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Department of Animal Sciences

Dairy Update

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2014 USDA Dairy Margin Protection Program (MPP): Understanding and Using It

Mary Sowerby

Introduction

With the US Congressional passage of the Agricultural Act (Farm Bill) of 2014 in February 2014, came a new Margin Protection Program (MPP) for dairy producers. Scheduled to begin "no later than" September 1, 2014, the National Milk Producers Federation claims the program, "will help address the volatility in farmer's milk prices, as well as feed costs, and provide appropriate signals to help address imbalances in supply and demand."(1)

Although the US Department of Agriculture is currently writing rules for administering the MPP through the USDA Farm Service Agency (not private insurance agencies like the former Livestock Margin Insurance Program - Dairy (LGM-Dairy) program), we do know enough about the program for dairy producers to begin calculating how the program may best fit into their individual risk management programs.

Overall the MPP is a volunteer insurance program designed to provide a safety net of indemnity payments for dairy producers when the national benchmark for milk income minus feed costs (the margin) falls below the coverage level selected by the participating producers.

Four primary components make up the Margin Protection Program:

1. Actual Dairy Production History (ADPH)
2. Coverage Percentage
3. Actual Dairy Production Margin (ADPM)
4. Coverage Level

1. Actual Dairy Production History (ADPH)

When signing up for the MPP, dairy producers will be asked to show their total annual milk production for 2011, 2012 and 2013. Their Actual Dairy Production History (ADPH) will be based on the highest annual production of those three years. New dairies operating for less than a year will use an estimated production (method still to be determined by USDA).

There will probably be a production seasonality factor based on past production records which will be factored into payments. In future years, the ADPH will probably be adjusted by USDA to reflect changes in US milk production.

2. Coverage Percentage

Participants in the MPP will have a choice of what percentage of their Actual Dairy Production History they would like to insure between 25% to 90% in 5% intervals.

3. Actual Dairy Production Margin (ADPM)

Simply stated the Actual Dairy Production Margin (ADPM) is the US All-milk Price ($/hundred weight (cwt)) minus the cost of three primary feed ingredients (corn, soybean meal and alfalfa hay) which comprise the majority of rations fed on US dairies.

The US All-Milk Price ($/cwt) is defined as the average price of milk received by dairy farmers for all grades of milk sold to plants and dealers in the US, which is calculated monthly by USDA.

To calculate the monthly feed cost/cwt, several animal nutritionists worked with National Milk Producers to create the feed ration underlying the program. All cattle on a dairy farm from calves to milking and dry cows are included. The ration was formulated to meet the nutritional requirements of a cow producing 68.85 lbs. of milk per day.

To calculate feed costs/cwt, a 10% shrink factor was used between volumes of feed purchased and feed consumed by the cattle. It was also assumed that the price of corn silage per ton is equal to 10.1 times the price of corn for grain/bushel.

Feed prices used are the national average price for corn and alfalfa as determined by the USDA-National Agricultural Statistics Service and the Central Illinois soybean meal price as reported by the USDA-Agricultural Marketing Service.

After adding the total daily cost of purchasing the four feed ingredients and dividing by the daily volume of milk marketed (0.6885 cwt per milking cow), the feed cost per hundred weight of milk was determined to be:

1.192 x price of corn/bushel
0.00817 x price of soybean meal/ton
0.0152 x price of alfalfa/ton

This was then reduced by 10% each for budgetary reasons to arrive at the Actual Dairy Production Margin (ADPM) in $/cwt of milk =

US All-Milk Price minus the sum of:
1.0728 x the price of corn/bushel
+ 0.00735 x the price of soybean meal/ton
+ 0.0137 x the price of alfalfa hay/ton

Although the margin will be calculated monthly, MPP payments will (presumably) be based on a 2-month average of the Actual Dairy Production Margin for the periods of: January-February, March-April, May-June, July-August, September-October and November-December. Actual payment information is still pending final rule writing by USDA, and as mentioned earlier, may include a production seasonality factor.

The Actual Dairy Production Margin is set with only one national price per item for corn, soybeans, and alfalfa hay. The MPP does not guarantee an individual producer's margin

(which in Florida would include by-product feeds not considered in the formula and transportation costs of corn, soybeans and alfalfa).

4. Coverage Level

Coverage level is the Margin value selected by producers from between $4 and $8 at $0.50 increments. Premium payments increase as the coverage level margin increases. Premium prices will be fixed for five years at the amounts shown in Table 1, but will be discounted by 25% in 2014 and 2015 for volumes up to 4 million pounds.

Producers will pay annual premiums based on production history and coverage level. There is a higher premium for all production history milk over 4 million pounds.

