

# DAIRY DEVELOPMENT AND PROFITABILITY ENHANCEMENT PROGRAM

Work Plan Fiscal Year 2020

Fiscal Year 2018 Legislative Report



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Pursuant to Minn. Stat. § 3.197, the cost of preparing this report was approximately \$1,000

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# WORKPLAN FOR FISCAL YEAR 2020 (FY20)

## Dairy Profit Teams

The Dairy Profit Teams provide one-on-one guidance to dairy producers across the state, including comprehensive financial analysis, risk management education, and production enhancement advice.

**In FY20: Support and direct the regional Dairy Profit Teams to work with at least 200 farms statewide. Continue to stress using most of the budget for team activities.**

## Dairy Business Planning Grants

These grants provide matching dollars for producers to develop a business plan. Grants are capped at \$5,000 per producer. Recipients continue to evaluate modernization projects and test for stray voltage.

**In FY20: Work with 20 farms statewide, capped at \$5,000 per application. All grant recipients required to provide a dollar-for-dollar match.**

## Administration

The administration for this program is a .2 FTE at the Minnesota Department of Agriculture (MDA) and includes office rental, benefits package, copier expenses, and supplies. The MDA is continuing to support the Dairy Profit Teams and Business Planning Grants.

## Special Projects

The MDA works with the Dairy Research, Teaching, and Consumer Education Authority to identify and fund other industry projects directly related to profitability in Minnesota, such as studies on agriculture plastic recycling, economic and profitability research at the University of Minnesota, and other dairy related collaborations.

## Budget

Budget Item	FY19 Amount	FY20 Amount
Dairy Profit Teams	\$480,000	\$500,000
Dairy Business Planning Grants	\$90,000	\$89,000
Administration	\$45,000	\$45,000
Special Projects	\$19,000	\$0
<b>Total Funding (2019-2020 Agricultural Appropriations Act)</b>	<b>\$634,000</b>	<b>\$634,000</b>



# LEGISLATIVE REPORT FISCAL YEAR 2018

## EXECUTIVE SUMMARY

1. Dairy Profit Teams worked with 316 producers across the state, helping them reduce costs, adjust herd size, improve safety by building or redesigning milking facilities, and make other improvements. The teams also helped producers increase their profitability by improving milk production and quality, enhancing animal health and comfort, and pursuing value added dairy opportunities. According to farm financial records, Dairy Development and Profitability Enhancement Program (DDPEP) efforts generated \$13,958,354.62 in Fiscal Year 2018 (FY18), with a 29:1 return on every dollar invested. The program also generated in-kind contributions worth at least \$1,628,617.
1. Dairy Business Planning Grants helped 12 Minnesota producers hire professional advisers to aid them in developing business plans and strategies in FY18. Some producers were thinking about expanding their herds, others investigated ways to transfer operation to a new generation, manage debt, or invest in improvements to protect water, soil, and other natural resources.

Most dairy farms experienced severe financial challenges in 2018, due in large part to low milk prices. Experts believe these stresses will continue in 2019, making this program as relevant and helpful to the dairy community as it has ever been. The continuation of this critical program is essential.

## INTRODUCTION

Since 1996, the DDPEP has helped Minnesota dairy farms lower costs and improve quality and profits.

The Minnesota Department of Agriculture (MDA) prepared this report to meet its statutory obligation in Laws 2017 Chapter 88 Subd.3c.

The Minnesota Legislature appropriated \$634,000 per year for the 2018/19 biennium to continue the Dairy Development and Profitability Enhancement and dairy business planning grant programs established under Laws 1997, chapter 216, section 7, subdivision 2, and Laws 2001, First Special Session chapter 2, section 9, subdivision 2.

The Legislature specified that “The Commissioner may allocate the available sums among permissible activities, including efforts to improve the quality of milk produced in the state, in the proportions that the Commissioner deems most beneficial to Minnesota’s dairy farmers.”

## BACKGROUND

The DDPEP funds two primary components to serve dairy farmers in Minnesota: 1) dairy profit advisory teams and; 2) dairy business planning grants.

