Livestock Gross Margin - Dairy

What is the Livestock Gross Margin for Dairy Cattle Insurance Policy?

The Livestock Gross Margin for Dairy Cattle Insurance Policy provides protection against the loss of gross margin (market value of milk minus feed costs) on the milk produced from dairy cows. The indemnity at the end of the eleven-month insurance period is the difference, if positive, between the gross margin guarantee and the actual gross margin. The Livestock Gross Margin for Dairy Cattle Insurance Policy uses futures prices for corn, soybean meal, and milk to determine the expected gross margin and the actual gross margin. The price the producer receives at the local market is not used in these calculations.

Who is eligible for the LGM for Dairy Cattle insurance policy?

Any producer who owns dairy cattle in any of the 50 states is eligible for LGM for Dairy Cattle insurance coverage.

What milk is eligible for coverage under the LGM for Dairy Cattle insurance policy?

Only milk sold for commercial or private sale primarily intended for final human consumption from dairy cattle fed in any of the 50 states is eligible for coverage. Milk cannot be insured under more than one livestock policy issued under the Act.

What are the advantages of the LGM policy over traditional options?

LGM has two advantages over traditional options.

Producers can sign up for LGM coverage each Thursday and insure all their milk production they expect to market over a rolling 11-month insurance period. The producer does not have to decide on the mix of options to purchase, the strike price of the options, or the date of entry.

The LGM policy can be tailored to any size farm. Options cover fixed amounts of commodities, and those amounts may be too large to be used in the risk management portfolio of some farms.

How is LGM different from traditional options?

LGM is different from traditional options in that LGM is a bundled option that covers both the price of milk and feed costs. The mix of target milk marketings per dairy cow and target feed rations are supplied by the producer. This feature allows the producer to select feed rations and production levels that best reflect their actual production situation. The resulting bundle of options effectively insures the producer’s gross margin, milk revenue minus feed costs, over the insurance period.

LGM works as a bundle of options that pay the difference, if positive, between the value at purchase of the options and the value at the end of a certain time period. So, LGM would pay the difference, if positive, between the gross margin guarantee and the actual gross margin, as defined in the policy provisions.

Can LGM be exercised?

No, LGM cannot be exercised during the insurance period. LGM pays the difference, if positive, between the gross margin guarantee and the actual gross margin, as defined in the LGM provisions, at the end of the insurance period.

Does LGM use the price the producer receives at the market?

No. The prices for LGM are based on simple averages of futures contract daily settlement prices and are not based on the prices the producer receives at the market.

Does LGM make early indemnity payments?

Yes. If an indemnity is due under LGM coverage, the company will send the producer a notice of probable loss after the last month of the producer's marketing plan. The last month of the producer's marketing plan is the last month in which the producer indicated target marketings on the application.

When is LGM for Dairy Cattle sold and how long do the sales periods last?

LGM for Dairy Cattle is sold every Thursday. The sales period begins when the coverage prices and rates are posted on RMA's website and ends on the following calendar day at 9:00 AM Central Standard Time. If expected milk and feed prices are not available on the RMA website, LGM will not be offered for sale for that sales period.

How are the feed quantities for LGM determined?

Producers must supply the total number of tons of corn or corn equivalent and the tons of protein meal or protein meal equivalent that they expect to feed for each month in which they insure their milk. Feed quantities are bounded. The number of tons of corn or corn equivalent must be between 0.00364 and 0.0381 tons per hundredweight of milk. The number of tons of protein meal or protein meal equivalent must be between 0.000805 and 0.013 tons per hundredweight of milk. Default values of 0.014 tons (0.5 bushels) of corn and 0.002 tons (4 pounds) of soybean meal per hundredweight of milk can be used if producers do not wish to choose feed amounts.

How can feed equivalents be determined?