Table 1. MPP producer levels by coverage level and production

	Premium per Cwt *	
Coverage Level $/cwt milk	**First 4 Million Pounds of Production**	**Excess of 4 Million Pounds of Production**
$4.00	None	None
$4.50	$0.01	$0.02
$5.00	$0.025	$0.04
$5.50	$0.04	$0.10
$6.00	$0.055	$0.155
$6.50	$0.09	$0.29
$7.00	$0.217	$0.83
$7.50	$0.30	$1.06
$8.00	$0.475	$1.36

*Premiums will be discounted by 25% in 2014 and 2015 for volumes up to 4 million pounds.

For a payment to be made, the Actual Dairy Production Margin must be below the producer's selected annual coverage level for the averaged 2-month period. They will be paid based on the Actual Dairy Production History contracted divided by 6 (and possibly seasonally adjusted).

Since the $4.00 coverage level is free, all producers should seriously consider signing up for at least this base level as a safety net against another 2009 or 2012. To participate in the MPP at any coverage level, each dairy operation will be required to pay a $100 annual administration fee. USDA defines a dairy operation as one or more dairy producers that produce and market milk as one operation (other ownership structures will be defined by USDA, if necessary.)(2)

Example: A dairy producer with 100 cows selects to cover 90% of his annual production history of 19,674 cwt for a margin level of $6.50. The actual March-April margin was $4.59 (as it was in 2012). This producer would have paid an annual premium of $0.09/cwt, or $1,594. His indemnity (amount paid for March-April) would have been calculated:

90% of 19,674 cwt annual production history = 17,707 cwt covered. Per 2-month period, this is 2,951 cwt. Now, $6.50 coverage level - $4.59 Actual Dairy Production Margin = $1.91 payment per cwt. Therefore, for March-April, the payment is $1.91 x 2,951 = $5,635.

Had the MPP been previously in existence, Figure 1 shows the MPP margins and coverage levels from 2004 to 2013. The Actual Dairy Production Margin ranged from a high of $14.00 in 2007 and low of $3.00 in 2009 and 2012. The free $4.00 coverage would have provided some much needed income during the two very low years.

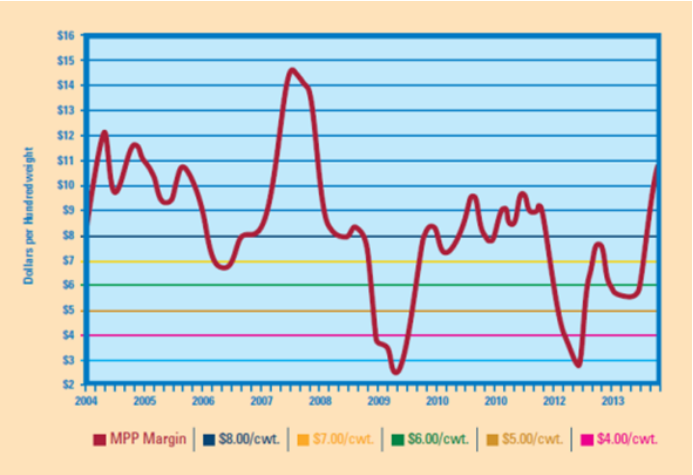

Figure 1. MPP Margin and Coverage Levels 2004 – 2013 (if the MPP had been in existence).

Differences between MPP and LGM-Dairy

There are some important differences between the coming MPP and the current Livestock Gross Margin for Dairy (LGM-Dairy) which will continue to be available:

1. The LGM-Dairy allows the producer to select different quantities of two feeds: corn and soybean meal to approximate the producer's actual feed use. The MPP is based on a national average feed cost, not an individual producer's costs.
2. The milk price used for LGM-Dairy is the Federal Order Class III price, not the US All-Milk Price used by the MPP.
3. The LGM-Dairy establishes its margin protection by looking to the future using Chicago Mercantile Exchange futures market prices. The Actual Dairy Production Margin (ADPM) is calculated for the present, based on the actual milk and feed prices.
4. The MPP is an annual program. The LGM-D allowed specific months to be selected.
5. The MPP will be administered by the USDA's Farm Service Agency. The LGM-Dairy will continue through private insurance agents under the Risk Management Agency of USDA.

Summary

For a MPP payment to be made, the Actual Dairy Production Margin must be below the producer's selected annual coverage level of between $4.00 and $8.00 at $0.50 intervals (see Table 1 for MPP Producer Premiums by coverage level and product). Note that $4.00 coverage level is free, so all producers should seriously consider signing up for at least this base value. In years like 2009 and 2012, indemnity payments would have been made (see Figure 1). In the MPP, producers will pay annual premiums based on production history and coverage level.

When signing up for MPP, producers will be asked to show their annual milk production for 2011, 2012 and 2013. Their Actual Dairy Production History (ADPH) will be based on the highest annual production of those three years. New dairies operating for less than a year will use an estimated production (method to be determined by USDA). There will probably be a production seasonality factor based on actual

past production used but this has yet to be determined by USDA.