The DDPEP is administered by the MDA with input from the Minnesota Dairy Initiative (MDI). MDI partner organizations coordinate dairy profit advisory teams on a regional or, in one case, statewide basis. The partners include the Sustainable Farming Association, Minnesota Milk Producers Association, the University of Minnesota, University of Minnesota Extension, Minnesota State Colleges and Universities Farm Business Management (FBM), and other industry groups.

The DDPEP began as a pilot program with a single team in 1996; the Minnesota Legislature funded the program at \$1M for the biennium. In 1997, the program expanded to support five regionally-based teams and one statewide team, which specialize in management practices such as organic production and grazing, and with alternative dairy species like sheep and goats. The legislature appropriated \$2 million for the 2004/05 biennium to expand advisory team activity and began a grant program to encourage individual farmers to invest in dairy business planning. In 2009, the funding was reduced to \$635,000 per year during budgetary reductions and has remained at that level to this date. Appendix B references all the laws pertaining to the program.



## Dairy Profit Teams

Figure 1 shows an example of a Dairy Profit Team. Each team is comprised of people who bring varying backgrounds and expertise tailored to an individual farm's needs. The team works with the farmer and partners and/or family members to evaluate how the current farm operation is performing and discuss objectives for the future. The team makes recommendations, not decisions. It identifies priorities and suggests changes that could help the farmer/family meet those objectives. No two teams' recommendations are exactly the same – just as no two farms are exactly the same. The issues may be similar, but the means for resolving them are often very different. Farmers don't receive this service for free, they pay \$200/farm and then are eligible for up to \$500 of funds to address issues on their farms.

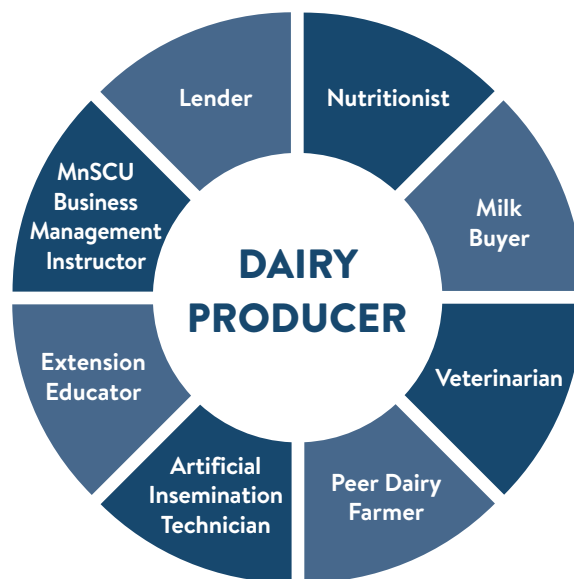
Farmers can work with "their" dairy profit team for three years. They can reapply for the program if they want to continue working with the team. The average team will cost between \$2,000-\$2,500 per farm to facilitate and provide services.

In FY18, 316 dairy farms milking a total of 68,000 cows participated in the program (Appendix A). These figures represent eleven percent of the dairy farms and fifteen percent of the dairy cows in the state.

