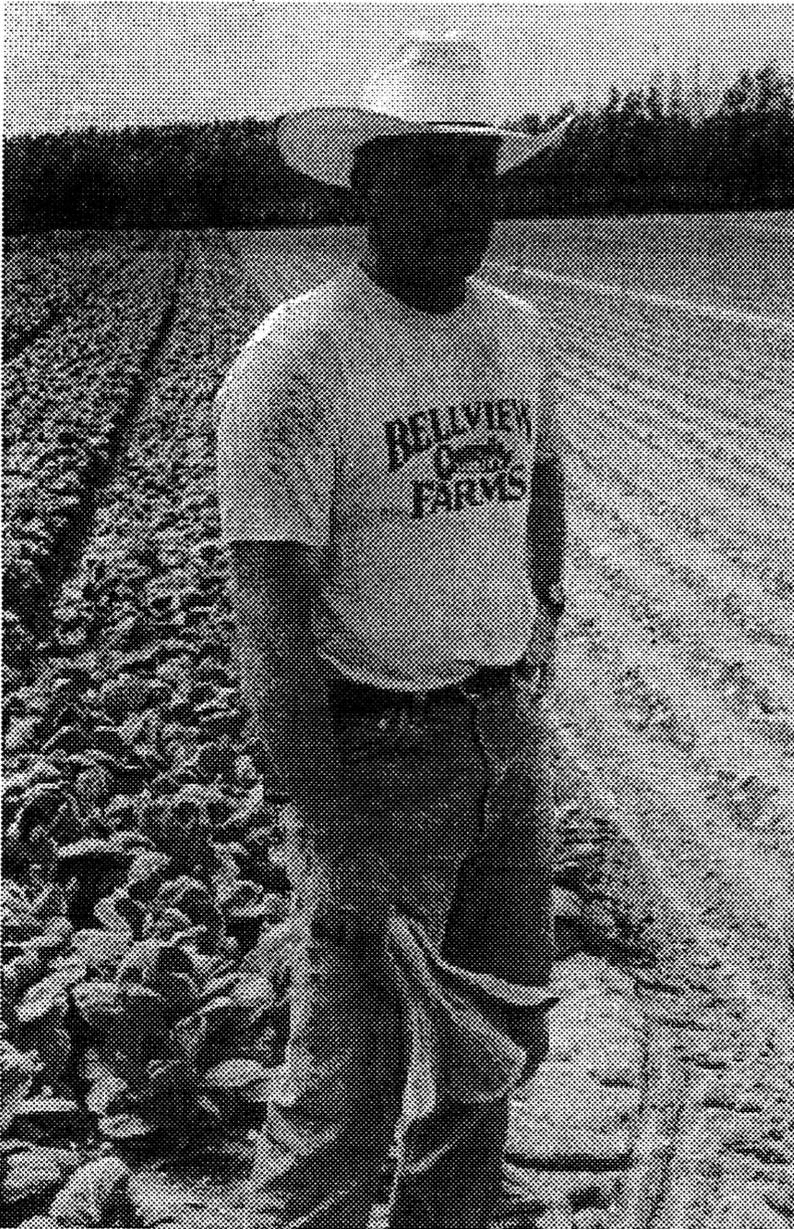
THIS PAGE: THE TEXAS ORGANIC COTTON MARKETING COOPERATIVE'S COTTON, SHOWN HERE BEFORE PROCESSING, IS SOLD TO CLOTHING COMPANIES LIKE PATAGONIA. PHOTO BY JIM CHILDRESS



**BUENA, N.J., VEGETABLE
PRODUCER JIM QUARELLA
IMPROVED PROFITS BY
SELLING SPECIALTY CROPS,
SUCH AS THESE ASIAN
GREENS, TO MARKETS IN
NEW YORK CITY. PHOTO BY
VALERIE BERTON**

Crown Organic Cooperative and Pennsylvania's Tuscarora Organic Cooperative—presented Idaho growers with information about forming and operating a cooperative. They agreed to form their own co-op under the name Idaho Organics Cooperative, Inc.

To be a member, growers must be certified organic. Their product line ranges from early herbs and lettuces to "virtually everything" by mid-season. Some growers are relatively small-scale, while others plant several hundred acres of potatoes and dry beans and market only part of their crop through the co-op.



Every Sunday, co-op growers provide lists of what they will have for delivery on Thursday, including quantity, description (such as "first of the season"), and price. The list is compiled and faxed to customers. By Tuesday evening, growers receive "pick" lists that tell them how much of each item they need to pack for each customer. On Thursday morning, growers bring produce to a central location to divide up boxes for delivery. Customers are billed at the end of each month, and growers get paid once a month.

In Costillo, N.M., where Lonnie Roybal farms, there is plenty of land and water, but little industry and economic development. With funding from a SARE grant, members of a local co-op demonstrated that area farmers could not only grow wheat organically, but also market it locally under their own label. Eight growers belong to the three-year old organization.

First, they began sharing equipment: a tractor, a plow, a disc and a leveler. "Last year we only sold wheat," Roybal says. "This year, we have gone to the second step—milling." The co-op sends the wheat to a mill in Denver, then the flour is sold to Cloud Cliff Bakery in Santa Fe. The bakery bought 38,000 pounds of flour and asked for more. The bread is sold under the brand name "Nativo," meaning "native."

The co-op, which also sells grains to organic livestock farmers, acquired grain bins and are close to securing a mill. "This will add value to our product, and allow us to market the complete grain in varying forms such as rolled wheat, bran and flour in 2- and 5-pound bags with our own logo," Roybal says. Another potential

CONDUCTING ETHNIC MARKET RESEARCH

Ethnic groups tend to form close-knit communities with strong cultural ties to their homeland. Food remains a strong connection for many new U.S. residents, who present a potentially concentrated and lucrative market for farmers.

The New York City-based nonprofit Just Food received a SARE grant in 1997 to connect area farmers with communities inside the city seeking ethnic food.

"We know 8 million people are here buying food, but most of it is not locally grown," says Kathy Lawrence, Just Food executive director. "We want to create New York City-based support for regional farmers so they can stay in business."

Farmers growing for the Just Food project produce Italian and traditional Latin vegetables and herbs, goat meat and live poultry.

marketing strategy is to sell whole-wheat berries, for which demand is growing.

Cooperative marketing can be a great opportunity—or a headache. Here are some tips on how to make it work for you:

- The USDA's Rural Business-Cooperative Services program offers information and assistance in setting up and managing a cooperative marketing effort. It's a great place to start (see Resources, p. 19).
- Consider a marketing club, an informal cooperative that relies on using member marketing skills. Many extension offices offer training programs and assistance in setting up marketing clubs.
- Join a nonprofit farmer network group to share ideas and inspiration.
- As always, adequate market research and business planning are keys to successful cooperative marketing. It pays to research well ahead of time. Factors such as inadequate market demand and undercapitalization are danger signs for a cooperative.
- The club or cooperative should be made up of members who have common goals, or boredom and frustration can ensue. Member commitment is crucial for success. Members have to be able to give up a little individuality to work together.

SALES TO RESTAURANTS AND SPECIALTY FOOD STORES

Restaurants and specialty stores such as health food outlets long have been prize markets for many growers, as they and their customers often are willing to pay premiums for quality, freshness and reliable delivery.



Cass Peterson, who raises vegetables and herbs in south central Pennsylvania, sells to some of the finest restaurants in the Washington, D.C., area. For Peterson, cultivating relationships with chefs is worth the effort. Once they know her produce is fresh and tasty, they create dishes around what is fresh that week.

The communication goes both ways. "Get to know how the chef wants the produce picked, which will depend on how he or she intends to use it," Peterson says. "If squash soup is on the menu, larger ones are okay. If the squash is to be steamed and presented whole on the plate, they can't be longer than 3 inches."

At her web site, www.flickerville.com, Peterson gives other reasons for her success: "Our varieties are chosen carefully for flavor, not 'shippability.' Many of our favorites are so-called heirloom varieties, treasures from a time when vegetables were grown for their taste, not

CRAIG MAPEL (LEFT), A MARKETING SPECIALIST FROM THE NEW MEXICO DEPARTMENT OF AGRICULTURE, USED A SARE GRANT TO RESTART AGRICULTURAL PRODUCTION IN COSTILLO. MAPEL TAUGHT GROWERS LIKE LONNIE ROYBAL (RIGHT) AGRICULTURAL PRODUCTION AS WELL AS PROCESSING, PACKAGING AND MARKET POSITIONING. PHOTO BY JEFF CAVEN

Bridging the cultural gaps between consumer and producer is both a challenge and an opportunity. Just Food, in cooperation with the Farming Alternatives Program at Cornell University and Cornell Cooperative Extension of New York City, brought together farmers and residents of the Williamsburg neighborhood in Brooklyn to plan and implement a pilot marketing project. The community is home to many ethnic groups, such

as Latinos, Hasidic Jews, Italians and Poles.

Through interviews conducted with approximately 65 restaurants, retailers, and wholesalers serving the area, the group sought to learn what foods people bought, where they bought them, quality and supply needs and their willingness to buy from regional growers. The study turned up valuable information for farmers.

The purchasers were satisfied with the quality

and variety of produce they received through conventional channels. Low-income ethnic groups such as those surveyed were not willing to pay more for higher quality produce. Thus, chain supermarkets were clearly the hardest to crack as a possible market, due to consolidated delivery and the perceived advantages of lower prices with high-volume purchases. However, middlemen who buy for resale—called "jobbers"—who

serve smaller-scale buyers showed some interest.

Restaurants appeared more interested than grocery stores in buying regional produce because of its freshness and better quality. "The process [of securing a market] is slow," says Lawrence. "Restaurants are reluctant to place an order from the farmers unless they see the product. The farmers are reluctant to raise the crop until they have a commitment from the buyer. A lot of

what we're working on is relationship-building."

The Just Food project kicked off by creating a farmer-ethnic community connection through El Puente, a community-based organization that is becoming a hub for multiple market outlets. By spring 1999, El Puente had helped an area farmer start a 25-member CSA, expanded farmer participation in a farmers market and cultivated about 10 restaurants that now place weekly orders.

Starting with small sales of specialty grain to a few regional bakeries, the Folkvords have transformed their wheat farm into Wheat Montana, selling packaged raw grain and grain mixes, flours and bakery goods.

their ability to withstand cross-continental truck rides."

Peterson advises that small, diversified farms do best selling to restaurants that change their menus daily, or at least weekly. "Restaurants with ever-changing menus will be happy to feature whatever is abundant and in season. It's a good idea to let them know a week or two in advance of when something is likely to be ripe and ready to harvest. They need time to dream up those menus."

An Indiana grower's use of integrated pest management and shrewd marketing attracted a bevy of new customers to his consumer-oriented crop farm. In 1992, Brian Churchill began using integrated pest management on some of Countryside Farm's 100 acres of sweet corn, melons, tomatoes and other produce. In 1994, with a SARE producer grant, Churchill began scouting for pests, withholding routine spraying and building better habitat for beneficial insects. He cut insecticide costs drastically, then decided to use that as a marketing hook.

That summer, Churchill held an "expo" for 50 chefs from top restaurants in nearby Louisville, Ky. "We showed we can produce the volumes they need in as good or better a quality as they can get anywhere," Churchill says.

Two chefs now use the farm's name on their menus. Another has given out free ears of Churchill's low-input popcorn as a promotion. Other specialty marketing efforts to promote Countryside Farm's low-pesticide crops include a customer newsletter, farm tours for school groups, talks at regional horticulture conferences and serving as a location for a television station's gardening show.

Here are some considerations for the prospective restaurant supplier:

- Upscale restaurants and specialty stores pay top dollar for quality produce and hard-to-get items. According to Eric Gibson's *Sell What You Sow!* growers can expect a minimum of 10 percent over wholesale terminal prices for standard items at mainstream restaurants.
- Most restaurants buy in limited quantities, and sales may not justify the necessary frequent deliveries. Growers should start lining up buyers a year in advance and develop secondary outlets such as processing or selling at lower-end markets.
- Call buyers for appointments and bring samples.
- Major selling points include daily deliveries, special varieties, freshness, personal attention and a brochure describing your farm and products.
- Chefs often prefer to buy semi-prepared food, since they usually have a hard time finding affordable

labor. These include pre-sliced vegetables, pre-peeled potatoes, pre-washed greens, or tomatoes and potatoes sorted according to size and variety.

- When planning your crop mix, talk with chefs and specialty buyers, who are constantly looking for something new. Many growers just plant what sold well last year, but successful restaurant sales depend on meeting the changing needs of your buyers.

MAIL ORDER AND INTERNET

As mail order and Internet sales continue to grow, creative farmers are jumping on board. Both spell convenience for busy people looking for unique products. The good news: You don't need to be a copywriter or a computer expert to tap into millions of potential buyers, although maintaining a successful web site is time-consuming and challenging. You may want to hire a helper or find a friendly computer whiz to help you.

If you have a good customer base, these strategies offer good ways to diversify and expand marketing outlets. Earnie and Martha Bohner, who have a pick-your-own farm and farm stand in Missouri, spread their reach from one state to the rest of the nation through a Christmas gift mail-order catalog. Previous customers and gift recipients can count on receiving a folder describing mouth-watering packages. The catalog cover features the farm's black Labrador retrievers watching St. Nick's sleigh heading off into the Ozark night.

The Hartzler Family Dairy in Wooster, Ohio, uses its web site to tell customers more about their farm and how they produce their special cream-topped milk in its many iterations: skim, low-fat, whole and chocolate. Product pictures show milk in glass bottles with colorful labels accompanied by lively text to encourage sales.

"2% Reduced Fat: This is a good, flavorful choice for



many families," the description reads. "You will see a small cream line inside the top of these red-labeled bottles. Gently shake the bottle to spread the creaminess throughout the milk before serving it."

Those interested in how their milk is produced can click on "The Process" and learn about how the family produces milk from cows raised on grain grown without commercial fertilizers and pesticides.

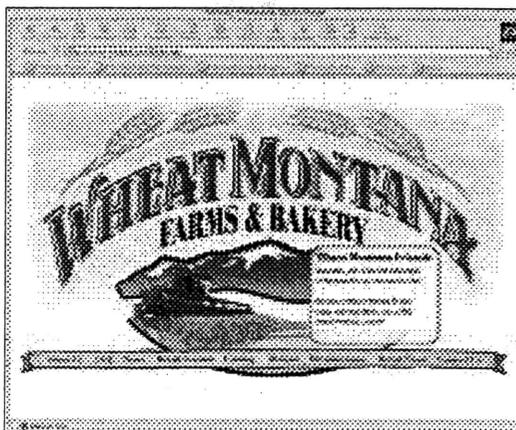
Links lead to you to one of 66 Ohio stores. Check out www.hartzler.eyemg.com

Bring customers back to your web site by sending e-mail announcements about new features. Maintain an electronic list of customers, then send them weekly or monthly announcements that beckon them back to your site.

The main disadvantage to mail order and Internet marketing is fierce competition. Attracting buyers can be difficult when hundreds of other farmers offer similar products in catalogs or web sites. Keep in mind that you need to budget time to maintain a good web site. If it's not current, a customer will zip away with a click of the mouse.

If you're interested in investigating the potential of mail or Internet marketing, keep in mind:

- ▶ The proliferation of web sites can make navigating the Internet difficult. Make sure your customers know how to find you.



- ▶ Link your page to web sites that strive to connect farmers and consumers, such as www.localfarm.net, www.upick.com and www.smallfarms.com
- ▶ Update your catalog or web site often with new product information and uses.
- ▶ Make sure the site is secure for credit-card users, and provide regular and toll-free telephone numbers for customers who prefer to call in orders
- ▶ Find reliable and cost-effective shippers who will deliver products on time in good condition.

For more information about Internet marketing, see Resources, p. 20.

New Paths for Commodities

DIRECT MARKETING MEAT AND ANIMAL PRODUCTS

Decades ago, most meat and animal products were sold directly to customers, but all that changed with the advent of the modern feedlot-to-wholesale system.

Recently, consumer concerns about food safety and animal welfare have spurred renewed interest in buying directly from the source. Producers, meanwhile, see the value of re-connecting to consumers.

For farmers facing an increasingly concentrated market with a few large processors controlling prices, direct marketing offers the opportunity to retain a greater share of product value. Marketing meat and animal products, however, means making food safety issues paramount.

Meat producers address consumer safety concerns through inspection. Before launching a direct meat-

selling venture, decide where and how you want to market your meat. With the exception of poultry, the type of inspection you choose limits where the meat can be sold. Then, identify a processor to meet your needs.

Meat producers can choose from three processing options: in a federally inspected facility, which checks meat that can then be sold anywhere in the U.S. as long as labeling requirements are met; in a state-inspected facility, which certifies meat that can only be sold in that state; and custom processing at a local meat locker.

Custom processing exemptions usually allow you to pre-sell parts of the live animal, then process and deliver the meat without being subject to inspection. Most states, however, attach special conditions, which vary widely.

Small poultry producers may be exempt from some federal and state inspection regulations, depending on

THIS PAGE: GANADOS DEL VALLE, A NONPROFIT GROUP IN LOSOJOS, N.M., MARKETS WOOLEN PRODUCTS AND LAMB FROM LOCAL FARMERS. PASTORES LAMB, A DIVISION OF GANADOS DEL VALLE, SELLS OUT EVERY SATURDAY AT THE SANTA FE FARMERS MARKET. PHOTO BY JERRY DEWITT

OPPOSITE: MARTHA AND EARNE BOHNER STARTED WITH 80 ACRES AND SOME BIG IDEAS. TODAY, WITH THE HELP OF SOUND BUSINESS PLANNING, THEY RUN A SUCCESSFUL PICK-YOUR-OWN FARM AND THRIVING BUSINESS CENTERED ON VALUE-ADDED AGRICULTURAL PRODUCTS IN LAMPE, MO. PHOTO BY MARTHA BOHNER



the number of birds marketed annually. Egg sales are also subject to exemptions. Contact the American Pastured Poultry Producers Association for more information. (See Resources, p. 19)

Dairy products are usually heavily regulated by state officials. Check with your state Department of Agriculture.

For more information about meat inspection regulations, see the newly published *Legal Guide for Direct Farm Marketing*. Using a SARE grant, author Neil Hamilton answers common questions about laws on marketing meat — and other products — directly to consumers. (See Resources, p. 20.)

Educate yourself about processing. Learning about the various cuts of meat and approximate yields from a carcass will help when dealing with both the butcher and your customers. Food science departments at most universities can offer invaluable information.

Develop a relationship with your butcher to get your animals processed the way you want and to ensure that the meat is hung to age for an appropriate amount of time.

With less volume, small producers will want to market quarter, half or whole carcasses rather than specific cuts. Be prepared to tell customers how many steaks, roasts and other cuts they can expect from a half or whole carcass. Certain cuts are more popular than oth-

ers, particularly the hind portions. It may be necessary to sell "split halves" which include equal portions of both front and hind, to avoid filling a freezer or meat locker with unsalable meat. Freezer meat that is sold by the cut will have to be inspected.

You may want to develop labels describing how you produce your meat, such as without drugs, organic or grass-fed. Check with USDA's Food Safety Inspection Service (FSIS) at www.fsis.usda.gov or (202) 205-0623.

Provide cooking instructions, especially for grass-fed meats, which require much less cooking time than conventionally produced meat. Many people today are unfamiliar with how to cook items such as roasts. Let them know how simple it is, and you may find it easier to move some of those larger cuts. If possible, provide samples. With a quality product, sampling can be the most effective form of marketing.

Herman Beck-Chenoweth, who has direct-marketed meat and eggs for years, co-owns the first farm in Ohio to market fresh meat at an outdoor farmers market. An avid marketer, Beck-Chenoweth sells meat, eggs and vegetables to two restaurants, through a CSA operation and at farmers markets under his Locust Grove Farm label.

"We prefer to tell customers exactly what we do to our products," he says. "We tell people that we kill the chicken using the kosher method. We tell them what the chickens eat, and how old they are."

At the farmers market, Beck-Chenoweth takes care to create an attractive display: a folding table, umbrella, and fiberglass trays with ice and a clear cover to display fresh chickens packaged in plastic bags.

Jim Goodman of Wonewoc, Wis., began selling organic beef directly not only to increase profits, but also to talk with his customers. After 16 years of selling to packing companies, Goodman now brings beef to three restaurants, a farmers market and directly to friends and neighbors.

"Traditionally, farmers never see their customers," says Goodman, who regularly drives 75 miles to Madison to deliver beef. "It's nice to be able to hand your customers a package of burgers with tips on how to cook it and be able to tell them how the animals are raised."

When he takes a 1,500-pound steer to the packing plant, he receives about \$800. That same animal brings \$2,000, minus about \$400 in processing costs, when he sells it directly. Selling meat himself means more time on the road, including waking at 3:30 a.m. on farmers market days, but Goodman is gratified that he now sells one or two animals a month through his own carefully cultivated channels.

"People are willing to pay more for direct-marketed organic beef," he says. "Once you get regular customers, you develop a friendship with them. Then people start talking about buying meat from 'my farmer.'"

ADDING VALUE THROUGH PROCESSING

It was 1986 when Earnie and Martha Bohner began making jam in rented facilities near their farm in southern Missouri. Since then, Persimmon Hill Berry Farm has built its own processing kitchen for value-added products. To create special treats that would appeal to customers, the Bohners worked with a chef to perfect recipes for jams, shiitake mushroom sauce, dried shiitakes and barbecue

sauce. Today their value-added foodstuffs account for 50 percent of the farm's gross income.

"From the first, we were committed to quality, and quality entails a lot of time and cost," says Martha Bohner. "Our jam recipe is simple: fresh, ripe fruit; sugar; natural pectin; a bit of lemon juice—and nothing else. We want our product to have a distinctive, berry taste."

Processing fruits and shiitake mushrooms allows the Bohners to use produce "seconds," extend the marketing season and diversify their marketing outlets.

The notion of adding value to crops to improve profitability is not limited to horticultural ventures. A team of grain producers launched a value-adding food business for organic oat farmers in Vermont.

The fledgling Vermont Cereal Co. was paying high transportation costs to process food-grade rolled oats in Ontario, Canada. A SARE producer grant paid part of an engineering consultant's fee to design a local production line in Cabot, Vt., cutting processing expenses in half.

Company co-founder Andrew Leinoff banked on a product that would impress a growing health-conscious market. After a family member designed the logo, Eric and Andy's Home Grown Rolled Oats was off and running.

"We wanted to tell people that the oats are home grown," Leinoff says. "We think our buyers really respond to our label."

The oats are sold through distributors to food co-ops, health food stores, specialty stores and mail order catalogs. In addition, the partners do demos at stores that carry their product. Not only do demos promote the product, but they also offer a great way to get customer feedback and recommendations about taste, texture and appearance.

In one three-hour demo, they sold six cases of oats, which are packaged in cotton muslin bags, ziplock plastic bags and 50-pound bulk bags, depending on customer needs. The "Oat Tote" offers 10 pounds of rolled oats sewn into a sturdy tote bag.

Value-added opportunities abound. Examine your product and brainstorm about how processing it might increase its value. Fruit growers can dry their product or make wines, juices, vinegars, spreads, sauces, syrups and preserves. Grain growers might create cereals and baking mixes. Dairy operators can bottle milk or make cheese, while livestock producers might sell dried meat or specialty cuts.

When you add variety to your product line, you increase the choices presented to your customers and your chances for expanding your sales volume.

Provide cooking instructions, especially for grass-fed meats, which require much less cooking time than conventionally produced meat.



Attracting consumers to remote areas may require communities to work together to develop tourism.

ALTERNATIVE MARKETING FOR COMMODITIES GROWN IN REMOTE LOCATIONS

While farmers located near population centers have a variety of opportunities to connect with consumers, farmers in very rural areas have to be more creative. Those in remote locations, usually producing grains, oilseeds and livestock products, face special marketing challenges. Yet, changing tastes and an increasingly "wired" world offer new options.

Diversification. One of the keys to broadening marketing strategies is diversification. Diversifying your operation can increase your returns and spread risk. Today's consumer-driven market offers new opportunities for marketing a wide variety of products tailored to the end user's needs. Consider growing edible soybeans, high-value horticultural crops or organic beef. Or branch out: New technology is creating a growing market for non-food, non-feed uses of agricultural products and byproducts, many based on nontraditional crops.

While some alternative crops are grown almost exclusively under a contract arrangement, many do not have well-established markets. Be certain you can sell a crop before planting it. For more information, see SAN's "Diversify Crops for Profits and Stewardship" at www.sare.org/san/htdocs/pubs/.

Adding Value. While adding value through processing can be profitable for face-to-face marketing, it can be even more valuable to farmers who market at a distance. Dean and Hope Folkvord of Three Forks, Mont., found that conservation tillage and recycling not only protect natural resources, but also increase profits.

Starting with small sales of specialty grain to a few regional bakeries, the Folkvords have transformed their wheat farm into Wheat Montana, selling packaged raw grain and grain mixes, flours and bakery goods. Wheat Montana products are marketed on-farm, through stores in five states and on the Internet, bringing in \$3.5 million a year. The Folkvords tell their story on their web page, www.wheatmontana.com.

"Until the early 1980s, the Folkvords would sell their grain to distant markets as other wheat farms do, but they were getting hammered by price fluctuation as they watched most of the other farms in the area discontinued. Rather than getting slowly sucked under, they decided to make changes. 'We looked for a way to make lemonade out of lemons. We can't grow a lot of wheat but we can grow high quality milling wheat—the best milling wheat in the country,' Dean Folkvord says.

"They diversified their operations and added value to their farm by focusing on their strengths. It now includes

a bakery with their own brand-name bread and a thriving business selling their high-protein grain to 110 specialty breadmakers around the country. 'Our farm now generates 10 times the gross income it did when we shipped grain as a Plain Jane wheat farm,' Folkvord says."

A key to their success lies in their bread bag recycling program, where customers receive a free loaf of bread with every 13 bags returned. The program has helped Wheat Montana build an identity and inspired interest from a very diverse group of consumers.

Mail Order and Internet Marketing. Mail order and the Internet offer farmers new ways to form long-distance relationships with consumers. Newsletters, catalogs and web sites offer customers a personal introduction to the farmer and the farm. They tell, in words and with pictures, about your operation and the community as well as the product. Consumers can learn about the issues facing sustainable farmers today and how to support efforts to protect the environment.

The Internet is also a great way to research potential markets or connect farmers in remote areas with buyers all over the nation and even overseas. Web sites such as Kansas National Farm Organization's www.tri.net/farmnet/markets offer databases for producers and buyers of specialty grains to connect.

Maggie Julseth Howe of Prairieland Herbs (www.radiks.net/~mhowe/) relies on Internet marketing to expand sales of herb and body products beyond her small Iowa town. Not only does the web site offer an easy way for people to re-order their favorite products, but it offers her small shop a more cosmopolitan cachet.

"Many people are excited to hear we have a web page—I think it lends us credibility," she says. "I can keep it more up to date than our print catalog—it's a lot easier to change a web page than a print catalog!—and use the web site to show color pictures of our products. As our catalog business grows, the web site will grow to be more of an asset."

Do not rule out agritourism even if you own a farm in a remote location, especially if some other basis for tourism, such as parks or historical sites, already exists. Harvest festivals, dude ranches, fee hunting, and bed and breakfast operations all integrate well with wider regional efforts.

Attracting consumers to remote areas may require communities to work together to develop tourism. Local farmers could band together to offer a wide variety of farm products and agri-entertainment activities, based on unique local attributes.