Producers can choose their coverage (what percent of their Actual Dairy Production History to cover from between 25% and 90%, in intervals of 5%) and their coverage level. Coverage level is the Actual Dairy Production Margin from $4/cwt to $8/cwt in intervals of $0.50/cwt.

Producers will be paid an indemnity if the ADPM for any 2-month period falls below a producer's elected coverage level based on the percentage of their Actual Dairy Production History contracted divided by 6, since the year is divided into six 2-month periods.

Totally confused? Hopefully not, but either way plan on attending the ***August 6, 2014 Florida Dairy Business Conference*** in Ocala where:

Dr. Joe Outlaw from Texas A&M will explain the Margin Protection Program and introduce you to an on-line calculator to help producers decide which options are best for their dairy.

Dr. John Van Sickle from UF Food and Resource Economics Department will describe the features of the LGM-Dairy Program and give a market up-date on corn, soybeans and milk.

Calvin Covington, former Southeast Milk, Inc., CEO, will give his predictions of milk prices and why.

All three speakers will form a panel for conference attendees to ask specific questions to make the best future risk management decisions.

References

1. National Milk Producers Federation, 2014. Introducing the New Margin Protection Program. (http://www.futurefordairy.com)
2. Bozic, M., J. Newton, A.M. Novakovic, M.W. Stephenson, and C.S. Thraen. 2014. Program on Dairy Markets and Policy Information Letters, The Dairy Subtitle of the Agricultural Act of 2014. Information Letters 14-01. (http://dairy.wisc.edu/PubPod/Pubs/IL14-01.pdf)

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2014 Florida Dairy Production Conference Summary

Mary Sowerby

The sun was welcoming as over 140 participants of the 2014 Florida Dairy Production Conference congregated in the Alto Straughn IFAS Extension Professional Development Center in Gainesville on April 9.

A variety of topics and views were presented during the day to accomplish the conference mission of: "bringing together some of the newest research, innovations, recommendations and ideas for improving the sustainability and profitability of the Florida dairy industry."

Avoiding Silage Problems

UF Animal Sciences Professor Adegbola Adesogan, led off the presentations discussing how to avoid the two greatest silage problems: 1) shrinkage (dry matter loss) during the preservation process and 2) heating (aerobic spoilage). Through the natural fermentation process a minimum of 10% shrinkage can be expected, but under poor management this can increase to 40% with tremendous economic impact for producers. In a nutshell, Dr. Adesogan recommended:

1) Corn and sorghum should be harvested when dry matter is about 35% (spoilage increases as silage maturity and dryness increases.) Using the old recommendation of harvesting corn for silage at the ½ milk-line stage is no longer valid with the new varieties of corn. Corn plants from representative parts of a field should be selected, chopped and dried (preferably by oven) to determine dry matter content starting two weeks before anticipated harvest date and continually monitored thereafter.

2) The finer the chop length the better the silage packing. For unprocessed silage, ¼ to 3/8 inch chop length is recommended; for processed silage, ¾ inch. However, the forage needs of the cattle eating the silage must also be considered, especially if hay is not also fed for longer dietary fibers. Silage density is also an important consideration and should be 44 lb/cu.ft. wet or bulk density. Use the heaviest tractor for packing and make sure side walls and top layer are well packed. The University of Wisconsin density calculator is recommended to help calculate silage density (http://www.uwex.edu/ces/crops/uwforage/storage.htm).

3) Seal the silo immediately and properly. Is the seal touching side walls and are all tires touching? Specially-made silo covers such as Silostop are effective in preventing spoilage.

4) Properly manage silo faces with facers or shavers. Remember narrower is better at eliminating oxygen infiltration for bags, piles and bunkers.

5) Manage feed-out rate to remove a minimum of 6 inches a day and 12 inches during the summer.

6) Potentially use additives to reduce spoilage and shrinkage. Always apply additives at the chopper to ensure uniform distribution throughout the forage.

Additives should be chosen based on whether the goal is to reduce shrinkage, heating or both. Use a homolactic inoculant to reduce shrinkage; use a L. buchneri inoculant (or propionic acid additive) to increase bunk life.

Optimizing Cow Health via Employee Performance

Dr. Gustavo Schuenemann, from the Veterinary College of The Ohio State University, Columbus, Ohio, discussed management and training of dairy personnel using his veterinary perspective to optimize health. Many factors affect herd health including nutrition, the environment, facilities and equipment, and the animals themselves, but intersecting all of those factors are the farm dairy personnel who work to make the system function optimally or do not. Are we training personnel to meet the management demand of dairy cows? Dr. Schuenemann made many suggestions for helping the personnel part of the system work optimally.