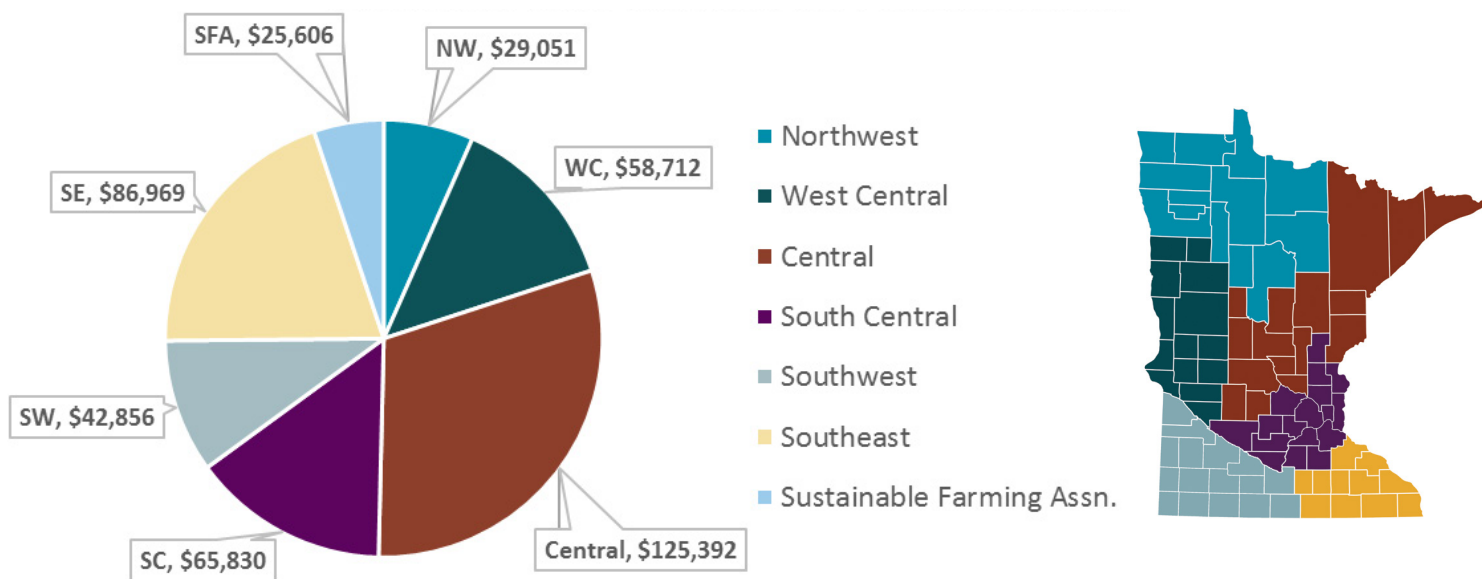
In addition to the farms that were directly served by Dairy Profit Teams, 11,421 people attended other educational programs offered at MDI-sponsored events. These programs included organic transition workshops, milker trainings, barn tours, and more.

In FY 2018 the DDPEP awarded a total of \$460,000 to support advisory teams fielded by the seven MDI programs across the state (Figure 2).

**Figure 1. Members on a Typical Dairy Profit Team.**



**Figure 2. Distribution of FY 2018 MDI Dairy Profit Team Funds**



# FISCAL YEAR 2018 ACTIVITIES AND ACCOMPLISHMENTS

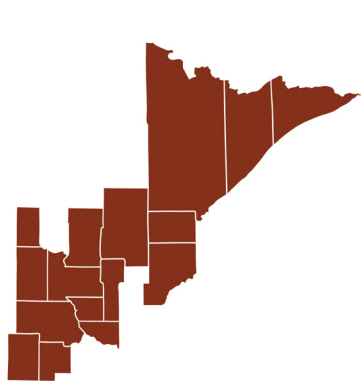
This section summarizes the activities and accomplishments reported by the MDI Dairy Profitability Teams. They all worked directly with farmers and farm families. They also coordinated or co-sponsored other dairy education events during the year.

Profit margins in the dairy industry are by far the biggest concern of farmers today. With increasing operating costs in every area and continued low commodity prices, profits for farms are slim to none. Farms are being forced to look hard at their profitability and in most cases make hard decisions about their management style and future of their dairy operation. In 2017, Minnesota lost approximately 150 dairy farms.

Rural mental health has consequently been a rising concern as well. Because dairy farmers find such a large portion of their identity tied to their farms, deciding to change careers is a change in lifestyle choice. It is impactful, difficult, and weighs heavy for farmers to face this decision.

MDI has taken a focus on Farm Transition this past fiscal year. In doing so, we held a training led by the International Farm Transition Network in Willmar the first week of October 2017. Eight MDI personnel went through the training, as well as additional industry professionals that work closely with MDI such as FBM instructors, lenders, and accountants. A total of 30 people attended the training and are now certified as farm succession coordinators. This training has helped spark a movement of farm succession planning in the state, and the same speakers have made more appearances to educate farms directly as well as industry professionals on the delicate conversations of farm succession planning.

The following highlights are provided by each of the regional partners and represent their interpretation of points of interest, challenges, and issues from dairy farms in their region.



