# Dairy Revenue Protection



Jason Hartschuh
OSU Extension Educator
Crawford County





THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES



# **Dairy Revenue Protection (DRP)**

- Revenue protection program
  - Minimizes the impact of price decline
- Offered through the Risk Management Agency (RMA)
- Uses prices from the futures market to set a revenue protection price
  - Sold by the quarter
- Covers declines in milk production from your pooled region

- Who to use as your DRP insurance provider
  - Offered through many RMA insurance providers who also provide you with crop insurance
  - Some offer:
    - coverage quote tools
    - Dairy emails with coverage updates

# Level of Coverage to purchase

- Percent coverage of futures quote price
- Higher coverage closer to current futures price
- Trigger price

Coverage, %	80	85	90	95
Premium Subsidy, %	55	49	44	44



- Amount of production to cover
  - Policies to fit any size herd
  - Milk can only be covered once but multiple contracts can be purchased per quarter for a different portion of the farms production
  - Production obligation
    - Class coverage
      - 85% of covered production
    - Component coverage
      - 90% of Fat and Protein pounds

- When to purchase/quarter of coverage
  - Market window from 4 pm to 10 am eastern
  - Sales close 15 days before start of the quarter

- Available for up to 5 quarters
  - Premiums are generally more expensive for farther out quarters

- Type of Coverage:
  - Class III
  - Class IV
  - Component Blend (Fat and Protein)

 Select the coverage combination that best matches your herds production and current market conditions

### **Comparing Class III to Component Blend**

- Payment from Class III coverage:
  - Revenue guarantee: \$121,875
  - =  $[5,000 \text{ (cwt covered)} \times $16.25 \text{ (trigger price)} \times 1.5 \text{ (protection factor)}]$
- Minus
- Actual Revenue: \$121,125
- =[\$16.15 (Class III milk price) x 5,000 (cwt covered) x 1.5 (protection factor)]- \$3,050 (producer premium)
- = Producer payment \$-2,300 (while a payment was triggered, it was not enough to cover the premium cost)
- Payment from Component coverage with 4.55% Fat and 3.55% Protein:
  - Revenue guarantee: \$148,500
  - =  $[5,000 \text{ (cwt covered) } \times $19.80 \text{ (trigger price) } \times 1.5 \text{ (protection factor)}]$
  - Minus
  - Actual Revenue: \$135,675
  - = [\$18.09 (component milk price) x 5,000 (cwt covered) x 1.5 (protection factor)] \$4,050 (producer premium)
  - = Producer payment \$8,775

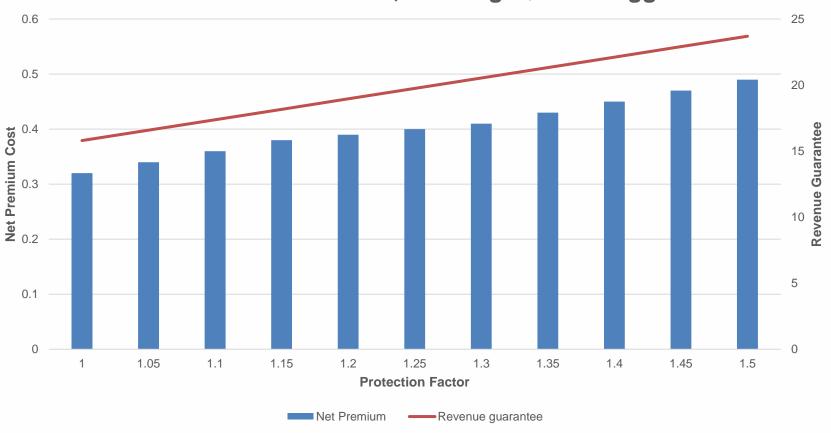
- Protection Factor
  - Multiplier from 1 to 1.5 in 0.05 increments
    - Does not change the trigger price
    - Increases the triggered revenue guarantee
    - Increases the premium
    - Can be thought of as Basis

### **Comparing Protection factor of 1 to 1.5**

- Payment at protection factor 1:
  - Revenue guarantee: \$165,300
  - =  $[10,000 \text{ (cwt covered) } \times $16.53 \text{ (trigger price } \times 1 \text{ (Protection factor)}]$
  - Minus
  - Actual Revenue: \$160,500
  - = [\$16.05 (Class III milk price) x 10,000 (cwt covered) x 1 (Protection factor)] \$2,700 (Producer premium)
  - = Producer payment \$2,100
  - Payment at protection factor 1.5:
    - Revenue guarantee: \$247,950
    - =  $[10,000 \text{ (cwt covered)} \times $16.53 \text{ (trigger price)} \times 1.5 \text{ (Protection factor)}]$
    - Minus
      - Actual Revenue: \$240,750
      - = [\$16.05 (Class III milk price) x 10,000 (cwt covered) x 1.5 (Protection factor)] \$4,000 (Producer premium)
    - = Producer payment \$3,200

