

# Dairy Development and Profitability Enhancement





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# **Executive Summary**

The Dairy Development and Profitability Enhancement Program has two primary components:

### 1. Dairy Profit Teams

- Based on 2012 farm records analysis, these teams produced an \$18,718,381.30 return on the state's investment, resulting in a \$40 return for every grant dollar spent.
- Significant returns like this occurred through cost savings (reduction of feed, interest or labor expense, etc.), increased
  herd size and increased profitability (increased milk production, improved milk quality, improved health and other
  management factors).
- In addition, the program has received in-kind contributions from the dairy industry totaling \$715,250.

### 2. Dairy Business Planning Grants

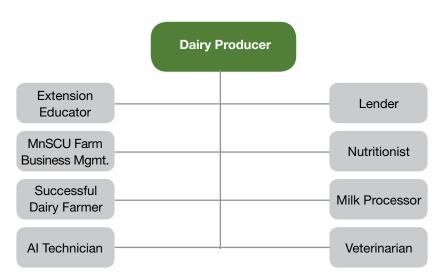
• The Dairy Business Planning Grants Program assists producers in positioning themselves for the future. This grant covers 50 percent of the cost of developing a business plan, up to a maximum of \$3,000.

A number of producers are exploring expanding their herds, while others are investigating transferring the operation to the next generation, managing debt or investing in feedlot improvements for environmental protection.

## Introduction

The Dairy Profit Team Grant Program began as a pilot program in 1996. The program was then funded by a biennial appropriation of \$1 million. The program expanded in 1997 to six regional groups and one statewide organization. The 2003 Legislature appropriated \$2 million for the 2004/05 biennium to increase dairy profit team efforts and to provide grants to individual farmers for dairy business planning and modernization. For fiscal year 2013, a total of \$460,000 was granted to the program partners.

# Dairy Development and Profitability Enhancement Team



The above chart shows an example of a Dairy Profit Team. Each team is comprised of people with varying backgrounds and expertise. They work with the farm family to evaluate the current farm operation and future objectives. The team makes recommendations and lists priorities to help the family meet those objectives. The team can also help the farmer redirect resources to meet the objectives. Some recommendations may take longer than others to implement. No two farms are exactly the same, just as no two teams' recommendations are exactly the same. The issues may be similar, but the means for resolving the issues may be very different.

The following is a short progress report on the activities of the grant recipients.

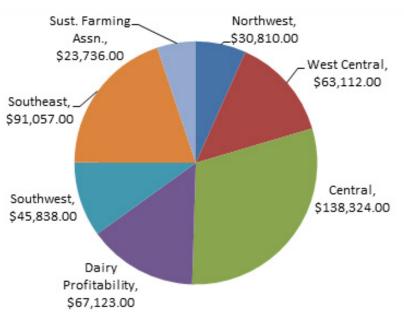
# **Background**

# **Minnesota Dairy Initiative (MDI)**

The MDI is a producer-led initiative to coordinate a comprehensive approach to the delivery of on-farm services to Minnesota's dairy farmers through the Dairy Development and Profitability Enhancement Program (DDPE).

The MDI is a federation of six regional partners, Sustainable Farming Association (SFA), and several affiliated organizations, including the Minnesota Department of Agriculture (MDA), Minnesota Milk Producers Association (MMPA), the University of Minnesota, Minnesota State Colleges and Universities (MnSCU) through Farm Business Management and other industry groups

# **Distribution of Fiscal Year 2013 Dairy Team Grant**



# **The Program Partners**

In FY 2013, 312 dairy farms representing 50,432 cows statewide (8 percent of farms and 11 percent of the cows respectfully) participated in the program (see attachment B). Of this total, 297 farmers were enrolled in the six regional groups with the remaining 15 dairy producers working with the Sustainable Farming Association. In addition, 7,075 farms participated in educational programs conducted and led by the Minnesota Dairy Initiative programs, including: organic transition workshops, milker trainings, and barn tours. The program is limited to a three-year involvement with the team, but farmers can reapply if they need assistance in their next phase of management.

