
Nurturing the Next Generation of Wisconsin's Dairy Farmers

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The Center for Integrated Agricultural Systems brings together university faculty, farmers, policy makers, and others to study relationships between farming practices, farm profitability, the environment, and rural vitality.

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PATS conducts innovative research and outreach programs on the impacts of new agricultural technologies and public policies on family farming in Wisconsin. We seek to ensure that the future of Wisconsin includes a strong agricultural economy that is supportive of family farming, of the role of farm families in strengthening rural communities, and of land stewardship.

Our research programs assess the social and economic implications of technologies and public policies for Wisconsin's family farmers. Our survey research, public input meetings, and focus group sessions provide a voice for Wisconsin farmers to express their views on the trajectory of agricultural development. Our outreach programs communicate the results of our work to a wide range of audiences.

Nurturing the Next Generation of Wisconsin's Dairy Farmers

Brad Barham, Douglas Jackson-Smith, Steve Stevenson, and Jennifer Taylor

Executive Summary

Introduction

A strong dairy economy has both economic and social benefits for Wisconsin. While support for beginning dairy farmers is not the only way to sustain and increase dairy productivity, it is an important strategy that can renew the dairy industry with new farmers.

There are many challenges in attracting new people to the dairy business. New dairy farmers often face high start-up costs for land, equipment, and facilities. Volatile milk prices, long hours, and hard work reduce the appeal of a career in dairy farming. In the 1990s, prospective dairy farmers could readily find off-farm jobs that often paid better than dairying.

To better understand the start-up strategies used by beginning dairy farmers, a research team from the Program on Agricultural Technology Studies (PATs) and the Center for Integrated Agricultural Systems (CIAS) at UW-Madison surveyed 321 beginning dairy farmers in 1996. The research team then supplemented this survey research with 30 in-depth case studies of beginning farmers from a wide range of backgrounds.

From this research, a picture emerged showing a wide range of possibilities for getting established in dairying. Dairy farmers can successfully start at different ages and stages in their careers. They can employ a range of production strategies at different scales. Some take over the family farm, while others start out on their own farms. Some enter farming as a second career.

Despite all of these differences, the most important characteristic of the successful beginners in this study was the ability to negotiate a good fit between their resources, skills, and farm and family goals. Public and private sector agencies and businesses can help beginning farmers develop “smart” entry strategies based on clear assessments of their resources, skills, and goals.

Meeting the challenges

Farm transitions are much more complex than the traditional picture of a young farmer taking over the family operation. Eighty percent of the beginning dairy farmers in this study were not taking over family farms, and many were getting started without growing up on a family farm. **Families alone cannot shoulder all the responsibilities of helping these farmers get started.** By working together, public and private entities can help beginning dairy farmers gain the resources and skills they need to get started. These include:

Dairy business management skills: Beginning farmers today may need a wider range of business skills than farmers needed in the past. Dairy farmers need to develop business plans, financial analyses, human relations skills, and risk management strategies. Cooperatives, agricultural professionals, researchers, extension, and technical college instructors should work together to assess the strengths and gaps in current educational programs for beginning dairy farmers. This assessment should emphasize how well these programs help beginners who seek low capital production systems.

Equity: Getting into too much debt early on was one of the biggest threats to the beginning farmers in this study. Many of the successful beginners focused on building their equity in cows, savings, and inexpensive equipment. Beginners need to know the benefits and costs of equity-building strategies that involve very little initial acquisition of equipment, land, and machinery. Researchers, extension agents, and technical college instructors can work with farmers to determine the suitability and profitability of various farm plans. Public policies such as tax credits can provide financial incentives for retiring farmers to transfer their assets to beginners.

Effective production systems: The farmers in this case study successfully used a range of production systems. Beginners taking over a family farm were more likely to have traditional farming setups. Those who were not taking over a family operation had more flexibility to try different management strategies, such as management intensive rotational grazing. Transition teams composed of farmers and professionals can help beginners make decisions about production systems. Many beginning dairy farmers have trouble finding farms to rent with the facilities which they need. Public agencies could help finance investments in retrofitted “start-up” and incubator farms on strategically located lands.

Effective marketing strategies: When successful, value-added processing and marketing strategies increase milk prices and net incomes for dairy farmers. Public agencies and private institutions can work together to provide research and funding for value-added processing and marketing of unique dairy products.

Income and cash flow: All of the beginning farmers in this study said that income and cash flow problems were the biggest obstacles to their success. Given this level of concern, it makes sense that off-farm income plays a major role in helping beginners maintain sufficient income. Typical farm management evaluations often do not account for off-farm income. Researchers, extension agents, farmers, lenders, technical college instructors, and private sector businesses can help beginners evaluate various scenarios for on- and off-farm income, and develop cash flow analyses that include multiple income sources.

Dividing management and labor: Dividing management responsibilities within the farm family or farm operators can create conflict. Counselors, churches, family living extension agents, and other social service agencies can help families work through difficult

Getting into too much debt early on was one of the biggest threats to the beginning farmers in this study.

management decisions. Off-farm labor opportunities can significantly impact the success of a beginning dairy farm operation. Public programs should develop dairy entry opportunities in areas of the state where good jobs are available and land is affordable. Public support for day care and job training programs in rural areas will also benefit beginning dairy farm families.

Social support: In this study, the ability to build strong social support networks with family and neighbors distinguished many of the successful beginning dairy farmers. Mediation services offered by public and nonprofit agencies can help families work through emotionally charged farm transitions. Nonprofit organizations and cooperative extension can provide valuable support for grazing networks, providing facilitation, organizing assistance, and financial support.



Rewarding lifestyles: Beginning dairy farmers face strong pressures against taking time for personal health and recreation. Taking time off, however, is critical for successful farming operations and healthy family relationships. Churches, friends, and family living extension agents can help beginning farm families understand the importance of setting quality of life goals for their operations. They can support beginning farm families as they explore ways to maintain rewarding lifestyles, such as seasonal milking and sharing labor with family or neighbors.

Unique needs of beginners without a family farm background

Small but increasing numbers of Wisconsin's beginning dairy farmers do not come from farming backgrounds. In the future, the proportion of Wisconsin's beginning dairy farmers who come from non-farm backgrounds will most likely increase. Policies and programs that meet the unique needs of this group can dramatically improve their chances for success.

Integrated public-private approach

While government alone cannot solve the crisis of dairy entry, free markets by themselves will not necessarily help the next generation of dairy farmers get started. The public and private sectors will need to work together to help the next generation of dairy farmers get established. The following list highlights a few potential initiatives to support beginning dairy farmers.

Government policies: Tax exemptions for retiring farmers who actively assist beginners; a publicly funded pool of "start-up farms," such as farms next to Wisconsin Department of Natural Resources (DNR) managed lands; increased support for rural day care and job training programs.

In the future, the proportion of Wisconsin's beginning dairy farmers who come from non-farm backgrounds will most likely increase.

Research: Analyses of sharemilking versus farm rental, alternative equity acquisition strategies, alternative production scenarios, and on-farm/off-farm income scenarios.

Public and private institutional support programs:

Nonprofit organizations, churches and cultural organizations: Support for family communication, development of support networks, and setting quality of life goals.