Evaluating New Farm Enterprises

GOALS AND VALUES

Before undertaking new farm enterprises or making major changes to an existing business, set some well-defined farm goals. Those goals should go beyond profit objectives to include available resources as well as personal and family values.

"When asking for assistance with farm planning, people always ask 'What should I grow? What market should I be using?'" says Mike Hogan of the Ohio State University Extension Service. "They should take a step back and ask: 'Why do we want to buy a farm? Why do we want to grow this crop?'"

Hogan works with farm families to develop a mission statement and goals based on their core values as part of a whole-farm planning process. With SARE funds, Hogan and Ohio State's sustainable agriculture teams have developed an information packet helping individuals and families set personal goals. (See Resources, p. 20)

"Financial returns generally are not at the top of reasons why people want to farm," Hogan says. Rather, the quality of life available on a farm, independence, environmental stewardship and spending time with the family often lead people back to the land.

EVALUATING YOUR RESOURCES

New marketing strategies can help enhance farm profitability, but you need to identify methods that will help you reach your specific goals. To achieve them, it helps to base decisions about new farm enterprises on existing resources.

Individual and family strengths and weaknesses.

You and your family will have to decide how you feel about taking on the extra work, time and risk involved in direct marketing. Who will be involved in the new enterprise and how can various tasks reflect each person's abilities and interests? Some family members may be highly skilled in production or record-keeping, for example, but not enjoy dealing with people. Identifying someone who can build relationships with customers is crucial to successful direct marketing.

Natural resources. Think about what resources you have and how to use them in a new enterprise. Consider your acreage, the quality of the land, and current and possible land uses as well as water, woodlands and wildlife habitat.

On-farm infrastructure. Buildings and machinery are important resources to consider. You might turn existing buildings into on-farm stores or packing sheds. Possibilities for using machinery and other equipment may be limited by condition, size or other features, so take those into account as you mull over alternatives.

Byproducts. Culls or seconds from a produce enterprise might be turned into processed foods like jams, fruit roll-ups, dried foods and more. Byproducts from livestock slaughter could be turned into pet food. Get creative—some farmers are marketing buckwheat hulls as pillow stuffing!

HERMAN BECK-CHENOWETH AND HIS WIFE, LINDA LEE, HAVE RAISED POULTRY ON PASTURE SINCE 1991. A SARE GRANT ALLOWS THEM TO TEACH FARMERS AND OTHER AG PROFESSIONALS HOW TO PRODUCE AND MARKET FREE-RANGE POULTRY. PHOTO BY JEFF FRIEDMAN



Labor resources. Cost and availability of both on- and off-farm labor play a part in evaluating your options. If labor is limited to the farm family, your choices should be based on how much the family is willing and able to contribute. If you plan to hire others, a nearby town with a school or university might provide a pool of workers available in the busy summer season.

Off-farm infrastructure. Off-farm infrastructure includes a variety of important resources including local processing and storage facilities, potential markets and market outlets, paved roads and high-speed Internet connections.

Financial resources—cash, savings and credit. Your choice of enterprises will depend on the availability of investment funds, as well as your family's ability to risk losing those funds. While it is possible to minimize financial risk through careful planning, there is no way to guarantee your new enterprise will succeed. Even thriving enterprises usually take time to begin showing a profit, and that time will be increased if debt service is added to other operating costs. If research shows a particular venture will require substantial credit or loans, consider other enterprises.

CREATING A BUSINESS PLAN

If new goals are your destination and the resource base is your means of getting there, a business plan serves as a kind of road map. A business plan sets objectives and priorities, providing a format for regular review and course corrections. Useful business plans contain concrete programs to achieve specific, measurable objec-

tives, assign tasks to appropriate people, and set milestones and deadlines for tracking implementation.

Begin by developing a mission statement, critical factors, market analysis and break-even analysis. This kind of plan won't tell you how to run your business, but it can indicate whether an enterprise is worth pursuing. Try the following:

- Write a mission statement that addresses why your business should exist, who your customers will be and how the business will benefit them.
- Determine what factors are critical for the enterprise to survive and whether those requirements can be met. Adequate parking, hours or seasons of operation and location of market outlets are all examples of critical factors.
- Conduct a simple market analysis. Define what characteristics make someone a potential customer and think about where those customers are shopping now. Estimate how many customers you may have and how many you will need. Simply observing traffic flows and the types of products people buy at farmers markets or specialty stores, and attending



ELEMENTS OF A BUSINESS PLAN

A full business plan includes a standard set of five main parts.

- 1 Business Description
- 2 Marketing Plan
- 3 Production Plan
- 4 Human Resources Description
- 5 Financial Plan

Anyone planning a new business should consider a holistic management course or publication. See p. 19.

Many software packages

will help you write business and marketing plans.

As you begin to think about new enterprises, try organizing notes, ideas, catalogs and other information in a divided notebook.

If the plan indicates outside financing is required, your report can demonstrate credit worthiness to the lender. Bankers want borrowers who have a clear vision of where they are going and how they will get

there. Be aware that direct marketing and specialty products may be new areas for the lenders, who may need some background to fully understand the plan. The plan must show ways to pay back any necessary loans and alternative plans with and without outside financing. A business that relies on continual injections of funds from the outside will not be sustainable for long.

farm tours or farm-related community events can provide needed information about who your customers might be and ways to target them. "Find out how the market works," advises Herman Beck-Chenoweth, who direct-markets poultry and vegetables in Ohio. "Research a farmers market to learn what sells and for how much. You don't want to take 40 dozen eggs hoping to sell them at \$2 a dozen when someone else is already selling eggs for 50 cents a dozen."

- Analyze basic break-even scenarios. Project sales volumes and prices, and complete a preliminary production plan to figure out the costs of producing the goods. Knowing the costs of production will tell you whether prevailing market prices will cover those costs. Many direct marketers set their prices too low. Prices should be based on what the market will pay to ensure a reasonable return over the costs of production.
- Assess how many units of sales are needed to cover costs. Be realistic: Add up costs for rent, advertising and other overhead, figure out how much money

you'll make for every unit you sell after its specific costs of production and calculate how many units you need to break even. Estimating profitability under best, expected and worst-case scenarios for yield or sales, costs and prices can provide a better feel for the risks. While higher-risk activities tend to generate the highest profits, you will have to decide how much risk you are willing to accept.

Once you digest this information, the potential viability of the enterprise should be apparent. If it seems worth pursuing, the creation of a full-fledged business plan is warranted.

CONDUCTING MARKET RESEARCH

Failure to judge the true demand for a product is a common cause of failure in many business ventures. To improve your odds, thoroughly research your ideas.

Market research includes ferreting out potential business, competition and consumer trends. Good research also entails finding out as much information as possible about your planned products or services.

Gather information on demographics, consumption, and current and future trends from libraries, government agencies, chambers of commerce, universities and trade publications.

Pinpoint trends that would most likely affect your enterprise, such as customer preference toward specialty shops, existence of local direct marketing associations, attendance and sales figures for farmers markets, popularity of farm tours for school and senior groups, and so on. Local and regional sustainable farming and direct marketing associations are also good sources of advice.

Collecting data yourself can help fill the gaps. You may want to do the following:

- Talk to other farmers. Ask them what kinds of buyers they attract, what kinds of service they offer and how they promote their products. Most small-scale farmers are happy to offer such information. Visit market outlets at different times to see what they have to offer.
- Evaluate marketing methods and consider new approaches that put a new twist on an existing product. Not only might you produce homemade jam, but you also could offer it in cases. Hook up with community centers or jam-making groups, or offer to teach the old art of canning.
- Design surveys to find out about customers' buying habits and preferences, and whether there is a need that you can fill. Personal interviews are time-consuming but will yield valuable information.



Failure to judge the true demand for a product is a common cause of failure in many business ventures. To improve your odds, thoroughly research your ideas.



Combined with samples or other promotional materials, surveying doubles as advertising. Be careful when you interpret the responses. What people say about how they spend their money is often very different from what they actually do. You want to get a realistic idea of whether people will in fact spend money on your product.

- Talk to store owners to assess your potential to sell your product. Compare stores to determine which ones best meet your strategies and needs.

Investigate as many marketing options as possible and identify several that look promising. The more ways and places you have to sell your product, the better your chances of success.

Using the results of your market research, you can target the customers or businesses you want to attract and pinpoint your strategy. Estimate the number of customers in your target market and how often they buy similar products. Your target market may already be satisfied by the competition, and you will need to rethink your strategy.

Promotion and customer relations must be part of your marketing plan. A common rule of thumb for

promotional expenses is 3 percent of projected sales. Some ideas:

- Network, then rely on word of mouth.
- Make attractive, eye-catching signs for your displays, to direct traffic, to advertise your stand, etc.
- Offer promotional items and don't be shy about passing them out to interested visitors.
- Advertise in local or state guides to organic foods. Contact your county extension agent or selected state Departments of Agriculture for suggestions.
- Offer school and other group tours of your farm or facilities. Contact schools to encourage visits and tours.
- Conduct cooking demonstrations.
- Offer samples (if health laws allow), at farmers markets and stores.

LEGAL CONSIDERATIONS FOR DIRECT MARKETERS

Marketing activities are guided by a wide variety of laws and regulations at federal, state, county and city levels. Some regulations vary by type of enterprise and location, while others are more general. Legal considerations include the type of business ownership (sole proprietorship, partnership, etc), zoning ordinances,

small business licenses, building codes and permits, weights and measures, federal and state business tax issues, sanitation permits and inspections, food processors' permits and others. See *Legal Guide for Direct Farm Marketing*, p. 20.

If you plan to employ workers, you must meet more requirements, such as acquiring an employer tax identification from the IRS and getting state workmen's compensation insurance. Environmental laws also are becoming increasingly important to farmers.

Adequate insurance coverage is essential. Every operator should have liability insurance for your product and your premises, employer's liability insurance to protect you if employees are injured, and damage insurance to protect against loss to buildings, merchandise and other property. General comprehensive farm liability insurance often does not cover on-farm marketing operations such as agri-tourism businesses. Check with your local insurance agent about liability and loss insurance specifically designed for direct-market farmers.

EXECUTING THE PLAN

The best-laid plans go to waste without good management. Track actual spending and sales, then compare the results against the plan projections—a technique called variance analysis. Once you have the variance, follow up with course corrections, new plans, revisions and more follow-up.

Holistic Management begins with the assumption that every plan is "wrong"—a safe bet when you consider future weather, capricious markets and other unforeseeable factors. Managers engage in a repeating cycle of planning, monitoring and re-planning that adjusts the course of the business as circumstances change.

Earnie Bohner of Persimmon Hill Berry Farm in southern Missouri recognizes the road-map value of a plan. Every year, he reviews production and marketing records and adjusts his long-range plan. He sets goals for the next 12 months, then breaks down jobs by two-week periods. "In an ideal situation, I would look at these goals monthly," Bohner says. "Every day I carry a list of jobs that supports the overall plan."

Resources

GENERAL INFORMATION

Appropriate Technology Transfer for Rural Areas (ATTRA), PO Box 3657, Fayetteville, AR 72702, (800) 346-9140; www.attra.org. Provides assistance, publications and resources free of charge to farmers, Extension educators and other ag professionals. Ask for "Adding Value to Farm Products: An Overview," and "Fresh to Processed: Adding Value for Specialty Markets."

Sustainable Agriculture Research and Education (SARE) program, U.S. Department of Agriculture, 1400 Independence Ave. SW, Stop 2223, Washington, D.C. 20250-2223, (202) 720-5203; www.sare.org. Administered by USDA-CSREES, SARE studies and

spreads information about sustainable agriculture via a nationwide grants program.

Sustainable Agriculture Network (SAN), Hills Building, Room 10, University of Vermont, Burlington, VT 05405-0082; www.sare.org/san/htdocs/pubs. As SARE's national outreach arm, SAN disseminates information through electronic and print publications. Call (802) 656-0471 or email nesare@zoo.umv.edu for questions about bulk discounts or rush orders.

North American Farmers' Direct Marketing Association (NAFDMA), 62 White Loaf Road, Southampton, MA 01073, (413) 529-0386 or (888) 884-9270; www.nafdma.com

American Pastured Poultry Producers Association publishes a quarterly newsletter about production practices, processing equipment, marketing, legal issues and more. A database networks producers and customers. Membership is \$20. APPPA, 5207 70th Street, Chippewa Falls, WI 54729, (715) 723-2293; dkaufman@discover-net.net

Office of Commodity Development and Promotion, 1688 W. Adams, Phoenix, AZ 85007; <http://ag.arizona.edu/AREC/mkt/tabcontents.html>

BUSINESS PLANNING AND MANAGEMENT

Allan Savory Center for Holistic Management. A network that exchanges information about HM. (505) 842-5252; www.holisticmanagement.org

NxLevel. The Agricultural Entrepreneurs Program module is a SARE-funded project offering training and materials for farmers seeking marketing opportunities. (800) 873-9378, www.nxlevel.org

Service Corps of Retired Executives (SCORE), 409 Third St., SW, 4th floor, Washington, DC 20024. Call (800) 8ASK-SBA for SCORE office near you.

USDA Rural Business Cooperative Services. Helps cooperatives learn to market and distribute agricultural

Resources *continued*

products. (202) 720-7558; www.rurdev.usda.gov/rbs/coops/csdir.htm

Whole Farm Planning Resource Packet: Mike Hogan, Ohio State Extension Sustainable Agriculture Team, (330) 627-4310

WEB SITES

Agricultural Direct Marketing E-mail Discussion Group, direct-mkt@reeusda.gov Information about agricultural direct marketing. Send "subscribe direct-mkt" as a message to majordomo@reeusda.gov, with the subject line empty.

Agricultural Marketing Service Farmers Market Directory. Lists hundreds of farmers markets across the country. www.ams.usda.gov/farmersmarkets/map.htm or (202) 700-8317

Alternative Farming Systems' Information Center. CSA Resources for farmers & consumers. www.nal.usda.gov/afsic/csa or (301) 504-6449; afsic@nal.usda.gov

Farmer/Consumer links www.localfarm.net and www.smallfarms.com link farmers and consumers

Internet Marketing Center. Offers marketing tips and strategies, research resources, a free monthly newsletter and more. www.marketingtips.com/index.html

Sustainable Farming Connection, <http://metalab.unc.edu/farming-connection>. Offers a forum for farmers to find and share information,

including a diverse collection of resources and links about marketing. See "Net Marketing: How Farmers are Using the Internet to Reach and Satisfy Customers."

BOOKS, PERIODICALS AND VIDEOS

Direct Farm Marketing and Tourism Handbook, by the Arizona Department of Agriculture. A comprehensive overview of direct marketing options, available at <http://ag.arizona.edu/lc/pubs/dmkt/dmkt.html>

Direct Marketing of Farm Produce and Home Goods, by John Cottingham, et al. (A3062). Available from Wisconsin Cooperative Extension Publications. Free. (608) 262-3346

The Direct Marketing Resource Notebook by Nebraska Sustainable Agriculture Society. Includes case studies of different direct marketing enterprises, Midwestern state and federal marketing contacts and an extensive resources section. \$20. (402) 254-2289

Dynamic Farmers Marketing: A Guide to Successfully Selling Your Farmers' Market Products, by Jeff Ishee. Covers the best ways for farmers to display their products and themselves, the best items to sell and how to interact with customers. \$16.95. Bittersweet Farmstead. (540) 886-8477.

"*Farmers and their Diversified Horticultural Marketing Strategies.*" by the Center for

Sustainable Agriculture. 50-minute video, \$15. (802) 656-5459 or susagctr@zoo.uvm.edu.

Farming Alternatives: A Guide to Evaluating the Feasibility of New Farm-Based Enterprises. \$11.50. NRAES-Northeast Regional Ag Engineering Service. (607) 255-7654 or nraes@cornell.edu. Catalog includes relevant titles such as *Facilities for Roadside Markets*, \$7, and *Produce Handling for Direct Marketing*, \$7 at <http://rcwpsun.cas.psu.edu/NRAES>

Food Consumption, Prices, and Expenditures, 1970-97 by Judith Jones Putnam and Jane E. Allshouse. Economic Research Service, U.S. Department of Agriculture. (No.965) Describes U. S. consumer purchasing habits from 1970 to 1997. Free. (800) 999-6779; www.econ.ag.gov/epubs/pdf/sb965/index.htm

Free Range Poultry Production and Marketing, by Herman Beck-Chenoweth. A guide to raising, processing and marketing chicken, turkey and eggs. \$29.50. (740) 596-4379

Growing for Market newsletter, published by Lynn Byczynski. \$27/yr. (800) 307-8949. *Marketing Your Produce: Ideas for Small-Scale Farmers* is a collection of GFM's best articles. \$20 + \$3 s/h.

Internet Marketing for Farmers (FS 510) by Washington State University Cooperative Extension, King County. Free. (206) 296-3900

The Legal Guide for Direct Farm Marketing, by Neil Hamilton. Offers tips about legal issues to consider when direct-marketing farm products. \$20. Agricultural Law Center, Drake University, Des Moines, IA 50311. (515) 271-2947.

Making it on the Farm: Increasing Sustainability Through Value-added Processing and Marketing, by Southern SAWG. Includes interviews with Southern farmers and ranchers who are adding value to their products, describes some of their practices and includes a list of resources. \$12. (501) 292-3714.

Marketing for Success: Creative Marketing Tools for the Agricultural Industry, by Robert Matarazzo, Doe Hollow Publishing, rjm@interactive.net or (908) 475-4460.

Pastured Poultry Profits, by Joel Salatin. This how-manual offers information about relationship marketing for poultry. \$30. ACRES USA. (800) 355-5313.

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To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice or TDD). USDA is an equal opportunity provider and employer.



Salad Bar Beef, by Joel Salatin. This guide explores marketing beef in addition to production methods to raise superior beef on pasture. \$30. ACRES USA. (800) 355-5313

Sell What You Sow! The Grower's Guide to Successful Produce Marketing, by Eric Gibson. This 304-page book specifies strategies from master marketers around the country. \$22.50. New World Publishing, (530) 622-2248.

Sharing the Harvest: A Guide to Community-Supported Agriculture, by Elizabeth Henderson with Robyn Van En. Lays out the basic tenets of CSA for farmers and consumers. \$24.95. Chelsea Green Publishing, (800) 639-4099; www.chelseagreen.com

Small Farm Today magazine. Six times/year for \$21. (800) 633-2535.



Alternative Farming Systems Information Center
National Agricultural Library, USDA, ARS
10301 Baltimore Avenue, Room 304
Beltsville, Maryland 20705-2351

Community Supported Agriculture (CSA) Resources for Producers

Compiled by Mary Gold,
October 1999

Introduction

This publication lists books, magazine and journal articles, periodicals, audiovisual materials, internet sites and organizations that are part of the web resource, "Community Supported Agriculture (CSA)" at the Alternative Farming Systems Information Center's website. The website is a cooperative effort between the Cooperative State Research Education and Extension Service (CSREES) and the National Agricultural Library (NAL) of the U.S. Department of Agriculture. The specific programs involved are CSREES's Sustainable Agriculture Research and Education (SARE) program and its Sustainable Agriculture Network (SAN), and NAL's Alternative Farming Systems Information Center (AFSIC). The CSA website, <http://www.nal.usda.gov/afsic/csa/>, also includes a database of CSA farms throughout the U.S., resources related to "Eating Seasonally and Regionally" and links to other sources related to sustainable agriculture.

Much effort has been made to provide accurate information about the resources listed in this publication.. Mention of a particular CSA, publication, website, or organization does not constitute an official endorsement or approval by the United States Department of Agriculture or the Agricultural Research Service of any product or service to the exclusion of others that may be suitable. **Suggestions as to additions and/or corrections to this list of resources are most welcome.**

A Little About CSA

From *Community Supported Agriculture (CSA): An Annotated Bibliography and Resource Guide* by Suzanne DeMuth (AFSIC, 1993):

"Community supported agriculture (CSA) is a new idea in farming, one that has been gaining momentum since its introduction to the United States from Europe in the mid-1980s. The CSA concept originated in the 1960s in Switzerland and Japan, where consumers interested in safe food and farmers seeking stable markets for their crops joined together in economic partnerships. Today, CSA farms in the U.S., known as CSAs, currently number more than 400. Most are located near urban centers in New England, the Mid-Atlantic states, and the Great Lakes region, with growing numbers in other areas, including the West Coast.

“In basic terms, CSA consists of a community of individuals who pledge support to a farm operation so that the farmland becomes, either legally or spiritually, the community's farm, with the growers and consumers providing mutual support and sharing the risks and benefits of food production. Typically, members or "share-holders" of the farm or garden pledge in advance to cover the anticipated costs of the farm operation and farmer's salary. In return, they receive shares in the farm's bounty throughout the growing season, as well as satisfaction gained from reconnecting to the land and participating directly in food production. Members also share in the risks of farming, including poor harvests due to unfavorable weather or pests. By direct sales to community members, who have provided the farmer with working capital in advance, growers receive better prices for their crops, gain some financial security, and are relieved of much of the burden of marketing.

“Although CSAs take many forms, all have at their center a shared commitment to building a more local and equitable agricultural system, one that allows growers to focus on land stewardship and still maintain productive and profitable small farms. As stated by Robyn Van En [1948-1997], a leading CSA advocate, "...the main goal...of these community supported projects is to develop participating farms to their highest ecologic potential and to develop a network that will encourage and allow other farms to become involved." CSA farmers typically use organic or biodynamic farming methods, and strive to provide fresh, high-quality foods. More people participate in the farming operation than on conventional farms, and some projects encourage members to work on the farm in exchange for a portion of the membership costs.

“Most CSAs offer a diversity of vegetables, fruits, and herbs in season; some provide a full array of farm produce, including shares in eggs, meat, milk, baked goods, and even firewood. Some farms offer a single commodity, or team up with others so that members receive goods on a more nearly year-round basis. Some are dedicated to serving particular community needs, such as helping to enfranchise homeless persons. Each CSA is structured to meet the needs of the participants, so many variations exist, including the level of financial commitment and active participation by the shareholders; financing, land ownership, and legal form of the farm operation; and details of payment plans and food distribution systems.

“CSA is sometimes known as "subscription farming," and the two terms have been used on occasion to convey the same basic principles. In other cases, however, use of the latter term is intended to convey philosophic and practical differences in a given farm operation. Subscription farming (or marketing) arrangements tend to emphasize the economic benefits, for the farmer as well as consumer, of a guaranteed, direct market for farm products, rather than the concept of community-building that is the basis of a true CSA. Growers typically contract directly with customers, who may be called "members," and who have agreed in advance to buy a minimum amount of produce at a fixed price, but who have little or no investment in the farm itself. An example of one kind of subscription farm, which predates the first CSAs in this country, is the clientele membership club. According to this plan, which was promoted by Booker Wheatley in the early 1980's, a grower could maintain small farm profits by selling low cost memberships to customers who then were allowed to harvest crops at below-market prices.”

Books and Articles

1996 CSA Farm Network, by Northeast Organic Farming Association. Still water NY: CSA Farm Network, 1996. 88 pp. [NAL Call #: HD1484 A15 1996]

On-line information/reviews: Sustainable Agriculture Sourcebook:
<http://www.sare.org/san/sourcebook/book/NY0412.html>

- and -

1997 CSA Farm Network, by S Gilman, editor. Still water NY: CSA Farm Network, 1997. 96 pp.

Availability: Steve Gilman, Coordinator, CSA Farm Network Publications, 130 Ruckytucks Road, Still water NY 12170, phone 518-583-4613; Volume I (1996), \$6.00 plus \$2.00 mailing; Volume II (1997), \$10.00 plus \$2.00 mailing; both Volumes I & II, \$14.00 plus \$2.50 mailing (\$16.50)

On-line information/reviews: Permaculture listserv (includes tables of contents for both volumes):
<http://metalab.unc.edu/london/permaculture/mailarchives/permaculture-WA/msg00509.html>

Basic Formula to Create Community Supported Agriculture, by R Van En. Great Barrington, MA: R Van En, 1992. 80 pp. [HD9225 A2V35 1992]

Availability: Biodynamic Farming and Gardening Association, P.O. Box 29135, San Francisco CA 94129-0135, phone 888-516-7797, fax 415-561-7796, e-mail biodynaimc@aol.com; \$12.95 plus \$4.50 shipping & handling (plus \$1 for each additional book ordered), checks payable to "Biodynamic Farming and Gardening Association"

A limited number of copies are also available from the Robyn Van En Center, c/o Center for Sustainable Living, Wilson College, 1015 Philadelphia Ave., Chambersburg PA 17201, phone 717-264-4141 ext. 3247, fax 717-264-1578; \$10.00.

On-line information/reviews: BDA: <http://www.biodynamics.com/books.html>

"Community Shared Agriculture: Putting the Culture Back Into Agriculture," by R Samson. *Sustainable Farming: The Magazine of Resource Efficient Agriculture Production* (1994) [NAL Call #: HD9225 A2V35 1992]

Availability: Ecological Agriculture Projects
<http://www.eap.mcgill.ca/MagRack/SF/Spring%2094%20E.htm>

"Community Supported Agriculture," by S Ehrhardt. *Dig Magazine* [1996?].

Availability: <http://www.digmagazine.com/96/56-96/sylvia.cfm>.

"Community Supported Agriculture," by E Wiggins. *Ag Opportunities (Missouri Alternatives Center)* (Nov./Dec. 1998) 9(1)

Availability: <http://agebb.missouri.edu/mac/agopp/arc/agopp022.txt>

"Community Supported Agriculture," by E Gibson. *Small Farm News* (Nov./Dec. 1993) pp.1, 3-4. [NAL Call #: HD1476 U52C27]

"Community-Supported Agriculture: A Risk-reducing Strategy for Organic Vegetable Farmers," by C Nickerson. *American Journal of Agricultural Economics* (1997) 79(5): p. 1729. [NAL Call #: 280.8 J822]

"Community Supported Agriculture: Can it Become the Basis for a New Associative Economy," by G Lamb. *Biodynamics* (Nov./Dec. 1994): p. 8-15.

Community Supported Agriculture Conference (University of California, Davis, Dec. 1993), Davis CA : Small Farm Center, 1994? 37 pp. (Proceedings, edited by G Cohn). [NAL Call #: S494.5 A65C65 1993]
Availability: ANR Communication Services, 6701 San Pablo Ave., Oakland CA 94608-1239, phone 800-994-8849, fax 510-643-5470; Product code SA-002, \$8.00.

“Community Supported Agriculture: Connecting Consumers and Farms,” by V Grubinger. *The Grower: Vegetable and Small Fruit Newsletter* (1993) 93(11): pp.6-7. [NAL Call #: SB321 G85]

Community Supported Agriculture: Growing Food and Community. Madison WI: Center for Integrated Agricultural Systems, College of Agriculture and Life Sciences, University of Wisconsin-Madison, 1998.
Availability: <http://www.wisc.edu/cias/pubs/resbrief/021.html>

The Community Supported Agriculture Handbook: A Guide to Starting, Operating or Joining a Successful CSA, by Wilson College Center for Sustainable Living. 88 pp. Chambersburg PA: Center for Sustainable Living, Wilson College, 1997. [NAL Call #: S494.5 A67C65 1998]
Availability: The Robyn Van En Center, c/o Center for Sustainable Living, Wilson College, 1015 Philadelphia Ave., Chambersburg PA 17201, phone 717-264-4141 ext. 3247, fax 717-264-1578; \$10.00.