Producers can determine the corn and soybean meal equivalents of their feeds. The only restriction is that the feed rates must be within the bounds listed in Question 11. The LGM-Dairy Commodity Exchange Endorsement contains a table with suggested feed conversion rates. Below is an example feed conversion based on the suggested rates. If a producer fed 140 bushels of oats and 0.2 tons of meat meal,

he/she would need to convert these to corn and soybean meal equivalents.

The conversion for the oats can be done in two steps:

Step 1. Converting feed to tons.

- 140 bushels of oats X (32 pounds/1 bushel of oats) X (1 ton/2000 pounds) = 2.24 tons

Step 2. Using the suggested conversion rates for corn and soybean meal equivalents.

- 2.24 tons of oats X 0.120 = 0.2688 tons of soybean meal equivalents
  2.24 tons of oats X 0.779 = 1.7450 tons of corn equivalents

- The conversion for the meat meal can be done in one step as the meat meal is already measured in tons:

- Using the suggested conversion rates for corn and soybean meal equivalents.
  0.2 tons of meat meal X 1.227 = 0.2454 tons of soybean meal equivalents
  0.2 tons of meat meal X -0.349 = -0.0698 tons of corn equivalents

- So the corn and soybean meal equivalents for 140 bushels of oats and 0.2 tons of meat meal are 0.5142 tons of soybean meal (0.2688 + 0.2454) and 1.6752 tons of corn equivalent (1.7450 – 0.0698).

Feeds should be combined when creating corn and soybean meal equivalents. Please notice that many of the protein meal feeds have negative corn equivalent values.

How are the feed costs for LGM determined?

Expected feed costs for a month equal the expected corn price times the tons of corn or corn equivalent (converted to bushels) specified by the producer for that month plus the expected soybean meal price times the tons of protein meal or protein meal equivalent specified by the producer for that month. Actual feed costs use actual prices for the month and the same producer-specified quantities of feed.

What types of losses are covered by LGM?

LGM covers the difference between the gross margin guarantee and the actual gross margin. LGM does not insure against dairy cattle death loss, unexpected decreases in milk production, or unexpected increases in feed use.

Where can I purchase LGM coverage?

LGM is available for sale at your authorized crop insurance agent’s office. Crop insurance agents must be certified by an insurance company to sell LGM and that agent’s identification number must be on file with the Federal Crop Insurance Corporation.

What months make up the insurance period?

The insurance period contains the 11 months following the sales closing date. For example, the insurance period for any January sales closing date contains the months of February through December. However, coverage begins in the second month of the insurance period, so the coverage period for this example is the months of March through December.

What are the producer's target marketings and target feed?

A determination made by the insured as to the quantity of milk to be sold and the quantity of feed to be fed for each month during the insurance period. Target marketings must be less than or equal to that producer’s applicable approved target marketings as certified by the producer. Target feed must be within the bounds that are specified in the underwriting rules.

What are the producer's approved target marketings?

The producer’s approved target marketings are the maximum amount of milk that may be stated as target marketings on the application. Approved target marketings are certified by the producer and are subject to inspection by the insurance company. A producer’s approved target marketings will be the capacity of the producer’s dairy operation for the 11-month insurance period as determined by the insurance provider.

What is the expected corn price?

For months in which a CME Group corn contract expires, the expected corn price is the simple average of the settlement prices for the CME Group corn futures contract for the month during the expected price measurement period. For other months, the expected corn price is the weighted average of the immediately surrounding months' simple average of the daily settlement prices during the expected price measurement period. The expected price measurement period is the three days prior to and including the date when LGM is available for purchase. (See the Commodity Exchange Endorsement for more information.) Prices will be released by RMA after the markets close on the last day of the price discovery period.

What is the expected soybean meal price?

For months in which a CME Group soybean meal contract expires, the expected soybean meal price is the simple average of the daily settlement prices of the CME Group soybean meal futures contract for the month during the expected price measurement period. For other months, the expected soybean meal price is the weighted average of the immediately surrounding months' simple average of the daily settlement prices during the expected price measurement period. The expected price measurement period is the three days prior to and including the date when LGM is available for purchase. (See the Commodity Exchange Endorsement for additional information on the calculation of the expected soybean meal price.) Prices will be released by RMA after the markets close on the last day of the price discovery period.