Public service agencies: Create a coordinating agency or assign an existing agency to coordinate beginning farmer activities in Wisconsin; participate on farm transition teams; finance investment in parlors on “start-up” farms that could be rented to beginners; provide funding for value-added dairy products and enterprises; help beginners evaluate scenarios for on- and off-farm income.

Social service and economic development agencies: Explore rural development policies and strategies that recognize the reciprocity between the farming and non-farming sectors, including the importance of day care and job training for beginning farm families.

Environmental groups: Work with farmers and state agencies to ensure that program efforts aimed at beginning farmers include environmentally friendly production practices.

Educational and training institutions: Assess the gaps in existing educational programs; develop basic courses and more advanced apprenticeship programs for beginning farmers; develop educational materials for farm transition teams and other educational contexts.

Agricultural professional groups: Create and maintain paid apprenticeships as well as mentoring and social support networks for beginning farmers; commit to low-debt, herd-first lending strategies for beginners; participate in farm transition teams.

Nurturing the Next Generation of Wisconsin's Dairy Farmers

Introduction

Hundreds of people embark on dairy farming careers each year, despite volatile prices and long hours. Dairy farmers appreciate being their own boss and working independently. Many want to raise their kids on a farm. Some are taking over a family farm business. Compared to other kinds of livestock farming, dairy farms can provide a higher income per animal, a monthly paycheck, and, in many areas, more markets.

Despite these positive reasons to start a career in dairy farming, the number of people in Wisconsin entering dairy farming declined substantially in the 1990s.¹ This decline was largely due to low milk prices and abundant off-farm job opportunities. A declining number of dairy farm entrants to fill the places of those leaving farming means a significant net loss in dairy farms.

From the late 1980s to the present, the rate of decline in numbers of Wisconsin dairy farms was the greatest seen since the 1960s. Milk output peaked in 1988; since then, output has either stagnated or fallen slightly each year.²

These trends have taken their toll on rural communities and small town businesses. Declining farm numbers and milk production reduces employment in businesses that support dairy farms. These declines also reduce overall retail sales and participation in schools, churches, and other community organizations.

Statewide, tight milk supplies mean that Wisconsin cheese and dairy processors have to pay more for milk than their competitors elsewhere. Anecdotal evidence indicates that higher prices could eventually drive processing businesses out of the state, resulting in a rapid decline of Wisconsin's dairy industry and rural communities. This possibility is of great concern to the dairy industry and warrants further study.

A strong dairy economy has both economic and social benefits for Wisconsin. The dairy industry is a cornerstone of Wisconsin's economy. Studies by agricultural economists at the University of Wisconsin-Madison found that dairy contributes \$10 billion directly and \$7 billion indirectly to the state economy.³ Dairy farming provides opportunities for people to live, work, and raise their families in rural communities. Wisconsin's pastoral landscape is both a source of state pride and a draw for tourists.

While support for beginning dairy farmers is not the only way to sustain and increase dairy productivity, it is an important strategy that can benefit individual farmers and Wisconsin's economy. A 1997 survey by the UW-Madison Program on Agricultural Technology Studies found that new dairy farmers and gradual expansions (under

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50 percent growth) by existing dairy farmers accounted for 85 percent of the dairy operations adding cows to the industry.⁴ Gradual expansion of herd size is one way to increase milk supply. So too is the development of larger dairies in the state. However, farm expansion alone will not keep Wisconsin's dairy economy vibrant. The dairy industry has to continue to renew itself by attracting new farmers.

As this report will describe, beginning dairy farmers in Wisconsin build their enterprises at a variety of different scales, using a diverse range of production and management strategies. This kind of diversification makes for sound economic development. Furthermore, supporting beginning dairy farmers provides important opportunities for people to start—and succeed at—their own businesses.

There are many challenges in attracting new people to the dairy business. New dairy farmers often face high start-up costs for land, equipment, and facilities. Volatile milk prices, long hours, and hard work reduce the appeal of a career in dairy farming. In the 1990s, prospective dairy farmers could readily find off-farm jobs that often paid better than dairying, while offering health benefits and time off. These realities, which discourage young people from becoming dairy farmers, must be addressed.

Supporting the next generation of dairy farmers has generally been considered a farm family issue. We propose that concerns about the next generation of dairy farmers should be addressed by a broad coalition of private and public organizations and businesses. Just as public and private support has helped many entrepreneurs start small businesses, there is a clear role for public and private efforts to support new people getting started in dairying.

More than one way to get started

In order to better understand the strategies that beginning dairy farmers are using to get started and address the issues described above, a research team from the Program on Agricultural Technology Studies (PATS) and the Center for Integrated Agricultural Systems (CIAS) at UW-Madison surveyed 321 beginning dairy farmers in 1996. These farmers provided information about their family backgrounds, management experience, off-farm jobs, spouses' roles in the dairy operation, and other information about the strategies they used to get started in dairy farming. The research team then supplemented this survey research with 30 in-depth case studies of beginning farmers from a wide range of backgrounds.

From this research, a picture emerged showing a wide range of possibilities for getting established in dairying. Dairy farmers can successfully start at different ages and stages in their careers. Some start at a large scale, others at a smaller scale. They can employ a range of production strategies, from management intensive rotational grazing (MIRG) to intensive confinement operations. Some take over the family farm, while others start out on their own (usually rented) farms. Some enter farming as a second career.

Just as public and private support has helped many entrepreneurs start small businesses, there is a clear role for public and private efforts to support new people getting started in dairying.

The beginning dairy farmers participating in the survey ranged from their early twenties to their mid-fifties. Only 12 percent of the beginning farmers in the survey sample were under 25 years of age, while 43 percent were over 35 years old. Some of the older farmers were entering dairy farming as a second or third career. Young people are by no means “typical” beginning dairy farmers, and they are no more likely to succeed than people who get started later in life. Yet most beginning farmer programs target young adults.

The research also showed that many different production and enterprise strategies work well for beginning dairy farmers. Beginning farmers participating in the case study were succeeding with intensive production systems featuring high rolling herd averages, and grass-based production systems with much lower herd averages. These farmers were prospering with herds under 50 cows and over 150 cows, although most of them started with relatively small herds.⁵ Successful beginning dairy farmers can own or rent land, and can buy or grow most of their feed. Their wives may work as full-time farmers, or both husband and wife may work at full-time or part-time off-farm jobs.

Different paths to a dairy farming career

Beginning dairy farmers take a variety of paths to get started. Their start-up strategies are influenced by their family circumstances, equity, availability of land and facilities, farming experience, and management skills.

Despite the diverse range of possibilities for getting started, the beginning dairy farmers participating in this survey took one of three major paths. Sixty-eight percent came from a dairy farm background but started out on their own farm. Another 20 percent took over their family farms. Twelve percent got started in their dairy careers with no farming background.

These three groups of beginning dairy farmers have some qualities in common. They all have similar education levels, and at least half of them or their spouses have off-farm jobs. There are some significant differences, however, between their start-up strategies and the challenges they face:

Taking over a family farm: Compared to the other two groups, these farmers begin acquiring cows sooner. They tend to have larger herds and own more land than the other groups. They generally raise their own feed, and they rely the least on off-farm income. Acquiring dairy management skills and equity are not

major obstacles for these farmers, but a smooth transition between the older and younger generations is a key to success for this group.