Community Supported Agriculture: Local Food Systems for Iowa [December 1996]
Availability: PDF file at Iowa State University Extension,
<http://www.extension.iastate.edu/Pages/pubs/su.htm>

Community Supported Agriculture - Making the Connection: A 1995 Handbook for Producers, by University of California, Cooperative Extension, Placer County. Auburn CA; Davis, CA: University of California Cooperative Extension, Placer County; Small Farm Center, University of California, 1995. [NAL Call #: S494.5 A65C66 1995]
Availability: UC Cooperative Extension, Attn: CSA Handbook, 11477 E Avenue, Auburn CA 95603, phone 530-889-7385; \$31.81, make check payable to UC Regents.
On-line information/reviews: Press release reference,
<http://www.sare.org/san/htdocs/hypermail/html-home/10-html/0264.html>

“Community Supported Agriculture: Niche Market or Paradigm Shift,” by D Guenther, pp. 2-5 in *Greenbook*, Saint Paul MN: Minnesota Dept. of Agriculture, Energy and Sustainable Agriculture Program, 1996. [NAL Call #: S494.5 S86M56]
Availability: Energy and Sustainable Agriculture Program, Minnesota Department of Agriculture, 90 West Plato Blvd., St. Paul MN 55107, phone 651-296-7673; ask about free copies of this article as well as the *Greenbook* series.

“Community Supported Agriculture - Part II”, by J Hoffman. *The Natural Farmer* (special supplement, 1996).

“Community Supported Agriculture: Research and Education for Enhanced Viability and Potential in the Northeast,” by DA Lass. *Sustainable Agriculture Research and Education (SARE) Research Projects, Northeast Region* (1996). 31pp. (SARE Project Number: LNE95-63. Record includes computer diskette. Reporting period for this report is September 1995 to December 1996. Report includes publication entitled “1996 CSA Farm Network”). [NAL Call #: S441 S855]

"Creating a Market," by S Milstein. *The Mother Earth News* (1999) 172 pp.40-44. [NAL Call #: AP2 M6]

"CSA - A First Year's Experience," by J Bauermeister. *Washington Tilth* (1997) pp.3, 12-15. [NAL Call #: S605.5 W372]

"Direct Marketing Options: Farmers Markets, Restaurants, Community Supported Agriculture and the Organic Alternative," by S Gilman, pp. 118-121, in *Agricultural Outlook Forum. Proceedings* (Washington DC, 1999). Washington DC: USDA World Agricultural Outlook Board, 1999. [NAL Call #: aHD1755 A376]

Availability: WordPerfect and ASCII versions at
<http://www.usda.gov/agency/oce/waob/outlook99/99speeches.htm>

"Eight Tips From the Experts to Make Your Community Shared Agriculture Project a Success," by A Salm. *COGNITION: The Voice of Canadian Organic Growers* (1997). [NAL Call #: SB453,5 C6]

Availability: Ecological Agriculture Projects
http://www.eap.mcgill.ca/MagRack/COG/COG_E_97_04.htm

"Factors Influencing the Decision to Join a Community Supported Agriculture (CSA) Farm," by JM Kolodinsky and LL Pelch. *Journal of Sustainable Agriculture* (1997) 10(2-3): pp.129-141. [NAL Call #: S494.5 S86S8]

"A Farmer's Perspective on the CSA Movement," by J Leap. *The Cultivar* (1996) pp.7-8

Farms of Tomorrow Revisited: Community Supported Farms, Farm Supported Communities, by T Groh and S McFadden. Kimberton PA: Bio-dynamic Farming and Gardening Association, 1997. 294 pp. [NAL Call #: HD1491 U6G76 1997]

Availability: Biodynamic Farming and Gardening Association, P.O. Box 29135, San Francisco CA 94129-0135, phone 888-516-7797, fax 415-561-7796, e-mail biodynamc@aol.com; \$17.50 plus \$4.50 shipping & handling (plus \$1 for each additional book ordered), checks payable to "Biodynamic Farming and Gardening Association"

On-line information/reviews: BDA: <http://www.biodynamics.com/books.html>

"Filling the Boxes - Designing a CSA Crop Plan," by J Leap. *The Cultivar* (1997) pp.3-5.

"Growing Food, Growing Community: Community Supported Agriculture in Rural Iowa," by B Wells, S Gradwell, and R Yoder. *Community Development Journal* (1999) 34(1): pp.38-46. [NAL Call #: S521 C65]

Iowa Community Supported Agriculture Resource Guide for Producers and Organizers. Ames IA: Iowa State University Extension, 1999.

Availability: ISU Extension Distribution, 119 Printing and Publications Bldg., Iowa State University, Ames IA 50011-3171, phone 515-294-5247, fax 515-294-2945; Publication # Pm-1694, \$5.00, non-Iowa residents add \$4.25 shipping and handling.

The Legal Guide for Direct Farm Marketing, by N Hamilton. Des Moines IA: Drake University Agricultural Law Center, 1999 (Prepared under a grant from the US Department of Agriculture, Sustainable Agriculture Research and Education (SARE) Program)

Availability: Drake University Agricultural Law Center, 2507 University Ave., Des Moines IA 50311, phone 515-271-2065; \$20.00.

The Many Faces of Community Supported Agriculture (CSA): A Guide to Community Supported Agriculture in Indiana, Michigan, & Ohio, by LB Delind. Hartland MI: Michigan Organic Food and Farm Alliance, 1999. 107 pp. (Funding provided by the North Central Region Sustainable Agriculture Research and Education (SARE) Program through the Cooperative State Research, Education and Extension Service, U.S. Department of Agriculture under special project number 06709)

Availability: Michigan Organic Food & Farm Alliance (MOFFA), P.O. Box 530, Hartland MI 48353-0530, phone 810-632-7952, fax 810-632-7620, e-mail hccinc@ismmi.net, web <http://www.moffa.org>; Item # BK101, \$13.50 plus \$5.00 shipping and handling (\$1.50 each additional item), make checks payable to MOFFA.

On-line information/reviews: MOFFA <http://www.moffa.org/pubs.htm>

Maximizing Shareholder Retention in Southeastern CSAs: A Step Toward Long Term Stability, by DJ Kane and L Lohr. Portland OR: D. Kane, 1997 ("This study is supported by a grant from the Organic Farming Research Foundation (OFRF) in Santa Cruz, CA"). [NAL Call #: HD1484 K36 1997]

Availability: Organic Farming Research Foundation, P.O. Box 440, Santa Cruz CA 95061, phone 831-426-6606, fax 831-426-6670, email research@ofrf.org; \$2.00.

Rebirth of the Small Family Farm: A Handbook for Starting a Successful Organic Farm Based on the Community Supported Agriculture Concept, by B Gregson and B Gregson. (1st ed., Vashon Island WA: IMF Associates, 1996. 64 pp. [NAL Call #: HD1476 U62W24 1996]

Availability: IMF Associates, P.O. Box 2542, Vashon Island WA 98070; \$9.95, checks payable to IMF.

Sharing the Harvest: A Guide to Community-Supported Agriculture, by E Henderson and R Van En. White River Junction VT: Chelsea Green, 1999. 254 pp. (In partnership with Sustainable Agriculture Research and Education (SARE), Northeast Region) [NAL Call #: HD1492 U6 H46 1999]

Availability: Chelsea Green Publishing, P.O. Box 423, White River Junction VT 05001, phone 1-800-639-4099; \$24.95 plus \$6.00 shipping and handling

On-line information/reviews: The Publisher: <http://www.chelseagreen.com/Sharing/index.html>

Small Farm Resource Guide. Washington DC: Small Farm Program, USDA/CSREES, 1998.

Availability: USDA-Cooperative State Research, Education and Extension Service, Plant and Animal Systems, Stop 2220, 1400 Independence Ave, S.W., Washington DC 20250-2220, phone 202-401-4385, fax 202-401-5179, email sfp@reeusda.gov; Free. Also: <http://www.reeusda.gov/smallfarm/guide.htm>

"Small-scale Community Supported Agriculture." *Countryside and Small Stock Journal* (Mar. 1999) 83(2): p.78. [NAL Call #: S521 C62]

"Successful Transition to Organic Farming," by D Block. *In Business: The Magazine for Environmental Entrepreneurship* (Nov./Dec. 1998). (Magazine published by J-G Press, Inc., 419 State Ave., Emmaus PA 18049, phone 610-967-4135)

Sustainable Agriculture Research and Education (SARE) Program, National Database of Projects.
Washington DC: Sustainable Agriculture Research and Education (SARE) Program, CSREES, USDA,
1999.

Availability: <http://www.sare.org/san/projects/>

To Till It and Keep It: New Models for Congregational Involvement with the Land, by D Guenther. White
Bear MN: Land Stewardship Project, 1995.

“Western Region Community Supported Agriculture (CSA) Conference,” by J Lawson. Sustainable
Agriculture Research and Education (SARE) Research Projects, Western Region (1996) 9 p. (SARE
Project Number: SW94-022. Date of report is March 11, 1996. This is a final report.) [NAL Call #: S441
S8554]

“Who Leaves the Farm? An Investigation of Community Supported Agriculture (CSA) Farm
Membership,” by J Kolodinsky and L Pelch. *Consumer Interests Annual* (1997) 43: p.46.

“Why People Join CSAs.” *In Business: The Magazine for Environmental Entrepreneurship*
(Nov./Dec.1998). (Magazine published by J-G Press, Inc., 419 State Ave., Emmaus, PA 18049, phone
610-967-4135)

Video and Audio Cassettes

CSA: Be Part of the Solution. Slide show including 22 text slides and 44 photo slides that illustrate text.
Availability: The Robyn Van En Center, c/o Center for Sustainable Living, Wilson College, 1015
Philadelphia Ave., Chambersburg, PA 17201, phone 717-264-4141 ext. 3247, fax 717-264-1578; \$45.00.

CSA: Making a Difference. 15 minute video
Availability: The Robyn Van En Center, c/o Center for Sustainable Living, Wilson College, 1015
Philadelphia Ave., Chambersburg, PA 17201, phone 717-264-4141 ext. 3247, fax 717-264-1578; \$10.00.

CSA Clip Art. Over 300 images relevant to small-scale and CSA. Hard copy only.
Availability: The Robyn Van En Center, c/o Center for Sustainable Living, Wilson College, 1015
Philadelphia Ave., Chambersburg, PA 17201, phone 717-264-4141 ext. 3247, fax 717-264-1578; \$4.00.

CSA: Building a Future for Farming in the Northeast. Northeast CSA Conference Proceeding Audio
Cassettes. 38 lectures on audio tape.
Availability: The Robyn Van En Center, c/o Center for Sustainable Living, Wilson College, 1015
Philadelphia Ave., Chambersburg, PA 17201, phone 717-264-4141 ext. 3247, fax 717-264-1578; ask for
the list of tapes/order form; tapes are @5.00 plus \$1.65 shipping and handling, through Technical Video,
Inc., no checks.

Periodicals and Listservs

The Community Farm: A Voice for Community Supported Agriculture. Published quarterly, \$20/year.
Availability: Jim Sluyter and Jo Meller, 3480 Potter Rd., Bear Lake MI 49614, phone 616-889-3216,
e-mail: fsfarm@mufn.org
web site: <http://www.mufn.org/public/tcf>

Growing for Market: A Journal of News and Ideas for Market Gardeners. Published monthly,
\$30.00/year.
Availability: Fairplain Publications, P.O. Box 3747, Lawrence KS 66046, phone 785-748-0605 or
800-307-8949, fax 785-748-0609, e-mail growing4market@earthlink.net

CSA-L Listserv, CSA-L@prairienet.org e-mail list
listowners John Barclay (jbarclay@prairienet.org) of Prairieland CSA in Champaign, Illinois and Sarah
Milstein (milstein@pipeline.com) of Roxbury Biodynamic Farm in New York
Availability: subscription information: <http://www.prairienet.org/pcsa/CSA-L/>

Internet Resources

Center for Agroecology & Sustainable Food Systems, University of CA, Santa Cruz
"What is Community Supported Agriculture (CSA)?"
<http://zzyx.ucsc.edu/casfs/publicinfo/community.html>

Community Supported Agriculture in Maine
<http://www.state.me.us/agriculture/marketprod/communityag.htm>

Farmer's Market Online
Community Support (Resource Page)
<http://www.farmersmarketonline.com/Communit.htm>

Missouri Alternatives Center
<http://agebb.missouri.edu/mac/>

The Small Farm Program
USDA-Cooperative State Research, Education and Extension Service
<http://www.reeusda.gov/smallfarm>

Sustainable Agriculture Network
<http://www.sare.org/>

USDA Agricultural Marketing Service, Farmer Direct Marketing, Farm Direct Marketing Bibliography,
Part 8
http://www.ams.usda.gov/directmarketing/b_8.htm

Urban Agriculture Notes/City Farmer
Canada's Office of Urban Agriculture
<http://www.cityfarmer.org/>

Homepage for E-Mail List CSA-L@prairienet.org
<http://www.prairienet.org/pcsa/CSA-L/>
(includes resource and networking organizations, CSAs with Web pages, etc.)

Organizations

National Organizations

Alternative Farming Systems Information Center
National Agricultural Library, ARS, USDA
10301 Baltimore Ave., Room 304
Beltsville MD 20705-2351
phone 301-504-6559, fax 301-504-6409
e-mail afsic@nal.usda.gov
<http://www.nal.usda.gov/afsic>

American Farmland Trust
Agricultural Economic Development, Technical Assistance
Herrick Mill, One Short Street
Northampton MA 01060
phone 413-586-4593; fax 413-586-9332
<http://www.farmlandinfo.org>

Appropriate Technology Transfer for Rural Areas (ATTRA)
P.O. Box 3657
Fayetteville AR 72702
phone 800-346-9140 (M-Th 8:30am-4:30pm CST; F 8:30am-12:30pm CST)
<http://www.attra.org/>

Biodynamic Farming and Gardening Association
P.O. Box 29135
B'dg 1002B, Thoreau Center, The Presidio
San Francisco CA 94129-0135
phone 415-561-7797; fax 415-561-7796
e-mail biodynamic@aol.com
<http://www.biodynamics.com>

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About AFSIC

The Alternative Farming Systems Information Center (AFSIC) is one of several topic-oriented information centers at the National Agricultural Library (NAL). The Library, located in Beltsville, Maryland, is the foremost agricultural library in the world, and is one of four U.S. national libraries along with the Library of Congress, the National Library of Medicine, and the National Library of Education. AFSIC is supported, in part, by USDA's Sustainable Agriculture Research and Education (SARE) program. AFSIC specializes in locating and accessing information related to alternative cropping systems including sustainable, organic, low-input, biodynamic, and regenerative agriculture. AFSIC also focuses on alternative crops, new uses for traditional crops, and crops grown for industrial production.

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the wisconsin foodshed

Family Farmer Cheese

Addressing milk pricing injustices and family dairy farm loss

Cheese carrying the Family Farmer Cheese label is designed to address milk price fluctuations and dairy farm losses. The cheese is distributed through Family Farm Defenders, a coalition committed to farmer-controlled and consumer-oriented food and fiber production. All cheese sold under the Family Farmer Cheese label guarantees a fixed price of \$16 per hundredweight of milk, giving dairy farmers a reasonable and stable price for their milk.

With this Family Farmer Cheese project, Family Farm Defenders has changed its focus from changing dairy policy to increasing consumer action. Family Farm Defenders is counting on consumers to make choices with their cheese purchases that will insure that family dairy farmers can earn a reasonable living from their milk check.

During the first few years of its existence, the Family Farm Defenders focused its efforts on legislative and regulatory problems, reacting to the effects federal milk pricing systems have had on family dairy farms all over the nation. "The value of milk from a small dairy farm is determined to maximize profit for large conglomerate dairy interests," says John Kinsman, LaValle, Wisconsin, dairy farmer with the Family Farm Defenders.

A sense of urgency among the group's members provoked them to speak out in the "Dump the Dairy Board" campaign and the fight against rBGH in the nation's milk supply. Both efforts enjoyed successes and failures. However, the rate of loss of family dairy farms has not slowed, and milk prices have remained low.

"After banging our heads against the legislative walls for a long time, we began discussing creative ways to more directly influence the markets," says Kinsman. In partnership with consumers, food safety groups, and farmers, board members worked to identify and address the main

problems facing small family dairy farms. Many meetings later, they identified the primary targets for action: milk price fluctuations resulting in farm financial insecurity, artificially low milk prices in relation to dairy product prices in the store, and food quality and environmental deterioration due to conglomerate dairy industry practices.

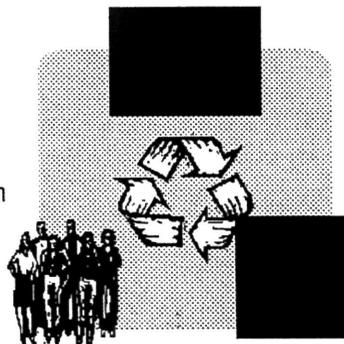
Realizing that producers and consumers needed to team up to attack unfair economic practices, they approached Bob Wills at Cedar Grove Cheese, a dairy processor in Plain, Wisconsin, to ask for guidance and support. "We decided to market a

cheese brand based on a fair relationship between trading partners, providing consumers an opportunity to vote for family dairy farms with their food dollars, and providing family dairy farmers financial security," says Francis Goodman, Wonewoc, Wisconsin, dairy farmer and member of Family Farm Defenders.

Family Farm Defenders believes their pricing structure gives farmers a fair portion of the consumers' dollar.

Family Farm Defenders plays a pivotal role by taking the place of middle traders, distributors, and marketers while acting in the interest of family dairies. By collecting a minimal premium (ten percent of costs) from the sale of Family Farmer Cheese, Family Farm Defenders is able to achieve some self-sufficiency of funds, while offering a fair business model that can be replicated at other small processing plants.

continued on back page



Waiter! Where's my foodshed?!

the wisconsin foodshed relies upon submissions from food system activists, researchers, and organizers for its content. Lately, the editors' cupboards have been a bit bare. Have folks been hoarding for Y2K? Whatever the reason, we would like to hear from you! (See the bottom of page 2 for contact information.)

What's for Lunch?

news about the food system

Direct meat marketing enhances local food systems and local culture

Three hundred sheep roam the rolling hills of Doc's Summit, a 232-acre farm in southwestern Wisconsin near Mineral Point. Doc's Summit is also home to Matthew Schickel and Jennifer Nugent, second generation farmers committed to sustainable farming practices. Like many Wisconsin livestock farmers, Matthew and Jennifer are facing low prices and are searching for alternative ways to process and market their livestock, including direct marketing. And they are taking part in a unique effort in direct marketing called Healthy Meats!

Direct marketing helps farmers recapture the profit margin they forfeit by selling their crop through processors, wholesalers, distributors, and brokers. However, direct marketing creates a new set of challenges. Farmers who use direct marketing need access to ample state-inspected freezer space and access to a state-inspected processing plant. They need to develop promotional materials and set appropriate prices. Direct marketing also means direct and frequent interaction with the public, which can be both gratifying and frustrating. Little information is available on what direct meat marketing strategies work best under what circumstances.

In 1997 Matthew and Jennifer, along with seven other farmers interested in the promise of direct marketing developed the Healthy Meats! project coordinated by Michael Fields Agricultural Institute (MFAI), a not-for-profit sustainable agriculture research and policy center located in East Troy, Wisconsin in collaboration with the UW-Madison Center for Integrated Agricultural Systems (CIAS). The project's goal is to gather and share useful direct marketing information for interested farmers and to create a model for direct marketing.

The philosophy behind Healthy Meats! is that everyone is entitled to healthful, nutritious food, and a food system that provides for the long-term survival of small- to medium-sized family farms using environmentally sustainable practices is in the best position to provide such food. Healthy Meats! farmers are all committed to good land stewardship practices, humane methods of animal husbandry,

and socially responsible non-exploitive farming methods. They see direct marketing as an integral part of their long-term economic viability.

Most Healthy Meats! farmers currently market their meat at the Dane County farmers market. Farmers markets develop a loyal base of customers and provide a way for farmers to advertise that they can deliver meat direct to customers' doors throughout the year. In its initial stages, Healthy Meats! farmers tried to build on the success of farmers markets by creating a brochure listing farmers and their products and by coordinating meat tastings and other publicity.

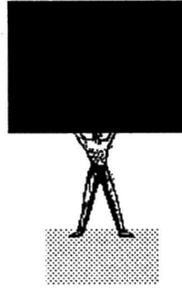
Healthy Meats! farmers tried techniques that worked for vegetable farmers, but had mixed results. For example, consumers seem less inclined to call Healthy Meats! producers, and have constraints like lack of freezer space or a need for preparation convenience. Once contact has been established between farmers and consumers, however, consumers have proven to be satisfied and loyal.

Healthy Meats! farmers hope to attract more customers by asking current customers to coordinate neighborhood meat purchasing. This would decrease transportation costs, increase sales, and foster community around food. Healthy Meats! farmers are planning a public cookout with meat dishes prepared by Madison chefs.

In addition to getting the word out about their own meat and farming practices, Healthy Meats! farmers plan to provide information about industrialized livestock production's impacts on animal and human health, rural development, and the environment. A study of the problems associated with conventionally raised meat is underway to ensure that Healthy Meats! makes truthful statements about the meat industry.

Healthy Meats! farmers are working with SHARE, a food distribution organization that serves low income families. SHARE is interested in purchasing Healthy Meats! ground beef in bulk. This helps farmers find a market for their less popular cuts of meat, and addresses the group's social justice goals.

continued on page three



the wisconsin foodshed

Vol. 3, Issue 1 November 1999

the wisconsin foodshed is a food systems newsletter produced by the Center for Integrated Agricultural Systems. CIAS is a sustainable agricultural research center at the University of Wisconsin-Madison, College of Agricultural and Life Sciences. Please contact us to submit articles or for more information on CIAS' food systems research programs.

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From Field to Table

research on the food system

Study explores farmers' options: selling produce to retail stores

Small-scale growers of certified organic vegetables and fruits use a variety of marketing options: farm stands, farmers' markets, community supported agriculture, and wholesale marketing of goods through local specialty groceries and natural foods cooperatives. Sales to retail stores is another opportunity for producers of certified organic produce. While many retail produce buyers take advantage of the rich and steady year-round supply of organic produce from California, some also buy local, organic produce.

Laurie Greenberg of Cooperative Development Services in Madison, Wisconsin, with support from the UW-Madison Center for Integrated Agricultural Systems, completed a study to assess the retail marketing opportunities for local, organic produce growers in the Upper Midwest. She interviewed 21 retail produce buyers in Minneapolis/St. Paul, Minnesota, and Madison, Wisconsin.

Produce buyers cited numerous reasons for carrying local, organic produce. It is generally considered of good quality and appeals to some consumers who prefer organic food. Buyers saw numerous advantages to locally-raised produce:

- **Locally grown product is preferred by customers; people love it.
- **Some customers want to support local farmers.
- **Product can be "super" fresh.
- **Local producers can get their products to the store faster than those shipping from long distances.

Greenberg found that produce buyers are a diverse lot, with different needs. But the buyers cited several common issues they consider in buying local, organic food. Quality was the most important issue cited by all produce buyers. Although buyers can get the quality they want from California, high quality

local produce is also attractive to them. Price is another important consideration for buyers. Some outlets can sell higher priced local, organic produce more readily than others. Buyers highlighted grower integrity as key to building a relationship, and maintaining communication as crucial to deepening the buyer-grower tie.

Marketing cooperatively can be a real time-saver for growers of local, organic produce, and most buyers prefer to negotiate business arrangements with a single representative. But buyers had concerns about cooperative marketing. They appreciate and in many cases require product consistency in size, shape, and quality, as well as standardized packaging and

labeling. Growers marketing cooperatively need to work diligently to provide a standard product across all participating farms.

Greenberg offers several suggestions for growers approaching retail buyers. First, prepare an availability sheet describing your products and prices. Send the sheet to buyers for whom you have collected enough information on to know that their needs match what you have to offer. Have a knowledgeable, professional growers' representative meet with the buyers, and work out sale details. And finally, keep in touch with the buyer.

Many opportunities are available for growers interested in selling to retail stores. They can join an existing cooperative, form a new cooperative, or work out another kind of arrangement. But maintaining relationships and paying attention to details are key to making it work.

CIAS *Research Brief #38* discusses the study in more detail. For more information, contact Cooperative Development Services at (608) 258-4396.



Direct meat marketing

from page two

Along with these marketing initiatives, Healthy Meats! farmers are interested in addressing barriers to direct marketing. For example, finding affordable, local processing facilities has been a difficult task for Healthy Meats! farmers. Processing problems will need to be addressed strategically by policy makers to create a business environment that is friendly to small- and medium-size farmers. Ultimately, Healthy Meats! will partner with CIAS to evaluate the merit and drawbacks of various direct marketing strategies and policy options.

Matthew and Jennifer work hard to keep the values of good stewardship alive and their sustainable farming approach might be lost without new solutions and support. Direct marketing is one tool to help farms thrive today . . . and survive for generations to follow.

For more information about Healthy Meats! or for a producer brochure, please contact project coordinator, Derek V. Lee at (608) 257-1660 or e-mail him at derlee@itis.com

—contributed by Derek Lee

Family Farmer Cheese *from page one*

The third and most crucial step is finding consumers to buy Family Farmer Cheese, and getting it to them in a convenient manner. Until recently, Family Farm Defenders gourmet cheese has been available only by mail order. Yet to make a significant

and lasting difference for the farmers, the organizers knew that their products must be more accessible. This year, the group offers new ways of becoming a consumer of Family Farmer Cheese. And anyone who takes delight in eating delectable hand-made gourmet cheese is qualified.

One way to get the cheese is for consumers to join together into groups of "Family Farmer Friends" to place a total cheese order of 50 pounds or more. Family Farm Defenders is offering eight varieties of handmade cheeses at \$3.80-\$4.10 per lb. Built into this price is 50 cents per pound for the Family Farmer Friends group to use as a fundraiser or to cover shipping costs (if the cheese must be delivered outside of their existing truck route). Church or community groups that meet regularly, or Community Supported Agriculture farms can also act as links from producer to consumer in solidarity with family dairy farms.

If you are interested in forming a cheese buying group, or would like to learn more, please call (608) 255-1086 and leave a message for Alicia Leinberger or e-mail her at aguilatres@yahoo.com

—contributed by Alicia Leinberger

Table Settings

- According to the Organic Trade Association's July, 1998, newsletter, Wisconsin has 900 certified organic acres. Only three states have more: Texas (18,000 acres), California (13,765), and Florida (1,312). Idaho also has 900 acres.
- Wisconsin had 16.4 million acres of agricultural land in 1998, making certified organic acres one half of one percent of the total.
- According to the 1997 USDA Census, Wisconsin has 3,843 farms engaged in direct marketing, ranking eighth nationwide. (California has the most with 5,901.)
- The value of direct market sales in Wisconsin was \$21,866,000 in 1997, ranking sixth nationwide. (California was first at \$73,179,000.)

