



Dyson
Cornell
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Dairy Revenue Protection

agriskmanagement.cornell.edu



“It’s farming, so it’s not easy that’s for sure. The weather and the changing variability in the weather in recent years has been a real challenge, with wet to dry extremes”

-NY organic grain farmer in 2016 testimonial for NYSDAM

What is crop insurance?

Crop insurance helps producers **manage risk**.

You pay an annual **premium** (the cost is shared with the Federal government) to buy an insurance policy.

Crop insurance is purchased from private agents

If your yields or revenues fall below a certain level due to a “covered cause”, you receive an **indemnity** payment.



Crop Insurance Products for Dairy Farms

- Single-crop policies for corn (for grain and silage), as well as most grains and oilseeds
- Pasture, Rangeland, Forage
- Livestock Gross Margin Insurance
- Whole-Farm Revenue Protection (for farms with up to \$1 million in livestock or livestock product revenues only, works best for diversified farms)
- **NEW!** - Dairy Revenue Protection Insurance



Dairy Revenue Protection

- Dairy-RP is a relatively new RMA insurance product, with first policies written in October 2018.
- Insures against unexpected declines in the quarterly revenue from milk sales.
- Allows producers to insure a level of their expected milk/dairy revenue on a quarterly (3-month) basis, up to five quarters (15 months) in the future.
- Similar to area plans (GRIP) for field crops



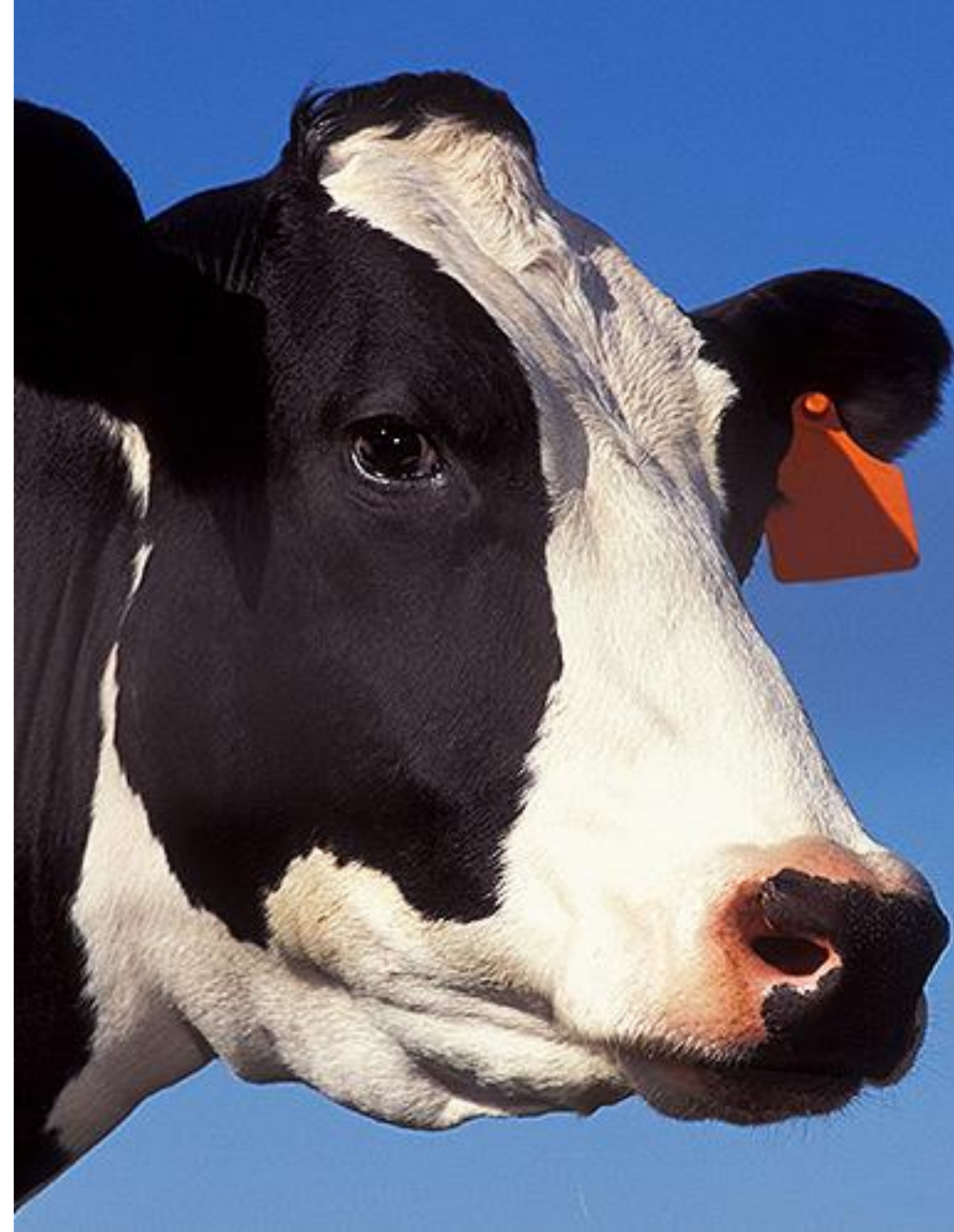
Dairy Revenue Protection

- Expected revenue is calculated as a function of futures market price and regional or state-level yields.
 - In New York, the New York state-level yield is used.
 - Expected yields for New York vary, but are approximately 6,000-6,300 lbs/cow, depending on the quarter being insured.
- Producers can choose from two pricing options, both of which are based on futures market prices:
 - Class pricing uses a combination of Class III and Class IV milk prices.
 - Component pricing uses the component milk prices for butterfat, protein and other solids to calculate a price based on the producer's individual butterfat and protein test percentages.