Farm background, different farm: Beginners who grow up on dairy farms but start their own operations elsewhere typically own the least land of all the groups. The most successful farmers in this category keep their living expenses and debt loads down, purchasing land and buildings after they have built equity in their herds. Although they are not taking over family land, other kinds of family support—such as sharing labor and machinery—is a key to these farmers’ success.

No family farm background: There are three subsets of farmers within this group. Some enter dairy farming after working for many years as farm employees. Others come to farming as a second career after building equity in a non-farm job. A few enter through institutional training programs such as the Wisconsin School for Beginning Dairy Farmers. Beginners without a family farm background are more likely to use management-intensive rotational grazing systems. Building mentoring relationships and support networks with other farmers is a key to their success.

Beginning dairy farmers in Wisconsin follow a variety of career paths. Only 20 percent of the beginners in this survey had taken over a family farm. Another 68 percent came from a family farm background but were not farming family land. Surprisingly, 12 percent⁵ did not come from a family farm background, although many of these beginners had gained extensive dairy experience by working for relatives or as dairy employees. Some had been farming all their lives, while others got started in farming after a successful career elsewhere. A few got established after completing an institutional training program for beginning dairy farmers.

The most important characteristic of successful beginners in this survey was the ability to negotiate a good fit between their resources, skills, and farm and family goals.

Despite all of these differences, successful beginning dairy farmers have some characteristics in common. The most important characteristic of successful beginners in this survey was the ability to negotiate a good fit between their resources, skills, and farm and family goals. These beginners chose their entry paths after assessing their equity and financial resources, dairy management skills, social support networks, and health and family needs. Many took the time to increase their dairy management experience or build their equity before starting their own farms. Public and private sector agencies and businesses can help beginning farmers develop “smart” entry strategies based on clear assessments of their resources, skills, and goals.

What resources and skills are necessary to begin dairy farming?

Dairy business management skills

Beginning farmers today may need a wider range of business skills than farmers needed in the past. Dairy farmers not only need to know how to care for and milk their herds, they also need to develop business plans, financial analyses, and risk management strategies.

Beginning farmers generally go through three different stages of building their management skills. At the front end, beginners need to learn basic dairy production and management skills. They can gain this information through work as hired labor or junior partners in family farming enterprises, classroom learning, and internship experiences. At this point, however, they are nowhere near ready to farm on their own because of the high risk of failure caused by mistakes in management.

The middle stage of dairy farm entry is a time to build equity and management skills in a low-risk environment. At this stage, beginning farmers need opportunities for dairy farm employment, apprenticeship, and mentoring by experienced farmers. The later stage of dairy farm entry is when beginners buy cattle, rent or take over a farm, and hone their management skills by farming on their own. Beginners acquire assets in different ways, for example, taking out a loan or entering into a livestock share lease.

In Wisconsin, there aren't many opportunities for beginning farmers to gain middle stage experience unless they are taking over a family farm or working intensively on a family farm before starting out on their own. In New Zealand, beginners gain this middle-stage experience first as farm employees and then as sharemilkers. Sharemilking arrangements

Resources and skills for starting a dairy farm

- Dairy business management skills
- Equity
- Effective production systems
- Effective marketing strategies
- Income and cash flow
- Dividing management and labor
- Social support

pair beginning and existing farmers or landowners. In return for their labor, the landowner or farmer divides profits and calves with the beginner. In New Zealand, beginning farmers who provide only labor receive 30 percent of the farm's proceeds. Those who provide labor and the milking herd receive 50 percent of the proceeds.

Although some of the farmers in this study had worked as sharemilkers, they did not recommend this approach. Sharemilkers need to accumulate enough cows, cash, and experience to eventually get started on their own. But most Wisconsin dairy farms are too small to provide sufficient income and equity to sharemilkers. The growth in dairy farms with more than 200 cows, combined with a shortage of reliable farm labor, may provide future opportunities for meaningful farm employment followed by profitable sharemilking arrangements.

Equity

With the exception of some farmers embarking on a second career, most beginning dairy farmers have limited equity. While going into debt is inevitable for most beginners, the successful ones have the dairy management skills and support from family and neighbors they need to generate profits from their herds. Of the nine farmers interviewed for the case studies who were experiencing significant troubles, eight had either problematic approaches to debt management or poor dairy management skills.

This research found that successful beginners build their equity and assets gradually, rather than “buying the farm” all at once. Getting into too much early debt was one of the biggest threats to the beginning farmers in this study. Many of the successful beginners in this study employed a “herd first” strategy for getting established. They focused on building their equity in cows, savings, and inexpensive equipment rather than land, buildings, and expensive machinery. Several rented land or milking facilities or entered sharecropping agreements.

Cows are the most flexible investment that a beginning farmer can make. They are relatively easy to buy and sell, should a farmer wish to change his or her farm management strategy. The beginning farmers interviewed for the case studies repeatedly said that, “Only the cows really make money.”

Effective production systems

The beginning farmers in this case study successfully used a range of production systems. Beginners taking over a family farm were more likely to have traditional farming setups characterized by moderate sized herds (40-85 cows) and confinement or semi-confinement operations, with most of the feed, forage, and replacement heifers produced on the farm.

Beginners starting out on their own used more diverse production systems. These ranged from a 50-cow confinement operation to a 130-cow MIRG setup. The farmers who were not taking over a family operation had more

Many of the successful beginners in this study employed a “herd first” strategy for getting established. They focused on building their equity in cows, savings, and inexpensive equipment rather than land, buildings, and expensive machinery.



flexibility to purchase or rent farms that fit their ideas about how they wanted to manage their farm. This flexibility allowed these farmers to choose potentially cost-effective investment strategies such as buying the herd first, purchasing less expensive land in the northern part of the state, or making do with minimal machinery and repaired or rebuilt buildings.

The beginning farmers in this study successfully managed their herds at different milk production levels. They were able to do well with lower per cow production levels if they had sufficient cow numbers and low debt levels, used low-capital input production systems like MIRG, or supported the household with a mix of farm and off-farm income. Production-enhancing technologies such as total mixed rations and recombinant bovine somatotropin were not used by most of the beginners in this study.

Beginning dairy farmers in Wisconsin are much more likely to use MIRG than established dairy farmers. Thirty percent of the beginning farmers in this study used MIRG,

Farmer profile: Farm background, different farm (Tom and Beth)

Background

Tom and his wife, Beth, both grew up on dairy farms. After graduating from high school in 1982, Tom worked on his father's farm, and took a winter short course at UW-Madison. He then worked for three years on a 50-cow dairy. Next, he worked for about a year on a 90-cow dairy farm to get experience with a bigger operation. Both of these employers were good mentors who taught Tom about dairy management and financial matters.

Tom then ran a 50-cow dairy on a 50:50 sharemilking agreement. He milked the cows, raised the young stock, and managed about 200 acres of cropland for seven and a half years. During this time, he acquired some cows and machinery of his own. Tom was running this farm without any help from the owner, and soon grew tired of doing all of the work for half of the paycheck. He decided to purchase a farm of his own.

Tom found his current farm in a newspaper ad. He negotiated with the owner to rent the farm before buying it and purchase the existing 115-cow herd with an FHA loan. He sold most of his machinery and all of his young stock, except the springing heifers, to pay off debts and buy more cows. This allowed him and Beth to pay off 25 percent of the principal on the cow loan during their first three years on the farm. They recently completed a purchase deal through Farm Credit Services for the remaining balance on the buildings and property.