# **West Central Dairy Profit Teams**

- West Central teams worked with 43 participant herds in 2013 (3,873 cows), including one farm that invested almost \$1.3 million in equipment and facility updates.
- Estimated in-kind contributions for this region are \$12,800.
- In addition, 115 other farms not enrolled within the program received educational information via workshops and seminars.
- The economic impact of the program was at least \$200,000 as a result of improvements in productivity and profitability on these farms. Several farms are looking to improve their facilities within the next year.
- West Central is also working with a number of farms dealing with stray voltage (stray voltage is electrical current which
  may be impacting animal behavior or milk production); on most farms the problems have been diagnosed and fixed.
  This devastated farms by reducing production, milk quality and herd health. Sometimes it even results in death of
- West Central has been working with farms transitioning to organic production. Several farms are doing a
  pre-organic inspection before a certified organic inspection. In addition there are several farms interested in
  robotic milking.

### **West Central Team Testimonials/Observations:**

### **Lawrence Suchy, Ottertail County**

Because of the action plan taken, I am having my best year yet.

### Jeremy Mursu, Ottertail County

Dairy diagnostics has helped our farm "know the numbers. Where else can you invest \$200 (registration) and receive \$1000 to spend for information ... Whether that be soil testing, feed samples, or tuition for farm business management.

### **Rob Ruther, Ottertail County**

Advice on crops and fertility in soils has put us on the right road and having a team meeting of industry people is always helpful.

### Nancy Grunhord, Star Dance Dairy

We have learned how to manage our problem with stray voltage.

# **Northwest Dairy Profit Teams**

- There were 16 farms enrolled in this region in 2013 (1,986 cows).
- Estimated in-kind contributions for this region are \$26,500.
- Based on the MNSCU FBM Database numbers, the economic impact was \$562,038 over the other farms statewide.
- This region has sponsored several educational events including pasture management, forage quality meetings, pasture
  walks, and milk quality meetings in addition to meetings on robotic milking meetings that included over 80 additional
  farms.

### **Northwest Team Testimonials/Observations:**

### **Olson Dairy, Polk County**

The DPT helped us put together some good ideas for planning the future of our Farm

### Schafer Dairy, Roseau County

The Dairy Initiative program helps us to understand our farms financial position and to know our cost of production for milk. Our lender really appreciates getting that information.

### Steinmetz Dairy, Mahnomen County

We expanded the herd to include two new robotic milkers, we have been looking for ways to improve efficiency and ultimately produce more milk per cow per day.

### Weidenborner Dairy, Beltrami County

With the help of the diagnostic teams we have been able to transition the dairy operation to the next generation.

# Dairy Profitability Enhancement Program (DPEP)

- Forty farms, (with a total of 12,548 cattle and goats) were enrolled with DPEP in 2013. Including 368 more cows added to herds enrolled in the program.
- One hundred forty eight industry professionals donate their time to the dairy producers enrolled in DPEP. The majority of these professionals serve on multiple teams and participate in an average of 3.4 meetings per farm, per year. This is equivalent to \$167,790 of in-kind contributions to the dairy industry in the DPEP region.
- DPEP was involved with 500 farms through educational programs, workshops, etc.
- DPEP estimates the economic impact of their program is \$2,144,340.
- There continues to be difficulty in getting young farmers into the dairy industry. This is compounded with high feed
  costs and the instability of milk prices.

### **Dairy Enhancement Program Testimonials and Observations:**

### Vance and Melanie Schumacher, Carver County

We found the DPEP program to be incredibly helpful as we have begun planning a new dairy. Through the DPEP, a team of supportive and knowledgeable individuals was created that we were able to meet with or contact on a regular basis. The team was made up of very knowledgeable individuals with various backgrounds, customized to support our situation. We really appreciated the various perspectives offered by our team; they gave us new ideas and fresh ways to look at our business plan. Information is crucial in planning and our team was able to either provide us with the information we needed or direct us to where we could obtain it. Just a couple of the many benefits enjoyed included: (1) A team of knowledgeable individuals with whom we shared a look at our current operation and future plans. They asked good questions that helped us consider all aspects of our operation. The team was very supportive of what our goal is, provided us with many great ideas and gave us a lot of encouragement; and (2) Many new contacts with peers and farmers in similar situations. To aid in planning our new dairy, the team provided us many contacts that we could talk with. As a result, we've been able to build a network with peers and farmers and learn what worked or didn't work for them.