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ALTERNATIVE MEAT MARKETING



LIVESTOCK TECHNICAL NOTE

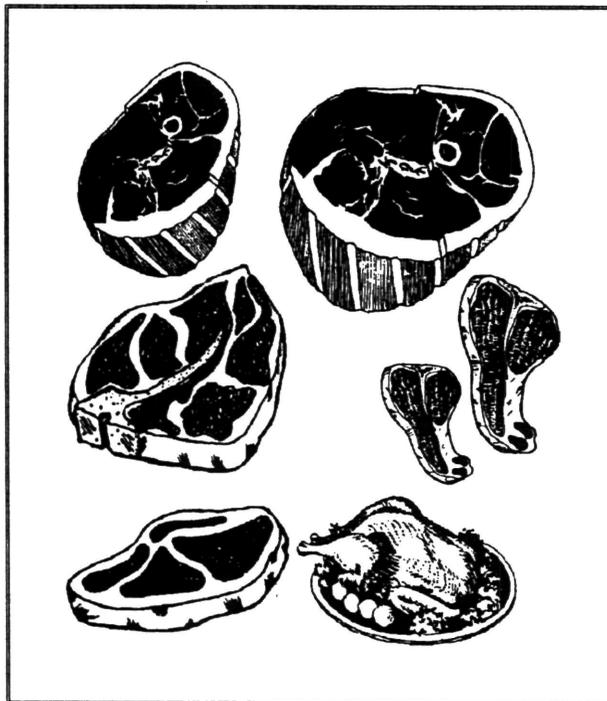
ATTRA is the national sustainable agriculture information center funded by the USDA's Rural Business -- Cooperative Service.

ABSTRACT: *This publication offers general information on alternative meat marketing. Topics include pitfalls to be aware of, production and processing, different types of direct marketing options, legal and regulatory considerations, and information on differentiating products through organic certification, natural and environmentally sound production, and targeting ethnic and religious markets. Information on production and marketing of meat products from specific species is also available from ATTRA (see Related ATTRA Materials) and from other sources (see Resources).*

By Holly Born
ATTRA Program Specialist
May 2000

INTRODUCTION

Marketing is an important and challenging task for all farmers and livestock producers. Livestock production is high-value production, and not only is the final product often perishable or semi-perishable, but there are relatively narrow windows during which slaughter stock are at their market peak. In this respect, livestock production



shares much with the fresh produce industry – the product has to be sold within a certain time, and the buyers know it.

Unlike the produce industry, however, much livestock production, especially that involving cattle, requires very long lead times that preclude rapid changes in plans. From the moment a producer decides to retain a heifer calf for breeding it will be roughly four years before her calf is on the consumer's plate. Such

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generally long lead times, coupled with the relatively perishable nature of many livestock products, underline the fundamental importance of developing an effective marketing plan for each livestock enterprise (1).

Faced with the increasing concentration of today's conventional market, in which livestock producers have less and less control over the prices they receive, producers need to take advantage of every opportunity for innovative marketing and adding of value. Alternative marketing can provide an opportunity to receive fairer prices for livestock or meat products than conventional channels offer.

Alternative meat marketing can be the backbone of the farm business, or a way to supplement income in times of low prices in conventional markets. Many farmers sell the majority of their livestock on the conventional market and direct-market a few head for extra cash. Others may not be livestock producers, but have some acreage that would be suitable for feeding out a few head for the local freezer market, for example.

Many small farmers find that diversification allows them to make maximum use of their land as well as to maximize their returns. For example, pasturing a few head of cattle and a herd of sheep or goats allows farmers to offer a mix of products while maximizing pasture resources. Small ruminants offer more efficient pasture utilization and conversion than cattle, and have different forage preferences. Swine and poultry may also play a role in the integrated farm. The shorter production cycle of poultry allows more continuous sales and

more frequent income. Offering poultry can serve to gain customers for the other meat enterprises. While few consumers are willing to commit to spending hundreds of dollars for a half side of beef, almost everyone can afford to try a whole chicken or a dozen eggs. Once they taste the difference, they'll be much more inclined to buy

RELATED ATTRA MATERIALS:

- * Alternative Beef Marketing
- * Alternative Marketing of Pork
- * Bison Production and Marketing
- * Sustainable Chicken Production and Marketing

meat.

Ultimately, the success of any meat or egg producer depends on marketing. Producers who want to "cut out the middleman" must be prepared to wear many hats. While margins are

Questions to Ask Yourself

What market segments do you want to focus on? Why? What are the needs of each segment? What type of product(s) do you need to produce to meet the needs of each segment? Can you do this profitably?

For example, you may decide to focus on segments that care about health aspects of meat, because you think that there is a large potential customer base, because you want to produce in an environmentally friendly way while reducing production costs, and because you can sell at a premium. These segments may focus on low fat, non-medicated, and/or organic. Consider breed and methods of production: one segment might want more tender/fattier meat that is certified organic, another might prefer a grass-fed or very lean product. What types of cuts and sizes do these consumers want? Can you produce these while not losing money on less popular cuts? Do customers need education about aspects of your products, and if so, how can this be done? Where do consumers in these segments shop, and can you get your product to them? Or give them good reasons to come to you? For more information, request the ATTRA publications *Direct Marketing* and *Evaluating a Rural Enterprise*.

considered excessive by some, be aware that the middleman does earn a large share of the end price by performing a wide range of functions. Some of the functions you will be taking on include processing, packaging and labeling, storage, transportation, and marketing. Marketing includes research, targeting markets, advertising, and going out and making the sale. This can be one of the most difficult aspects for producers to master. While it is relatively simple for a good producer to learn how to produce something different, marketing is an entirely different occupation. To succeed, you will need to learn the jargon of business and how to feel comfortable and confident when drumming up new business. You may want to contact your local university's college of business or small business development center for recommendations on good introductory materials to get you started.

PITFALLS

As you'll read below, there are many decisions the marketer has to make. With each decision there is the opportunity to make mistakes. Some of these mistakes are fairly easy to resolve, such as changing the type of products you offer to better suit customer preferences. Some, however, can be costly. You need to be aware of what you as a producer can realistically hope to accomplish by direct marketing meat, and decide first and foremost whether what you can accomplish will meet your needs. Very few producers can meet all their financial needs in the first several years of direct marketing meat. Even when the market is there, doing your own marketing can take an incredible toll on your time, sanity, and family and personal life.

Many small producers find that when they begin direct marketing meat, it practically sells itself. Word of mouth and some minimal promotion let them sell out quickly. Encouraged by the great response, producers see what appears to be the answer to their farm problems and begin expanding production and investing in facilities and equipment. What they don't realize is that after getting beyond a certain number of sales a year, they may "hit the wall" of demand. In other words, the market for these higher-priced

specialty products is shallow: there are a limited number of people who are willing and able to buy. This turning point will come at different sales levels depending on the size of your community and the number of customers inclined to buy your products. The "easy" customers have all been located and supplied to their satisfaction, and the freezers begin to fill up.

Selling more products then becomes a true challenge. This is the point where the real marketing begins, as you have to target, educate, and persuade consumers and food industry people to try to buy your meats. Making the transition from selling a few head a year to full-time commercial meat marketing is extremely difficult, and the odds of success are low. You will need to carefully evaluate your goals and resources to decide whether you want to take that next step. Many producers have tried and failed. Beginning to doubt their own abilities, they get discouraged. A hidden key to many of the success stories you have heard is that the producers had some source of capital beyond farm income and bank loans. Often this capital comes from previous, non-agricultural jobs, a well-paid spouse, or an inheritance. The point is that unless you are fortunate enough to be in this position, your best bet is to start small and be patient.

The Tallgrass Prairie Producers' Cooperative found how difficult marketing can be. Pete Ferrell, a cooperative member, says:

"The wholesale meat business is totally ruthless and cut throat. The minimum volume for a successful wholesale business is pretty high. We figure our breakeven is around 30 head a month. You are going to need a lot more capital than you think and you need to start out with experienced management. We made a lot of costly mistakes early on because we didn't know what we were doing...In retrospect, we should have hired a consultant who understood the natural meat trade. We have learned it the hard and expensive way – by doing it wrong first (2)."

Annie Wilson, another Tallgrass member, relates some of the co-op's experiences (3). She says that

members thought that direct marketing would require less capital and lower risk than conventional marketing, but found that it was still very risky. Consumers expect to pay less, since they are buying direct and usually in bulk. A large number of small sales mean much more

time is required for order processing and delivery to generate the same amount of sales dollars. Given this, she questions whether it is truly possible to “beat the middleman.”

Profitability, Wilson says, means access to volume markets, cost-effective operations, and professional management. The latter is required to make the first two possible. There is a critical mass of supply needed to get into the volume markets and to run a cost-efficient operation. There is also the question of capital needs, and the need to gain enough expertise to develop a business plan and manage the business. Business planning and management was much harder and took more time than the coop had expected. At the minimum, says Wilson, gross margins and cash flow need to be evaluated monthly. Cash flow in particular makes or breaks the business. As is true in any enterprise, cash shortfalls at critical times can put even a very profitable business out of business. Wilson, like many producers, found that it was inefficient to take time from being an excellent producer to be even an average marketer. She thinks that “alternative” marketing shouldn’t always mean direct marketing. She encourages producers to consider “new generation” cooperative marketing through viable-scale, functionally integrated, professionally managed, producer-owned enterprises.

PRODUCING AND PROCESSING FOR QUALITY AND CONSISTENCY

Regardless of product or marketing outlet, developing a sales base depends on being able to deliver a consistent product. While there may be more tolerance for slight inconsistencies among consumers who have developed a relationship with the producer, consistency is cited over and over as a key factor in sales to restaurants, stores,

and other non-consumer direct outlets.

Consistent quality begins at the production level with selection of the right breeds of livestock for your markets.

For example, a grass-finished beef producer who is targeting health-conscious consumers and plans to market beef for the freezer will need to avoid large-frame cattle bred for the feedlot, as these breeds may not do well on pasture. Additionally, the smaller breeds of cattle offer smaller cuts of meat, which are more appealing to today’s smaller families with limited freezer space. On the other hand, a producer targeting the “gourmet” niches may need breeds that put on more fat for the tenderness and mouth-feel that this segment craves. In addition to breed selection, careful management is required to avoid variations in flavor caused by differences in forage, age at slaughter, and so on.

You may need to change your production methods to better accommodate marketing. For example, some farmers combine baby beef marketing with innovative herd management: cows are bred to calve in the late summer, and the calves weaned when they go out to pasture the following spring. The young stock are large enough to profit from good pasture, but are slaughtered before having to be carried over another winter. One disadvantage to marketing baby beef is that the price per pound may need to be somewhat higher to generate the same gross income per animal.

- **Processing**

Producing a quality animal is only the first step in producing quality meat products. The ability to offer a safe and attractively packaged product is a basic requirement for successful marketing. You would be well advised to learn as much as you can about slaughtering, cutting, aging, packaging, and so on. Learning about cuts, dressing percentages, and weights is crucial. This information is available from most university meat science textbooks or departments. While basic information is available from textbooks, it can be difficult to relate the diagram in the book to the actual carcass at the processing facility. If at

all possible, you should try to get some hands-on experience. Some universities offer workshops and short courses at their teaching facilities.

- **New Rules**

In July 1996, the USDA-Food Safety and Inspection Service (FSIS) announced implementation of new rules for improving the safety of meat and poultry. A major component of the final rule is the Pathogen Reduction/Hazard Analysis and Critical Control Points (HACCP) system, a science-based strategy for protecting public health. Many small processing plants are uncertain about their future due to the implementation of HACCP. Before making long-term marketing plans, you may want to check with potential processors to make sure that they will be able to continue operating under HACCP. For more information on USDA regulations for processing meat, milk, or egg products, call the USDA Technical Information Service in Omaha, Nebraska, at (402) 221-7400.

There are basically three levels of inspection: federal, state, and uninspected or custom-slaughter plants. Meat processed at a federally inspected plant may be sold in any state, while meat from state-inspected plants can usually only be sold in-state, and is subject to state regulations. Uninspected plants usually process for the owners' use, and meat processed in these plants must be stamped "Not For Sale". Your marketing decisions are likely to be based on your processing arrangements. For example, many stores and restaurants demand federally inspected meats. Liability insurers may also require federal inspection.

However, small producers are finding that industry consolidation hits home when they begin looking for a suitable processing facility. Federally inspected processing plants that are willing to keep your meat separate, or even to take on small numbers of animals, are increasingly difficult to find. Larger plants may not be equipped to do custom butchering for smaller producers. Those that are willing to custom process may not meet your standards of cleanliness and integrity. What are your options?

You may be able to pool your livestock with other producers' in order to meet the volume that some processors demand. Or, you may be able to use university meat science department facilities. If federal inspection is not possible, your marketing decisions will have to be based on using either a state-inspected facility or making arrangements with custom processors. The marketing options discussed below give some general guidance as to which markets require which types of processing.

A bill to allow state-inspected meats to be sold interstate and internationally was introduced by South Dakota Senator Thomas Daschle in late 1999 and referred to the Senate Agriculture Committee. There is some controversy regarding whether to wait to make this bill a law until HACCP regulations are fully implemented, or to pass the bill as soon as possible. Ohio Agriculture Department director Fred Dailey, who spearheaded the move to change regulations, says that this legislation will not only increase interstate marketing options but is also likely to increase in-state meat sales. Distributors and retailers will no longer have to segregate federal and state-inspected meat and poultry products in their warehouses and delivery trucks, for instance. Dailey also expects this action to improve competition by providing livestock producers with more markets for their animals (4). For current information on the status of this bill, check "Bill Summary and Status" for the 106th Congress for Bill "S. 1988" at <http://thomas.loc.gov/home/thomas.html>. If you would like to express your opinion about this bill, contact information for all Senate and House members by zip code is available at <http://www.congress.org>.

When selecting a processor, look for facilities that offer the level of inspection you desire and that are clean. Bacterial build-up is immediately evident to the nose. The processor should be able to package with Cryovac™ plastic film (see Packaging, below). When you find a good processor, it will be essential to develop a strong and mutually beneficial relationship. Some questions to ask prospective processors include: In addition to their certification level, has the processor had any experience in working with

direct-market/alternative-market producers? Has this experience been successful? Is the processor willing to work with your special needs? Is the processor interested in establishing a long-term business relationship? Producers need to "think like the butcher thinks" and be able to talk their language. You should be there while the butcher cuts and pay attention to the process. Keep instructions as simple and straightforward as possible. Some producers pay higher prices during busy processing times to ensure that their livestock get priority.

Aging of beef is recommended for tenderness and taste (pork and lamb are not aged). Ideally, the beef should hang for at least two weeks, preferably three. Pay the processor a bit more if needed to ensure enough aging time. Producers should insist on quick-freezing the meat no matter what packaging method is used. Although home freezers are designed to maintain previously frozen products, they can lower the final quality of fresh meat because they are not designed to freeze large amounts of meat at one time. Disposing of offal can be a major challenge for the processor. Be prepared to pay more or negotiate some other concession if the processor will perform this service. Finally, remember that the processor benefits too (from use of your trim, for example), so being aware of this can help you negotiate a win-win outcome.

- **Packaging**

All packaging should be done with airtight, high quality freezer paper or Cryovac™. Be aware that customers, especially first-time buyers, may want to buy meat that is packaged like the meat they see in the store, advises Jerry Jost of the Kansas Rural Center (5). This means using Cryovac™ packaging for "everything except soup bones", offering smaller portion sizes, not confusing carcass weights, etc. Jost

also recommends giving bulk customers the option of paper or Cryovac™. Vacuum packing meat with a Cryovac™ machine is perhaps the best method of packaging meat. The vacuum-sealed meat is not exposed to air and does not suffer from freezer burn. However, this will add about ten cents a pound extra to costs.

Each package should be marked with the name of the cut and the date packaged. It may be possible to provide the slaughterhouse with a stamp containing the necessary farm information, in addition to the required "NOT FOR SALE" wording required by law when the product is not federally inspected.

- **Types of product to offer**

The complexity of balancing purchases of different cuts among multiple buyers is a challenge that most producers, especially beginning marketers, may not want to take on. Small-volume producers primarily market whole, half or quarter animals so they do not have to find alternative uses for slower-moving cuts. This is the easiest since there is little inventory to carry and no storage hassles or costs, as well as no losses from unsold fresh product. For smaller livestock, this may be the best option.

However, many beef farmers begin by marketing sides of beef, or even whole animals; in most cases they discover that sides simply involve too much meat for the average family. The consumer has to pay too much money up front, and the meat takes too long to consume. Not only does

YIELD INFORMATION

These are some very general guidelines to help estimate meat yields from the Sustainable Farming Association's Locally Produced Meat Fact Sheet Series (see "How to talk to customers" below for more information).

Weights are in pounds.

	<u>Beef</u>	<u>Pork</u>	<u>Lamb</u>
Live weight, whole animal	1000	250	95
Hanging weight (after slaughter)	682	175	40
Total meat yield after processing	550	165	33

So, a half beef will yield about 200 pounds of meat; a quarter about 100 pounds.

quality suffer after many months in the freezer, but the consumer is likely not to buy a side every year. Such start-and-stop marketing is often difficult to manage.

One common response to the problem has been to sell quarters rather than sides, but most preferred cuts are at the rear end of the animal, leaving the farmer to seek additional markets for shoulders and such. One response has been to sell "split halves" containing cuts from both front and hind quarters. Another response has been to slaughter short-keeps (700-850 lb. live) as "baby beef." Baby beef is not only tender without having a fatty finish to it, but there is simply less meat on a side, bringing the product more into line with current eating trends (1).

Other farmers have focused on the box market, providing a selected combination of cuts to particular market segments; such meat is often sold through catalogs and usually shipped via postal or courier service (with a block of dry ice to keep it frozen). Still others deliver boxes of beef directly to consumers in regional centers.

Pork, lamb, goat, bison, rabbit, and other specialty meats present even greater marketing challenges than beef and poultry. The meat being marketed is less popular, less well known and/or more expensive than beef and poultry. Most of these meats are sold in relationship, ethnic, or niche markets, and while the profits are often good, the markets are not particularly deep. A common characteristic of markets lacking depth is that there is little room for expansion, and even a modest amount of competition can erode profits severely.

Producers of specialty meats will need to be even more careful than beef and poultry producers in their work of planning and developing markets. Profitability can evaporate in a hurry if a producer goes to the extra effort and expense of bringing a specialty meat onto the market, particularly certified organic meat, only to find that there is no demand for the product at a price the producer can live with.

- **Pricing**

Your first step will be to figure out what prices you will need, for a projected sales level, to at least cover your costs (break-even) or to achieve your desired profit margin. Missouri producer David Schafer provided an example of gross margin analysis in *Marketing Grass-Fed Beef* (5), which is adapted here to show how to arrive at a reasonable price estimate. Example: Start with "Purchases", which is either the price you originally paid for the animal or the price that you would have received for it at a given point in time. Say that you paid \$1/pound for a 750-pound steer, or \$750. Your Cost of Sales for this animal would then also be \$750 (this ignores livestock inventories since we are only considering a single animal here). Gross Product is thus zero.

Sales = Gross Income

Purchases = Cost of Sales

Gross Product = Gross Income-Cost of Sales

Total Direct Costs =

Processing + Marketing + Feed + Freight + Other Costs

Gross Margin = Gross Product-Direct Costs

Percent Return = Gross Margin/Cost of Sales+Direct Costs

Next, figure direct costs. Say the steer dresses out at 500 pounds of usable meat. Schafer likes to add 25 cents a pound for marketing costs, or \$125. Assume that processing will cost \$100, that feed (or what you could have gotten for renting pasture over the animal's growth period) is \$50, freight is \$50, and interest is 10% of \$750 or \$75. Total direct costs are \$400.

Schafer shoots for at least a 30% return. So, $0.3 = \text{Gross Margin} / (\$750 + \$400)$ and the Gross Margin is \$345. Thus, Gross Product equals \$745 ($\$345 + \400) and Gross Income equals \$1495 ($\$745 + \750). Since inventory is ignored, Sales will also be \$1495. So, to make a 30% return on this animal, you would need to charge \$1495 for 500 pounds of meat, or an average of \$2.99 a pound. While rough, this analysis gives a base from which to calculate prices for simple or split halves, quarters, and individual cuts.

Now that you know the kind of price and sales ranges you need, you will need to evaluate your target market(s) to determine whether the market can meet your needs. For example, you may find that your profit goals could be met by a range from selling 100 pounds of steak for \$5/pound, or 10 pounds for \$50/pound. Market research is probably going to be necessary in order to determine whether you want to go after the \$5 or \$50 consumer, or both. You may be able to get assistance in setting prices and similar issues from Extension or the agricultural economics department at your local land-grant university.

HOW TO GET STARTED IN DIRECT MARKETING

The strength of *relationship marketing* lies in first selling yourself, then selling your product. Relationship marketing is a powerful and effective means not only to build on positive consumer perceptions; it is a wonderful opportunity to educate consumers about the joys and challenges of farming. As educated consumers tend to be loyal customers, the advantages of this type of extra marketing effort are apparent. Yet it is also clear that the overall market needs both relationship marketing and wider distribution systems. Farmers may choose one or the other, or both.

Direct involvement is not for everyone, on either the consumers' or the producers' end of the equation. For the producer, direct marketing means deferring to customers and being responsive to their needs. It is crucial that the producer evaluate his or her own attitude before going into direct marketing. It won't work for some people, and they should be aware of that and concentrate on developing alternative markets that allow higher profits, such as selling direct to store or institutional buyers.

Allan Nation, writing in the *Stockman Grass Farmer* (6) recommends that you produce first for yourself, then for family & friends. If they don't ask for more, you're not ready to market. You need to find out why they didn't like the meat. Then you'll have to figure out what you need to do to produce the product that people want. This

sounds slow but in reality is faster and costs much less than the more typical way of jumping in and trying to learn as you go. Many start-ups fail because people aren't emotionally prepared for how difficult a business start-up really is. It takes time, persistence, and some source of income to live on while the business gets established. Since the customer base is very small for new businesses, total customer satisfaction from the very beginning is crucial to survival. For more information on direct marketing, please request the ATTRA publication *Direct Marketing*.

- **How can you find customers?**

If you follow Nation's advice, your first customers will find you by word of mouth. Other ways to begin building a customer base include building relationships not only with consumers but also with private and government agencies, organizations, and businesses. Preparing attractive, interesting, informational materials about your family, your farm, and your products is a good place to start. Sampling is recommended over and over by producers as the best way to generate sales: "One taste is worth a thousand words." Your expertise as a sustainable farmer offers many opportunities for public education, and incidentally, opportunities for publicity.

A good way to begin getting your name out there is to write articles about topics that are interesting, newsworthy, and relate to your operation in some way. Newsletters, bulletins, and special-interest magazines are always in need of material. Newsletters from your farm or cooperative that link producers and consumers, both paper and on the Web, are another idea. Further possibilities include contests, which provide consumer names and addresses for targeted promotions, and partnering with state or county tourism associations. Media exposure generates mixed results. Some farmers have found that it greatly increases sales, others that it isn't very effective.

Successful direct marketers recommend giving presentations to community, church, and other groups about your operation and products. Offer to give talks that relate the issues of interest to

your operation. The local Sierra Club may be very interested in how your sustainable operation has preserved wildlife habitat, for instance, and members may want to support you. Schools and universities offer marketing opportunities, as well. Give talks to student classes and send the kids home with your brochures and a coupon or sample for their parents. Universities can be good places to begin identifying niche markets, since there are usually ethnic, religious, or special-interest (such as environmental concerns) student groups on campus.

Producers have found success from in-store cooking demonstrations with free samples. Demonstrations also offer the chance to bring in producers to connect with consumers so that producers can learn about what consumers want, and consumers can learn more about family farms and the rural life. Producers can invite consumer groups, foodservice buyers, and retail meat managers to tour their farms and processing facilities.

Exhibiting and selling products at local special events and giving tastings and demonstrations at farmers' markets helps many producers find customers. State fairs and other festivals require a lot of product that can be made available quickly to a large group of people who are in a hurry. Running a food booth also requires lots of advance preparation and possibly extra labor. Regulatory issues become more complex if you offer prepared foods such as burgers or sandwiches. However, it can be a great way to generate a lot of publicity and customers throughout the year.

Advertising in local newspapers and the like also produces mixed results. It is better to target your audience. For example, church newsletters and signs in appropriate stores such as health foods stores that are sympathetic to local producers can be good places to advertise. Since today most small farmers (and/or their spouses) have an off-farm job, the workplace offers marketing opportunities as well. Many producers have found their first customers to be co-workers.

Alternative marketing strategies require consumer education. Collect market research and apply for grants like SARE funds to do market research. Try working with universities to get student and professor help, and offering coupons or samples in return for completing surveys. Your enterprise could get free research and marketing assistance from the National Agricultural Marketing Association (NAMA). Interns can be found through the Association, and teachers and students are always looking for projects. For more information, contact:

NAMA
11020 King Street, Suite 205
Overland Park, KS 66210
(913) 491-6500
FAX: (913) 491-6502
agrimktg@nama.org
<http://www.nama.org>

- **How to talk to potential customers**

Some of the barriers to direct marketing include the perception that meat has to be bought in large quantities, the desire to see the meat and the farmers before purchasing, and questions about the safety of the meat. It's important that people know the kind and number of cuts they will get when they order a quarter or half of meat. For example, Snowball Beefmasters, of Snowball, Arkansas
<<http://www.northark.com/snowballbeefmasters>> lets consumers know that a split half of beef totals "about 2 and 1/2 brown paper grocery sacks". Producer Martha Mewbourne (7) says that on orders under a quarter, people don't realize that they only get 3 steaks. She adds that boning cuts gives consumers the same amount of meat, but it's a much smaller total poundage, so consumers may think they are getting ripped off. Many customers ask for separate cuts to be available, but these are more difficult to price and smaller producers usually don't have enough volume to sustain this kind of marketing.

An excellent, comprehensive source of consumer-education material is the "Locally Produced Meat" fact sheet series from the Sustainable

Farming Association (SFA) of Northeast Minnesota. These fact sheets cover nearly every question that the consumer may have about buying local beef, pork, and lamb, including how to find a producer, how to order and arrange slaughtering and processing, details on meat and cut yields, costs, transport, storage, and cooking tips. You may want to use these fact sheets to model your own materials. For more information, contact:

SFA
PO Box 307
Carlton, MN 55718-0307
(218) 727-1414
sfa@skypoint.com

Ohio State Extension's "Buying Beef for the Freezer"

<<http://www.ag.ohio-state.edu/~ohioline/hyg-fact/5000/5400.html>> is also helpful.

WHAT KIND OF DIRECT MARKETING?

Many producers rely on a combination of markets. The most common outlets for direct marketing meat include the direct-to-consumer market; the restaurant and institutional foodservice market; and the retail market.

DIRECT-TO-CONSUMER MARKET

- **Freezer meat market**

The freezer market is accessible to almost all producers who can locate suitable processing facilities. The number of animals producers can sell and the price they can charge depend on the population and demographics of the nearby area. Producers located near large metropolitan areas have a greater potential to market large numbers of animals to individual consumers than those in more remote areas. The freezer market is also a good way for farm families to add some extra cash to their income either by diverting a few animals from the conventional market or by feeding out a few head on unused pastureland, as long as quality can be maintained.

Any type of processing facilities can be used to access this market, including custom processing plants that are not federally or state inspected. In this case, the live animal is sold prior to slaughter. Rather than selling by liveweight, which doesn't account for variation in dressed-out percentages between animals, some producers often sell the animal for a token fee, such as \$1/head and then charge for processing based on carcass weight. An interesting option is the "Pay as They Grow" approach (8), which makes purchases more affordable for families while giving producers monthly income and a guaranteed market price. Here the customer contracts directly with the producers to raise their animals. The producer guarantees that their animal will produce at least a certain total weight of processed and packaged meat, for a predetermined price. The customer gives the producer a down payment and makes payments every month until the agreed upon price is reached and they get their meat.