Production strategies

Tom and Beth put their time and energy into their most profitable asset: the cows. They milk 170 cows in a double-8 milking parlor. They own minimal machinery: a skidsteer with five attachments, a tractor, a manure spreader, and the TMR mixer that came with the farm. They rent out their 55 tillable acres, use the remaining 20 acres of pasture themselves, and contract with nearby cash croppers for forage.

Tom and Beth hire the work done that needs particular expertise, including equipment repairs and AI breeding. Their manure is custom hauled and spread on cropland owned by farmers who sell them feed. These farmers adjust their feed prices accordingly. Tom and Beth feed their baby calves for a couple of weeks, and then sell them to another dairy. This farmer raises and breeds the calves at his expense, using sires of Tom's choosing. Tom and Beth buy the heifers back three weeks prior to freshening.

Tom keeps close track of forage quality and uses a nutritionist to adjust his ration to achieve high milk production. He mixes and feeds a total mixed ration three times a day. In 1998, he achieved a 26,000 pound rolling herd average, or about 82 pounds per cow. He is on a monthly herd health program, and uses information from DHIA tests to monitor production and somatic cell counts. He uses rBST selectively on cows as long as they are healthy.

Financial resources

At the time that Tom and Beth bought their farm, Beth worked at a well-paying off-farm job as a chief accountant. While Tom's calves and machinery provided cash and collateral for the farm purchase, Beth's job offered a steady income as they established their operation. While Beth's income was substantial, about 80 percent of her earnings were going toward pay and benefits for Tom's full-time employee. When he decided to leave after 18 months, Beth quit her job and joined Tom working on the farm.

With their almost exclusive focus on milking cows, Tom and Beth have reduced other expenses and are able to milk enough cows to make a good living. Feed purchases amount to only 37 percent of their gross income. Tom is satisfied with their financial situation.

Social resources

Tom and Beth do virtually all of the farm work. Tom takes care of the machinery work, and Beth is the primary milker. Occasionally, a friend or relative will come by to work for a day. Since Beth quit her job, however, they have not hired a relief milker or taken any time off.

Parental support was helpful early in Tom's dairy career. He kept his cows on the home farm until he took them to where he sharemilked. Currently, he and Beth rent some pasture from Tom's brother, who now runs their parents' farm.

Tom has a good relationship with his neighbors, who run a lot of land and sell him quality feed. Currently, he is contracting with three different farmers for forage. Tom appreciates not having to take the risks of growing crops, and the farmers who sell to him are

glad to have a consistent and reliable buyer.

Challenges and lessons learned

Looking back, Tom felt that it took him longer to get into farming independently than he would have liked. He feels that sharemilking is not the way to go, adding that half a milk check from a 50 to 60 cow herd is not enough for either party. He strongly suggests that beginning farmers get on their own sooner by buying cows and renting a farm.

Tom had a couple of bad years while running a farm in the late 1980s. After purchasing new equipment for fieldwork, he had trouble making ends meet after a dry year in 1988. Because of this, when he and Beth bought their farm, they had to carry over some of the debt on the machinery they used to own. He is now wary of major capital improvements, saying that they are worth about half of their original value the day after they are completed.

Outlook

Tom is satisfied with their dairy operation and lifestyle. He views the farm as a business that provides them with a good income doing something that they both like. Beth also enjoys farming, but said that the isolation sometimes gets to her. She recognizes their need to take vacations, but said that they are unable to find good relief milkers.

If they were to have children, Tom and Beth would feel no need to pass the farm on to them. Even if he had a child who wanted to farm, Tom would make him or her do something else for a while before coming back to the farm. He knows of many instances where children were pressured to take over the family farm, and he would not put that pressure on his children.

compared to 15 percent of all Wisconsin dairy farmers. Not all beginning farmers using MIRG are successful. MIRG works extremely well when it is part of a solid farm management plan. It can aid a beginning farmer who is starting out with minimal resources, but only when management skills are in place and when cow health and nutrition, efficient milking systems, and a financial plan are in place. By itself, MIRG cannot rescue a troubled farming operation, nor is it a low-capital answer to starting out on a run-down enterprise without enough experience, equipment, or equity.

Effective marketing strategies

In the past several years, efforts in Wisconsin and elsewhere are helping dairy farmers add

value to their farm products. When successful, value-added processing and marketing strategies increase milk prices and net incomes for dairy farmers. Increased prices and incomes are powerful factors influencing dairy career decisions.

Value-added marketing strategies can link farmers to specialty markets such as organic dairy products, specialty cheeses, grass-based dairy products with labels emphasizing the health benefits of conjugated linoleic acid (CLA) and omega fatty acids, and other niches that might add value to the milk. While these are currently relevant to only a small number of Wisconsin dairy farmers, it is likely that these kinds of marketing strategies will be important in the future.

All of the beginning farmers in this study said that income and cash flow problems were the biggest obstacles to their success.

Income and cash flow

Beginning farmers and farm families need to have a clear view of the income needs for their households. All of the beginning farmers in this study said that income and cash flow problems were the biggest obstacles to their success. Given this level of concern, it makes sense that off-farm income plays a major role in helping beginners maintain sufficient income.

An off-farm job can provide the farm and household with start-up equity, a steady income when milk prices fluctuate, health insurance, and a chance to see if farming works out for the family. The farm business does not need to be the primary income source during the early years of a new farm business. An off-farm job can provide an extra financial cushion for beginning farmers who want to start slowly, and without a lot of debt.

Compared to established Wisconsin dairy farmers, the beginning farmers in this study relied much more on off-farm income. More than half of the survey and case study households reported either the operator or spouse working 20 or more hours per week at an off-farm job. In contrast, among established Wisconsin dairy farmers, less than one-third report either the operator or the spouse working 20 or more hours per week at an off-farm job. On some of the most successful beginning farms, the wife had a high-paying professional job off of the farm.

Dividing management and labor

Beginning farmers are succeeding with a wide variety of labor and management arrangements. The division of management and decision-making responsibilities can become a critical issue when beginners are taking over the family farm. When parents are unwilling to hand over management responsibilities to their children, family farm takeovers often fail.

The couples in this study successfully divided farm labor in different ways. On some farms, husbands and wives worked as equal partners. On other farms, the wives worked full-time off the farm. Women with good jobs providing both salary and benefits, such as teachers and accountants, were able to make significant contributions to family finances. Women with poorer paying part-time jobs, such as fast food service workers and bus

chaperones, were sometimes unable to provide effective support for their farms.

Most beginning dairy farmers need some additional labor, especially if their wives work at full-time, off-farm jobs. Beginners who milk large herds or milk three times a day are the most likely to hire labor. More commonly, beginners share labor with family and neighbors. Labor and equipment sharing arrangements can reduce up-front costs and make use of the expertise that other farmers have to offer.

Social support

In this study, the ability to build strong social support networks with family and neighbors distinguished many of the successful beginning dairy farmers from the unsuccessful farmers. Families can provide beginning farmers with low-interest loans, inexpensive or free living accommodations, and heifer raising agreements. Family and neighbors can provide beginners with opportunities to share equipment and labor, purchase feed and supplies in bulk, and learn new production and management strategies. Taking advantage of these networks is an extremely important strategy for beginning farmers to hone their management skills and save money. Beginning farmers can get needed moral support and encouragement from these networks, as well.