### Mike and Donna Tellers, Carver County

By working with DPEP, our milk production and the health of our cows have improved by making changes in our operation such as a TMR, tunnel ventilation, cow mats and more lights.

### Mike Schloesser, Le Sueur County

Our herd average is the highest it has ever been!

# **Central Dairy Profit Teams**

One hundred ten farms in this region worked with this program in 2013 (11,425 cows and dairy goats). A total of 340 new animals added due to expansion within this region. Twenty of this year's participants were first time enrollees and five were new startup dairies.

- Estimated in-kind contributions are \$396,000.00 (or 6,600 hours).
- Estimated economic impact of their program is \$ 12,450,308 which includes the economic impact of added animals, positive changes in new returns per cow of farms enrolled versus those that are not.
- Teams focused on increasing cow numbers, low cost expansion and remodeling, beginning farmers, improved record keeping skills, increasing milk production, improved milk quality, farm transfers, robotics, stray voltage, and water issues.
- Central teams also promoted seminars and Summer Farm tours. An additional 5,540 farms were impacted by the program.

### **Central Team Testimonials/Observations:**

### **Farmer, Benton County**

This is a very beneficial program; the team concept is a great concept that has helped us reach our goals that we thought were unattainable.

### **Farmer, Todd County**

This program has helped me expand my operation I feel the correct way, I am not up to my ears in debt and still have money at the end of the month to pay the incoming bills. When the team first met I thought that a composted bedded facility was going to be the right answer for our farm to expand, but after much help from Sarah and the team we decided for the cost that a small freestall barn and sand bedding was a better fit for what we were trying to accomplish. And now we are saving money and making milk like crazy.

### **Farmer, Stearns County**

Robots were added to our operation this past year and thanks to the peer group in Central MN we have learned a lot from other producers without a sales pitch! Love the group and the honesty!

### **Producer from Carlton County**

I have been farming for nearly all my life (45 years) and this program has helped me open my eyes to different areas that I have never considered before. The team goes above and beyond for their producers.

### Farmer, Kandiyohi County

I have worked with this program on and off for a few years, seems when I have an issue that arises that needs more attention than myself or wife, we pull the group together to figure a way to work through the hiccup. Who would have thought that you could turn an old falling down chicken coop into a barn for new born calves with the right ventilation and stalls.

### Agribusiness, McLeod County

If a producer wraps his head around all three of the goals for a meeting and moves forward, they can make HUGE noticeable changes to their operations within a short period of a few months.

### Agribusiness, Morrison County

I think that every dairy producer in the state should have some kind of "team" the dairy industry is one for crazy up and downs and with the team approach I think they make a producer take a hard look at how to prepare for it.

# **Sustainable Farming Association (SFA)**

- SFA worked with 15 producers (414 cows) as they explored converting their operations to grazing and/or organic production. The SFA also sponsors educational workshops, seminars and field tours across the state to be a resource to producers about organic management. More than 925 participants attended these events.
- SFA provides statewide networking for dairy grazing, organic production and marketing information.
- SFA helps the dairy farm family meet its goals by: identifying and utilizing mentors and specialists with experience in grass-based and/or organic dairy methods, networking with other dairy farmers, and developing additional value added options. SFA is also actively working with new and startup farms to get established in a share milking arrangement.
- SFA collaborates and acts as a resource with regional teams for several farms needing grazing, organic conversion, or other help.
- SFA has conducted several workshops or farm tours to introduce dairy farmers to grazing and organic production, educate new graziers and transitional organic producers, and provide experienced dairy farmers with strategies for enhancing efficiency and profitability.
- Specifically the new farmer start-up model will likely include most of the following elements:
  - · Little or no consumer or college debt.
  - · Acquire livestock first.
  - · Avoid debt to acquire livestock.
  - Establish a herd, including replacements, through a milk share arrangement, working to earn bred heifers, or cash (this is your cash flow and equity).
  - After livestock, invest in "portable" equipment and infrastructure during start-up phase.
  - · Rent land and facilities early on.
  - Demonstrate positive cash-flow and management skills for at least three years.
  - Work under a mentor and/or team who understand the model.
  - Ultimately move into farm ownership.
  - Utilize low-cost, efficient and/or dual purpose infrastructure such as straw pack bedding, managed grazing, outdoor wintering, pit parlors, and group feeding calves to minimize labor and capital expenditures.
  - Develop forage based feeding system utilizing a complex forage chain to minimize harvest, production, and manure handling costs while maximizing soil health.
  - Maximize existing infrastructure.