What is the expected cost of feed?

The expected cost of feed for each month equals the target corn (or corn equivalent) to be fed times 2000/56 (to convert tons to bushels) times the expected corn price for that month, plus the target protein meal (or protein meal equivalent) to be fed times the expected soybean meal price for that month. Prices will be released by RMA after the markets close on the last day of the price discovery period.

Expected cost of feed for an operation that produces 1,560 cwt. of milk in a month with target feed levels of 20.5 tons of corn and 6 tons of soybean meal:

20.5 tons x (2,000/56) x Expected Corn Price + 6 x Expected Soybean Meal Price

If the expected corn price is $2.10 per bushel and the Expected Soybean Meal Price is $150 per ton, expected feed costs would be $2,437.50 [20.5 x (2,000/56) x $2.10 + 6 x $150 = $2,437.50].

What is the expected milk price?

The expected milk price is the simple average of the daily settlement prices of the CME Group Class III milk futures contract for the month during the expected price measurement period. The expected price measurement period is the three days prior to and including the date when LGM is available for purchase. Prices will be released by RMA after the markets close on the last day of the price discovery period.

What is the expected gross margin per month?

Expected revenue less the expected cost of feed for the month.

How is the expected total gross margin calculated for each insurance period?

The expected total gross margin is the sum of the expected gross margins for each month of an insurance period.

How is the gross margin guarantee calculated for each insurance period?

The gross margin guarantee for each coverage period is calculated by subtracting a deductible amount from the expected total gross margin for the applicable insurance period.

If our example producer wants a $0.10 deductible on each of 1,560 hundredweight of milk, then the gross margin guarantee would be $16,126.50 [$16,282.50 – ($0.10 x 1,560) = $16,126.50].

The deductible is the portion of the expected gross margin that you elect not to insure. Allowable deductible amounts range from zero to $2.00 per hundredweight of milk in $0.10 per hundredweight increments.

What is the actual corn price?

For months in which a CME Group corn contract expires, the actual corn price is the simple average of the daily settlement prices for the CME Group corn futures contract for the month during the actual price measurement period. For other months, the actual corn price is the weighted average of the immediately surrounding months' simple average of the daily settlement prices during the actual price measurement period. The actual price measurement period is the last three trading days prior to contract expiration. (See the Commodity Exchange Endorsement for more information.)

What is the actual soybean meal price?

For months in which a CME Group soybean meal contract expires, the actual soybean meal price is the simple average of the daily settlement prices for the CME Group soybean meal contract for the month during the actual price measurement period. For other months, the actual soybean meal price is the weighted average of actual soybean meal prices in the immediately surrounding months. The actual price measurement period is the last three trading days prior to contract expiration. (See the Commodity Exchange Endorsement for more information.)

What is the actual cost of feed?

The actual cost of feed for each month equals the target corn to be fed times 2,000/56 (to convert tons to bushels) times the actual corn price for that month, plus

the target soybean meal to be fed times the actual soybean meal price for that month. Calculation of the actual cost of feed uses the same target corn and soybean meal to be fed as the expected cost of feed. Changes in feed rations from these target amounts are not covered under the LGM for Dairy Cattle policy.

The actual cost of feed for an operation that produces 1,560 cwt. of milk in a month with target feed levels of 20.5 tons of corn and 6 tons of soybean meal:

- 20.5 tons x (2,000/56) x Actual Corn Price + 6 x Actual Soybean Meal Price
- If the Actual Corn Price is $2.00 per bushel and the Actual Soybean Meal Price is $175 per ton, actual feed costs would be $2,514.29
- [20.5 x (2,000/56) x $2.00 + (6 x $175) = $2,514.29].

What is the actual milk price?