Cultivating mentoring relationships and support networks with neighbors and other farmers requires more initiative than negotiating family support. In many cases, however, these networks are just as important as family support. This is particularly true for farmers who are not able to draw on family resources, such as farmers who are getting started in a new town or state, or beginners with a non-farm background.

Rewarding lifestyles

Quality of life issues such as professional autonomy, rural living, health, and recreational time are extremely important for beginning dairy farmers. Many beginners are attracted to their profession by the satisfaction of living in a rural area and working for themselves. But when dairy management skills are insufficient, this satisfaction can evaporate rapidly. Women, who may feel lonely or isolated out on the farm, may experience rural life quite differently than men.

Time off can be a major challenge for all dairy farmers, especially beginners. Overwork is a chronic problem for beginning dairy farmers, as successful start-up strategies are built on hard work, long hours, tight budgets, and reduced spending. This overwork can lead to strained family relationships, especially when women don't feel the same degree of attachment to the farm operation as men do. Farmers need to take time off to maintain their family relationships and personal health. Beginners are often able to negotiate time off by hiring relief milkers, milking seasonally, and swapping labor with neighbors and/or family members.

Overwork is a chronic problem for beginning dairy farmers, as successful start-up strategies are built on hard work, long hours, tight budgets, and reduced spending.

Meeting the challenges

Farm transitions are very complex. Eighty percent of the beginning dairy farmers in this study were not taking over family farms, and many were getting started without growing up on a family farm. It doesn't make sense to assume that families alone can shoulder the responsibilities of helping these farmers get started.

Farmer profile: Taking over the family farm (Matt)

Background

Matt grew up on the family dairy farm that he now manages with his parents. He has four siblings, none of whom farm. From the sixth grade on, Matt was paid for his farm work and managed his money. He feels that this gave him a good sense of what earning his way was like early in life.

After high school, Matt worked on the farm for his father for several years in a salaried position. In 1994, they decided to initiate a transfer of farm ownership to Matt by setting up a Limited Liability Partnership (LLP). In doing so, Matt purchased 50 percent of the cattle and feed, while his father maintained ownership of the machinery. When they formed the LLP, Matt was living at home with his parents and owned 25 percent of the herd. He did not own any machinery at the time.

In 1996, Matt got married and purchased a neighboring farm with a Farm Credit Services loan. This farm is under the partnership umbrella. The LLP pays rent for using Matt's farm, and this income goes directly to FCS to pay off the loan. The LLP does the same for Matt's father, who pays his mortgage similarly. The farm partnership pays the utility bills for both properties. Since forming the LLP, all purchases made by the farm belong to Matt and his father equally.

The LLP business arrangements are set up on a five-year basis so that they can be reviewed and modified at regular intervals. Matt and his parents are considering a "rent to own" agreement sometime in the future, as Matt's father will not be able to collect Social Security at age 62 if he remains a partner in the business. This arrangement would take care of Matt's parents while Matt buys their remaining half of the partnership.

Matt and his father milk 60 cows three times a day and ship over 27,000 pounds of milk per cow per year.

They also have a full-time employee, Joe, who has worked out so well that they are considering making him a partner in the business. Matt's wife works as a schoolteacher, and provides the majority of their household income at present. Matt's mother pays the farm's bills, manages the finances, and helps out with milking.

Production strategies

Matt and his family have a conventional dairy and cropping operation with a stanchion barn. In order to increase their farm income without expanding their facilities or adding cows, they switched to milking the herd three times a day in 1989. Matt wants to keep the farm operation at a size where he can handle it himself in the future.

Matt has moved to a completely registered herd and is able to sell some animals each year at good prices. The cows are on monthly herd health and milk testing (DHIA) programs. Matt makes most of the breeding selections, and Joe does the AI service.

Matt and his dad grow most of their own feed including hay, haylage, corn silage, and high moisture corn. This past year they met all of their own corn and forage needs, and sold an extra 10,000 bushels of high moisture corn. They feed a total mixed ration (TMR), buying in some cottonseed or other protein source and mineral. They have no manure storage and haul daily. With 400 tillable acres, they have plenty of ground for spreading manure.

Financial resources

Matt built his equity by buying cows first and saving his wages by living on the farm before his marriage. Now Matt, his wife, and their infant son live on the farm next door, which is convenient but also gives them some breathing room.

Matt and his wife each have cars, but they do not

spend much money on clothing or other purchases. His wife's salary is used to pay living expenses and provides their insurance. The farm pays for the mortgage, utilities, and taxes, and provides Matt with a small salary. Matt's parents and Joe receive larger salaries from the farm. Joe also receives insurance through the farm. This approach allows them to build equity more quickly than they might have otherwise.

Social resources

Matt has the benefit of working into an established family farm operation. The farm transfer went smoothly, and Matt and his parents work well together. Joe is trustworthy and reliable. The family and Joe have worked out effective, friendly communications, which is critical for smooth family farm transfers.

Matt is the primary manager of the dairy herd. Matt's father is in charge of the cropping operation and does not work much with the dairy herd any more, although he will sometimes mix feed in the morning. Matt and Joe share the feeding, milking, and other cow chores. They milk together at 8 a.m. and 4 p.m., and trade off every other midnight milking. They alternately take

Saturday nights and Sundays off. They both do fieldwork in the summer, although Matt's dad does all of the heavy work like planting and mowing.

Matt generally has the last word when it comes to herd management, although his father occasionally voices his opinion on decisions about the herd. Matt does not mind leaving the crop management to his father. Sometimes, Matt will ask Joe to approach his father with suggestions for farm improvement. Since Joe is not a family member, this approach seems to go over better.

Outlook

Matt intends to stick with dairy farming into the foreseeable future. Even though his father will semi-retire in the next two years, he will be active in the cropping operation for some time. With hired help and his wife's off-farm job, Matt feels comfortable with the farm operation and his lifestyle. He likes the area in which he lives and hopes to retire on the farm. While Matt and his wife have some investments in CDs, he acknowledges that he might eventually have to sell most of the land for recreation or development to afford retirement.

There is a clear role for public and private sector cooperation to help beginning dairy farmers gain the resources and skills they need to get established. Universities, cooperative extension, technical colleges, and high schools can provide educational resources, planning assistance, and career counseling for beginners. Nonprofit organizations, social service agencies, and public agencies can provide mentoring and networking opportunities, links between beginning and retiring farmers, counseling and mediation services, financial assistance, legal assistance, technical support, and planning assistance for beginning farmers. Private businesses, lenders, and agricultural professionals can explore financial options and production strategies with beginners. State and federal government policies, such as tax credits for farmers who rent or sell farm assets to beginners, can create a favorable environment for a successful farm start-up.

One example of public/private cooperation is transition teams. Transition teams composed of farmers and professionals can provide beginners with valuable advice for decision-making. Transition team members might include practicing and retiring farmers, attorneys, extension agents, technical college instructors, accountants, family counselors, farm management specialists, and other agricultural professionals. Transition teams require a great deal of coordination and commitment. Teams would be locally based and serve the following functions:

- Maintain a farm link database for the region by providing names of beginning and retiring farmers

- Identify families who could make use of transition team resources
- Provide members of farm families with overall and specific advice on farm transition plans
- Help beginning farmers and their families develop business and production plans for their farms
- Refer families to private or public experts for special help

Public agencies and private businesses in Wisconsin and across the country are providing assistance and support for beginning farmers, and deserve praise for this work. In order to reverse the declining number of people entering dairy farming, however, much more needs to be done. By working together, public and private entities can help beginning dairy farmers gain the resources and skills they need to get started.