# **Southwest Dairy Profit Teams**

- Thirty five farms were enrolled in the program in 2013 with a total of 5,408 dairy cow and dairy goat operations, including an expansion of 490 cows to the region.
- Estimated in-kind contributions are \$53,550.
- Estimated economic impact of their program is \$ 1,662,225.30.
- This region partnered and hosted a number of workshops. An estimated 120 educational contacts made during the past year.
- The Southwest Minnesota Dairy Profit Group advisory board feels, "It is important to try to help any dairy in any way we can or at least try. Our goal is to 'Leave No Farm Left Behind.' We try to be a resource for farms we do not work with on a regular basis. To find answers to questions, get resources, or connect them with someone who can answer their questions or help them with a certain situation. We find this is a good recruiting tool. Some of these farms later come to be a farm that forms a team."
- Part of the group spearheading a new university program online to help farmers through the process of modernizing or
  expanding their dairy farms. Also helping them look to the future to what their farms need to do to remain competitive
  and viable at any size.

### Southwest Team Testimonials/Observations:

### Dennis Schroeder, Marshall Farm Business Management Instructor

I am a Farm Business Management Instructor and have worked with the Southwest Minnesota Dairy Profit Group for more than five years on a variety of dairy farms in southwest Minnesota. They have been a very valuable asset providing current dairy information to help farmers prepare for the future. The coordinator's dairy background and own farming experiences have made it possible for us to make a more reliable analysis of what is actually happening with individual farming operations. We have worked on many cash flow projections together, and I feel confident that our information is accurate and usable. I always turn to the program for dairy related information and highly recommend their services to other dairy farmers in our area.

### **Bruce Iverson ABS Global Representative**

I am an A.I. technician and an ABS Global Representative. In recent years I have worked with many local dairies as a team member through The Minnesota Dairy Profitability Enhancement Program. I have had the privilege of working with Merri Post, Tim Dolan and Heidi Sellner along with various veterinarians, nutritionists, bankers, and other key people involved in the specific needs of each dairy.

I feel this program has not only helped some of these dairies make important key decisions necessary for profitability and efficiencies but without this program I truly believe some of these dairies would no longer exist. The economic impact to a family that fails in the dairy industry is devastating to that family; however it is just as devastating to the surrounding community if the dairies are not able to survive. The dollars these dairies generate back into the community has hardly an equal rival in the agriculture industry or for that matter any industry.

The DPEP Program plays a major role in putting people together who can learn from one another and help impact and ensure the survival of many dairies. I feel that the program has personally helped me better understand my customers' needs. I look forward to serving as a team member in the future.

# Southeast Dairy Profit Teams

- Fifty three farms (with a total of 14,778 cows) enrolled in the dairy profitability program in 2013.
- Estimated in-kind contributions are \$56,610.
- Estimated economic impact of the program is \$ 1,699,470.00.
- Seven hundred and twenty farms participated in educational outreach within the region.

# **Dairy Business Planning Grants**

The Dairy Business Planning Grants Program granted \$60,000 to producers exploring making some changes to their operations in fiscal year 2013. The grants are capped at \$3,000/producer with a requirement of a one–to-one match by the applicant. A number of the producers are considering expansion, while others are improving their environmental stewardship or refinancing their debt or transferring the operation to the next generation. Six of the 20 farms tested for stray voltage and determined the best route to eliminate it. The end result of the Dairy Business Planning Grant must be a thorough business plan exploring on-farm changes.

Appendix C is a map of the 20 producers who applied for and received dairy business planning grants in FY 2013.