## Central

### Statistics

- 13,908 total cows enrolled in program
- Several of the farms enrolled expanded their herds adding 180 new cows during the year
- 3 first time enrollees to the program

- 22 farms graduated from the program in FY18

### A few of the focus areas of interest this past year were

- Expansion / Low cost expansion / Low cost parlors
- New farm start ups
- Improve record keeping skills
- Increase milk production
- Farm Transfer / Estate planning / Partnership agreement
- Cow comfort
- Robots / Calf feeders
- Water issues / Stray voltage issues
- MN Pollution Control – working with producers on reversing any compliance issues
- Labor management

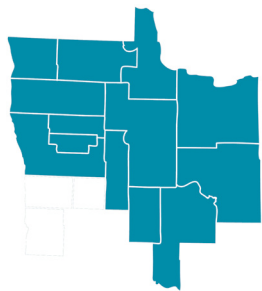
*“The dairy profit team program has been a tremendous success with assisting dairy producers to improve their operations, profitability, and dairy herds. We have been actively involved in numerous dairy team meetings over the past several years and see a great benefit to both the producer and ourselves as the lender.*

*The dairy team meetings allow the producer to express their goals, needs and concerns for their operation and develop plans to meet their goals and/or correct problem areas in the operation. They are able to discuss their various issues as a group and receive important feedback or ideas to improve their operation or resolve problems in the most economical and effective manner. The interaction and feedback from the team members is vital to the team process. By being involved early in the process, we as the lender are able to provide input and guidance for the types of financing that may or may not be available. We become familiar with the operation and their financial needs. This speeds up the loan application process because the producer understands the loan requirements and process and the lender fully understands the request for credit. We encourage our applicants to utilize the dairy team process and to include their lenders in the process as soon as possible.”*

*Jerry Hurrle, Stearns County*

## Educational programs

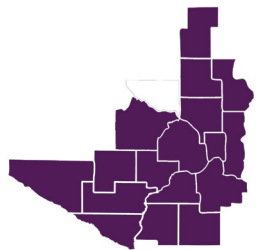
- Our executive board believes that sponsoring educational programs is an excellent way to offer producers and their advisers high quality educational programs. MDI Central partners with extension and agri-business professionals in the area to offer field days on current topics of interest.
- This past year we had excellent attendance at all the field days in Central Minnesota. 3,785 total people attended this past year's events.



### Northwest

- Milk produced per cow continues to increase
- Total cost per hundredweight (cwt) of milk produced is below the state benchmark average
- Net farm income tends to be above the benchmark average

- Tend to have lower feed cost per cow than the state average
- Lower priced land in the area provides some economic benefits to NW dairy farms
- Negative is hauling costs due to distance to processor and the number of dairy supply and equipment repair service providers.



### South Central

#### Challenges/Concerns

- Low milk prices
  - Stress on farmers is incredible; mental health is a huge concern

- Many farms aren't able to make ends meet and are running out of financial options
- Too many farms are exiting the dairy industry
- Labor continues to be a struggle
  - Good employees are hard to find
  - Many farms struggle to find any employees

*"I am grateful for MDI it helped me restructure and become profitable again"*

*Peter Welle, Stearns County*

*"They helped us make changes to our business with everyone at the table."*

*Steph Goeller, Wadena County*

*"Without the help of the MDI program team, we would not have been able to develop a farm transition plan." We are looking to have our plan completed this year. The team is also helping us put together a ration to start feeding corn silage."*

*Kolton and Debbie Olson, Polk 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 this information. Also, getting ideas on farm transition planning has also been very beneficial."*

*David Schafer, Roseau County*

*"We expanded the herd to include three new robotic milkers, we have been looking for ways to improve efficiency and ultimately produce more milk per cow per day." Our daughter has come back from college to become involved in the dairy. The team helped us put together cash flows to allow her into our operation."*

*Steinmetz (Parents), Mahnomon County*

*"I saw the success that my parents have received as they expanded their dairy herd with robotic technology. The team has shown us the importance of having regular employee meetings."*

*Steinmetz (Daughter), Mahnomon County*

*"With the help of the diagnostic teams we have been able to transition the dairy operation to the next generation." All family members were in favor of keeping the farm in the family name and the team helped us accomplish this."*

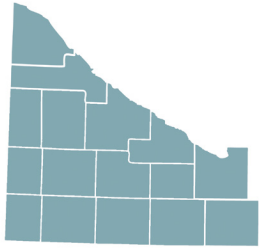
*Weidenborner, Beltrami County*

*"The only reason we're still farming is because of our diagnostic team!" Bob Rademacher, Carver County*