The easiest option is to have people come out to your farm for meat pickup. However, you'll need to be fairly close to a moderate-to-large sized town or city to have a large enough customer base to support that kind of marketing. In addition, you will need adequate storage capacity to accommodate the meat until pickup and possibly a backup power source in case of power failure. Customers must be educated about the hours you will be open, or to make appointments. They will need a place to park and clearly marked directions to the building. Especially during holiday seasons, you will need to have popular cuts available in good supply. You may be able to notify customers when fresh meat will be available.

- **Farmers' markets**

Selling at farmers' markets is another option. However, not all markets allow meat sales, and those that do will require strict attention to health and cleanliness regulations. Market managers may not be familiar with local law so you may have to educate them yourself (see end section on legal aspects), and sampling (one of the most effective marketing tools) may not be allowed. If

you are going to market through a local farmers' market, you may want to coordinate with your health department and make sure that they are in agreement with state laws and regulations that govern the sales of meat products.

Some markets require producers to furnish their own generator and freezer if selling fresh or frozen meat. Some allow cooking at the market and the sale of cooked items, while others only allow processed and preserved meats such as dry sausage and jerky. While market rules differ, there are some general rules that apply to almost all markets. Frozen meat must be kept below zero degrees Fahrenheit (a plug-in chest freezer will usually be adequate).

Producers have found some keys to success at farmers' markets. Items sold at farmers' markets need to be fairly low-priced and small enough for people to carry easily. Displays are crucial. The Polyfoam company (900-323-7442/<http://www.polyfoam.com>) offers some products that producers recommend (9), including Styrofoam display boxes designed especially for frozen foods. Again, Cryovac™ packaging greatly increases sales appeal. Some producers buy used chest freezers and resell them at the market to customers who want to buy meat, but don't have the freezer space.

This is a very time-consuming option, but can be a great way to get started. Once you build a customer base, it may be possible to take orders and make deliveries at the market, which limits the amount of time you need to spend there. Send regular customers an order sheet with price, quantity, and pick-up dates listed. Customers can also sign up at the market or place orders by telephone or e-mail for market pick-up. Some markets do require regular attendance, so check with market managers before you begin attending the market less frequently.

- **Catering**

Other possibilities include catering meals such as hog roasts and barbecues for special events. In addition to consumers, your clients could include institutions such as schools or community and

church groups and community festivals and events. Again, getting into food service introduces new legal aspects since preparing and serving food is subject to a different series of regulations. While catering has worked well for some, it is also extremely time consuming (10).

- **Internet and mail-order**

Internet and catalog and other mail-order marketing outlets may represent a useful supplement to other outlets, but appear to be of limited value at present. One of the barriers to this kind of "remote marketing" is that packaging and shipping costs can as much as double the end price to the consumer. Websites can be useful in helping local buyers to locate producers in their area. Meat producers who joined to create the Prairiefare site (<http://www.prairiefare.com>), for instance, found that a website had real value as "kind of a combination business card and bulletin board", but that few sales directly traceable to the website were generated. For more information on the Prairiefare project contact:

LeeAnn Van Der Pol
Sustainable Farming Association
4075 110th Avenue NE
Kerkhoven, MN 56252
(380) 847-3432
vanderpol@prairiefare.com

Some excellent market research has been conducted by the University of Maine Specialty Food and Drink on the Internet Project (<http://www.ume.maine.edu/~specfood/papers.html>). For more information, contact:

Dr. Greg White
5782 Winslow Hall
University of Maine
Orono, ME 04469-5782
(207) 581-3159
gwhite@maine.edu

RESTAURANT AND INSTITUTIONAL FOOD SERVICE

The restaurant market is one in which producers sell primal or subprimal cuts of meat directly to

Market Makers: Processors and Producer Partnerships

Mike and Rob Lorentz, of Lorentz Meats & Deli in Cannon Falls, MN, are custom meat processors and deli operators who realized that their small business depends on local family farmers for survival. So they are teaming up with producers for mutual benefit (11). The Lorentzes' experience in both processing and retailing through their deli have given them insight into what consumers want. Meanwhile, farmers in the area are looking to add value to their animals through marketing meat direct to consumers, but lack expertise. Thus Market Makers was born. The program requires farmers to pay a one-time fee of \$100 (refundable when the farmer processes with Lorentz). In return, they receive training on how to reach and keep customers, develop brochures, differentiate products, and cope with regulations. Program participants also get preferred treatment when scheduling processing.

The Lorentz brothers offer some advice to beginning marketers:

- State agriculture departments and processors can help guide you through red tape.
- You need to make a commitment to direct marketing and stick to it. Too many farmers drop their direct market customers when prices on the conventional market rise, only to find that these customers are gone forever when prices fall again.
- Don't let the going market price determine your prices! Your goals, costs, and types of product should set the price.
- Plan ahead and find out what breeds and cuts customers want. Try to sell as many animals before processing as you can. Don't wait until a few weeks before slaughter to begin marketing.

individual restaurants. Producers selling to this market must make arrangements for meat slaughter and cutting and the facilities must be inspected by the appropriate federal and/or state agencies. Care must be taken to prepare the meat according to the specifications of various restaurant chefs.

Individual producers often experience difficulty coordinating the complex management of production, processing, delivery, and sales system required to target the restaurant market. Since individual restaurants do not use large quantities of meat, access to a large number of restaurants and a mixture of different restaurant types is necessary for a producer to successfully target this market. Producers must be near a large metropolitan area with numerous restaurants in order to develop a direct marketing business based on restaurant sales. Access to a variety of restaurants will allow producers to market more of the animal, although the price received for the same cut will vary. Producers who sell directly to

restaurants usually establish a route and deliver directly to the restaurants once or twice a week year round.

Institutions, such as hospitals and nursing homes, school and university foodservice, and even prisons, offer more foodservice marketing options. Larry Jacobsen, Purchasing Manager of Allen Memorial Hospital in Waterloo, Iowa, explained how institutional buyers think and how to access these markets (12). Jacobsen found that costs didn't change overall from relying more heavily on locally produced foods, and that consumer reaction was extremely favorable.

When researching institutional markets, you'll need to find out what the vendor arrangements are. Jacobsen points out that most institutions (and many restaurants) have long-term contracts with food suppliers. These contracts offer many advantages for buyers: consistent pricing, fewer people to deal with, constant supply of consistent quality products, and the volume discounts

Northwood Farms Beefs Up Restaurant Menus

Jim Goodman of Northwood Farms in Wisconsin raises Holstein dairy cows and steers without chemicals, hormones, or pesticides. When a restaurateur he knows mentioned that she was taking beef off the menu because she didn't have enough information about where it came from or how it was produced, Goodman saw an opportunity. He has been selling his beef to fine restaurants in the Madison area for several years. Goodman says that he likes the relationship aspects of direct marketing – knowing his buyers and making personal contact with them.

Goodman offers the following tips for producers who are interested in tapping into the restaurant trade (13, 14):

- Establishing a market can take years, so be patient.
- Remember that owners, chefs, and other staff are busy. Find out when “slow” times are and plan to make sales calls then. You'll need to establish contact and ordering policies. Misunderstandings are inevitable; so make sure you resolve them quickly.
- Be aware that the restaurant business is subject to frequent changes of staff and even ownership, and that the failure rate is high. Supplying restaurants means continually seeking out new accounts, sometimes even at the same restaurant if they hire a new chef.
- Menus, and demand for your meat, change often too. In general, however, restaurants want only the best cuts. Not only does this make it difficult to move the other cuts fast enough to be able to supply restaurants, but you may not have enough steaks for your other customers.

available from dealing with only a few suppliers. However, the prevalence of such contracts doesn't mean that you can't sell to institutions. Buyers have many ways of getting the products they want and the volume to enforce that with suppliers. You do need to understand the differences between institutional purchasing patterns. Schools and universities usually have more layers of bureaucracy, and thus are more difficult to access. Another obstacle is the increasing tendency of institutions to contract-out their food services to non-local chain operations, including fast food shops that have no interest in fresh, local produce.

Institutions may only require state-level inspected meats. Generally, food safety is not an issue for buyers since the suppliers are liable, but vacuum-packed fresh meats would be better received. An important thing to realize is that most food purchases are frozen, pre-cut, and even precooked. Purchasing locally may increase food preparation time for institutions. Jacobsen says that it's important to involve management in going local in order to get all staff cooperating.

To access these markets, Jacobsen says, you need to dedicate yourself to institutions and be ready to offer consistent supplies of quality products. Don't try to unload lower-quality product or start and stop marketing, or you'll lose business fast. Consider the size of the institution and the preferences of customers at each institution.

Hospitals, for instance, have different needs than university foodservice. A factor beyond your control is the personality and the commitment of buyers – persevere until you find someone who is interested. Institutions are volume buyers where “one call sells it all.” For pricing, buyers say what they have been paying, and negotiations can go from there. Loyalty is important. Keep your prices consistent so that buyers benefit when national prices rise.

Your best bet to land restaurant and institutional accounts is to visit chefs and buyers with an attractive sample offering. Your packet of informational materials will be useful here. You may want to include table tents with information about your farm and products and other

COOPERATIVES

Individual producers often experience difficulties in profitably achieving either the level of marketing services or the volume necessary to service the retail outlet. Therefore, a producer cooperative where several producers pool their animals and share fixed costs is often more appropriate when targeting the retail store market. Marketing through a cooperative can shift many of the time-consuming marketing activities away from the producer. The cooperative can engage in bargaining, transportation, grading, processing, distribution, and research and development for its members. A related option is the marketing club, a more informal farmers' group.

Cooperatives allow producers to get into the value-added sector of the marketplace while pooling knowledge, risks, and profits. Since the meat market is very competitive and it can be difficult to get shelf space in supermarkets, it can be impossible for smaller producers to compete with the high-volume large producers. Smaller producers will find more opportunity in developing local markets through cooperative marketing, which can ensure the quality and consistency that are vital to retail sales. Organizing farmers in a formal cooperative can be very challenging; however, a great deal of information and assistance for people interested in forming new cooperatives is available from the Cooperative Services (CS) branch of the USDA.

All Natural Beef Cooperative Accesses Retail Markets

When Diana and Gary Endicott offered their drug- and hormone-free beef to meat managers at a local grocery, they found that demand for the meat exceeded what they could supply. So the Endicotts began locating other producers for what would grow into the All Natural Beef Cooperative. Over five years or so, the co-op has established a profitable niche in a regional supermarket chain. Diana Endicott, who heads the co-op's marketing efforts, uses all the methods described above to attract and keep customers.

Endicott says that "a cooperative is like a family. You put together a diverse group of people and you have to respect each other's knowledge and opinions...Getting people together who have different skills and attributes really helps the business" (18). Some of Endicott's advice to producers interested in cooperatively accessing retail markets (15, 19):

- Building lasting relationships is vital for success. Loyal customers only make up about 30% of customers, but account for 90% of profits.
- Know what the retailer wants: a product that is unique, that the retailer's competition doesn't have, and product that will bring customers to the retailer's store. Your product should not replace products that the retailer already carries, but rather bring in *new* customers.
- Getting your product into the meat department means that you contact meat managers at the right time (when the store is looking for something new or different); that you are targeting the right place (upscale stores for a higher-priced product, for example); and that you are giving the right message — that you understand and believe in your product.
- Don't take rejection personally, but do your best to find out why the retailer doesn't want to carry your product. You may not yet be producing at the level of quality desired or the retailer may not be convinced that you can supply that quality consistently. Even an outstanding product can be hard to place, however. Remember that grocery department managers vary in their ability to make independent decisions. While an individual manager may want to stock your meat, he or she may be constrained by store buying policies, long-term contracts with conventional suppliers, and so on, especially in larger chain stores.

CS staff include cooperative development specialists who do everything from helping with initial feasibility studies through the development of bylaws and business plans, as well as training for cooperative directors. CS also provides technical assistance to existing cooperatives facing specific problems or challenges. Contact:

USDA Rural Development/ Cooperative Services
Stop 3250
Washington, D.C. 20250-3250
(202) 720-7558
FAX: (202)720-4641
E-mail: coopinfo@rurdev.usda.gov
<http://www.rurdev.usda.gov/rbs/coops/cswat.htm>

VALUE-ADDED PRODUCTS

Ground meat will probably make up an important part of the operation. It is often necessary to sell a large proportion of the carcass as ground meat, which moves faster than cuts, in order to avoid inventory buildup. As marketers say, you need to sell it before you can smell it. Since ground meat is cheaper, you will need to evaluate your product mix to balance out lower returns with higher returns from the more popular cuts. Cull animals can be used exclusively for ground meat, which gives a superior product with more profit due to the low market prices for culls.

Cuts that are hard to move offer added value and sales when packaged as cubes for stews, stir fries, or kabobs. Ask the butcher to make square packages of ground and cubed meat, which pack and fit onto store shelves better. It may be possible to market bones to chefs, who appreciate the quality and high yield for soup stock, or to consumers who are interested in more gourmet cooking. You could include bones with soup stock instructions and recipes in your stew meat packages as a "freebie" to encourage sales.

Organ meats can be marketed to ethnic customers, in particular. Many ethnic dishes rely on organ meats and these can be difficult to find in mainstream stores. When researching the ethnic markets that may be available to you, don't forget

to find out whether there is demand for organ meats as well.

Producers are finding that further processed products can be quite profitable. Many small business and rural development centers and other organizations offer assistance in beginning food processing (for more information request the ATTRA publication *Adding Value to Farm Products: An Overview*). Some of the many options include sausage, hot dogs, and jerky. Be aware that meat products such as sausage that contain ingredients other than meat are subject to different laws (see following section for more information).

There is a growing demand for healthier, more natural pet foods. You may be able to market organ meats, ground meats, bones, and other low-end cuts as pet food. Even items such as pig's ears and hides can be made into dog chews. Getting into pet food manufacturing is too complicated a subject to cover in depth here. For more information, the Nebraska Food Processing Center (see **Resources**) can be very helpful. Other sources of information include food science departments at many universities. You may even be able to market composted offal. Compost marketing involves selling high volumes at low unit cost, which may be difficult for small producers to supply. Transportation costs will be considerable, as compost is a bulky, heavy product. Other ways to add value could include trading nutrient-rich compost to crop producers for products or services that you need, or offering compost as "thank-you" gifts to valued customers who enjoy gardening.

FOOD SAFETY AND LABELING REGULATIONS

• Regulatory Considerations

Before starting any marketing, consult local, county and state authorities on regulations governing the marketing of food products. Some rules that may apply include USDA inspection, health permits, licenses, sales taxes, weight and measurement requirements, sanitary requirements, zoning, and right-of-way regulations. Another important consideration is

waste disposal if you are slaughtering and processing the animals on-farm (see **Resources** for information on state environmental regulations).

Regulations vary depending on the type of product that you want to market. For example, selling frozen meat products directly to the public requires that the animals be butchered at a USDA-inspected facility; the meat must be weighed, wrapped and labeled in secure federally approved packages; and the meat must be kept hard-frozen at all times. In addition, regulations vary depending on where you wish to sell. Any interstate sales are subject to meeting USDA regulations. Sales within the state are regulated by state law. The county and regional industrial development authorities are a great and under-used resource that can help with these issues.

- **Product Liability**

With the increase in concern over food safety, the producer always has a small amount of product liability risk to deal with. Processing livestock increases this risk. The closer you get to the consumer in direct marketing, the higher the liability risk. For example, a ranch was asked to provide proof of \$2 million dollars of product liability insurance to be able to sell at a farmers' market (20). It is important to discuss this business consideration with your insurance carrier to see if farm liability insurance coverage is sufficient or if additional coverage is required.

The North American Farmer Direct Marketing Association (NAFDMA) offers its members liability and loss insurance specifically designed for direct-market farmers. Contact:

North American Farmers' Direct
Marketing Association (NAFDMA)
62 White Loaf Road
Southampton, MA 01073
(413) 529-0386 or (888) 884-9270
<http://www.nafdma.com>

- **Label Laws**

There are specific laws regarding product labels that will require state and federal review prior to their use in advertising. Expediter services are

available. However, if you are going to be marketing single meat products (such as steaks or roasts) rather than products such as sausage that include other ingredients, it can be fairly easy to go through the labeling process yourself since a federal inspector at the plant can approve the label.

The Food Safety Inspection Service (FSIS) is the agency in USDA that has the responsibility for assuring that the labeling of meat and poultry products is truthful and not misleading. To label a product as being unique or superior by using words such as "natural" or organic, a producer must first contact the Labeling Review Branch of the USDA to make an "Animal Production Claim" for labeling the product. The producer then has to submit a label application, a sample label with the feature wishing to be claimed, and usually an Operational Protocol (OP). The OP describes how the product is produced and determines whether a producer can make the desired claim. Since each OP is based on the individual producer and the claim wishing to be made, the Labeling Review Branch (LRB) stresses the need for producers to contact their office for more information.

The Nutrition and Labeling Act (NLEA) of 1990 requires nutrition labeling for most foods and authorizes use of nutrient and FDA-approved health claims. While meat and poultry are exempted, if they are processed in such a way that they contain ingredients other than the meat, they become subject to meeting NLEA requirements. However, small businesses are exempted from these requirements. A "small" business is defined as having under 100 full-time-equivalent employees producing fewer than 100,000 units of any one product that will only be distributed in the U.S. Producers wishing to claim the small business exemption will have to notify the FDA that they meet the criteria unless they employ under 10 people and produce under 10,000 units a year. You may still need to include this information as a marketing tool or if your retailers request it, but be aware that if you do, you will lose your exemption. More information on the small business exemption can be found at <http://vm.cfsan.fda.gov/~dms/sbel.html>.

If you want to include the "lean" claim on the label, or make claims regarding your meat as a source of CAL or other nutrients, you will need to have it analyzed by a lab in order to back up your claim. Testing costs approximately \$30 for fat, \$135 for saturated fat, and \$112 for cholesterol (5). Some laboratories experienced in analyzing foods for NLEA compliance include:

Warren Analytic Laboratory
650 "O" Street
Greeley, CO 80632-0350
(800) 945-6669
<http://www.warrenlab.com>

TPC Labs
Pillsbury Technology Center East
737 Pelham Boulevard
St. Paul, MN 55114
(800) 400-2390
<http://www.tpclabs.com>

Because the USDA has not yet defined the term "organic", it may not be used by itself as a claim on the labeling of meat and poultry products. The FSIS will permit the use on the label of a meat or poultry product of a statement that the product has been "certified organic by (a certifying organization)." The certifying organization must have standards for what constitutes an agricultural product that is "organically" produced, and a system for ensuring that products it certifies meets those standards. Again, since each label claim is reviewed individually, the producer needs to contact FSIS him or herself. Contact:

Anita Manka
USDA FSIS
Labeling and Compounds Division,
Labeling Review Branch
Washington, DC 20250-3799
(202) 205-0623
FAX: (202) 205-0145
<http://www.fsis.usda.gov>

While not required, code dating that identifies when a product was made can be very helpful. Remember that storage of the finished product is also regulated. Check with your local health inspector for information regarding storage.

Your label needs to be carefully chosen and designed to communicate the image you wish to

convey. A basic check-off label saves costs on label printing and design. These labels list all cuts of meat and the butcher checks the appropriate box. In addition to meeting legal requirements, the producer may want to consider getting a trademark to identify and distinguish their products in the market place. The trademark prevents others from copying the look or name of your product. There are state and federal trademark registrations. While it can take several months to a year and cost several hundred dollars, it may be worth it to ensure consumer recognition in today's brand-conscious market environment.

Even if you choose not to register you may want to add the TM symbol to provide some protection. Despite popular belief, trademarks do not have to be registered for rights to be acquired. Anyone who claims rights in a mark may use the TM (trademark) designation which alerts the public to the claim. But bear in mind that the first person to register or file an intent to register the trademark legally owns it. Also, there is a difference between trademarks and trade names. Trade names, or the names under which you do business, usually do need to be registered with the state. A good source of information on this often confusing issue is the Small Business Administration (<http://www.sba.gov> or call 1-800-827-5722 or email answerdesk@sba.gov).

For comprehensive information on the legal issues surrounding marketing of meat, poultry, eggs and dairy products, including a state-by-state list of contacts, consult "The Legal Guide for Direct Farm Marketing" by Dr. Neil Hamilton (1999. 240 p. \$20.00 +\$2 s&h.) Order from:
Drake University Law School
Agricultural Law Center
2597 University Avenue
Des Moines, IA 50311-4505
(515) 271-2947

DIFFERENTIATING YOUR PRODUCTS

- **Organic**

Organic certification, and the ability to identify organic products as "certified organic" in the marketplace, have been useful marketing tools for

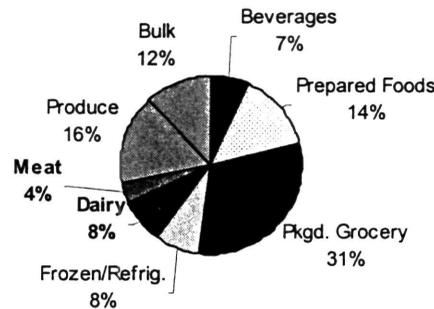
over a decade. With producers now able to include the word "organic" on labels for meat products, the organic market represents a real

Some producers feel that marketing of "natural" meat has hurt sales of truly organically produced meats. Producers have to explain over and over

what the difference between "free-range," "natural," and certified organic is. Most successful producers provide educational materials to the stores that carry their products and usually do demonstration and other promotional activities as well (23).

When you contact a certifying organization, ask for their livestock standards and list of approved materials.

Natural/Organic Market Share by Product Type, 1999



Source: Nutrition Business Journal, March 1999.

opportunity to add value to meat products. Many consumers who have stopped consuming meat because they didn't know where the meat came from or how it was produced are, with increased availability of organic meats, now adding meat back into their diets. Most producers indicate greater interest in their products from buyers, now that they can include "organic" on their labels. While most of these buyers are willing to pay more for organic products, price is more of a factor than with the gourmet niche. In addition to individual customers purchasing organic meat directly from the producer, organically produced meat can be marketed through health food retail stores and natural foods restaurants. Profit margins on meat run about 30% (21). However, organic producers must still contend with an immature and developing market that makes thorough planning all the more important.

Total sales of fresh meat (including seafood) were \$238 million in 1998 in natural products stores, accounting for only 2% of total sales. Organics at \$25 million represented 10% of the meat category.

(In contrast, organic produce accounted for 66% of all produce sold (22)). While this does not take into account sales in mainstream stores or the large volume of direct-marketed meat, clearly, there is a lot of room to grow for natural and organic meats.

While standards for raising organic meat are relatively simple, the audit trail that most organic merchandisers require from their suppliers involves a lot of time-consuming paperwork, say farmers. For more information on organic certification, please contact ATTRA.

One of the first to begin marketing organically produced animal products, CROPP/Organic Valley has spearheaded the move to allow using "organic" on labels. Organic Valley spokespeople predict healthy growth in organic meat demand with sales in 2000 expected to nearly double from 1998's \$28 million (24). CROPP welcomes inquiries from interested farmers who are or can be certified organic, able to produce to CROPP specifications, and willing to become a CROPP member, including making an investment in the co-op. General information on CROPP is available from their web page (<http://www.organicvalley.com>) or by calling (608) 625-2602.

The *Upper Midwest Organic Livestock Producers' Directory* is intended for producers in Iowa, Minnesota, North and South Dakota and Wisconsin. The directory contains contact info for veterinarians, buyers, distributors, processing facilities, resources and resource organizations including producer cooperatives. Send \$5.00

(check payable to Cooperative Development Services) to:

Cooperative Development Services
30 West Mifflin St. Suite 401
Madison, WI 53703
608-258-4396
FAX: 608-258-4394
E-mail: darcylk@inxpress.net

More general information on buyers, industry associations, and so on is available in the ATTRA publication *Resources for Organic Marketing*.

- **"Natural"**

Consumers remain unclear about the difference between "natural" products and "organic" products, a situation made worse by the USDA's very broad definition of "natural." Under current USDA policy, meat can carry the "natural" label if it contains no artificial ingredients (color, flavor, preservatives, etc.) and is minimally processed. Production methods are not considered by the USDA in granting permission to carry the "natural" label, meaning that nearly all cuts of meat can be called "natural." In popular use, however, consumers often interpret (incorrectly) the term "natural" as meaning that the animals have been raised without growth hormones, routine antibiotic treatments, or feed additives. As consumers become more sophisticated, they are becoming more aware that a "natural" product may not offer the attributes they seek and more likely to read labels carefully. It can pay for a producer to include those special claims on the label.

Natural meats marketers are often seeking producers to fill growing demand. These marketers can be located using directories such as *Natural Food Merchandiser's Retailer Purchasing Guide* (see **Resources**).

- **Grass-fed/Pastured**

Consumers are uncertain about market terminology such as "grass-fed" (commonly translated in their mind as "tough"). To capitalize on marketing opportunities from grazing-based production, consumer education is needed.

Consumers need to understand why grazing-based production is beneficial for the animals and for the environment. More importantly from a marketing standpoint, there is some evidence that meat and milk from grass-fed livestock is also beneficial to human health.

Conjugated linoleic acid, or CLA for short, is a modified form of the essential fatty acid linoleic acid (otherwise known as the omega-6 fatty acids) found in high concentrations in pastured livestock. Studies have suggested that CLA enhances immune function, acts as an antioxidant, and even lowers the risk of cancer. It may also play a valuable role in changing body composition by helping to decrease fat, while maintaining or gaining muscle (25). The combination of lower overall fat and possible health benefits from existing fat represents a potentially powerful marketing tool for the grass farmer. References on CLA are available at <http://www.wisc.edu/fri/clarefs.htm>. Additionally, the publication *Why Grassfed is Best!* provides exhaustive information on the benefits of grass-fed livestock products (see **Resources**).

Difficulties with grass-fed production in general include seasonal production, but year-round consumer demand. The additional time required to fatten grass-fed cattle may result in a tenderness problem. The yellow fat that can result from green grass in forages may result in lower prices received, because consumers are unaware that the yellow fat is beta-carotene storage. For more information on the grass-fed market, consult the ATTRA publication *Alternative Beef Marketing*.

- **Other Niches**

"Humanely raised" is another term with a very wide range of interpretations. Generally, organic certification will require that the animals are raised and processed humanely. Producers not wishing to become certified but who feel that promoting their good treatment of livestock will help sales should detail their production practices for consumer and retailer educational materials. Providing, on consumer request, affidavits from

reliable sources that can attest to the practices used is a good idea.

While at present this does not appear to be a viable niche in itself, it is certainly an important attribute in the natural meats market. A 1998 national consumer opinion survey conducted by the Animal Industry Foundation found that 44% of respondents were willing to try meat products labeled "humanely raised" if the cost were only 5% more than for conventional meats. A 10% price increase lowered the number who would buy to 20%, while at a 20% price increase only 6% of respondents were willing to buy (26). There are many organizations involved in promoting consumption of humanely raised livestock products. Perhaps the most influential is the Humane Society of the United States (see Resources).

Some livestock producers are successfully marketing based on their management of predators. Rather than killing predators such as wolves and coyotes, these producers use other methods to control predation. This appeals to the segment of the population that is concerned about preserving wildlife. The "Wolf Country Beef" label developed by Jim Winder and Will Holder, ranchers who have teamed up with the nonprofit Defenders of Wildlife, is an example. They're developing the seal-of-approval so that beef coming from ranchers who avoid killing predators will stand out in stores. Wolves can be an economic asset to the region, says Holder, who hopes the Wolf Country Beef program demonstrates that ranchers can live with wolves and still make money (27).