The actual milk price is the simple average of the daily settlement prices of the CME Group Class III milk futures contract for the month during the actual price measurement period. The actual price measurement period is the last three trading days prior to the last trading day for the futures contract. (See the Commodity Exchange Endorsement for more information.)

What is the actual gross margin per month?

The actual gross margin per month is the actual marketings times the actual milk price for that month less the actual feed costs for that month. Extending the above example, if actual marketings are 1,560 cwt. of milk for a month, the actual milk price is $10 per hundredweight, and the actual feed cost is $2,514.29, then the actual gross margin is equal to $13,085.71 [(1,560 x $10.00) – $2,514.29 = $13,085.71].

How is the actual total gross margin calculated?

The actual total gross margin is the sum of the actual gross margins for each month of an insurance period.

How are indemnities determined?

Indemnities to be paid will equal the difference between the gross margin guarantee and the actual total gross margin for the insurance period.

The producer in our example would receive an indemnity of $3,040.79 ($16,126.50 - $13,085.71 = $3,040.79).

Is a marketing report required and when should the company receive it?

Yes, in the event of a loss the producer must submit a marketing report and sales receipts showing evidence of actual marketings for each month. The producer must submit the marketing report within 15 days of receipt of notice of probable loss.

Is this a continuous policy?

This is a continuous policy with 12 overlapping insurance periods per year. Target marketings must be submitted for each sales period in which the producer wishes to establish coverage.

When must the application for insurance be turned into the company?

The sales closing dates are every Thursday that is a business day. The application must be completed and filed not later than the sales closing date of the initial insurance period for which coverage is requested. Coverage for the milk described in the application will not be provided unless the insurance company receives and accepts a completed application and a Target Marketings Report, and the insurance company sends the producer a written summary of insurance.

When does coverage begin?

Coverage begins one month after the sales closing date. For example, for any January sales closing date, coverage begins on March 1.

When are the contract change dates for the policy?

The contract change date is April 30. Any changes to the Livestock Gross Margin policy will be made prior to this contract change date.

When are the cancellation dates for the policy?

The cancellation date is June 30 for all insurance periods.

When is the end of insurance for the policy?

The end of insurance for the policy is at the end of the 11 month after the month of the sales closing date. For example for any January sales closing date, coverage ends on December 31.

What deductible levels are available for the policy?

The producer may select deductible levels between $0 and $2.00 per hundredweight of milk in $0.10 increments.

How is the producer's premium calculated?

The producer’s premium is calculated by a premium calculator program that determines the premium based on target marketings, expected gross margins for each period, deductibles, and premium subsidies.

When is the premium for the policy due?

The premium billing date is the earlier of the first day of the month following the last month of the insurance period in which you have target marketings or the billing date published in the actuarial documents. For example, if your insurance period is February-December, and you only have target marketings in March-May, your billing date is June 1.

What portion of a producer's milk will be insured under the policy?

100 percent of a dairy farmer’s milk can be insured under the policy.

What information is required for acceptance of an application for the LGM for Dairy Cattle insurance policy?

The application for the Livestock Gross Margin for Dairy Cattle Insurance Policy must contain all the information required by us to insure the gross margin for the livestock or livestock products. Applications that do not contain all social security numbers and employer identification numbers, as applicable (except as stated in the policy), deductibles, a target marketings report, and any other material information required to insure the gross margin for the livestock or livestock products, will not be acceptable.

Can the manager of RMA suspend LGM sales?

Yes. Sales of LGM may be suspended for the next sales period if unforeseen and extraordinary events occur that interfere with the effective functioning of the corn, soybean meal, or milk commodity markets.

What if the expected milk and feed prices are not posted on the RMA website on Thursday for the sales period that week?

LGM will not be available for sale for that sales period.

Does LGM-Dairy have producer subsidy?

Yes, but only if you have target marketings in at least two (2) months of an insurance period. No subsidy is available if you have only reported one (1) month of target marketings in an insurance period. The subsidy will range from 18 percent with 0 deductible up to 50 percent with a deductible of $1.10 or greater.