Dairy Revenue Protection

- Producers can choose the level of their expected revenue that is guaranteed.
- Premium costs are shared by the government at different amounts, based on the coverage level the producer chooses, and are not due until the quarter of coverage is over:

Coverage Level Percent	70	75	80	85	90	95
Premium Subsidy Percent	59	55	55	49	44	44



Dairy Revenue Protection – How much will it cost?

The following are premium estimates for a 500 cow Cayuga Co. dairy insuring 2.5 million lbs. (500 cows X 5,000lbs/head) of milk during 2019 Q2 (April – June) purchased on Dec. 20, 2019.

Class Price Option:

Class Weighting	95% Cov. Level	90% Cov. Level
0% Class III, 100% Class IV	\$4,131.00	\$1,465.00
50% Class III, 50% Class IV	\$3,411.00	\$1,079.00
100% Class III, 0% Class IV	\$3,361.00	\$1,061.00

Component Price Option:

Test Values	95% Cov. Level	90% Cov. Level
Butterfat: 3.5%, Protein: 3%	\$3,999.00	\$1,444.00
Butterfat: 4%, Protein: 3.25%	\$4,211.00	\$1,462.00
Butterfat: 4%, Protein: 3.5%	\$4,432.00	\$1,488.00

*For RMA premium estimator: Class Price Weighting Factor = 0% signifies 0% Class III and 100% Class IV price mix. Class Price Weighting Factor = 100% signifies 100% Class III and 0% Class IV price mix. These are estimates from RMA's Cost Estimator accessed 1/25/2018. Only a crop insurance agent can provide a true premium cost.

Dairy-RP: Guarantee

- **Expected revenue** = value of milk X volume of milk covered
- Futures prices, with both class-based and component pricing option
- Total milk production (as selected) indexed by state milk yield per cow
 - Example: insuring 1 million lb. of milk with state average 5,000 lb. per cow yield for a 200 animal unit/cow equivalent
- Coverage level (70-95%)

Guarantee Calculations			
Expected Milk Prices		Farmer's Class Ratio	Calculated Price
Class III	\$18.00	50%	\$9.00
Class IV	\$17.00	50%	\$8.50
Blended expected price (per CWT)			\$17.50
Coverage Level			95%
Protected Price (per CWT)			\$16.63
Declared milk production (lbs)			1,000,000
Producer's Revenue Guarantee (\$)			\$166,250

Source: USDA - Dairy Revenue Protection Insurance Standards Handbook

Dairy-RP: Actual Revenue

- USDA milk price or final futures prices in some articles, for this example final class III and IV prices were used
- USDA state milk yields
 - Used to determine state-indexed milk production volume
 - Assumed to be animal equivalent (cows) x state yield per cow

Actual Revenue Calculations			
Actual Milk Prices		Farmer's Class Ratio	Calculated Price
Class III	\$15.00	50%	\$7.50
Class IV	\$16.00	50%	\$8.00
Actual Price (per CWT)			\$15.50
State-Indexed Actual Production (lbs)			1,020,000
Actual Producer's Revenue (\$)			\$158,100

*Applies to only one quarter

Source: USDA - Dairy Revenue Protection Insurance Standards Handbook

Dairy-RP: Indemnities

- In this example, a 2% increase in yields and a 11% decline in price lead to a \$8,150 indemnity when insuring 1 million lbs. of milk at a 95% coverage level
- The indemnity payment will be made within 30 days after the claim form is received

Indemnity Calculations	
Producer's Revenue Guarantee	\$166,250
Actual Producer's Revenue	\$158,100
Indemnity	\$8,150

Source: USDA - Dairy Revenue Protection Insurance Standards Handbook

Dairy Revenue Protection – Things to be aware of...

- Dairy-RP is available for sale daily up to 15 days before the beginning of the insured quarter, except on days when a major dairy USDA report is published or the dairy/milk futures markets experience a limit move.
- As with any index-insurance product, there is the possibility the state-level production index will not match milk production on your farm.
 - You may not receive a payment when you experience a production loss on your farm.
 - The opposite may also be true. You may receive a payment when your farm production did not fall.
- As with the production basis risk explained above, basis risk exists with price. The changes in the price you receive may not match the changes in futures market prices.

Dairy Revenue Protection – Things to be aware of...

- There is no limit on how much milk can be insured.
- You may participate in both DMC (formerly MPP) and Dairy-RP at the same time.
- Milk produced in a single quarter cannot be covered by both a Dairy-RP and LGM policy.
 - The policy with the earliest date of endorsement for the quarterly insurance period will be in force and the other endorsement will be void
- You are not covered for losses due to:
 - Increased feed cost
 - Death of dairy cattle
 - Other loss or damage of any kind
- Be sure to contact a crop insurance agent to find out more!

Cornell Crop Insurance & Risk Management Education Project Resources Website: agriskmanagement.cornell.edu

Currently available

- Newly updated website including
 - Articles
 - Fact sheets
 - Presentations
 - Videos
 - Farmer testimonials

Coming soon

- Risk management podcast series
- More NY case studies
- More fact sheets
- Whole Farm Revenue Protection examples

Cornell University delivers crop insurance education in New York State in partnership with the USDA Risk Management Agency.

Diversity and Inclusion are a part of Cornell University's heritage. We are an employer and educator recognized for valuing AA/EEO, Protected Veterans, and Individuals with Disabilities.



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