- **Ethnic And Religious Markets**

Ethnic markets often offer opportunities for marketing livestock products that are not well accepted by mainstream America. Many cultures actually prefer meat from mature animals, such as the Muslim preference for mutton, which would be considered tough or stringy by others, and many ethnic cuisines use innards, feet, heads and other parts that would otherwise be thrown away. Products such as goat and mutton are not part of the usual American diet. But goat, for example, is

well liked by Hispanics, Caribbeans, and Muslims, to name just a few. When marketing meat from the same animal to different market outlets, the biggest challenge for the direct marketer is to balance the demands of the various outlets with the supply of the different cuts. Producers can use the special preferences of ethnic markets to balance out supply and demand problems. Jewish religious laws, for example, mean that this market prefers the front-end cuts that are difficult to market to mainstream America.

There are ethnic and religious niche markets available for nearly every type of livestock. Producers should develop a marketing plan consistent with the preferences of the ethnic groups in their areas. Even more "mainstream" meats like pork can be better marketed by targeting specific ethnic groups such as Hispanics or Chinese. Most mutton and a large proportion of goat is bought by those of the Muslim or Jewish religions. Meat slaughtered in compliance with the Islamic dietary laws is termed "halal" and that slaughtered in compliance with the Jewish dietary laws is termed "kosher."

Providing facilities for the on-farm ritual slaughter is often necessary to serve the ethnic/religious market. Some producers have provided only a water hose, rope, and tree with a crossbar, while others have provided a room with a sink, chopping block, and hanging hooks. The requirements for Islamic halal meat are less stringent than those for Jewish kosher meat, which can be difficult to provide on a small scale. More information on ethnic and religious niches can be found in the excellent publication *Marketing Out of the Mainstream* (see Resources).

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RESOURCES

- General

Stockman Grass Farmer offers practical information on producing and marketing. An excellent resource for any sustainable livestock producer. \$28/year from:

SGF
PO Box 2300
Ridgeland, MS 39158-2300
800-748-9808
FAX: 601-853-8087

- Small Ruminants

Marketing Out of the Mainstream is available at <http://www.sheepusa.org> (under "The Marketplace"). While specifically covering lamb and wool, the publication offers valuable information for any meat marketer.

An outstanding source of marketing information for meat goats is the E. (Kika) de la Garza Institute for Goat Research. They offer a comprehensive series of fact sheets covering meat goat marketing and information on consumer demand for goat meat. These are available on the Internet at <http://www.luresext.edu/goatext.html>, or by contacting:

E (Kika) de la Garza Institute for Goat Research
Langston University
P.O. Box 730
Langston, OK 73050
(405) 466-3836
FAX: (405) 466-3138

- Processing

American Meat Science Association
1111 North Dunlap Avenue
Savoy, Illinois 61874
(217) 356-3182
FAX: (217) 398-4119
<http://www.meatscience.org>

Arlis Burney
Food Processing Center, University of Nebraska
143 Filley Hall
Lincoln, NE 68583-0928
(402) 472-8930
E-mail: aburney1@unl.edu
<http://foodsci.unl.edu/fpc/market/ent.htm>

AURI's meat laboratory and pilot plant in Marshall, MN, offers small meat processors the opportunity to test out ideas for value-added processed products for both humans and pets. In addition to assistance with product development, AURI offers HACCP training and periodically gives workshops. Only available to Minnesota residents. For more information, call Darrell Bartholemew at (507) 537-7440 or visit <http://www.auri.org>.

Texas A&M offers meat science information and training seminars such as "Beef 101" and "Sausage School" to producers. Contact:

Ray Riley
Rosenthal Meat Science and Technology Center
Department of Animal Science
Texas A&M University
(409) 845-5651
FAX: (409) 847-8615
E-mail: ray-riley@ansc.tamu.edu
<http://meat.tamu.edu/>

Note: Sausage mix that does not contain MSG can be purchased from the KOCH company (800-456-5624) for use in processing.

- Legal Issues

The National Center for Agricultural Law Research and Information (NCALRI) at the University of Arkansas offers links to state and federal environmental laws that affect agriculture at their Web site: <http://law.uark.edu/arklaw/aglaw/envlinks.htm>. NCALRI staff attorneys can address specific legal questions, within the areas of their expertise, from farmers, attorneys, agri-businesses, agricultural organizations, and federal and state governmental entities. For more information contact:

NCALRI
147 Waterman Hall
University of Arkansas
Fayetteville, AR 72701
(501) 575-7646
FAX: (505) 575-5830
E-mail: swillia@comp.uark.edu

- **Niches**

Why Grassfed is Best! by Jo Robinson, offers 107 pages of information and resources on health and environmental benefits of eating grass-fed livestock products. It is available for \$7.50 plus \$2.50 s&h (single copy rates) from:

Columbia Media
2401 N. Cedar
Tacoma, WA 98406
(206) 463-4156
FAX: (206) 463-4666

Make checks payable to Columbia Media.

For more information on the *Retailer Purchasing Guide* contact:

Natural Foods Merchandiser
New Hope Natural Media
Circulation Department
1301 Spruce Street
Boulder, CO 80302
(303) 939-8440
FAX: (303) 473-0519

For more information on the "Good for You: Choosing a Humane Diet" campaign and the Eating with Conscience Programs, contact:

The Humane Society of the United States
Farm Animals and Sustainable Agriculture
2100 L Street, NW
Washington, DC 20037
(202) 452-1100
FAX: (301) 258-3081
E-mail: ewcp@hsus.org
<http://www.hsus.org>

For more information on the Wolf Country Beef program, contact the Defenders of Wildlife Southwest office at (520) 578-9334 or:

Jim Winder
Lake Valley Ranch
HC 66, Box 38
Deming, NM
(505) 267-4227

Other producers marketing predator-friendly meats include Ervin Ranch. For more information:

(520) 428-0033
E-mail info@ervins.com
<http://www.ervins.com/wildlf.htm>

The electronic version of **Alternative Meat Marketing** is located at:
<http://www.attra.org/attra-pub/altmeat.html>

**Prepared by Holly Born
ATTRA Program Specialist**

May 2000

The ATTRA Project is operated by the National Center for Appropriate Technology under a grant from the Rural Business-Cooperative Service, U.S. Department of Agriculture. These organizations do not recommend or endorse products, companies, or individuals. ATTRA is located in the Ozark Mountains at the University of Arkansas in Fayetteville at P.O. Box 3657, Fayetteville, AR 72702. ATTRA staff members prefer to receive requests for information about sustainable agriculture via the toll-free number 800-346-9140.

Free Farmed Foods



*An Innovative Program
That's Good for Animals
and Good for Business*

Tapping a Win-Win Market

The Free Framed Program is a value-added proposition. Consider this: In the last five years, sales of organic foods (most closely related in public perception to Free Farmed foods) have gone from \$3 billion per year to \$7 billion. A 1998 survey by Lake, Sossin, Snell, Perry and Associates reports that 31% of food purchasers bought organic food at least once or twice a month. The consumer demand is there. The potential market is enormous.

This program is a way to establish yourself as an industry leader in this fast emerging market of health-conscious, conscientious consumers who want to buy your products and feel good about consuming them. Farm animals win. You win. Consumers win.



Additional Information

This overview of the Free Farmed Program is intended to acquaint you with the program's highlights. More detailed information about how you can become the newest member of the Free Farmed family is available from Farm Animal Services at 202.543.2335. Check our website at www.freefarmed.org. The more you learn, the more you'll understand why we say—

*Free Farmed Foods:
Good for Animals.
Good for Business.
Good for Everyone.*



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That translates to 19 million-plus farm animals in the U.K. benefiting from improved standards.

The Free Farmed Program is dedicated to using the marketplace to improve the lives of farm animals. When you become a participant in the program, you're telling consumers that you are compassionate and caring, a message they want to hear . . . from you, backed by a credible, independent body.

Why the American Humane Association?

The American Humane Association is the oldest, most prestigious national humane organization in the United States. Founded in 1877, we are the only national charity dedicated to protecting both children and animals.

Over those many decades, we have developed considerable experience and expertise working with both industry and government to improve the lives of animals. Importantly, we understand the real-world, practical concerns and considerations you face as a business person. And, we work hard to meet your needs, as well as the needs of the animals. Our goal is to work with you to improve the lives of farm animals and, at the same time, improve your bottom line.

How? In close collaboration with veterinarians, animal scientists, and producers like you, the AHA has set standards of practice that guide the humane treatment of farm animals. FAS administers those standards and certifies producers, processors, and related product handlers that meet AHA's guidelines. Certification takes the form of a Free Farmed label that program participants may use on their farm animal products—a label that tells consumers that this product was reared, cared for, and slaughtered in the most humane way possible. The Free Farmed Program certification process is verified by the U.S. Department of Agriculture/Agricultural Marketing Service.

In addition, we work hard to

publicize the Free Farmed Program so that consumers will look for the label and use it to guide their purchasing decisions in the grocery aisle.

Free Farmed at a Glance

The Free Farmed labeling program establishes a traceable supply chain of inspected and accredited producers and processors, backed by a trusted organization, empowered by a message that has universal appeal. In short, it is a program built upon credibility and consumer confidence.

Free Farmed certification currently encompasses producers. Standards are being developed for processors, packers, slaughterhouses, and trucking companies—in short, any industry segment handling farm animals. In order to be certified Free Farmed, they must have passed inspection by our trained personnel, and to stay certified, pass periodic follow-up inspections. Free Farmed status is lost when the animals and their products fall outside the certified chain of supply.



Agritourism





Entertainment Farming & Agri-Tourism

Business & Marketing Series

Appropriate Technology Transfer for Rural Areas

(ATTRA)

P.O. Box 3657

Fayetteville, AR 72702

1-800-346-9140

(501) 442-9842 FAX



By Katherine Adam
Program Specialist
March 2001

Abstract: *This publication discusses agri-entertainment—a new, highly consumer-focused type of agriculture, which may offer additional options for diversification and add stability to the farm income stream. Farmers have invented a wide variety of "entertainment farming" options.*

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 Crop Art

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Introduction

Joel Salatin, innovator in small-scale agriculture and Proprietor of Polyface Farm in Virginia, has published a handbook for beginning farmers (1). In it he offers a perspective on an important dimension of the future of American farming—education and entertainment. At least one state has re-directed the bulk of support for agriculture into rural tourism. Salatin and other agricultural writers believe that this is what the public wants and will pay for. While the popularity of specific enterprises—such as pumpkin patches or U-Pick—may ebb and flow, the idea of catering to the public desire for a “farm experience” remains.

Small diversified farms are ideally suited to agri-entertainment. Unlike the mega-hog facility or a corn/soy operation producing raw materials for industry, the small farm can recreate a picture of an earlier, simpler, human-scale ideal of farming. The chief qualification for the rural landowner who expects to make a living from his land through agri-tourism is the desire and the ability to cater to tourists and meet their expectations of a farm visit.

Tourism is an important industry in most states. For example, it is the second largest industry in New York and the largest in Arkansas. Most writers agree on three main components of rural tourism: small businesses, agricultural events, and regional promotion. Some state agri-tourism

promoters lump new direct marketing methods such as CSAs, as well as farm sales of such new crops as flowers, garlic, and Asian pears, within the general category of agri-tourism. State-led agri-tourism initiatives work to expand existing businesses, create new festivals and farm markets, and tie this all together regionally to attract visitors. Federal, state, and corporate grants funded the 500-mile Seaway Trail along Lake Ontario in New York state, providing advertising and promotion of its agri-tourism enterprises along the way.

There are three agri-tourism basics:

- **Have something for visitors to see**
- **Something for them to do**
- **And something for them to buy**

How well you relate the various components (through a theme or otherwise) will determine how successful your entertainment enterprise will be. Things to see and do are often offered free of charge; but there is still an awful lot of money to be made in selling to meet the farmer's profit-making goals. Research has shown that tourists buy mainly food, beverages, and souvenirs (2).

Some Successful Entertainment Farming Enterprises & Techniques (farm recreation and hospitality businesses)

- | | | |
|---|--------------------------------|--|
| -Wineries with Friday happy hours | -Educational tours | -Historical re-creations |
| -Arts & crafts demonstrations | -Farm Schools | -Living history farms |
| -Farm store | -K-12 Schools | -Heirloom plants and animals |
| -Roadside stand | -Outdoor Schools | -Civil War plantations |
| -Processing demonstrations | -Challenge Schools | -Log buildings |
| -Cider pressing | -Movement-based Retreat center | -Antique villages |
| -Maple sugaring | -Herb walks | -Native American village |
| -Sheep shearing | -Workshops | -Frontier village |
| -Wool processing | -Festivals | -Collection of old farm machinery |
| -Sorghum milling | -Cooking demos | -Miniature village |
| -Apple butter making | -Pick-your-own Pumpkin Patch | -Farm theme playground for children |
| -Fee fishing/hunting | -Rent-an-apple tree | -Fantasyland |
| -Farm vacations | -Moonlight activities | -Gift shop |
| -Bed and breakfast | -Pageants | -Antiques |
| -Farm tours | -Speakers | -Crafts |
| -Horseback riding | -Regional themes | -Crafts demonstrations |
| -Crosscountry skiing | -Mazes | -Food Sales |
| -Camping | -Crop Art | -Lunch counter |
| -Hayride | -Pizza farm | -Cold drinks |
| -Sleigh rides | -Native prairie preservation | -Restaurant |
| -A place for snowmobilers or cross-country skiers | -Buffalo | -Theme (apple town, etc.) |
| -Bad weather accommodations | -Hieroglyphics, rock art | -Pancake breakfast during sugaring season |
| -Picnic grounds | -Mounds, mound formations | -Tastings |
| -A shady spot for visitors to rest | | -August "Dog Days" - 50% off dogwoods if customer brings a picture of family dog, etc. |
| -Campground | | |
| -RV Park | | |
| -Dude Ranch | | |
| -Hunting Lodge | | |

Advice for New Entrepreneurs

Starting any new enterprise can be risky. Before investing money, time, and energy into a new venture in special agricultural products and services, new entrepreneurs should complete personal, market, project feasibility, and financial evaluations. Technical and managerial assistance in these evaluations is available from a wide variety of sources. Examples of these sources include county extension educators, local and regional organizations committed to an area's economic development, small business development centers, state departments of agriculture, economic development agencies, banks, tourism agencies, state universities, and local community colleges. Refer to ATTRA's publications *Holistic Management* and *Evaluating a Rural Enterprise* for further guidance and resources.

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webmaster@attra.org

Things to See



Appropriate Technology Transfer for Rural Areas



**Marketing Channels:
Pick-Your-Own &
Agri-Entertainment**

Business Management Series

Appropriate Technology Transfer for Rural Areas (ATTRA)
P.O. Box 3657
Fayetteville, AR 72702
Phone: 1-800-346-9140 --- FAX: (501) 442-9842

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Pick-Your-Own

Introduction

Producers often consider pick-your-own (PYO) as a marketing channel because of its many advantages: there is reduced labor required for harvesting, PYO offers the chance to sell lower quality produce, and most of the post-harvest tasks (grading, storing, packing) are eliminated. There are disadvantages, too, however: PYOs require long working hours and more liability insurance, the location of the farm must be conducive to business, and there must be room for parking and traffic.

During the 1980s, PYO sales and farms grew steadily. This is typical in a time of economic downturn. When the economy is good, as it has been during most of the 1990s, PYO sales drop. Other reasons for the recent decline is that PYO requires more of a time commitment, and freshly picked produce is less "convenient" than pre-packaged, pre-cut food (like lettuce mixes at the supermarket).

The biggest variable in PYO sales is weather. Most PYO business occurs on the weekends in late spring and fall. If rain keeps customers away during part of those weekends, nearly all of the sales will occur in just a few days. For that reason, few farmers rely solely on PYO to sell their produce.

There are certain key attributes that every successful PYO farm should have:

- A phone with an answering machine that gives price, conditions & hours for the farm;
- Night and weekend hours;
- Accommodations and provisions for children, since many parents will view this outing as educational;
- Ample parking, good roads, and clean trails;
- Containers (even if customers are supposed to bring their own);
- Good signs that tell rules, prices, hours, etc.;
- Courteous, knowledgeable employees;
- Wide, clean rows and weed-free fields;
- Water or cold drinks;
- Lots of shade;
- Access to restrooms;
- A variety of produce that will keep customers coming back all season long.

Typical PYO Customers

One-fourth are over 62, and 43% are 26-45

Nearly 60% are educated beyond high school, with one-third being college graduates.

Two-thirds have annual household incomes over \$25,000, and one-fifth have incomes over \$50,000.

One-third spend between \$5 and \$10 per visit. One-fourth spend less than \$5. One in 10 purchase \$20 or more per visit.

Over half learned of the market through word-of-mouth.

Eighty percent traveled less than 40 miles to get to the farm.

Nearly half are concerned about the use of agricultural chemicals.

The farmer must be prepared to sell himself as well as his business, so image is all-important.

People want to see an attractive facility - neat and clean. Location and appearance are the most important aspects of farm, not necessarily price.

Even though most of the produce will be harvested by the consumer, some will have to be picked by the grower, so labor costs are not completely eliminated. Also remember that not everyone will want to pick his own produce, so some already-picked items should be on-hand.

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Advertising

A PYO grower must continually advertise and promote the farm. The best form of advertising is word-of-mouth, and the second-best is road signs. Other good advertising avenues include newspapers (not classifieds), PYO directories published by state Cooperative Extension offices, and direct mailings. Radio is not effective, except for special events. Billboards are not effective and television ads are usually cost-prohibitive (2).

Other places to advertise include county fairs or craft shows. Contests for various amounts of free produce can be a way to develop a mailing list. Many local papers and television stations are interested in human interest or new business stories in the area. Invite elementary schoolchildren to the farm for field trips.

Remember, return customers are the key to success. Eighty percent of your business comes from 20% of your customers, and it takes five times as many resources to get a new customer as it does to keep an old one.

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Crops

Choosing what to plant is an important decision. Fruits seem to sell better than vegetables, and early- and late-season crops are best. Sometimes, unusual crops like asparagus and cut flowers sell well.

Long season and early season crops can be ideal for PYO operations, especially if there are a large number of operations in the area. Producers can provide several varieties of one crop to diversify their operations and encourage greater varieties of customers and increase customer satisfaction. If there are any specific ethnic groups in the area, otherwise exotic crops can increase sales, especially if a producer can develop a reputation as a source of the desired produce.

It's hard to know how much to plant, and each operation will vary. Farms 30 miles away from a town with a population of 30,000 or more may have difficulty attracting customers, as will a farm 50 miles away from a city of 100,000. Most PYO operations should start

small. Studies of Illinois strawberry farms show that about 400 customers are needed to clear an acre of strawberries with a 10,000 pound yield, and that pickers buy an average of a little more than 20 pounds of berries on each visit to a farm (3).

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Facilities

Every PYO needs a parking lot and a checkout stand. A general rule for parking lot space is that 20 cars may be parked at a sixty degree angle, or 30 cars at a 90 degree angle, in a 1000 square foot area. The checkout stand should be placed so that it can be seen from the parking lot and will serve as the hub of business transactions. This is also the place to have tie-in items, like recipes, drinks, baked goods, crafts, and gift certificates.

Optional facilities can increase the customer services that the PYO operation provides and also increase the goodwill of the firm. The facilities could help differentiate one PYO from another and increase the competitive edge. Some such facilities are play areas for children, designated picking areas for children, and picnic tables.

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Pricing

Growers near cities usually charge more than those in rural areas where the average income may be lower and more residents have gardens and orchards. Some growers charge half the retail price, others charge slightly over the wholesale market price. In arriving at a price, don't ignore marketing costs. One grower estimated that PYO expenses are about 5-8 cents per quart of strawberries that would cost him 15-20 cents per quart if he hired pickers (3).

The simplest method for calculating prices is to sell by volume. Pricing by weight, however, can eliminate the problem of containers being over-filled by consumers, but this system requires more time and labor. Count pricing may also work for some large items. The price per item should be rounded to the nearest nickel or dime to make pricing easier for everyone.

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Liability

Producers increase their liability by inviting the public to come on their property to pick produce. Generally, producers should be concerned about the safety of children and older people who are more likely to be involved in an accident. Most insurance companies will request that producers take measures to ensure customer safety and reduce their level of liability, doing things like putting away ladders, keeping chemicals locked up, and keeping

animals penned up and out of the way (4).

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Agri-Entertainment

Some farms that offer PYO or have farmstands go on to consider entertainment farming. Agri-entertainment takes many forms: festivals, hayrides, petting zoos, seasonal events, and contests have all been used successfully. Most growers get into agri-entertainment slowly, and they often have a single creative idea that puts them ahead of the crowd.

Festivals and events might include things like:

- Easter egg hunts
- Perennial tours
- Halloween costume contests and haunted houses
- A pancake breakfast during sugaring season
- A moonlight pumpkin-picking party
- An annual Farm Fest
- August Dog Days (50% off dogwoods with photo of dog)
- Friday happy hours (5).

On-farm classes, demonstrations, and workshops are often considered a form of agri-entertainment. Cooking classes, whether offered to chefs or the general public, are usually quite successful, as are workshops showing how to prepare fresh or dried cut flowers.

Bed and breakfasts are turning up around the country. They range in size, shape and costs. The Busk Valley Ranch in Pennsylvania started when the owners converted an old farm house into a guest house, where horseback riding is the main entertainment (6). The book [How to Start and Run Your Own Bed and Breakfast Inn](#) provides more information. It is available for \$14.95 + \$2.50 S&H from:

Northwind Farm Publications
RR 2, Box 246
Shevlin, MN 56676

A very unique form of agri-entertainment is the "little village" run by Farn and Varlen Carlson of Stanhope, Iowa. The tiny community includes a school, general store, church, livery stable, and blacksmithy. Appropriate artifacts fill the buildings, which are one-half to two-thirds scale. The Carlsons hope to add a barber shop, telephone office, bandstand, and fire station in the future. There is an admission charge for viewing all the buildings, and the Carlsons cater to bus tour groups. Groups can also arrange to have barbecues at the village. The Carlsons schedule special events, including a threshing bee, an ice cream social on Father's Day, Apple Cider Days in August, and a Christmas Stroll, when the village is decorated for the season (7).

Another option for recreational farming is leasing wooded land or marginal cropland for hunting, fishing, or hiking. Hunting leases are the most common form of recreation leases and can range from one-day trespass fees to guided trips and lodging (8). Of course, liability, licenses, and regulations are important considerations in planning for a recreational lease (8).

For information and technical advice on licenses and regulations, contact local offices of the following agencies:

- Fish and Wildlife Service
- USDA Natural Resources Conservation Service
- State Department of Natural Resources

Another source of information on hunting leases is the booklet Managing Your Farm for Lease Hunting and a Guide to Developing Hunting Leases, a 1988 publication available from:

Delaware Cooperative Extension Service
RD #6, Box 48
Georgetown, DE 19947
302-856-7303

Ask for Item #147.

When the public is allowed on farms, some costs are incurred in the form of soil compaction where fields are used for parking, damage to orchards and crops, trash collection, etc. The American Society for Living Historical Farms Association (9) estimates such costs at \$1-2 per visitor. Some farms recover this cost by charging an admission fee or requiring a minimum purchase.

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9. Association for Living Historical Farms and Agricultural Museums (ALHFAM) 8774 Rt. 45 NW
N. Bloomfield, OH 44450-9701
216-685-4410
Accredits living history farms; \$40/year for institutional memberships

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Resources:

Wampler, Ralph L. and James E. Motes. 1984. Pick-Your-Own Farming: Cash Crops for Small Acreages. University of Oklahoma Press, Norman, OK. 194 p.

Although somewhat dated, this book provides excellent information about the business of pick-your-own, including what crops to grow and potential returns. This book has been out of print since 1994, but it can be obtained through inter-library loan (ILL) or through a good used bookstore.

Whately, Booker T. 1987. How to Make \$100,000 Farming 25 Acres. Rodale Press, Emmaus, PA. 180 P.

Everything you want to know and more, but were afraid to ask.

Video that profiles a year of events at a recreational farm that has been in business for ten years. Also offers tips on what to do and what to avoid. Available for \$49.99 from:

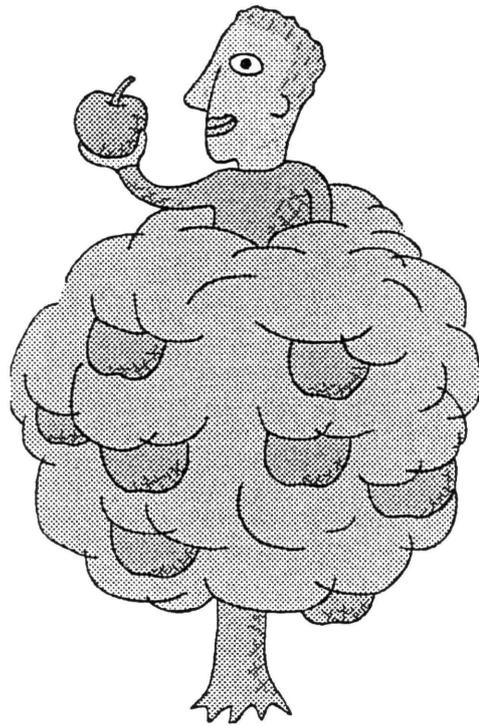
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**Prepared by Lane Greer
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February 1998**

The ATTRA Project is operated by the National Center for Appropriate Technology under a grant from the Rural Business - Cooperative Service, U.S. Department of Agriculture. These organizations do not recommend or endorse products, companies, or individuals. ATTRA is located in the Ozark Mountains on the University of Arkansas campus in Fayetteville, at PO Box 3657, Fayetteville, Arkansas, 72702. ATTRA staff prefer to receive requests for information about sustainable agriculture via the toll-free number 800-346-9140.

Agroforestry





Agroforestry Overview

Horticulture Systems Guide

Appropriate Technology Transfer for Rural Areas (ATTRA)
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Fayetteville, AR 72702
Phone: 1-800-346-9140 --- FAX: (501) 442-9842

Prepared by Alice Beetz
ATTRA Technical Specialist

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Abstract

Integrating trees and shrubs with other farm enterprises can provide economic benefits such as additional sources of income, spreading farm labor throughout the year, and increasing production of current enterprises. In addition, soil, water, and wildlife resources are protected. Agroforestry systems include alleycropping, silvopasture, windbreaks, riparian buffer strips, and forest farming for non-timber forest products. While they offer both economic and ecological advantages, these systems also involve interactions, which complicate their management. Designing and agroforestry enterprise should include research into marketing options as part of a complete business plan.

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Introduction

Agroforestry is a farming system that integrates annual crops and/or livestock with long-term tree crops. The trees are managed as an independent farm enterprise. The resulting biological interactions provide multiple benefits, including diversified income sources, increased biological production, better water quality, and improved habitat for both wildlife and humans. Farmers adopt agroforestry practices for two reasons. They want to increase their economic stability and they want to improve their management of natural resources under their care.

Traditional tree farms – or even nut plantations – are not defined as agroforestry when they are single purpose monocrops. However, they are if another enterprise, like grazing animals, harvesting pine straw, or producing mushrooms, is added. Likewise, farms with existing woodlands may be managed for special forest products and thus qualify as agroforestry systems. If they are only managed for wood products, they are not.

In an agroforestry system trees might provide products such as firewood, biomass feedstocks, fodder for grazing animals, or other traditional forestry products. They might perform the function of sheltering livestock from wind or sun, providing wildlife habitat, controlling soil erosion or, in the case of most legumes, fixing nitrogen to improve soil fertility.