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Dairy business management skills

Cooperatives, agricultural professionals, researchers, extension, and technical college instructors should work together to assess the strengths and gaps in current educational programs for beginning dairy farmers. This assessment should emphasize how well these programs help beginners who seek low capital production systems, as this is the most common entry strategy for beginners who aren't taking over a family farm. The assessment could also consider how well these programs help beginners at the front, middle, and later stages of dairy farm entry. Examples of existing programs include:

- ***The Wisconsin School for Beginning Dairy Farmers***: This four- to eight-month program offers seminars in the management of grazing-based dairy and livestock farms, farm internships, mentoring by experienced graziers and University of Wisconsin faculty, and classroom and field experience. This program primarily provides front-end learning.
- ***The Trempeleau County Farm Incubator***: This two- to three-year program provides beginning farmers with a place to hone their dairy management skills, mentoring, and payment in wages and heifers. This is perhaps the only program in Wisconsin that provides middle-stage learning experiences.
- ***The Youth Apprenticeship Production Agriculture Program***: The Wisconsin Department of Agriculture, Trade and Consumer Protection has recently teamed up with the Wisconsin Technical College System, Department of Workforce Development, and Department of Public Instruction to provide an apprenticeship program for high school students interested in a farming career. In 2001, over 250 students participated in this front-end educational program.
- ***The Wisconsin Professional Dairy Farmers Internship Program***: The Professional Dairy Producers of Wisconsin developed this front-end educational program to get more young adults interested in farming careers. Students at UW-River Falls, UW-Platteville, and UW-Madison get hands-on experience in dairy

farming through a summer internship. Beginners from non-farm backgrounds get a taste of what it is like to farm, while beginners from farming backgrounds are exposed to new management styles.

Given the decentralized nature of these programs, one agency should play a coordinating role in terms of developing curricula, overseeing apprenticeships and mentoring opportunities, and linking related programs. This role would be similar to that played in New Zealand's beginning dairy farmer programs by the government agency, ITO Agriculture.

Experienced dairy farmers should participate as trainers with these educational programs. Their experiences with the realities of dairy farming are invaluable to beginners.

Equity

What are the implications of pursuing a herd-first approach to building equity? How effective are other low-cost options for beginning dairy farmers, such as management intensive rotational grazing systems? Beginners need to know the benefits and costs of equity-building strategies that involve very little initial acquisition of equipment, land, and machinery.

Researchers, extension agents, and technical college instructors can work with farmers to answer these questions. Together, they can develop assessment tools to determine the suitability and profitability of various farm plans. They can also develop educational materials to help beginning farmers evaluate equity building strategies. These tools can help beginning dairy farmers map out their options for the early years of their operations.

Beginning dairy farmers using a "herd first" strategy need loans for cows and feed rather than land and buildings. Research can clarify the risks that lenders assume with loans that are not based on land or other fixed collateral assets. A cost-benefit analysis of low-cost entry strategies could be useful in designing a flexible beginning farmer loan program involving public sponsorship.

Equity is also an issue for retiring dairy farmers. Retiring farmers may want to maintain some farm income by exiting gradually. In some areas, these farmers may be able to make more money by selling their land for development, even if they want to keep it in farming. Public policies can help encourage retiring farmers to help beginners start farming on their land. For example, a program in Nebraska provides tax credits to farmers who rent agricultural assets to beginners. Likewise, rural policy analysts in Pennsylvania and elsewhere are recommending that farmers who receive farmland preservation tax credits or sell their development rights should maintain plans for transferring their farms. These plans would encourage affordable land transfers to beginning farmers.

Beginning dairy farmers using a "herd first" strategy need loans for cows and feed rather than land and buildings.



Effective production systems

Choosing effective production systems requires both good information and effective decision-making processes. Researchers, extension, and technical college instructors can work with farmers to analyze alternative production systems. Public agencies, educational institutions, and farmers can develop educational materials for beginning farmers that address questions such as:

- What production systems are most likely to work under different conditions?
- What are the returns and risks associated with a “buy feed, rent facilities, and milk cows” approach versus a classic, fully integrated crop and livestock operation?
- Can management intensive rotational grazing improve profits and quality of life?
- How do production systems choices affect opportunities for off-farm work?

When proposing changes to existing production systems, beginning farmers may run into considerable resistance from parents, landlords, or previous landowners. These decisions are also influenced by family income needs and spouses’ off-farm job commitments. It is nearly impossible to make decisions about production systems without looking at the whole farm and family situation.

Once they have decided on a production plan, many beginning dairy farmers have trouble finding a farm to rent with the facilities that they need. For instance, beginners may have a hard time renting farms with efficient milking parlors. Public agencies could help finance investments in low-cost parlors on “start-up” farms, such as retrofitted farms adjacent to lands managed by the Department of Natural Resources. The costs of building parlors on these farms could be recovered through rental arrangements.

Effective marketing strategies

To increase their profits, beginning farmers may want to consider adding value to their milk through the development of specialty products. While taking on a new processing business at the same time as starting a farm could be overwhelming, beginning farmers can work with existing co-ops or specialty product ventures. Public agencies can work together to provide research and funding for value-added processing and marketing of unique dairy products.

The Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) Agricultural Development and Diversification program is a good example of a program that provides resources for developing value-added products. DATCP, the UW-Madison Center for Cooperatives, UW Extension’s Emerging Ag Markets team, and other public and private marketing programs should work together to coordinate and target their services to beginning dairy farmers including collective marketing approaches, and locating, establishing, and sustaining a specialty food business.

It is nearly impossible to make decisions about production systems without looking at the whole farm and family situation.

Income and cash flow

Typical farm management evaluations of the anticipated or actual performance of a farm enterprise often do not account for off-farm income. As a result, beginning farm families may not get enough information to evaluate various strategies for starting a dairy business.

Most beginning farmers get started gradually and test out what works before they make major investments in their dairy enterprises. The best family decision might be to run a business that does not have a high expected return in the early years, while maintaining off-farm employment. If good off-farm jobs are available and an option for the family, it makes sense to include this income in the cash flow analysis for the farm.

Researchers, extension agents, farmers, lenders, technical college instructors, and other private sector businesses can help beginning farmers evaluate various scenarios for on- and off-farm income, and develop cash flow analyses that include this income. Including an off-farm job in the cash flow for the farm can give beginners the freedom to experiment with a business that does not need to make a high profit in the early years. Ignoring the possibilities for off-farm income may force beginning farmers into large, high-debt operations simply to make the numbers add up.

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Dividing management and labor

Dividing management responsibilities within the farm family can create tension and conflict. Sometimes, parents are not ready or willing to relinquish farm management decisions to their children. Couples may find it difficult to negotiate management roles or accept direction from each other. Beginning dairy operations may fail if these management roles are not clearly defined and agreed upon. Counselors, churches, family living extension agents, and other social service agencies can play a critical role in helping farm families work through difficult management decisions. To make transitions go smoothly, families can enter into written agreements with timelines for shifting responsibilities.