*"I appreciate the accountability of having a MDI team. We have a set time, place and atmosphere of bringing people together where everyone is accountable to the farm. You need a lot of tools to be good, and this is a good tool to help us."*

*Garrett Luthens, McLeod County*

*"What we like about the MDI program is that when you have all of the team members around your kitchen table, all the finger pointing stops." Scott Krueger, Sibley County*



## Southwest

### Looking back

- Our coordinators have been busy trying to help farms through this farm financial crisis. Helping them find areas where they can cut some costs or areas where improvements need to be made to help

their bottom line. Some farms have learned a lot from attending peer group meetings.

- We currently have two peer groups that are robotic dairy farms. These peer groups focused on learning from each other and from speakers about robot topics or teach them the how-to's in repairing or replacing parts on their own robots.
- We have one peer group of three prospective robot farms who are considering going robotic. They want to learn whatever they can, learn about each style of robot, and tour some facilities.
- The fourth peer group is just for Brown county producers. Topics covered are chosen by the producers of the peer group. They have included milk marketing, farm transition, calf health and vaccination considerations.
- Southwest region works closely with the I-29 Moo University in coordinating workshops and tours. We conducted three winter workshops in Minnesota with 45 attending in Pipestone focusing on cover crops for dairy diets, silage pile safety, feeding management and evaluating dairy diets. This summer on farm workshops focused on low stress cattle handling, working with downer animals, bio security. In addition a coordinated tour in coordination with the Central Plains Dairy Expo focused on Dairy Beef.
- We have one coordinator trained through the John Baker Farm Transition Network and our new coordinator will be attending a training session. One farm in the region is already getting assistance with farm transition and there are more seeking this help.

### Looking forward

- We plan to have our coordinators expand the producer peer groups to tackle the topic of farm transition.
- We plan to offer a bus to Central Plains Dairy Expo where farmers can network with other producers, attend breakout sessions, and visit vendor booths to gather more information.

## Sustainable Farming Association

Two new farm participants stopped pursuing their dairy farm dreams when informed by the processor it would be at least three years before they could have their milk picked up. One new dairy farm sold out after being informed that their processor would not take any additional milk from the planned herd expansion for at least three years. All of these farms were certified organic or in transition to organic. At least three other farms on the list of enrolled farms are on the cusp of going under or selling out. If they would have 1) contacted MDI for assistance two years earlier, AND 2) implemented the recommendations offered, there is a good chance these farms would not be in the predicament they are in.

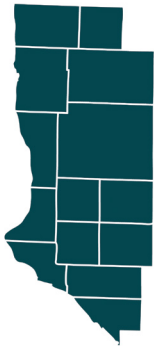
*"I find the MDI meetings are very beneficial to the dairy as it allows us to meet quarterly with the individuals that contribute to the success of the dairy. There have been many things that have been discussed and has been put into play that have improved our dairy. Having a group leader who organizes the meeting and contacts all the individuals that attend is such a huge help and comes prepared with an agenda which keeps the meeting on schedule and runs smoothly."*

*Don & Diane Hoffman, Brown County*

*"I have been working with MDI – SW Region for many years and I firmly believe its ability to help our local farmers remain viable in a tough economy. The ability to talk as a group amongst several people with a common goal is invaluable, providing we can count on the leader of the group to provide reliable contacts for information when requested. The number of people that the leader comes in contact with and the ability to compile this information to have available is what makes the program work. We all have our own resources. The power comes in the ability to be able to share these ideas and resources. The funding that the leader is able to help procure is also very valuable. It can mean the difference between being able to make improvements to stay afloat or sink the ship."*

*Dr. Roxanne Nielson, Lincoln County*





### West Central

A few of our main issues this past year had to do with low milk prices and low commodity prices. There is a great deal of stress in the farming community. A lot of client meetings ended up dealing with this issue. There are still operators who are looking to expand and or move to robots because of labor issues. There is a growing interest in

low-cost dairy, grazing as well as the use of cover crops. Our region plans to address these topics with workshops during the next year. Also, there is much work being done in the area of farm transfers; this is sometimes a difficult process but very necessary one. The area of farm record keeping and refinancing has been keeping us very busy. Much time has been spent with producers working on cow comfort, somatic cell counts, increasing milk production, and trying to remain profitable.