Agroforestry practices in the United States include:

1. alleycropping,
2. silvopasture,
3. windbreaks and shelterbelts,
4. riparian buffer strips, and
5. forest farming (special forest products).

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Agroforestry Practices

Alleycropping

Alleycropping involves growing crops (row crops, forage, etc.) between trees planted in rows. Spacing between the rows is designed to accommodate the mature size of the trees as well as for cropping in the alleyway between the trees. Some designs include sun-loving

crops such as corn or some herbs, so that, even when the trees reach maturity, the alleys must be wide. In other systems a cropping sequence changes to accommodate the amount of light available. For instance, soybeans or corn is grown when the trees are very small, then forages are harvested for hay as the tree canopy closes. Finally, when the trees are fully grown and the ground is more shaded, livestock may be grazed or shade-tolerant crops such as mushrooms or ornamental ferns occupy the alleyway.

Often the design includes plans for several thinning and pruning operations as the trees grow. Although this early harvested wood may have little market value, the extra trees train the main tree crop so they produce long, straight, sawlogs with few lower branches to ensure maximum profit at final harvest.

Alleycropping, like all integrated systems, requires skillful management because both the crop and the trees have production requirements which sometimes necessitate trade-offs between them. Allowing sufficient room for equipment necessary to each enterprise is just one example of the planning essential for the ultimate success of an agroforestry system. If either crop requires chemical herbicides or insecticides, the other must be tolerant of these treatments. In the case of livestock, there may be periods during and after chemical use when animals must be withdrawn from the area. Livestock can cause damage, even when trees are fully grown. Roots that have been injured by livestock hooves are susceptible to disease, and in wet weather, soil is easily compacted. Managers must plan for these contingencies, some of the trade-offs inherent in multiple-use systems.

In alleycropping, trees are commonly planted in straight rows, sometimes with no regard for slope or contour. There are, however, advantages to planting the trees in curves or on the contour. This practice helps slow surface water and reduce soil erosion. Single or multiple rows of trees can be used between the alleys. The first row of trees is planted on the contour line; subsequent rows are planted below the original line according to the slope of the land. The final row of trees in the first block is planted so that it is parallel to the contour line on which the next block of trees will begin. The width of the tree blocks varies, but the cropping alleyways between them have parallel edges. This design avoids creating point rows within the alleys, thus simplifying crop equipment maneuvers. Width of the alleys is determined by the size of this equipment.

If planting on the contour is impractical, another option is to plant trees in curved zigzags so that water running downhill is captured or at least slowed. Islands of trees can offer some of the same advantages if they don't interfere with cropping operations.

Whatever the planting design, trees on the outside edge of a group will grow toward the additional light, resulting in lower value sawlogs. In large plantings, lower value hardwoods or pines are used as trainers to maintain upright, unbranched trunks. The resulting quality sawlogs demand higher prices, especially if they meet the standards for veneer logs.

Alleycropping

Bob Carruthers, crop farmer from Morrilton, AR, faced the choices of getting bigger, getting out of commodity crop farming, or waiting to be pushed out. He decided to plant pecans on his laser-levelled fields and to continue cropping the alleys while the trees grow. He chose pecan varieties in demand in the marketplace that would provide an extended ripening season. Trees were spaced 60' X 35' with micro-sprinklers installed for irrigation, and fertilized according to soil and leaf tissue tests for four years. Four years after establishment, he is already harvesting a few pecans and selling them retail for \$1.50 per pound. He plans to buy a mechanical sheller so that he can add more value to his products.

In the 60-foot alleys, Carruthers plants no-till wheat and soybeans now, recording a 17% reduction in yield as compared to his former monocropped fields. When sunlight limits soybean production, he will grow only wheat in the alleys. At year 22 or thereabouts, he will take out every other tree in the row, leaving a 60' X 70' spacing. Whereas Bob originally estimated he would regain establishment costs in 13 years, that has been revised to 10 or 11 years. Meanwhile, the cropping system helps to pay off the establishment costs, contributing cash flow now when tree revenue is minimal.

Silvopasture

Tree and pasture combinations are called silvopastoral agroforestry. Hardwoods (sometimes these are nut trees) and/or pines are planted in single or multiple rows, and livestock graze between them. Although both the trees and the livestock must be managed for production, some systems emphasize one over the other. Usually, in the early years of establishment, crops or hay are harvested from the planting. Generally after two years, when the trees are large enough so that livestock can't damage them, grazing is begun. In other instances, tree tubes and electric fencing protect the young trees, and grazing begins immediately.

When livestock graze the silvopastoral understory, some of the costs of tree maintenance are eliminated. With good grazing management, for example, herbicides and mowing may become unnecessary. Since the animals actually remove very few nutrients, but rather recycle them into forms usable by the trees, no extra fertilizer is required. In fact, organic matter will increase and soil conditions improve as long as compaction is avoided. Controlling the number of animals per acre and the number of days those animals remain on each site is critical for a successful silvopasture system, however.

Competition between the pasture and the trees for water may be a concern. Seasonal water shortages during late summer in a silvopasture with nut trees, for instance, can seriously impact nutfill and the next year's harvest. Irrigation may be justified if the trees are being managed for nut production. Such competition may not be so critical for timber silvopastures. Further information about silvopastoral systems of agroforestry can be obtained from the National Agroforestry Center (1) and from ATTRA.

Silvopasture

Tom Frantzen and his family are innovative farmer sin NE Iowa. In 1992, they began an intercropping experiment by planting double rows of hybrid cottonwood trees at even spacings across one of their fields. Alternating strips of corn and oats underseeded with red clover are planted between the tree rows. A third strip between the rows is a second year stand of red clover. From a distance the field ahs an attractive striped pattern. Each year the oats are combined and the straw baled. The red clover, underseeded in the oats, is lightly grazed as a new seeding and then pastured in the second year.

Each year, a farrowing hut is placed on each second year clover strip. Bred gilts graze on clover (or alfalfa) while the adjacent crops and trees are protected from damage with two strands of portable electric wire. Six pounds of ground corn and minerals per gilt supplement the pasture to ensure proper nutrition prior to farrowing. In the fall, the growing pigs and lactating sows harvest the corn strips. By grazing both the corn and red clover, harvest costs are kept to a minimum. The corn and trees provided a physical separation between groups of sows and pigs, cut windblast, and provide shade in the heat (2).

Windbreaks or Shelterbelts

Extensive research on windbreaks has been carried out in the US. Trees are planted in single or multiple rows along the edge of a field to reduce wind effects on crops or livestock. An effective shelterbelt can affect a horizontal distance equal to at least ten times the height of the trees. Wind and water erosion are reduced, creating a moist, more favorable microclimate for the crop. In fact, even on land suited for high value crops, the benefits in production to the downwind crop can amount to as much as a 20% increase in yield for the whole field, even when the windbreak area is included (3).

In the winter, snow is trapped, and any winter crops or livestock are protected from chilling winds. Beneficial insects find permanent habitat in windbreaks and shelterbelts, thus offering additional crop protection. The trees do compete for available water along crop edges, however, and may reduce yield next to the windbreaks. Regular deep chisel plowing along the windbreak keeps roots under control.

Windbreaks can be designed specifically for sheltering livestock. Studies have shown the economic advantages of providing protection from windchill, a major stress on animals that live outside in the winter. Reduced feed bills, increases in milk production, and improved calving success have resulted from the use of windbreaks. The National Agroforestry Center (1) offers a series of booklets on windbreak technology as well as a publication entitled *Outdoor Living Barns*. Another resource especially focused on incorporating trees into family farms is *Shelter and Shade* by John and Bunny Mortimer (4).

Besides providing protection to crops and livestock, windbreaks offer other advantages.

They benefit wildlife, especially because they serve as corridors along which animals can safely move. Alternatively, they can be developed into profit centers with hunting leases, selective timber harvest, firewood sales or other special forest products (see section below).

Any tree species can be used in the windbreak. Deciduous species, even in multiple rows, will lose effectiveness when they lose their leaves. For year around use, some of the species selected should be evergreen. Fast-growing trees might be included; deep-rooted, non-competitive species along the edges would be advantageous.

Special Forest Products

The number of products that a woodland can contribute is limited only by the owners' imaginations and their ability to identify and exploit a profitable market. For example:

- fruits, nuts, berries
- honey and other hive products
- mushrooms
- herbs and medicinal plants
- materials for basket-making or chair-caning
- pine straw, boughs, pincones
- plant materials as dried or fresh ornamentals
- bamboo
- aromatics
- fenceposts, firewood, smokewood
- decorative or odd wood, e.g. burls
- dye materials
- seeds, seedlings, and cuttings
- charcoal

Riparian Buffer Strips

When trees, grasses, and/or shrubs are planted in areas along streams, or rivers they are called riparian buffers or filter strips. These plantings are designed to catch soil, excess nutrients, and chemical pesticides moving over the land surface before they enter waterways. Such plantings also physically stabilize stream banks. On cropland that is tilled to improve drainage, water containing pollutants can enter streams directly. Constructed wetlands can be installed in the buffers to capture and clean drainage water before it enters the stream.

Forested areas along streams fulfill other needs of the community at large by storing water and by helping to prevent streambank erosion which in turn increases sedimentation downstream. These areas protect and enhance the aquatic environment as well. Shading the water keeps it cooler which is an essential condition for many desirable aquatic species. Buffer strips also provide wildlife habitat.

Crop and livestock farmers, as well as local communities, have become aware of the threat that agricultural practices can pose to pure drinking water. Consequently, there are federal, state and local government programs to assist in the design and planting of riparian buffer strips. The local Farm Services Administration office can advise on current options.

Conservation organizations are another potential resource. Some offer conservation easements or trusts when land is permanently withdrawn from agricultural production.

Short Rotation Woody Crops

Several of the above-mentioned agroforestry systems can incorporate fast-growing trees such as poplar and willow. Called short rotation woody crops, they can be used in riparian buffers, windbreaks, or alleycrops. These fast-growing trees can be harvested for biomass, fiber, or other products. They can produce a marketable crop in as few as ten years when managed intensively. Rapid initial growth requires a prepared site, adequate fertility and water, and competition controls (e.g., mulch, herbicide, weed barriers).

In some situations, the trees are cut, and one of the resulting sprouts is chosen as the replacement stem. The new tree grows very quickly since it is being fed by the old root system, which had supported a much larger tree. This practice of cutting and re-sprouting a new tree on a mature root system is called coppicing. In other instances, trees are harvested normally and new trees are planted as replacements. Since new hybrids are continually being developed for use as short rotation woody crops, producers might choose to completely re-plant in order to take advantage of newer genetic lines.

Short rotation woody crops is an area of increasing interest to the energy and fiber industries. Considerable information is available on the Worldwide Web and can be found with a search. An excellent introductory publication on short-rotation woody crops is also available from the National Agroforestry Center (1). It includes a bibliography for further research. ATTRA has more information on this topic; it is available upon request.

Forest-Farming

When a natural forested area is managed for both wood products and an additional enterprise, it becomes an agroforestry system. For help with the management of timber, county Extension agents can refer to Extension forestry specialists. These specialists advise on thinning, pruning, and harvesting practices, as well as marketing options. They may even be able to visit the farm itself. Private forestry consultants can also help to maximize profitability while ensuring a sustainable harvest. The Association of Consulting Foresters of America (5) can refer to local consultants.

Besides producing saw timber and pulpwood, woodlands can produce income from many other products. Established forests offer many non-timber "special forest products." These products provide income from old growth forests, offering cash flow without necessitating a single harvest to gain a one-time benefit.

Landowners can manage the established woodlands to encourage naturally occurring patches of berries or bittersweet, for instance. Or they might plant crops as understory where they are adapted. Although growing mushrooms on logs in the forest requires considerable time and labor, a canopy of either hardwoods or pine will provide the shade needed to maintain moisture for fruiting. See the ATTRA publication, *Mushroom Cultivation and Marketing*, for more information.

Berries and vines for crafts or basketry are examples of products that can be harvested without any costs of establishment. Besides harvesting and marketing, they may only require

that the canopy be managed for optimal light conditions. Some examples of non-timber forest products are listed in the box on this page. Further information about special forest products is available from ATTRA and on the Web at [sites listed below](#).

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Business of Agroforestry

Establishment Costs and Interim Income

Proper site preparation combined with recommended planting procedures at the beginning of the agroforestry project will pay off later. Costs of establishment can be considerable. For an alleycropping system – or even a windbreak – destruction of existing vegetation and deep chiseling or ripping the soil are minimal requirements. A season of growing a cover crop before planting the trees and mulch or landscape cloth to reduce early competition for water and nutrients will increase the chances of quick, healthy growth. Establishing an acre of improved varieties of black walnuts following recommended practices has been estimated at \$865. Lending institutions may not fund such a project, especially for a beginner. However, government support programs such as CRP (Conservation Reserve Program) or other program payments will help to defray these costs in some cases.

A consideration for most landowners is the delay until a new planting will begin to generate income to pay back these costs. Alleycropping and silvopastures provide income from the area between tree rows in this early stage. In addition, as a stand of same-age trees matures, some trees will be harvested in order to reduce competition. Although early thinnings are not likely to be worth very much, the later ones may have some market value. Nevertheless, it pays to investigate all options, including marketing value-added products directly. Hardwood chips might be sold to a landscaping firm, for instance, or firewood may have nearby customers.

Nut trees produce income from the nuts long before the timber can be harvested. In fact, the value of the nut harvest of improved varieties over the life of the planting, is liable to surpass the value of the wood at final harvest. Black walnut is a valuable timber and nut tree, but it requires a good site and takes a long time (often eighty years) before timber harvest can begin. Early training and pruning, as well as managing for pests and fertility, ensure maximum value of both crops. Pecans, either native or improved varieties, have some of the same advantages and disadvantages. However, pecan trees are seldom harvested for timber while they are still producing because of the high value of the nut. Farmers in Minnesota are investigating the use of hazelnuts or poplars as part of their crop and livestock systems.

With pines, boughs for the ornamental market and pine needles for landscaping mulch provide early income potential. Again, the total value of these products over the life of the stand can be more than that of the timber. The advantage of providing income while trees grow to maturity, however, can be critical to the cash flow situation of the farm. In every system, the amount and type of management and labor required for interim and final products must be carefully weighed during the design stage.

Marketing

Thorough research into markets available for each type of tree product is absolutely essential before committing to any forestry enterprise. A buyer for the product must be relatively close to the site. Otherwise, transportation costs will eat up potential profits. Because short rotation woody crops are a relatively new type of forestry, it is likely that regional markets will develop over time. These markets will grow where there are customers such as ethanol producers, electric power producers, and the fiber industry. These customers require different feedstocks and will determine the market for each type.

Regions where forestry has a long tradition are likely to have markets for all types of forestry products (e.g. saw timber, chip and saw, pulpwood). Without such a forestry infrastructure already in place, it is risky to commit to an agroforestry system. However, because private lands are becoming a more important source of tree products, new markets will develop in other regions. It is, of course, difficult to predict where, especially when planning for harvests twenty years or more in the future.

Careful consideration must be given to the harvest plan as well as where to sell. The planting design must accommodate harvest equipment and leave room for maintenance operations. Thinning and pruning may generate sales if wisely marketed. This part of the planning process requires the advice of a forestry professional, whether from a government agency or from a private consultant. Loggers and timber buyers are not likely to have the best interests of the landowner in mind.

Landowners who want to add value to their forest products have some choices. One way is to certify that the forest and its harvest have been managed according to specified ecological standards. There are currently several certification programs. Such eco-labelling has caught on in Europe where consumer recognition is high, but has not consistently earned premium prices in the US. Contact ATTRA for more information about forest certification programs.

In some cases, landowners can add value themselves. Wood can be cut and sold as firewood. With access to a portable sawmill, property owners can saw their own logs into lumber, air dry it, and sell it directly to specialty woodworkers. Other options, such as selling pine thinnings as Christmas decorations, require imagination and marketing know-how. Fee hunting or wildlife photography, possibly combined with camping or bed and breakfast facilities might also be considered.

Evaluating Agroforestry Options

Agroforestry systems are more complex than single-purpose farm or forestry enterprises. Each component of the system—the trees as well as the crops or livestock—must undergo normal evaluation procedures. That is, testing against the farm or family goals, evaluating resources, choosing one option from a long list of possibilities after research and family consideration, planning, implementing the plan, and monitoring progress.

Evaluation of an agroforestry system requires collecting the following information:

- Farm Accounts – Including income and expenditure for existing enterprises and potential ones, including fixed and variable costs

- Planting and Felling Areas – Program of harvest and planting each year of the project
- Labor and Materials – Including costs of seedlings, fertilizer, herbicides, and insurance as well as expenses of planting, pruning, and thinning
- Wood Yields – Predicted wood product values by log grade, including cost of harvest and transport
- Understory Profiles – Crop or livestock products, including harvested tree products (nuts, pinestraw) and how production will change through the tree rotation; effects of canopy closure and windbreak benefits
- Environmental Impacts – Water yield, erosion reduction, carbon sequestration, wildlife
- Social Effects – Family and farm goals, support rural community, improve visual esthetic (6).

Since agroforestry systems in temperate climates have not been studied through several complete rotations, landowners will work with incomplete data during the evaluation process. Yield data from same-age tree plantations must be adjusted for an agroforestry system. Understory competition for water and nutrients as well as light effects on both understory and tree edges should be taken into account when projecting yields and expected market values.

Integrating several enterprises necessarily involves multiple interactions. How will each component affect the other—for better or worse? How can all operations be managed without damage to other parts of the system? Despite every effort to predict, there will be unforeseen consequences. Advantages and disadvantages will become apparent. It is therefore more critical than usual to continually observe what's happening on the site. If, during planning, certain indicators can be identified as early warning signs, better monitoring will result. Even though all problems can't be anticipated, losses can be avoided if they can at least be noticed right away. More information on evaluating agricultural enterprises can be obtained by calling ATTRA.

Agroforestry systems, especially for temperate climates, have not traditionally received attention or resources from the agricultural research community. Nevertheless, implementing designs using trees and bushes to enhance production, waste management, and natural resource protection is a step toward a permanent, stable agriculture. Farmers have been pioneering these systems. Each requires a careful initial design, adapted to the site and specific farm operation, continuous observation, and a commitment to a long timeline. The resulting farmscape will be beautiful as well as productive, and can be a source of pride for the family and the community.

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Information Resources

There are a growing number of associations and information resources on agroforestry in temperate climates available to anyone who seeks them.

The Association for Temperate Agroforestry (AFTA) (7) is an organization devoted to agroforestry research, demonstration, and information dissemination in North America. It publishes a quarterly newsletter, *The Temperate Agroforester*, and sponsors a biennial international conference. Proceedings from these conferences provide an overview of recent work being done in temperate agroforestry. Proceedings from a few of the past conferences are still available. (See AFTA's website or contact AFTA about availability for purchase.) The sixth conference was held in Hot Springs, Arkansas, in June 1999. When proceedings become available, ordering information will be posted on the AFTA website.

The National Agroforestry Center (1) in Lincoln, Nebraska is an interagency venture of the Natural Resources Conservation Service and the USDA Forest Service. The partnership combines resources of the two agencies to develop and apply agroforestry technologies in appropriate conservation and/or production systems for farms, ranches and communities. Many useful publications, several of which have been mentioned throughout this overview, are available, and most of them are free.

ATTRA distributed a recent USDA publication entitled [A Guide to USDA and Other Federal Resources for Sustainable Agriculture and Forestry Enterprises](#). It identifies agencies and programs that can help plan and fund new agroforestry projects. Although hard copies are no longer available, it is posted on ATTRA's website: <http://www.attra.org/guide>. An update of the electronic version is planned.

Several other excellent references—older classics and recent publications—are listed as well under [Further Resources](#), below. Two recently published books on agroforestry are Gordon and Newman's *Temperate Agroforestry Systems* and *Agroforestry in Sustainable Agricultural Systems* edited by Buck and Lassoie. Agroforestry design is addressed in Wojtkowski's *The Theory and Practice of Agroforestry Design*. *Restoration Forestry* by Michael Pilarski ([see below for full citation](#)) is an excellent reference on sustainable forestry topics; it is international in scope. Many of the associations listed at the end of this letter come from Pilarski's book. Also listed below are electronic sources of forestry or agroforestry information. These electronic sites are continually in flux. If they can't be found at the addresses listed, a Web search will assist in finding current locations.

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Rocky Mountain Forestry and Range Extension Station
Univ. of Nebraska East Campus
Lincoln, NE 68583-0822
(402) 437-5178
<http://www.unl.edu/nac>

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732 N. Washington St., Suite 4-A
Alexandria, VA 22314
(703) 548-0990
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School of Natural Resources
1-30 Agriculture Bldg.
University of Missouri
Columbia, MO 65211
Website: <http://web.missouri.edu/~afta/>
\$25/year membership fee includes subscription to *The Temperate Agroforester*

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Dr. John Ehrenreich, College of Forestry, Wildlife and Range Stations
University of Idaho
Moscow, ID 83844-1135
(208) 885-7600

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Northeast Regional Agricultural Engineering Service
152 Riley-Robb Hall
Ithaca, NY 14853-5701.
(607) 255-7654

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Department of Forestry
251 Bessey Hall
Iowa State University
Ames, IA 50011-1021

(515) 294-1166

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Agroforestry & Related Organizations

see also References section

American Pulpwood Assn., Inc.
600 Jefferson Plaza, Suite 350
Rockville, MD 20852
(301) 838-9385

Association of Forest Service Employees for Environmental Ethics
PO Box 11615
Eugene, OR 97440
(503) 484-2692

Forest Landowners Assn.
PO Box 95385
4 Executive Park East, NE
Atlanta, GA 30347-0385
(404) 325-2954
<http://www.forestland.org/>

National Forestry Assn.
374 Maple Ave. East, Suite 204
Vienna, VA 22180-4751
(703) 255-2700

National Woodland Owners Assn.
374 Maple Ave. East, Suite 310
Vienna, VA 22180
(703) 255-2300

World Forestry Center
40033 SW Canyon Rd

Portland, OR 97221
(503) 228-1367
<http://www.vpm.com/wfi/emerging.htm>

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Agroforestry & Related Websites

National Agroforestry Center:
<http://www.unl.edu/nac/>

Agroforestry Research Trust (England):
<http://members.aol.com/AgroResTr/homepage.html>

Poplar and Willow home page:
<http://poplar2.cfr.washington.edu/>

Agroforestry at Cornell:
<http://www.cfe.cornell.edu/agroforestry/agroforestry.html>

University of Minnesota site:
<http://www.cnr.umn.edu/FR/cinram/>

Non-timber Forestry Products:
<http://www.ifcae.org/ntfp/>

Short Rotation Woody Crops Working Group Homepage:
<http://www.woodycrops.org/index.html>

North Carolina State University Southern Center for Sustainable Forestry:
http://www2.ncsu.edu/ncsu/research_outreach_extension/centers/susforest.html

USDA Forest Service home page:
<http://www.fs.fed.us/>

Woods of the World:
<http://www.woodweb.com/~treetalk/WoW.html>

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October 1999**

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webmaster@attra.org

Specialty Crops



An odd-shaped corner or hillside may provide opportunities for income diversification through planting nut or fruit trees, Christmas trees, a maple sugar grove, floriculture, mushrooms or medicinal plants — if you have a local market for these crops. Help and advice from professionals is a must in order to be successful with specialty crops.



Nuts

Nuts in commercial demand include almonds, chestnuts, hazelnuts, heartnuts, hickory, pecans, and walnuts. Some nut tree species also have high value for timber and veneer use — an income bonus as trees are thinned or replaced.

Most commercial nut production is in the eastern, southern and southwestern states, where winter temperatures are moderate. Ideal sites include stream bottoms, flood plains, or odd corners of land. Many nut species are soil sensitive, preferring river terraces and other areas where silt has collected over the years. Some nut trees are susceptible to injury from herbicides, and care must be taken to avoid spray drift from nearby chemical use.



Christmas Trees

A wide variety of pine, fir and spruce are all popular as Christmas tree species. A successful Christmas tree plantation requires:

- Planting new trees each spring to produce sustainable crops year after year.
- Pruning trees annually until they are harvested (about six years minimum) to help them develop marketable shapes.
- Controlling weeds and grass, and minimizing rodent damage.
- Harvesting and marketing your trees in November and December of each year.

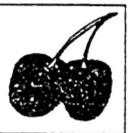
Before planting, check with your state forester or Christmas tree association about the market for Christmas trees in your area. Some local markets are saturated.



Maple Syrup

Black and sugar maples, native to the northeastern U. S. and parts of Ontario and Quebec, yield a sap prized for its flavor. A sugar maple grove needs many trees of tappable size (over 10 inches in diameter). Sap flow is triggered in early spring by days above freezing and nights below freezing, lasts about

4 to 6 weeks, and ends when buds swell and produce a less desirable flavor in the syrup. Each tap produces an average of 10 gallons of sap per season, which in turn yields about one quart of syrup.



Fruit

The best quality fruit is produced on relatively young trees. Modern orchard practice uses younger dwarf trees, often replacing them at age 40. In general, trees must be spaced far enough apart to allow sunlight to reach the lower branches, with enough room for spraying and cultivating equipment to work.

Good nursery stock is the foundation of a good orchard. For fruit varieties that are not self-pollinating, another variety in the same orchard may be needed for proper pollination.

STRAWBERRIES

BLUE BERRIES

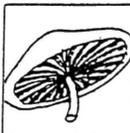
PUMPKINS / GOURDS



Floriculture

Windbreaks, riparian filter strips, and odd pieces of land can sometimes be used to grow plant materials for the floricultural industry or plant stock for sale by nurseries. Some shrubs, such as pussy willow, corkscrew willow, and red osier dogwood, have branches that can be clipped off and harvested for use

by florists. Again, finding a local market is important before attempting crops for the floricultural industry.



Forest Mushrooms

Shiitake, or "forest" mushrooms, are used by gourmet restaurants for their nutty flavor and unusual appearance. They are also valued for their medicinal properties, with some studies showing a decrease in cholesterol levels for persons eating them.

Originally from Japan, these mushrooms are grown on logs cut late in the winter from hardwood trees. The logs are drilled and the holes packed with pre-injected wooden dowels or sawdust filled with fungal spawn. The holes are then sealed with wax or foam and the logs are "incubated" in cribbed stacks so that the fungus can penetrate throughout the log. The mushrooms appear through the bark or ends of the log. Like most mushrooms, shiitake thrives in a cool, damp climate, and are grown most successfully at sites that provide shade and are relatively cool and damp all year. Low-lying woodlands near streams are often suitable.

Harvesting normally continues for weeks or months, and in some areas two crops per year can be produced. Associations have been formed in many states for marketing purposes.



Medicinal Plants

Existing hardwood timber stands can provide shade to grow native medicinal plants such as ginseng or golden seal for the growing traditional medicine market. Ginseng, used as a general health tonic for more than 4,000 years, generates more than \$5 million in Kentucky alone. Golden seal, widely used in Native

American medicine, is specifically used for eye ailments but is also used as a tonic and as a diuretic stimulant. Some medicinal plants require four to five years to reach maturity, but collecting and selling seed during the years prior to maturity can provide some interim income. While production is usually labor intensive rather than capital intensive, 1986 studies indicate that it is possible to gross \$6,000 from a one-tenth acre ginseng plot in four to five years.