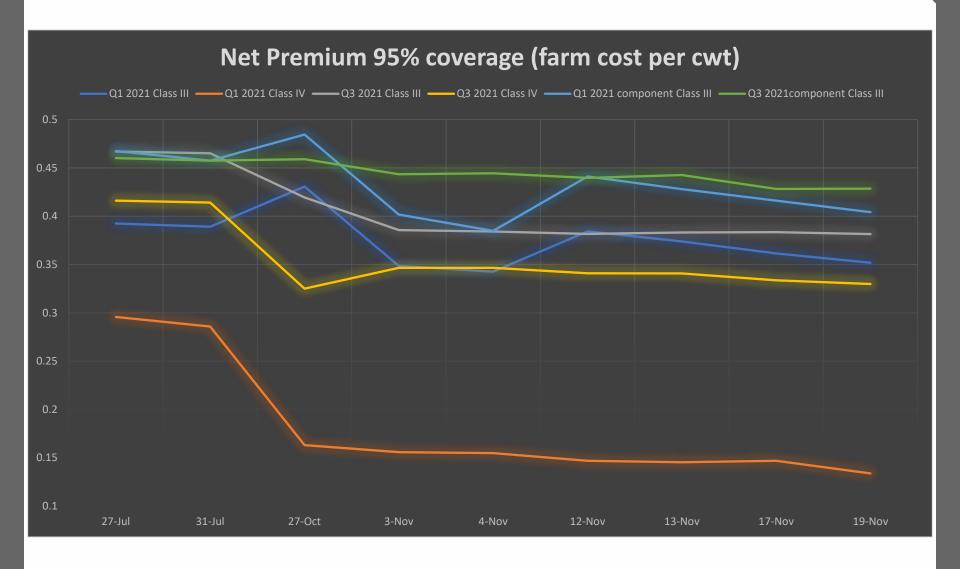
# Protection factor example Q1 2021 trigger \$15.80



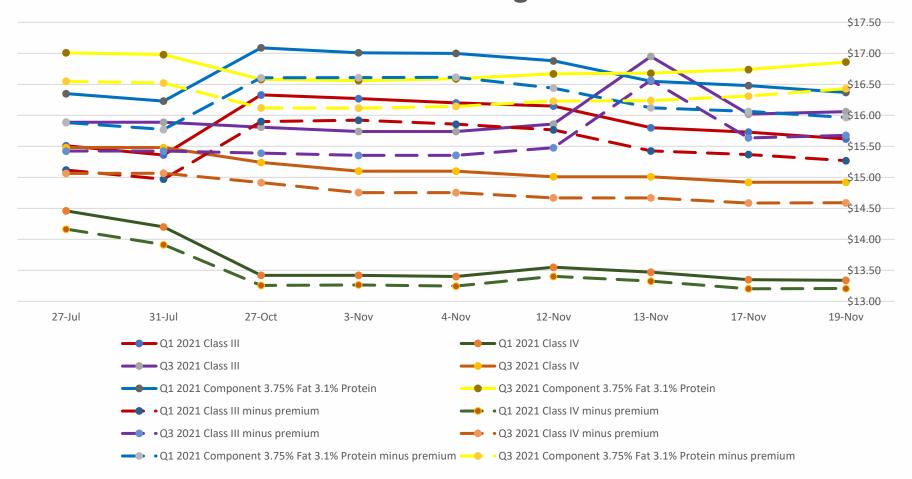


### **Protected Price 95% coverage (Trigger Price)**





#### **Protected Price 95% coverage and Break-even**



Solid line trigger price, doted line breakeven (trigger minus net premium)



- When to pull the trigger on purchasing a contract
  - Farm cost of production
  - Basis- Farm price compared to various CME prices
  - Strategies
    - Break-even: avoid losses
    - Above Break-even: lock in profits
    - Below Break-even: Protection from even greater losses

# **Summary**

- Premiums due at end of insured quarter
- RMA will notify you of a probable loss
- Can cover all or a portion of the milk you produce
- Each quarter is protected separately
- Protection factor increases coverage but not trigger price
- Each coverage type moves independently
- For more information: <a href="https://dairy.osu.edu/">https://dairy.osu.edu/</a>