*“MDI provides value to dairy farmers that we work with by helping them get outside valuable information that they would not get from family. MDI helps with facilitating area expertise that helps explore options to remain profitable in these hard times as well as a little financial help to aid in implementation of them.”*

*Craig Will, Douglas County*

*“MDI has helped turn our farm around and has helped us become profitable.”*

*Jerry Dahring, Becker County*

*“MDI is helping me with records and labor issues”*

*Karl Hanson, Ottertail County*

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### DAIRY BUSINESS PLANNING GRANTS

In FY 2018, the Dairy Business Planning Grants Program awarded \$50,350 to twelve producers considering making significant changes to their operations. The average grant was \$5,000 with recipients contributing a required match of \$50,350.

Some applicants were considering expansion, while others were improving environmental stewardship, refinancing debt, or transferring the operation to the next generation.

## BENCHMARKING

Despite the belief that the size of a herd and milk production predicts the profitability of a dairy enterprise, farm financial data collected from 2012 to 2018 indicate that even a well-managed small farm carrying a small debt load can have tight margins ([www.finbin.umn.edu](http://www.finbin.umn.edu)). Using resources efficiently, maintaining a healthy herd, and monitoring milk production and quality using milk testing programs such as the ones offered by the Dairy Herd Improvement Association (DHIA) can all return profits to a dairy enterprise.

While we can use benchmarks to compare the performance of different enterprises to an average, many variables can affect performance and profits in any given year – including weather, herd health, interest rates, debt load, milk marketing conditions, the availability and cost of labor, and the cost of feed and supplements (Table 1). Recently, milk price has had a particularly strong effect on dairy profitability. In 2014, Minnesota dairies reported receiving an average milk price of \$24.45/cwt.<sup>1</sup> That year, they saw an average profit of \$1,000/cow. By 2018, milk prices had plummeted to an average of \$15.99/cwt, with the average dairy cow generating \$(274)/head/year.

Most experts predict that dairy farms will continue to experience financial challenges in 2019 but there is some optimism that 2020 will be better.

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<sup>1</sup> Milk is priced per 100 pounds, a hundredweight (CWT)

**Table 1. 2018 Dairy Enterprise Data**

Benchmark Item	Minnesota Average
Hired labor	\$270/cow
Total interest expense	\$99/cow
Total direct expenses	\$12.42/cwt
Total direct and overhead expenses	\$15.28/cwt
Milk produced (pounds)	22,460 lbs./cow
Cull rate	28%
Turnover rate	35%
Percent of barn capacity	113%
Feed cost	\$8.29/cwt
Milk price and government support	\$15.99/cwt
Cost of production	\$17.45/cwt
Total debt to asset ratio	<50%
Debt per cow	<\$3,000
Labor hours per cow	<41
Average somatic cell count	<300,000

Source: [www.finbin.umn.edu](http://www.finbin.umn.edu)

## Quality Count\$

Quality Count\$ is a statewide campaign to improve milk quality in Minnesota. Quality Count\$ is led by the University of Minnesota with help from the University of Minnesota Extension, the MDA, regional MDI teams, FBM instructors, and Minnesota's dairy processors.

One key measure of milk quality is somatic cell count (SCC). Partner organizations worked together to help farmers reduce herds' SCC to less than 300,000 per milliliter. Since the Quality Count\$ program began in 2003, the average SCC on Minnesota dairies has fallen by 40% (Table 2).