Not all of the management and labor issues facing beginning farm families are actually on the farm. Off-farm labor opportunities can significantly impact the success of a beginning dairy farm operation. Job opportunities vary from place to place. Beginning farmers may fare best in locations that have relatively easy access to good jobs in urban centers. But they don't want to locate too close to these urban centers, or high land costs may drive them out of business. Public programs should develop dairy entry opportunities in areas of the state where good jobs are available and land is affordable. Public support for day care and job training programs in rural areas will also benefit beginning dairy farm families.

Social support

Many beginners taking over the family dairy operation are fortunate to have supportive family relationships that dramatically



improve their chances for success. Others, however, may get stuck in difficult family situations that can cripple or end farming careers. Churches and peer networks can help in these situations. Mediation services offered by public and nonprofit agencies can help families work through emotionally charged farm transitions.

All beginning dairy farmers can benefit from mentoring relationships with established farmers and farm professionals ranging from extension agents to bankers.

All beginning dairy farmers can benefit from mentoring relationships with established farmers and farm professionals ranging from extension agents to bankers. Grazing networks across the state provide mentoring opportunities for beginning dairy farmers who want to learn about and implement grazing-based dairy systems. Nonprofit organizations and cooperative extension can provide valuable support for these networks, providing facilitation, organizing assistance, and financial support when necessary.

Farmer profile: No family farm background (Mike and Laura)

Background

Mike's parents farmed when he was young, but quit and moved closer to town when he was in the first grade. They still owned a few acres of land, raised rabbits and ducks, and kept one or two cows for house milk. Until he was a junior in high school, Mike worked summers on an uncle's dairy farm. After high school, Mike went into the military for several years and later got a job as a lineman. He married Laura, a schoolteacher who grew up on a family farm and vowed never to marry a farmer.

Mike and Laura rented a farmhouse on about 50 acres. They raised a few sheep there, but supported themselves with off-farm income. A couple of years later, Mike found their current farm in the local newspaper. It had been defaulted on through a previous land contract, and he was able to buy it for less than \$650 per acre. At first he and Laura were hobby farmers, with no real intention to milk cows. Both still worked at their off-farm jobs.

Mike bought his first twenty Jersey heifer calves in 1990. When they freshened in 1992, he milked them in a small, double-4 herringbone parlor that he built in a former farrowing shed. In the fall of 1992, he bought 20 more cows and 20 young stock. He continued to work his day job and milked about 30 cows until the spring of 1993, when 40 more heifers freshened. He then quit his job at the power company to milk his herd full time.

Production strategies

Mike manages a low-input, management intensive rotational grazing operation on his 120-acre farm. He has increased his herd to 120 cows. He runs his herd on 80 acres of pasture and supplements their summer forage with hay and corn silage. His milking parlor enables him to manage a large herd on his own. He estimates that it takes him about two hours to milk his cows during the summer peak, with about one and a half hours of setup and cleanup.

Mike maintains a seasonal herd and dries the cows off for two months in the winter. He believes that the key to maintaining a seasonal herd is to have enough heifers to freshen in the spring window. If a cow does not freshen by the first of July, he will sell her unless she's a favorite. Mike has no winter housing for his herd, which is another reason for his seasonal approach to dairying.

The lack of dairy facilities on his farm forces Mike to manage his operation creatively. The former farrowing shed that houses his parlor also provides a holding area and maternity/treatment pens. Other than a few pens for calves, he has no housing for his cattle. He also lacks a feed bunk, concrete barnyard, and silos. When he can afford it, he would like to add the former two facilities and a low-cost, unconventional freestall barn for milk cow housing.

Mike owns some used machinery for haymaking. Otherwise, he custom hires out his other fieldwork, such as chopping corn silage. This saves him time and equipment costs. He bull breeds all of his cows, which saves more time. Since he has minimal facilities, he buys and sells young stock as he has space for them.

Financial resources

Mike phased into dairy farming by raising heifers, building only necessary structures, buying used equipment, and investing his own sweat equity into the operation. He has kept his capital investments low by purchasing an inexpensive farm, going directly to a parlor, using management intensive rotational grazing, and never having the cows in a stanchion barn with the associated feed and manure handling chores. Mike has never been in debt more than \$1,000 per cow, and at the time of the interview his debt was down to about \$800 per cow.

Mike and Laura both kept their off-farm jobs while working into the dairy business. Laura's income from her teaching jobs, along with a loan from Mike's parents, enabled them to buy the farm and pay for it during the years before they started milking. Because of their jobs and their low debt load per cow, they never had trouble securing loans. After Mike increased his herd size to over 100 cows, Laura reduced her work hours to occasional substitute teaching. The farm now provides almost all of the income needed to support them and their children.

Social resources

Mike feels that there is no way he could have started his dairy career without grazing. He learned about

grazing by reading the *Stockman Grass Farmer*. Seasonal, grass-based dairying gives Mike and his family a two-month vacation each winter.

Although Mike did not have much experience with dairy facilities or construction, he read, observed, and was not afraid to try things himself. He makes good use of connections with neighboring farmers, both for custom-hired work and advice.

Challenges and lessons learned

When asked about starting out without much dairy or farm experience, Mike recalls the first night he milked in his parlor. He discovered that he had installed the rail too far away, as the cows could almost turn around. On top of that, he felt awkward because he had not milked cows for many years. But he fixed the rail, got used to milking again, and persevered through breaking heifers.

Outlook

Mike plans to stay on the farm and milk cows for years to come. Laura is not particularly interested in the farming operation, but has grown tolerant of it. Recently, she has taken over spring calf chores. The children are starting to help out a little bit, although it is too early to tell if they will take an interest in farming. The family takes winter vacations, and Mike is considering taking every other Sunday evening off to spend more time with his family.

Mike is satisfied with his operation and pleased that he can earn a living off of his 120-acre farm. He says that it can be frustrating to break heifers in during the spring, but that most days are okay. He would not want to go back to his prior job as a lineman.

Rewarding lifestyles

Beginning dairy farmers face strong pressures against taking time for personal health and recreation. Taking time off, however, is critical for successful farming operations and healthy family relationships. Churches, friends, and skilled family living extension agents can help beginning farm families understand the importance of setting quality of life goals for their operations. They can also support beginning farm families as they explore ways to maintain rewarding lifestyles, such as seasonal milking and sharing labor.

Beginners without a family farm background

Small but increasing numbers of Wisconsin's beginning dairy farmers do not come from farming backgrounds. These farmers are at a distinct disadvantage, as they lack the years of hands-on training that comes with growing up on a family farm. However, these beginners have the advantage of coming to the farm without preconceptions about how things should be done. In the future, the proportion of Wisconsin's beginning dairy farmers who come from non-farm backgrounds will most likely increase.⁷ Policies and programs that meet the unique needs of this group can dramatically improve their chances for success.

Strategies used by these beginners vary depending on their backgrounds and entry paths:

- *Rural youth* who don't grow up on a farm often gain early experience by working on the farms of relatives and neighbors.
- *Second-career, older beginners* often develop their management skills gradually by seeking out mentors and networks of advice givers, and through on-farm trials and experiments. As these farmers usually start with equity from previous off-farm jobs, they may have more flexibility to learn while establishing their dairy businesses. These farmers can also apply management skills developed in previous jobs to their dairy operations.
- Beginners lacking experience and/or equity sometimes learn through *institutional training programs*, such as the Wisconsin School for Beginning Dairy Farmers at UW-Madison, designed to accelerate and strengthen the entry process.

