Victor E. Cabrera
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Strategic Alternatives to Corn Grain Feeding

Milk Price ($/cwt) 19
Corn Price ($/bu) 6

http://www.uwex.edu/ces/dairymgt/

Marginal Value Milk/Corn ($) vs. Week of Lactation
Marginal Value Milk/Corn ($) vs. Corn in Diet (lb)

Week of Lactation
- 13
- 18
- 24
- 28
- 32
- 36

Corn in Diet
- 42%
- 34%
- 27%
- 19%
- 17%
- 9%
Improving dairy farm sustainability through strategic alternatives to corn grain feeding

Income Over Feed Cost

Victor E. Cabrera, vcabrera@wisc.edu, 608-265-8506

<table>
<thead>
<tr>
<th>Diet</th>
<th>Alfalfa hay</th>
<th>Corn grain</th>
<th>Soybean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>38-48-68%</td>
<td>42-40-25%</td>
<td>18-10-05%</td>
</tr>
<tr>
<td>2</td>
<td>48-58-78%</td>
<td>34-33-17%</td>
<td>16-7-3%</td>
</tr>
<tr>
<td>3</td>
<td>58-68-88%</td>
<td>27-25-9%</td>
<td>13-05-01%</td>
</tr>
<tr>
<td>4</td>
<td>68-88-98%</td>
<td>19-09-00%</td>
<td>11-01-00%</td>
</tr>
<tr>
<td>5</td>
<td>98-98-98%</td>
<td>00-00-00%</td>
<td>00-00-00%</td>
</tr>
</tbody>
</table>

http://www.uwex.edu/ces/dairymgt/
Development of a stochastic, dynamic dairy herd simulation model capable of evaluating the economic outcomes of numerous managerial strategies.

- Identification and organization of local scientific knowledge to improve dairy economic outcomes (reproduction, physiology, genetics, nutrition, health, etc.).
- Development of a computer application to help researchers, dairy producers, dairy farm consultants, and extension agents make cost-efficient and profitable decisions.
- A stochastic economic risk analysis and forecasting tool for dairy herd production and expansion.
Lactation benchmark curves for Wisconsin dairy herds
Early postpartum mastitis testing and treatment decision-making
Livestock gross margin for dairy cattle

How does it work?

LGM-Dairy pays the difference, if positive, between an expected gross margin guarantee and actual gross margin, where gross margin is milk price less the feed costs per cwt.

The insured margins are calculated using futures prices for milk, corn and soybean meal.

Producers need to estimate the quantity of milk to be marketed, the feed quantity to be used, a deductible level and the months to insure the gross margin.

Farmers can insure any amount of milk up to 240,000 cwt per insurance period.

Deductible level ranges between $0 and $1.50 of the gross margin guarantee.

Insurance coverage begins one full month after the sales closing date.

LGM-Dairy is only sold on the 3rd to last business day of every month. Sales period starts at 4 P.M. the 3rd to last business day and ends at 9 A.M. the following day.

LGM-Dairy More Information:

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Additional Information at:
http://future.aae.wisc.edu/lgm_dairy.html
http://www.uwex.edu/ces/dairymgmt/
http://www.rma.usda.gov/livestock/

A New Risk Management Tool for Wisconsin Dairy Farms!
Livestock gross margin for dairy cattle

What is LGM-Dairy?

LGM-Dairy is a new insurance policy approved by the USDA Risk Management Agency available for dairy producers since August 2008.

LGM-Dairy protects producers against unexpected declines in the gross margins (milk prices less feed costs).

No producer premium subsidy is available for this insurance program, although all administrative and policy subsidies are paid by the federal government.

LGM-Dairy premiums depend on producers’ marketing plan, coverage selected, deductible level, futures and price volatility. Producer premiums are average of long-run expected indemnities at sign-up.

States Eligible to Participate in the LGM-Dairy Program (Darker Gray), 2008

What are the benefits of LGM-Dairy?

Convenience: Producers can sign-up for LGM-Dairy insurance 12 times a year over a 11-month rolling period.

Customization: LGM-Dairy can be tailored to any size farm and to any month or months of the year.

Bundled option insurance: LGM-Dairy is similar to buying both a call option to limit higher feed costs and a put option to set a floor on milk prices.

What does LGM-Dairy not insure?

Risk of dairy cattle death.

Unexpected production losses.

Unexpected increase in feed use.

Anticipated declines in milk prices or increases in feed costs.

Multiple years of decline in milk prices or increase in feed costs.
Effects of the incidence and prevalence of 5 selected clinical and sub-clinical diseases on the Income Over Feed Cost (IOFC) in Wisconsin dairy herds

- Milk fever
- Retained placenta
- Displaced abomasum
- Lameness
- Clinical ketosis
- Follicular and luteal cysts

- Clinical visits to 30 farms during a year
- Connection of Financial and DHI records
- Estimates of cost of diseases
- Correlation of estimates with income over feed costs loses


Cabrera, V.E. Development of a Dairy Economic Decision Support System for Wisconsin. 07/01/08-06/30/10. USDA Hatch. $54,532. Awarded
Cabrera, V.E., Gould, B.W. Assessment of gross margin insurance versus traditional price risk management strategies. 10/01/09-09/30/11. Hatch Interdisciplinary Multistate. $58,430. Pending
Cabrera, V.E., Shaver, R., Jones, B. Improving dairy farm sustainability through strategic alternatives to corn grain feeding. 9/1/09-8/31/11. NCR-SARE. $129,704. Pending
Cabrera, V.E., Shaver, R., Jones, B. Improving dairy farm sustainability through strategic corn grain feeding. 01/01/09-12/31/09. UW-Madison Graduate School. $46,807. Pending
Gould, B.W., Cabrera, V.E. The Use of Gross Margin Insurance versus Traditional price risk management strategies by Wisconsin dairy farm operators: Development of web-based decision tools. 01/01/09-12/31/09. UW-Madison Graduate School. $40,000. Pending
Welcome to Dairy Management UW-Extension

This site is designed to support dairy farming decision-making focusing on model-based scientific research. The ultimate goal is to provide user-friendly computerized decision support systems to help dairy farmers improve their economic performance.

Dr. Cabrera focuses on model-based decision support in dairy cattle and in dairy farm production systems. Dr. Cabrera’s primary interest is to improve cost-efficiency and profitability along with environmental stewardship in dairy farms by using simulation techniques, artificial intelligence and expert systems. Dr. Cabrera’s research and Extension programs involve interdisciplinary and participatory approaches towards the creation of user-friendly decision support systems. As an Extension Specialist, Dr. Cabrera works in close relationships with county-based Extension faculty, dairy producers, consultants, and related industries.

Highlighted Works of Interest

New September 2008!
- LGM-Dairy Brochure (2 pages, 342 KB)
- Corn-to-Milk PPT (15 slides, 854 KB)

New August 2008!

Biographical Information