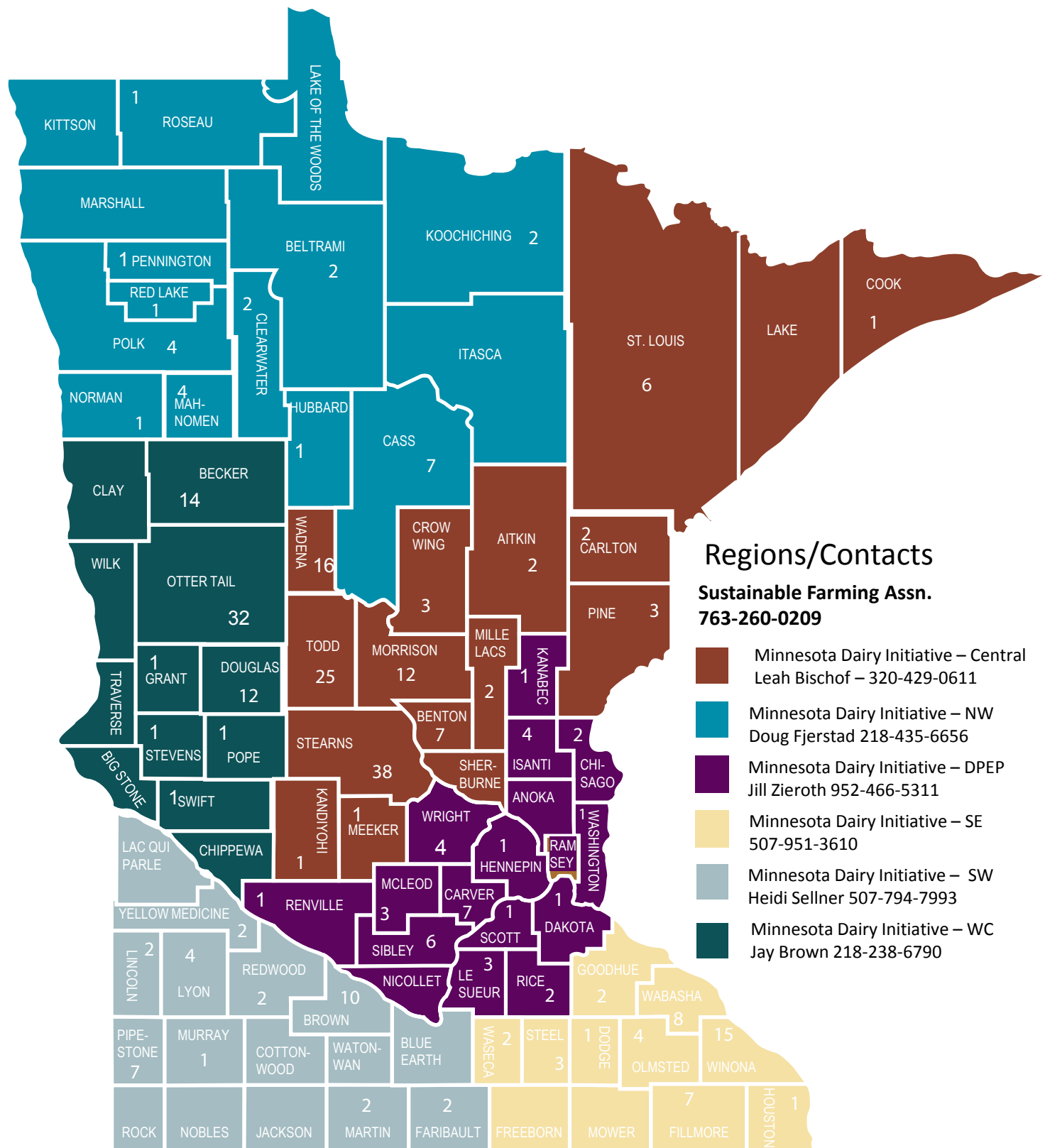
**Table 2.**  
**Average Somatic Cell Count (SCC) of Minnesota Herds Enrolled in DHIA Milk Quality Testing**

Calendar Year	Average SCC (x1,000)
2002	420
2003	397
2004	362
2005	366
2006	357
2007	347
2008	321
2009	297
2010	294
2011	266
2012	240
2013	234
2014	245
2015	251
2016	250
2017	239
2018	216