# **Benchmarks**

Despite the belief that the size of a herd and milk production is a predetermined factor or benchmark to the profitability of a dairy enterprise, Figures from the 2008-2012 Minnesota State Colleges and University (MnSCU) Farm Business Management Records well-managed small farm carrying a small debt load can provide a satisfactory level of income for a family. Efficient use of available resources, maintenance of a healthy herd, a base level of \$19/cwt of milk, and the use of DHIA (or similar) record will generate profits to the dairy enterprise. While benchmarks represent a certain level of profitability, these cannot be standalone numbers. Variables include: interest rates, milk marketing conditions, weather, debt load, supply and demand for energy, feed supplements, transitional stage of the herd, and herd health can affect the outcome any given year. In 2012, most herds profited about \$2/day/cow. In 2011, the average herd enrolled in Farm Business Management produced a profited \$1.50/day/cow.

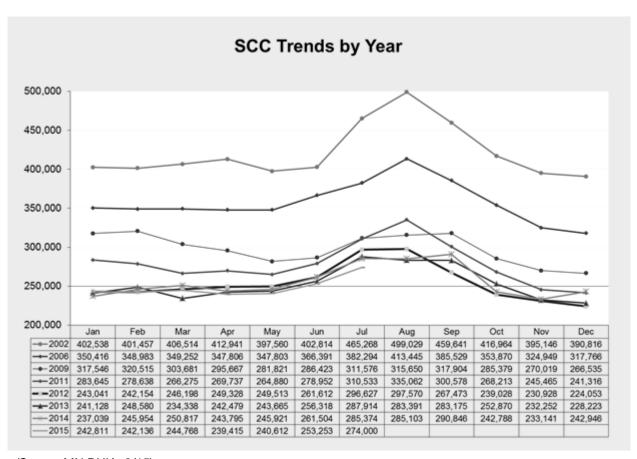
Hired Labor	<\$150/cow
Total Interest Expense	<\$98/cow
Total Direct Expense	<\$13/cwt
Milk Produced	+22,000/cow
Cull Rate	25%
Turnover Rate	33%
Somatic Cell Count	<300,000
Percent of barn capacity	112%
Feed Cost/cwt	<\$10.70
Debt per cow	<\$3000
Labor hours per cow	<40
Milk price & gov't support	\$19.42
Total Debt to asset ratio	<50%
Debt per cow	<\$3000
Labor hours per cow	<40

# **Quality Count\$**

Quality Count\$ was an initiative designed to help increase dairy farmers profitability and milk quality by decreasing their herd somatic cell counts (SCC). Quality Count\$ is an initiative that came about thanks to a unique partnership among Minnesota's public and private dairy organizations (University of Minnesota Extension Service, Minnesota Department of Agriculture, Minnesota Dairy Initiative Teams, Farm Business Management Instructors, and Minnesota's dairy processors) worked together to reduce SCC to below 300,000.

For calendar 2013, Minnesota's average herd SCC was 234,000, 240,000 for 2012, 266,000 for 2011, 294,000 for 2010, 297,000 for 2009, 321,000 for 2008, 347,000 for 2007, 357,000 for 2006, 366,000 for 2005, 362,000 for 2004, 397,000 for 2003, and 420,000 for 2002.

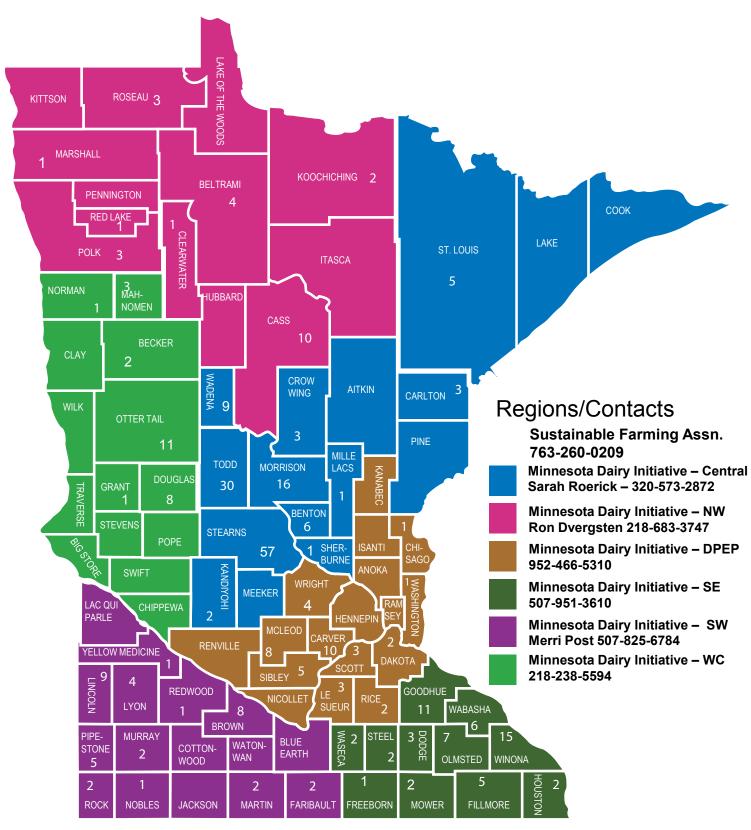
Bruce Dokkebakken, of MN DHIA, has been very helpful in tracking SCC as a measure of milk quality of farms within DHIA.



