LGM-Dairy: Livestock Gross Margin for Dairy

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Gaining the Competitive Edge: A Dairy Seminar Series
Dairy Road Show 2009
LGM-Dairy: What is it?

• New Livestock Gross Margin for Dairy Insurance
  o Federally reinsured dairy insurance program
  o Purchased from crop insurance providers
  o Approved July 2007, available August 2008

• Protects Dairy Business against Unexpected declines in Gross Margins
  o Gross Margin = Milk Revenue – Feed Costs

• Revenue neutral (No subsidies)
  o Premium = Expected Indemnity
LGM-Dairy: What impacts the premium?

- Insured milk and insured feed (selected)
- Deductible level (selected)
- Average futures prices and their volatility (market determined)
LGM-Dairy: Who is eligible?

Milk producers of 32 states
LGM-Dairy: What it covers?

Prices of:

• Any milk volume of producer’s target marketing for a 10-month period (up to 240,000 cwt)

• Amount of corn and soybean meal equivalents to be fed during insurance period restricted to be in range:
  - 0.00364 – 0.02912 tons corn/cwt milk
  - 0.13 – 1.04 bu corn/cwt milk
  - 0.000805 – 0.006425 tons SBM/cwt milk
  - 1.61 – 12.85 lb SBM/cwt milk
LGM-Dairy: What it does not cover/protect?

- Production losses
- Risk of dairy cattle death
- Unexpected decrease in milk production or increase in feed use
- Multiple years of declines in milk prices or increases in feed costs
- Anticipated declines in milk prices or increases in feed costs
LGM-Dairy: What farmer needs to decide?

Three main things to consider:

• Percentage (%) of target marketings to be insured (0% to 100%)

• Level of Gross Margin Deductible or risk assumed
  – $0 to $1.50/cwt in $0.1 increments

• Months to insure
LGM-Dairy: What farmer needs to provide?

Estimates of:

- Target milk marketing per insured month
- Expected feed per insured month
  - Corn and corn equivalents
  - Soybean meal and soybean meal equivalents
  - Feed Conversion software downloadable from our website
- Verifiable records should be available
LGM-Dairy: What is the insurance Period?

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<th>Feb</th>
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LGM-Dairy No Coverage

Insurance Coverage

Selected Covered Months

| 100% | 0%  | 50% | 50% | 0%  | 0%  | 75% | 100% | 0%  | 50% |

→ From 4 pm on 3rd to last business day to 9 am following day (17-hour period)
LGM-Dairy: How it works?

**GMG**
Gross Margin Guarantee

**EGM**
Expected Gross Margin

**DL**
Deductible Level

**AGM**
Actual Gross Margin

**IND**
Indemnity

**PREM**
Premium Cost

**EMR**
Expected Milk Revenue

**EFC**
Expected Feed Cost

**AMR**
Actual Milk Revenue

**AFC**
Actual Feed Cost

**EMP**
Expected Class III Price

**SMB**
State Milk Basis

**ECC**
Expected Corn Cost

**ESC**
Expected SBM Cost

**CME**
Class III Futures

**SCB**
State Corn Basis

**CBOT**
Corn Futures

**CBOT**
SBM Futures

**TM**
Target Marketings

**EFQ**
Expected Feed Quantity

**CME**
Actual Class III Price Settlement

**CBOT**
Actual Feeds Costs Settlement

**Policy Rules**
Exogenous Data

**Producer Data/Decision**
LGM-Dairy: What is the premium?

Premium is the average of expected indemnities in the long-run:

- Proportional to the insured milk and insured feed
- Increases with price volatility
- Decreases with elected deductible ($0 to $1.5/cwt in $0.1 increments)
- Decreases when all months insured together
- Estimates available in RMA website
LGM-Dairy: Overview

Advantages:
• Unique bundled insurance protects the margin: milk price less feed cost
• Very flexible and customizable
• Offered every month of the year

Drawbacks:
• Very short enrollment period
• Total premium due at sign-up
• No farmer subsidies available
• Limited capacity
LGM-Dairy: More Information