Source: MN DHIA

## APPENDIX A:

### Dairy Development Profitability and Enhancement Teams and Regions

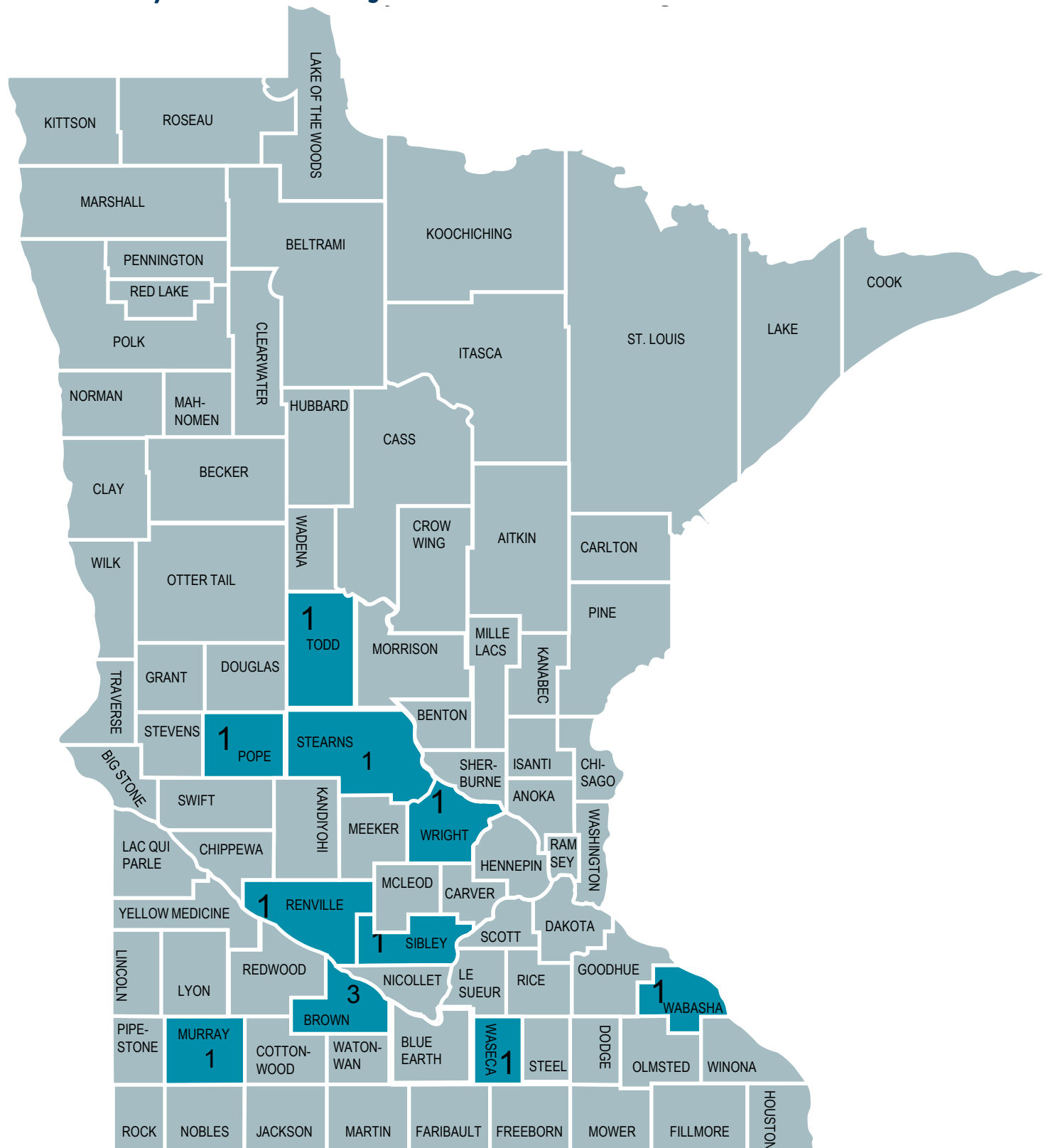


316 teams across the state in FY2018



## APPENDIX B:

### FY2018 Dairy Business Planning Grants



**316 teams across the state in FY2018**

# APPENDIX C

## **Legislative History of the Program Minnesota Laws and Statutes**

Minnesota Laws 1997, Chapter 216, Section 7, Subdivision 2

1999 Minn. Stat. Chapter 231, Section 11, Subd.2

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 Ch. 1 Article 1 Sec. 3 Subdivision 5

2007 Ch. 45 Article 1 Sec. 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,

MN Session Laws, 2015 Chapter 17 Subdivision 3

MN Session Laws, 2017 Chapter 88 Subdivision 3C