Two Important Keys to Success

"Ya gotta know the territory"

Markets for these and other specialty crops can be fickle, and can vary widely in different regions of the country. Before embarking too far down the road on a specialty crop, be sure that a market exists.

Get help from those in the know

If you are considering any specialty crop, the help of experts will save much time and expense. Depending on the crop, enlist the assistance of a consulting forester, arborist, extension agent, a current grower, or specialists from nearby universities or colleges.

For technical assistance in planning Specialty Crops, contact your nearest State Forester, Soil Conservation Service, County Extension Service, or Soil and Water Conservation District office.

For your free *Conservation Trees For Your Farm, Family & Future* booklet, write

 **The National Arbor Day Foundation**
Nebraska City, Nebraska 68410

1998

Pharmacia & Upjohn Company
 Allergon Division
 P. O. Box 693
 Carthage, MO 64836

417-358-9710

Below is a list of species that are frequently used in the manufacture of allergy related products.
 Most are Missouri natives or relatively common introduced species.

POLLEN SPECIES LIST

Scientific Name	Common Name	Flowering Dates (month)
<i>Acer negundo</i>	Box elder	4-5
<i>Acer saccharinum</i>	Silver maple	2-3
<i>Acer saccharum</i>	Sugar maple	4
<i>Acer rubrum</i>	Red maple	4
<i>Betula nigra</i>	River birch	4-5
<i>Corylus americana</i>	Hazelnut	3-4
<i>Fraxinus americana</i>	White ash	4-5
<i>Fraxinus pennsylvanica</i>	Green ash	4-5
<i>Juglans nigra</i>	Black walnut	4-5
<i>Juniperus virginiana</i>	Eastern red cedar	3-4
<i>Morus rubra</i>	Red mulberry	4-5
<i>Ostrya virginiana</i>	Eastern hop hornbeam	4-5
<i>Populus alba</i>	White poplar	4-5
<i>Populus deltoidea</i>	Eastern cottonwood	4-5
<i>Quercus alba</i>	White oak	4
<i>Quercus rubra</i>	Northern red oak	4-5
<i>Salix nigra</i>	Black willow	4-5
<i>Tilia americana</i>	Basswood or Linden	5-6
<i>Ulmus americana</i>	American elm	2-3
<i>Ulmus pumila</i>	Siberian elm	2-3
<i>Amaranthus tamariscinus</i>	Common water hemp	6-8
<i>Ambrosia trifida</i>	Giant ragweed	8-9
<i>Melilotus alba</i>	White sweet clover	5-6
<i>Rosa multiflora</i>	Multiflora rose	5-6
<i>Sorghum halepense</i>	Johnson grass	6-7
<i>Xanthium commune</i>	Cocklebur	8-9

IRONWOOD

Hop Hornbeam

4-5

#1.90



United States
Department of
Agriculture

Cooperative State
Research Service

Office for
Small-Scale Agriculture



A Small-Scale Agriculture Alternative

Herbs

The term "herbs" here means plants not used solely as vegetables or ornaments. They serve partly or mainly for culinary, cosmetic, industrial, medicinal, landscaping, decorative, and incense or fragrance-emitting purposes.

They include vegetables such as garlic, flavoring items such as red peppers or mint, decorative flowers such as roses, various oilseed shrubs, ground cover such as lemon thyme or perennial chamomile, edible flowers such as nasturtiums, trees such as the linden or bay, and plants such as chrysanthemums that may be used in alternative pesticides.

Herbal processed products include fresh and dried flowers, leaves, barks, roots, and seeds, dried, ground, or dissolved powders; essential oils (as distinguished from petroleum or synthetic oils); and oleoresins, naturally occurring mixtures of oil and resin. Among products are condiments, spices, or food seasonings; teas; dyes; cosmetic products; and so-called health foods.

The competition is intense in producing and marketing herbs. Producers range from giant corporations to small-scale entrepreneurs and hobbyists.

One challenge facing producers is that no chemicals are authorized by the Environmental Protection Agency for use in combating pests on herbs. Producers should be familiar with pesticide-free farming methods. Unless they can certify their products to be chemical free, growers may find wholesalers don't want their products.

Overproduction or shortages can affect herb prices, sometimes dramatically, because herbs represent such a small proportion of total food consumption. Mark Blumenthal, editor of the quarterly *Herbalgram*, notes that enough tarragon could be produced on just 250 acres to take care of U.S. needs for a year. Excessive production of catnip once brought sharp price drops. On the other hand, shortages can arise overnight and escalate prices. That's what happened after the recent nuclear plant disaster in the Soviet Union.

There has been "an incredible upturn of interest" in herbs, says Portia Meares, former editor and publisher of *The Business of Herbs*, one of few if not the only U.S. herb-trade newsletter. (Published

every 2 months, by Paula and David Oliver, North Wind Farm, Route 2, Box 246, Shevlin, MN 56676, its subscription rate is \$20 a year.

Only 200 people were expected when a trade group, International Herb Growers and Marketers Association (IHGMA), was formed in 1986 at an Indianapolis, Indiana, meeting. More than 600 appeared. Note: The group picked a broker, not a grower, as president. Officers expect membership to climb considerably.

Blumenthal also has noted an upsurge in requests for information. His *Herbalgram*, (512-331-4244) (available for \$25 a year) is supported by the American Botanical Council and the Herb Research Foundation, P.O. Box 201660, Austin, TX 78720.

Julie Macksoud, executive director of the Herb Society of America, publisher of the annual *Herbarist*, says she receives 4,000 letters a year. About 20 percent of the writers want to grow and market herbs commercially. (The *Herbarist* is available for \$5 a year from the Society, nonprofit and educational in nature, at 2 Independence Court, Concord, MA 01742.)

Fresh-Cut Herbs

For the small-scale entrepreneur, the best chance of competing may be in the fresh-cut herb business. A market must be found and there are many, such as a major wholesale produce or farmers' market. A prospective producer might contact produce managers of supermarkets, salespeople handling such specialty items as potted plants, or the owners of gourmet or ethnic-background restaurants. What herbs do they buy? At what prices? On a long-term basis? Magazines, newspapers, and other media note food trends and interests.

A prospective producer might consider marketing through his or her own mail-order business. Many home gardeners and others buy that way.

An information source is Julie E. Stewart at the Produce Marketing Association (PMA) (1500 Casho Mill

Road, Newark, DE 19714-6036; telephone 302-738-7100). She can provide herb market bibliographies to nonmembers of PMA for \$20 (the search fee) plus \$10 for computer page printouts of up to 10 pages, plus \$1 per additional page.

Much about pricing and marketing fresh-cut herbs can be learned from the Agricultural Marketing Service (AMS) of the U.S. Department of Agriculture (USDA). The AMS Fruit and Vegetable Division's Market News Branch provides daily reports on some fresh-cut herb prices and shipment sizes, mainly from New York City, Boston, Miami, San Francisco, and Los Angeles, centers of greatest herb use. But herb greens also are sold in the other 15 AMS reporting centers: Atlanta, Baltimore, Buffalo, Chicago, Cincinnati, Columbia (SC), Dallas, Denver, Detroit, Honolulu, New Orleans, Philadelphia, Pittsburgh, Seattle, and St. Louis. (Write: W. H. "Bill" Crocker, Room 2503-S, AMS, USDA, Washington, DC 20250, for lists of other types of reports and subscription prices.)

AMS provides reports on prices and supplies of "miscellaneous herbs," which are fresh-cut and whose leaves are usually used for flavoring, such as arugula ("rocket salad," to the trade), basil, chives, cilantro (also known as coriander, parsley, and spanish or Chinese parsley), chervil, dill, marjoram, mint, oregano, rosemary, sage, savory, sorrel, tarragon, thyme, lemon thyme, and watercress. Also listed as an herb is the confusingly named anise, which Green Grocer Joe Carcione says is a close relative of fennel, bulbous fennel, Florence fennel, or finocchio. It is generally boiled with its bulbous lower section like a vegetable and its leaves are not used for flavoring, as is the case with anise hisop, a kind of mint. (A third anise, sometimes classed as an umbelifer because of its relationship to dill, angelica, and celery, is *Pimpinella anisum*, a flavoring seed producer.) Some herbs used for their roots, such as ginger, are listed by AMS as oriental vegetables, but the horseradish (root) is sometimes listed as an herb. Herbs such as garlic, onions, parsley, and hot peppers also are priced but are listed as plain vegetables.

A majority of the fresh-cut herbs in the

United States come from California, Texas, or Florida, but some items come from other States. Some are imported at very competitive prices.

Processed Herbs

Prices for processed herbal products vary widely. The import prices usually are so low that they readily compete with U.S. products. In 1986 there was no domestic competition for imported rose oil (attar of roses) at \$2,766 per kilogram (kg). Despite growing competition from synthetic oils, imports have been increasing for other essential oils. These include onion and garlic oil (imports from China run about \$100 per kg); cedarwood, clove, and nutmeg oil; and begmot, citronella, grapefruit, neroli, origanum, palmarosa, pine, patchouli, peppermint, petitgrain, and rosemary. But U.S. companies also export orange, lemon, peppermint, spearmint, and other essential oils. Most of their domestic production already is contracted.

Information on U.S. trade and the world situation for many processed products from herbs and spices may be obtained from *Spice and Essential Oil* circulars of USDA's Foreign Agricultural Service (FAS) at an annual subscription rate of \$5 for three issues. (Write to FAS, Information Division, Room 4644-S, Washington, DC 20250-1000.)

Dr. James A. (Jim) Duke, botanist of the Germplasm Introduction and Evaluation Laboratory, USDA's Agricultural Research Service, suggests study of the *Chemical Marketing Reporter* (Schnell Publishing Company, 100 Church Street, New York, NY 10007) for the latest continuing data on processed herb prices and dealers. The publishers also issue an annual, *Oil, Paint and Drug Chemical Buyers Directory*, listing dealers.

Varietal Selection

Among many challenges in the herb business is varietal selection. Some seeds do not produce the crop desired. That's one reason why many herbs should be started from cuttings rather than seeds, advise both Duke and Thomas DeBaggio, herb grower in Arlington, Virginia, and an editor of *The Herb, Spice and Medicinal Plant Digest*.

For example, "oregano" seeds sold by some companies may not produce

plants of culinary use quality. While many kinds of lavender may be grown from seeds, plants so grown will not produce quality oil. Cuttings should be obtained from a reliable dealer and useful plants distinguished from the useless.

Growing Methods

The Herb, Spice and Medicinal Plant Digest is a quarterly devoted mainly to improving growing methods. It also reports on postharvest handling. Besides DeBaggio, other co-editors are Dr. James E. Simon, an assistant professor in the Department of Horticulture at Purdue University (West Lafayette, IN 47907) and Dr. Lyle E. Craker, a plant physiology professor. (The digest is available at \$6 a year, with checks to be made payable to the University of Massachusetts, in care of L. E. Craker at the Department of Plant and Soil Sciences, Stockbridge Hall, University of Massachusetts, Amherst, MA 01003).

Although many herbs flourish outdoors, prospective producers should seriously consider a greenhouse. Construction costs from \$10 to \$40 per square foot, depending on location and equipment. Expert advice is essential.

Ginseng is an herb that can be grown outdoors in many parts of the country. More than 90 percent of the U.S. ginseng harvest is exported, mostly to the Orient, to become herbal tea, which in turn is shipped back to the United States. Several problems with growing ginseng are noted in a chapter of the 168-page publication called *ADAPT100*. (The book is available for \$12.95 including postage from P.O. Box 10652, Des Moines, IA 50336.) It was published by *Successful Farming* magazine as an outgrowth of its 1986 conference on agricultural diversification.

Other Information Sources

Other sources of information about herbs of all kinds include the Horticulture Information Center of USDA's National Agricultural Library (NAL), Beltsville, MD 20705; the nearest county Cooperative Extension Service office; and the State university and its horticulture specialists.

Persons wishing to see a great variety of living herbs might visit the U.S. National Arboretum, part of USDA's

Agricultural Research Service, Washington, DC 20002. There, Holly Shimizu is curator of the National Herb Garden. Sponsored by the National Herb Society in 1965, it is the largest such formal garden in the world. Shimizu regularly schedules workshops in cooperation with local herb groups.

To learn about herbs which also can be considered wildflowers, interested persons can contact the National Wildflower Research Center (not a Government agency), which has directories of wildflower suppliers and specialists for every State. (To obtain information, include a self-addressed, legal-sized envelope affixed with 56 cents in stamps to 2600 FM 973 North, Austin, TX 78725.)

Simon and Craker also are editors-in-chief of an annual review, *Herbs, Spices and Medicinal Plants: Recent Advances in Botany, Horticulture and Pharmacology*. Volumes I and II are available at \$65 apiece (clothbound). Volume III is to be available early in 1988 from Oryx Press, 2214 N. Central at Encanto, Phoenix, AZ 85004.

Simon also issues a bibliography of production information for commercial vegetable growers, which lists two books: *Herbs*, by J. V. Crockett and O. Tanner, Time-Life Books, Inc., from the Silver Burdett Company, Morristown, NJ 07960; and *How to Grow Herbs*, edited by P. Edinger, a Sunset book from Lane Books, Menlo Park, CA 94025.

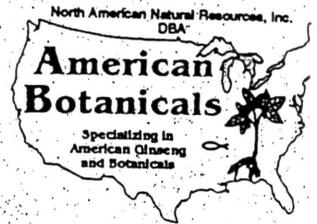
The Purdue University Cooperative Extension Service's horticulture department also publishes *Guide to Production Information for Commercial Vegetable Growers* that has a list of other information sources on practical vegetable production. It is available to new as well as experienced producers.

Prepared by George B. Holcomb of the Office of Information, U.S. Department of Agriculture, for USDA's Office for Small-Scale Agriculture (Howard W. "Bud" Kerr, Jr., Program Director). The address is: Office for Small-Scale Agriculture, Cooperative State Research Service, USDA, Room 342-D, Aerospace Building, Washington, DC 20250-2200. (Telephone: 202-401-4640 or Fax: 202-401-5179)

Slightly Revised, October 1991

American Botanicals

Allen Lockard, President



Main Office

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Eolia, Mo: 63344
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Summer: Sat 8:00 - 12:00

Southern Missouri: 573/485-2303

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RECOMMENDED PRACTICES FOR HARVESTING PLANTS

- I) OBEY THE LAWS OF NATURE, USE COMMON SENSE COLLECTING BOTANICALS.
- II) OBEY ALL FEDERAL, STATE, AND LOCAL LAWS REGARDING HARVESTING OF PLANTS.
- III) DO NOT TRESPASS, OBTAIN PERMISSION FROM LANDOWNERS AND PERMITS FROM LOCAL AUTHORITY. (IT SOMETIMES HELPFUL TO EXPLAIN TO LANDOWNERS MANY OF THE PLANTS WE HARVEST ARE CONSIDERED WEE AND MANY ARE PERENNIAL, THAT CAN BE HARVESTED EVERY YEAR.)
- IV) A) WHEN HARVESTING HERBS, LOOK FARTHER FOR LARGER STAND FROM WHICH TO HARVEST.
B) HARVEST SMALL QUANTITIES AND REPLACE FOLLIAGE AND DIRT AROUND THE HARVESTED ARE.
C) LEAVE 20% OF THE PLANTS INTACT TO GROW AGAIN AND LEAVE MATURE SEED PRODUCING PLANTS TO SEED DOWN SHAPE.
- V) RESEED AS YOU HARVEST.
- VI) WHEN COLLECTING HERBS, DO NOT PULL THEM OUT OF THE GROUND, CUT THE MOFF AND LEAVE THE ROOT SYSTEM IN THE GROUND FOR REGROWTH.

ROOT CROPS WHEN DIGGING ROOT CROPS, LEAVE ROOTLETS AND BROKEN ROOTS IN THE GROUND. THE DIGGING AREATES THE SOIL AND THIS HELPS REGROWTH.

DO NOT DIG IN THE PATCH EVERY YEAR, ROTATE YOUR STANDS AND ALLOW REGROWTH. MANY PLANTS WILL REGROW IN THREE YEARS.

LEAVES SOME SEASONS IT IS POSSIBLE TO COLLECT TWO CROPS OF LEAVES FROM THE SAME TREE OR BUSH PRUNING USUALLY INCREASES HEAVIER GROWTH FOR THE NEXT SEASON.

GOOD WILD CRAFTING PRACTICING INCREASES PLANT POPULATION INSTEAD OF DECREASING THEM.

1996 SPRING PRICE LIST

THE NUMBER IN BRACKETS () BESIDE EACH ITEM IS THE PAGE NUMBER THAT THE RESPECTIVE ITEM LISTED ON IN THE BOOK, "A GUIDE TO MEDICINAL PLANTS OF THE U. S.", WHICH SELLS FOR \$15.00 POSTAGE PREPAID. THE NUMBER IN BRACKETS < > IS LISTED IN THE BOOK "PETERSON FIELD GUIDE EASTERN/CENTRAL MEDICINAL PLANTS", WHICH SELLS FOR \$18.00 — POSTAGE PREPAID.

THE ITEMS LISTED IN BOLD TYPE ARE IN GOOD DEMAND

PRICES ARE SUBJECT TO CHANGE WITH NOTICE	PER DRY LB.	PER DRY LB.
BAYBERRY RT. BK	(155) <254>	2.50
BETH ROOT	(22) <138>	2.00
BLACKBERRY ROOT	(190) <234>	.50
BLACK ROOT (Culvers)	(231) <234>	8.00
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BLACK INDIAN HEMP RT	(39)	1.50
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BLUE COHOSH ROOT	(61)	1.00
BLUE VERVAIN HERB	(229)	.50
BURDOCK ROOT	(43) <166>	1.50
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BUGLEWEED HERB	(70)	1.00
BUTTERNUT TREE BARK	(127)	.40
BUTTON SNAKE ROOT-SPLIT		2.00
CALAMUS ROOT= SWEET FLAG	(26) <312>	1.50
CATNIP HERB	(157) <70>	.75
CHICKWEED	(210) <42>	.75
CLEAVERS HERB	(105)	.75
CRANESBILL ROOT	(109) <201>	1.00
CRAMP BARK	<246>	5.00
DANDELION ROOT	(213) <130>	1.50
FEVERFEW HERB	<84>	1.00
FRINGE TREE BARK	(69) <270>	5.00
GINSENG WILD	(16) -FALL MARKET	
GINSENG CULTIVATED	(16) -FALL MARKET	
GOLDEN SEAL ROOT	(123) <50>MKT	32.50
GOLDEN SEAL HERB	(23) <50>MKT	7.50
HOREHOUND HERB	(145) <70>	.50
INDIAN TURNIP ROOT	(44)	1.00
KANSAS SNAKE ROOT	(91) <200>MKT	18.00
KANSAS SNAKE HERB	(91)	2.00
LOBELLA HERB	(139) <184>	2.50
MAIDEN HAIR FERN HERB	(28) <308>	1.00
MAYAPPLE ROOT	(173) <46>	.25
MAYPOP HERB = PASSION FLOWER	(WEST CON)	.75
MISSOURI SNAKE HERB	<78>	.75
MISSOURI SNAKE ROOT - DRY CLEAN	<78>	3.25
MULLEIN LEAF	(228) <114>	.40
NEW JERSEY TEA ROOT -- (CUT)		.50
PEACH TREE BARK		.50
PEACH LEAF		.50
PINK ROOT (True)	(208) <148>	16.00
PLEURISY ROOT -(SLICED)--	(49) <136>	1.50
POKE ROOT	(164) CUT/DRY--	.50
PRICKLEY ASH TREE BARK		
(NORTH) AMERICANA	(238) <238>	.75
(SOUTH) ZANTHOXUM	<238>	2.50
QUEEN OF MEADOW ROOT	(100) <164>	1.00
QUEEN OF MEADOW HERB	(100) <164>	.50
QUEENS DELIGHT ROOT	(211)	2.50
RED CLOVER BLOSSOMS	(218) <158>	4.00
SASSAFRAS LEAF	(201) <278>	1.00
SASSAFRAS ROOT BK (NAT)	(201) <278>	2.00
SASSAFRAS ROOT BK (Select) **ROSSED BARK		4.00
SASSAFRAS TREE BARK		.15
SARSAPARILLA ROOT	<154>	3.00
SENECA SNAKE ROOT	(174) <72>	7.50
SCULLCAP HERB - TRUE	(203) <186>	3.50
SCULLCAP HERB - GERMANDER	<162>	1.00
SOLOMON SEAL ROOT	(174) <32>	1.50
SPIGNET ROOT	(41) <54>	2.00
SQUAW VINE HERB	(150) <26>	2.50
SLIPPERY ELM BARK - ROSSED ONLY		1.25
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STAR GRASS ROOT - HELONIAS	<142>	20.00
STONE ROOT	(77) <112>	.50
SUMAC ROOT BARK	(189) <250>	.75
SUMAC TREE BARK	(189) <250>	.75
SUMAC LEAF (Leaf Only)	<250>	.20
VIRGINIA SNAKE ROOT	(45) <224>	20.00
WAHOO ROOT BARK	(97) <244>	1.00
WAHOO TREE BARK	(97) <244>	1.00
WALNUT LEAVES	(128) <276>	.25
WHITE OAK BARK	(184) <278>	.10
WHITE WILLOW BARK	(196) <268>	.35
WILD CHERRY BARK - Thick	<290>	.20
WILD CHERRY BARK - Thin	<290>	.50
WILD GINGER ROOT	(47) <138>	3.00
WILD HYDRANGEA ROOT	(122) <242>	1.00
WILD INDIGO ROOT BAP. TINT		7.00
WILD LETTUCE LEAF	(134) <128>	1.00
WILD YAM ROOT	(88) <204>	.75
WITCH HAZEL BARK	(114) <256>	1.20
WITCH HAZEL LEAF	(114) <256>	1.35
YELLOW DOCK ROOT	(192) <214>	1.00
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SPECIAL FOREST PRODUCTS WORKSHOP

Monday, October 7, 1996

Sponsored by: Missouri Department of Conservation; Green Hills Resource Conservation & Development, (RC&D); Prairie Rose RC&D; Geode RC&D; Southern Iowa RC&D; USDA Natural Resources Conservation Service; U.S. Forest Service; and University of Missouri Extension

Workshop Speakers

Jim Anderson, *Horticulture Marketing Specialist, Missouri Department of Agriculture, 1616 Missouri Blvd. Jefferson City, MO 65102; phone 573-751-3394.*

✓ Larry Choate, *Owner, North American Habitat for Wildlife, 1202 Lincoln Street, Unionville, MO 63565.*

✓ Mark & Deb Damhorst, *Owner, Ohio Street Originals, 1001 Ohio Street, Quincy, IL 62301; phone 217-222-5003.*

✓ Dave Goering, *Plant Manger, Pharmacia & Upjohn, Allergon Division, P.O. Box 693, Carthage, MO 64836; phone 417-358-9710, FAX 417-358-1754.*

✓ Ron Heller, *Owner, NEMO Specialty Farms, Rt. 1 Box 18A, Ewing, MO 63440; phone 573-494-3608.*

✓ Stan Hildebrand, *Manager, Sandhill Farms, Rt. 1, Box 155, Rutledge, MO 63563; phone 816-883-5543.*

Jim Jones, *Vice President, Hammons Products Co., 217 Hammons Drive, Stockdon, MO 64738; phone 417-276-5181, FAX 417-276-5187.*

Shelby Jones, *Staff Supervisor, Resource Management & Utilization, Missouri Department of Conservation, P.O. Box 180, Jefferson City, MO 65109; phone 573-751-4115, FAX 573-526-6670.*

✓ Allen Lockard, *Owner, North American Natural Resources, Inc., Rt. 4 Box 94H, Eolia, MO 63344; phone 573-485-2300.*

Matt Nichols, *Agriculture Business Specialist, University of Missouri Extension, 503 E. Northtown Road, Kirksville, MO 63501-1999; phone 816-665-9866.*

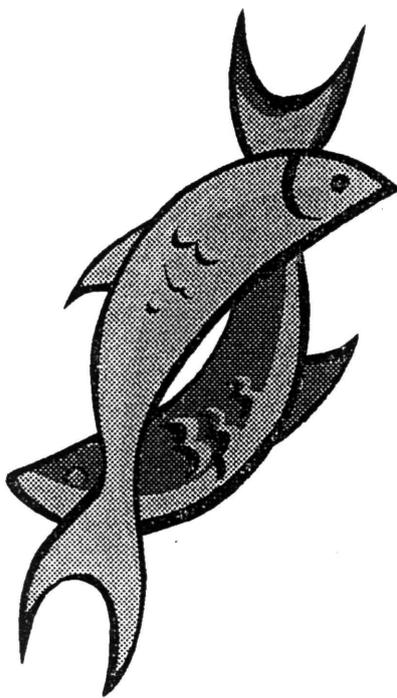
Jack Slusher, *Extension Forester, University of Missouri, I-34 Agriculture Building, Columbia, MO 65211; phone 573-882-4444.*

Tim Smith, *Botanist, Natural History Division, Missouri Department of Conservation, P.O. Box 180, Jefferson City, MO 65109; phone 573-751-4115.*

Ed Tamerius, *District Forester, Missouri Department of Conservation, P.O. Box 428, Hannibal, MO 63401; phone 573-248-2530, FAX 573-248-2532.*

Bill Yoder, *Forest Nursery Superintendent, State Nursery, Missouri Department of Conservation, Rt. 2 Box 465, Licking, MO 65542; phone 573-674-3229.*

Aquaculture





EVALUATING AN AQUACULTURE ENTERPRISE

Livestock Systems Guide

Appropriate Technology Transfer for Rural Areas (ATTRA)
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Prepared by Lance Gegner
ATTRA Technical Specialist
October 1998

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Abstract

This publication discusses some of the resources needed to begin a new aquacultural enterprise or to diversify an existing enterprise. Information provided includes: regulatory permits required, possible species of fish to produce and their requirements, production methods available, and marketing and financial planning considerations. There is a listing of further resources available including a listing of the five Regional Aquaculture Research & Development Centers, the 29 National Sea Grant Programs and their directors, aquaculture

book dealers, and common and scientific names of common aquacultural species.

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Introduction

Aquaculture has received considerable attention recently because of increased consumer demand for fish and shellfish, and a declining fisheries catch. Aquaculture, the cultivation of fresh and salt water animals and plants, is expanding to exploit the resulting market potential.

The wide range of cultured species and production methods makes it impossible to provide a full discussion of aquaculture in a single document of this kind. This publication surveys the important considerations that must be weighed when planning an aquaculture enterprise, and provides a list of resources and contacts for additional information. It can also help you identify the production systems, species, and marketing strategies most appropriate to your situation. Final determination of the best aquaculture enterprise for you will only be possible after considerable research, utilizing the enclosed materials as well as materials listed in the Further Resources section.

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Important Considerations for the Prospective Aquaculturist

Motivation and Goals

To begin, you need to ask yourself why you want to start an aquaculture enterprise-what goals do you seek for such an enterprise? The goal of a subsistence enterprise is to produce the amount of fish needed by a family at minimum cost; whereas, the goal of a commercial enterprise is to produce the greatest profit with the available resources. Farm diversification is a common goal of many aquaculturists. Most aquaculture experts advise prospective aquaculturists to set modest goals (lower resource requirements) initially and expand them as they gain experience. This advice can be followed by starting with a small-scale subsistence enterprise, which is gradually expanded into a small commercial operation for farm diversification. Eventually, if the success of the aquacultural enterprise warrants, the commercial aquaculture operation can become the main farm activity.

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Resources

Natural resources such as water, land, soil, and climate strongly influence the choice of