Livestock Gross Margin for Dairy: LGM - Dairy

- **Livestock Gross Margin for Dairy**, a poster presented at the ANRE 2008 UW-Extension meeting
- **Livestock Gross Margin for Dairy**, a two-page/three-fold brochure, Sept 2008
- **Managing the Newly Created LGM-Dairy Insurance Under Seasonal Climate Variability**, by V.E Cabrera and Daniel Solis, University of Wisconsin-Madison, June 2008
- **Premium Calculator from RMA’s**
- **LGM for Cattle RMA Website**
- **Understanding Dairy Markets - LGM-Dairy**

Victor E. Cabrera, PhD, Assistant Professor and Extension Specialist in Dairy Management, is available to contact for more information.

Livestock Gross Margin Insurance for Dairy

This section of our website provides information concerning the LGM available by the Risk Management Agency of USDA. The site and information is updated regularly. New material is available with the updated information.

As with other sections of this website, by clicking on an active link, you may generate an expanded menu. To make this menu disappear, click on the link again. If you have material that you think would be useful to contact Prof. Brian W. Gould with your suggestions.

The material contained within this site is for informational and research purposes only. The official website concerning material related to the Livestock Gross Margin for Dairy program is the USDA Risk Management Agency website (http://www.rma.usda.gov).

- **Background Material Made Available by the RMA**
  This is a collection of information provided by USDA as to introduce the LGM-Dairy program
- **Supporting Software**
  This is a collection of spreadsheet and other software used to exemplify the use of LGM-Dairy
- **Underlying Data**
  This is a collection of data used in the implementation of LGM-Dairy
- **Additional Material Explaining LGM-Dairy**
  Background Material Related to LGM-Dairy

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Contract

• Purchased Nov 26\textsuperscript{th} 08
• Coverage period: Jan-Oct 09
• Feed expected to be used:
  • 39.2 lb corn/cwt milk (68% max allowable)
  • 5.05 lb of SBM/cwt milk (39% max allowable)
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**LGM-Dairy: A Wisconsin Example (Nov 08)**

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Simulated Indemnities (Nov 08)

- DL ($/cwt): 0.86
- Premium ($/cwt): 0.61, 0.42, 0.27
- GMG ($/cwt): 13.1, 12.6, 12.1, 11.6
LGM-Dairy: GMG and Premium (Oct 2008)

![Graph showing the relationship between GMG and Premium for different DL and feed insured scenarios.](image)
LGM-Dairy: GMG and Premium (Jan 2008)
Wisconsin Expected and Actual (Jan 2008)

Milk

$/cwt

Not Yet Available

Mar-08 Apr-08 May-08 Jun-08 Jul-08 Aug-08 Sep-08 Oct-08 Nov-08 Dec-08

Expected Actual
Wisconsin Expected and Actual (Jan 2008)

SBM

$/ton

Mar-08 Apr-08 May-08 Jun-08 Jul-08 Aug-08 Sep-08 Oct-08 Nov-08 Dec-08

Not Yet Available

Expected
Actual

Wisconsin Expected and Actual (Jan 2008)
Wisconsin Expected and Actual (Jan 2008)

Gross Margin

Deductible: $0/cwt

Would have paid: $0.00/cwt in indemnities

Would have cost: $0.87/cwt in premium

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<td>Dec-08</td>
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Not Yet Available
Wisconsin Expected and Actual (Jan 2008)

Gross Margin

$/cwt

Mar-08 Apr-08 May-08 Jun-08 Jul-08 Aug-08 Sep-08 Oct-08 Nov-08 Dec-08

Deductible: $1.5/cwt

Would have paid: $0.00/cwt in indemnities

Would have cost: $0.22/cwt in premium
LGM-Dairy: Livestock Gross Margin for Dairy

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http://www.uwex.edu/ces/dairymgt/dairy.cfm
http://future.aae.wisc.edu/lgm_dairy.html#5