1) Monitor Performance – you cannot improve what is not being measured. How is information being collected and then utilized to make and reach goals? For instance, measure and set a goal for still births or 2% or somatic cell count below 200,000, etc.

2) Have written (preferably with pictures) protocols for employees so they know what is the right thing to do. (Beware: some employees may have vision problems.) Training should be based on the Standard Operating Procedures.

3) Proper execution of Standard Operating Procedures comes from knowledge, skills, attitude and performance. The best training for knowledge and skills does not guarantee desired results. It is totally affected by attitude.

4) Attitude is affected by the employee being given the right job for satisfaction (someone mechanically inclined should not be monitoring calving), with necessary resources and training with minimal conflict with other employees and managers, motivation factors, respect shown by management and effective communication.

5) Teamwork is an important part of any dairy operation. To build an effective team requires:

- Top level commitment and specific, clear, and agreed upon goals.
- Trust and involvement between manager and employee.
- Willingness to take risks and share information, and
- Time, resources and commitment to training.

Finding good employees is difficult. High turn-over rates are costly. Building individuals into teams who get the job done, trust and respect each other and work to improve measurable goals is challenging, but ultimately optimal.

More 2014 Dairy production conference topics will be reviewed in the next issues of Dairy Update.

Feedback from Participants

To conclude this article, feedback from the conference survey was extremely positive about all aspects of the 2014 conference except one. Many of the allied industry attendants felt that one presentation was too commercially biased. This feedback was relayed to the presenter. To address the one issue, the conference committee promises to be extra vigilant about keeping all talks as commercially unbiased as possible in the future. We apologize for any offence taken on this matter during one presentation this year.

Mary Sowerby is the UF Regional Specialized Dairy Agent located in Live Oak, FL. Reach her at (386) 362-2771 or meso@ufl.edu

UF Dairy Unit Has New Farm Manager

Todd Pritchard is the new farm manager at the UF Dairy Unit in Hague, FL. He started late April after the previous farm manager, Eric Diepersloot, had taken a position with Full Circle Dairy in Lee, FL. Todd's previous position was as a dairy manager with Brandy Branch Dairy in Jacksonville, FL.

The Dairy Unit milks approximately 550 cows and raises all of its young stock and grows most of its own forages. The farm is used extensively for teaching, research, and extension by faculty and students in IFAS and the College of Veterinary Medicine.

Contact Todd Pritchard at tpritchard@ufl.edu or call him at (904) 813-1386. Thank you Eric and welcome Todd!

Prediction of the Future Florida Mailbox Price: July 2014 - June 2015

Using the Class III and Class IV futures settle prices of July 2, 2014, the University of Wisconsin predicts the Florida mailbox prices for July 2014 to June 2015 as follows:

Month	Class III settle price*	Class IV settle price*	Predicted FL mailbox price
Jul-14	21.25	23.16	26.87
Aug-14	20.38	22.27	26.01
Sep-14	20.23	21.72	25.69
Oct-14	20.23	20.79	25.44
Nov-14	19.79	20.30	24.99
Dec-14	19.48	19.80	24.60
Jan-15	18.80	19.58	23.45
Feb-15	18.25	19.02	22.91
Mar-15	18.04	18.90	22.74
Apr-15	17.96	18.67	21.83
May-15	17.95	17.89	21.47
Jun-15	17.90	17.47	21.25

* Class III and IV settle prices ($/cwt) as of July 2, 2014.

Daily updated Florida mailbox price predictions are found at http://future.aae.wisc.edu/predicted_mailbox/?state=Florida
Contact Albert De Vries, devries@ufl.edu, (352) 392-5594.227

Dairy Extension Agenda

- August 6: 10 AM to 5 PM **– Florida Dairy Business Conference** – Marion County Extension Auditorium – Ocala – Featuring information about Washington dairy related policies, new Margin Protection Program, old LGM-Dairy program, milk, soybean and corn market updates, cost benefits of corn fertilization/applying herbicides and pesticides, employee wages and a manager panel on employee hiring, training and evaluating.
- August 19 - 20: an afternoon and morning **Milker Training** (for different shifts of milkers) at Brooks County Ag Center, Quitman, GA, and Brooksco Dairy. North Florida dairy producers are welcome to send their milkers. Training will be conducted by Dr. Steve Nickerson (UGA) in English and Jonael Bosques (UF/Marion County Small Farms Agent) in Spanish.
- August 21: 10 AM – 3 PM - **Calving and Newborn Management Program** at UF Vet School – Dr. Gustavo Schuenemann, Ohio State Vet School and Dr. Klibs Galvoa, UF Vet School will be presenting a very hands on program to teach those responsible for dairy maternity how to detect and assist difficult calvings and then care for newborn calves.

For more information about any of these 3 programs contact Dr. Mary Sowerby at meso@ufl.edu or 386-362-2771.

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