The support needed by these non-farm beginners depends on their career stage. Second career beginners may feel pressured by capital gains tax laws or other forces to buy the full package of land, buildings, and cows. This could be a major mistake, especially if they do not have the skills in place to manage these assets. Transition teams can help second career beginners avoid big mistakes and get a clear sense of all of the options available to them, including more gradual entry strategies. These beginners, however, may want to pursue different entry strategies than younger beginners who are climbing a very different career ladder.

Regardless of their career stages, non-farm beginners lacking dairy farm experience can benefit from networking, mentoring, and formal training. The Wisconsin School for Beginning Dairy Farmers and the farm management courses offered by the Wisconsin Technical College System can provide early stage learning for these farmers. Programs like the Trempeleau County Farm Incubator can provide beginners with advanced, hands-on learning and middle stage employment opportunities, as well as a chance to begin building a dairy herd. Retrofitted start-up farms, described on page 14 in this report, could potentially provide important opportunities to rent farms with up-to-date facilities such as milking parlors.

Integrated public-private approach

While government alone cannot solve the crisis of dairy entry, neither will free markets by themselves help the next generation of dairy farmers get established. People from the public and private sectors will need to work together to help the next generation of dairy farmers get established.

Following is a beginning list of potential public and private sector initiatives to support beginning dairy farmers, meant to serve as a starting point for more specific actions and work. The organizations listed above the initiatives are suggested leaders for the work; however, most groups could make significant contributions to items throughout this list.

Government policies

- Tax exemptions for retiring farmers who actively assist new entrants
- Requiring an updated farm transition plan to qualify for farmland preservation tax credits or purchase of development rights programs
- A publicly-funded, revolving pool of retrofitted “start-up farms,” such as farms next to Department of Natural Resources managed lands
- Matching funds for beginning dairy farmers to reimburse qualified mentors during the first years of farm management, and/or small business centers that would provide mentoring, business planning, and accounting assistance to beginners
- Focusing dairy entry programs in areas of the state that are close enough to urban centers for employment opportunities, but far enough away that land rents are affordable
- Increased support for rural day care and job training programs
- Federal estate and gift tax changes to benefit retiring farmers who are working with beginning farmers
- Supplemental pension for retiring farmers working with beginners
- Property tax incentives for arrangements allowing beginners to take over a farm
- Federal and state income tax breaks for retiring farmers leasing equipment to beginning farmers and to beginning farmers reinvesting in a farm

Research

- Comparative analysis of sharemilking to farm rental and other tenure options
- Analysis of alternative equity acquisition scenarios
- Analysis of alternative production scenarios
- Analysis of alternative on-farm/off-farm income scenarios
- Analysis of the retrofitted “start up farms” idea
- Analysis of long-term lease agreements between non-farming agricultural land owners and beginning farmers
- Investigations of value-added dairy enterprises

Public and private institutional support programs

Nonprofit organizations, churches, and cultural organizations

- Support for effective intra-family communication in family farm takeovers
- Support for the development of social support networks, particularly for beginning farmers who do not have farming backgrounds or connections, “new immigrants” who move in from the outside, and second career entrants

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- Support for family dynamics that recognize the importance of recreational time for beginning farm families, and the importance of a balanced division of authority and respect between farm family partners
 - Support for value-added dairy enterprises
 - Support for farmer networks, such as the grazing networks found across Wisconsin

Public service agencies

- Create a coordinating agency similar to Industry Training Organization (ITO) Agriculture in New Zealand (see page 13) for beginning farmer activities in Wisconsin
- Farm transition teams: Extension leadership at county level with statewide coordination through the Wisconsin Department of Agriculture, Trade and Consumer Protection Farm Center
- Support for effective intra-family communication in family farm takeovers
- Support for the development of social support networks
- Assistance negotiating effective rental or sharemilking agreements between beginning and older farmers or landowners
- Research and development of value-added dairy enterprises
- Explore rural development strategies that recognize the reciprocity between the farming and non-farming sectors. Family-organized farms significantly support rural non-farm economies, and strong off-farm employment opportunities significantly support beginning dairy farming families.

Social service and economic development agencies

- Explore rural development strategies that recognize the reciprocity between the farming and non-farming sectors
- Policies that recognize the importance to beginning farm families of excellent day care opportunities and strong job training programs

Environmental groups

- Work with farmers enrolled in farmland protection programs to ensure that their farm transition plans include conservation measures that are at least as rigorous as those required for participation in USDA commodity programs
- Work with beginning farmers and the Department of Natural Resources to ensure that environmentally-friendly production practices are used on “start-up farms” next to Department of Natural Resources managed land (see page 14)

Educational and training institutions and organizations

- Expand and integrate current early career training programs, and potentially expand these programs through distance education
- Connect early career training programs with middle and late career training to complement strong apprenticeship, employment, and/or sharemilking opportunities

-
- Develop a range of educational materials covering production through farm family business planning for use in transition teams, farm management courses, and other educational contexts

Agricultural professional groups

- Create and maintain mentoring and social support networks for beginning farmers
- Develop apprenticeships and employment/mentoring programs that become effective middle stage opportunities where entering farmers can develop management expertise, equity/cows, and learning/social support networks
- Bankers commit to low-debt, herd-first lending strategies for beginning farmers
- Bankers, lawyers, and farm consultants actively participate in transition teams
- Professional associations and bankers commit to building a range of institutional supports for beginning dairy farmers, such as underwriting annual conferences of beginning farmers as is done by the Dairy Marketing Board in New Zealand

In order to meet the diverse needs of Wisconsin's beginning dairy farmers, people and organizations with different experiences and views will need to work together. This kind of collaboration and organization is never easy. Still, it is our sincerest hope that public and private entities can work together on these issues, committing their resources and support to programs and policies that will help beginning dairy farmers get started on individually appropriate and viable courses. Only through this kind of collaborative effort will we help the Wisconsin dairy industry renew itself in the years ahead by attracting and assisting the next generation of dairy farmers.

Endnotes

¹ D. Jackson-Smith and B. Barham. 2000. *The changing face of Wisconsin Dairy Farms*. PATS Research Report #7.

² See note 1 above.

³ Deller, S.; A. Roth; E.V. Jesse. 1994. "The contribution of dairy to the Wisconsin economy." *Economic Issues*, Department of Agricultural Economics, College of Agricultural and Life Sciences, University of Wisconsin-Madison.

⁴ Barham, B. 1998. *What is the future of Wisconsin's moderate-scale dairy farm?* PATS Staff Paper Series #1.

⁵ Their herd sizes averaged 46 cows in 1996.

⁶ This figure may somewhat overestimate the percentage of people who enter dairy farming from a non-farm background because of a likely under-sampling of beginners taking over a family farm. Still, this figure is larger than expected.

⁷ Thirty percent of New Zealand's dairy farmers currently come from non-farm backgrounds. Stevenson, G.W., R. O'Harrow, and D. Romig, May 1996, *Dairy Farmer Career Paths*, UW-Madison CIAS.