(Source MN DHIA, 8/15)

# **Appendix A**

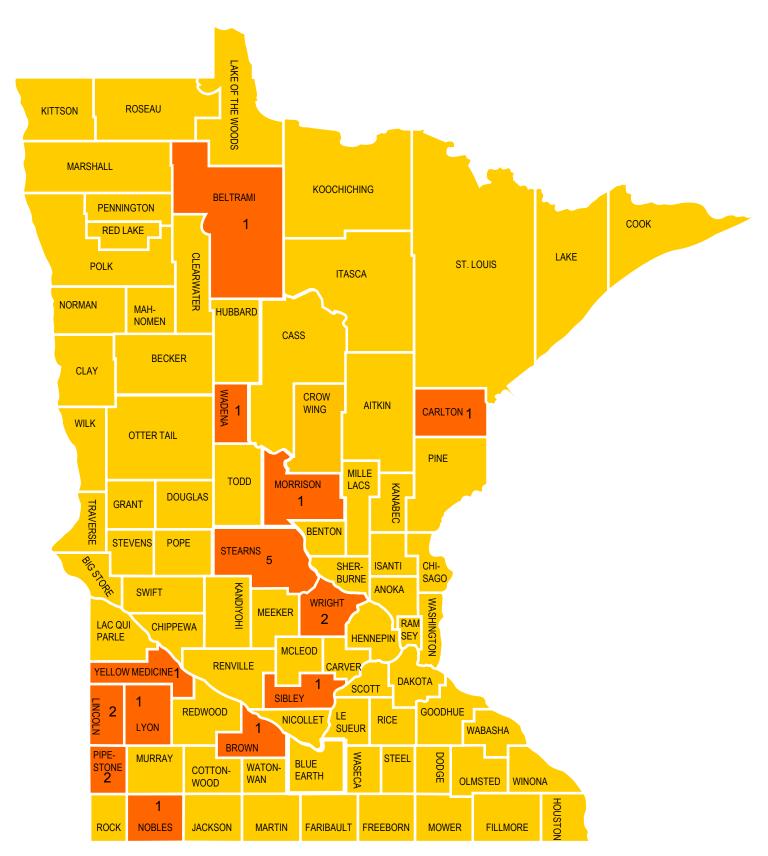
# **Dairy Development Profitability and Enhancement Teams and Regions**



312 teams across the state in FY 2013

# **Appendix B**

# **MDA FY 2013 Dairy Business Planning Grants**



12 Dairy Business Planning Grants distriubuted \$33,292

# **Appendix C**

Laws 1997, Chapter 216, Section 7, Subdivision 2

1999 Minn. Stat. Chapter 401, Section 6

MN Session Laws 2001, 1st Special Session, Chapter 2, Section 9, Subdivision 2

MN Session Laws of Minnesota 2003, Chapter 128

2005 First Special Session Chapter 1 Article 1 Section 3 Subdivision 5

2007 Chapter 45, Article 1 Section 3 Subdivision 5

MN Laws 2009, Chapter 94, Article 1

MN Laws 2011, Chapter 14, Section 3, Subdivision 5

MN Session Laws, 2013, Chapter 114, Subdivision 5

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