

# Livestock Risk Protection Insurance (LRP)

John Campbell

Area Farm Management Specialist

# LRP Is Price Risk Protection

- Establishes a floor selling price for livestock
- Pays producers if a regional/national cash price index falls below a set price
  - Does not guarantee a cash price received
  - Basis risk must still be considered
- Covers feeder cattle, finished cattle, hogs

# What is LRP?

- LRP can be viewed as “Price Insurance”
- LRP is a risk management tool
  - Protects against catastrophic price declines
  - NOT designed to enhance profit
- Calculate premium cost as part of breakeven price for livestock
  - Cheaper when prices are high
  - Premiums increase as prices decline

# Key Points

- All owners of eligible livestock in LRP states
- Once enrolled, producers have the right, but not the obligation to purchase coverage
- Coverage obtained with a Specific Coverage Endorsement (SCE)
- Livestock has to be in eligible state
  - Owners can be in other states

# Policy, Provisions and Forms

- Available through crop insurance agent system
- Application forms
- Substantial Beneficial Interest (SBI)
- Basic policy
- Specific Coverage Endorsement (SCE)
  - Insurance level
- Claim form

# Single Peril Insurance

- Policy provides protection against price declines during insurance period
- Does not cover any other peril
  - Death loss, condemnations, physical damage, disease, poor performance
- Limited to 1,000 head feeder cattle per SCE and 2,000 per crop year
  - Crop year is July 1 – June 30
  - Counted in crop year when coverage is purchased

# Eligible Feeder Cattle

- Feeder steers, bulls, and heifers < 600 lbs.
- Feeder steers and heifers from 600-900 lbs.
- Includes dairy and Brahman breeds

# CME Feeder Cattle Index

- Used to settle Feeder Cattle Futures
- 7 day weighted average of USDA reported prices from 12 states
  - Colorado, Iowa, Kansas, Missouri, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Wyoming
- Prices from auctions, video and internet sales and direct trades

# Actual Ending Value (AEV)

- CME Feeder Cattle Cash Index price
  - National average cash market price
  - 650 – 850 lb. steers
  - Reported index is 7-day average
- Heifers or different weight range still uses index
  - But Price Adjustment Factor (PAF) is used

# Price Adjustment Factors

- Wide range of eligible feeder cattle
- Price varies by size and type
- Feeder Cattle Cash Index not representative of all feeder cattle
  - Lighter weight (less than 650 lb)
  - Heifers
  - Brahman and dairy breeds
- Price adjustment factors more accurately reflect value of feeder cattle of all types and weights

# Price Adjustment Factors

Weight	Steers Weight 1	Heifers Weight 1	Braham Weight 1	Dairy Weight 1
<600 lbs	110%	100%	100%	85%

Weight	Steers Weight 2	Heifers Weight 2	Braham Weight 2	Dairy Weight 2
600-900 lbs	100%	90%	90%	80%

## Multiply Feeder Cattle Index by PAF to calculate Expected Ending Value, Coverage Prices, and Actual Ending Value

- Feeder Cattle Index = \$100.00 cwt.
- 750 lb. steer:  $\$100.00 \times 1.0 = \$100.00$
- 750 lb. heifer:  $\$100.00 \times 0.9 = \$90.00$
- 500 lb. steer:  $\$100.00 \times 1.1 = \$110.00$
- 750 lb. Brahman:  $\$100.00 \times 0.9 = \$90.00$
- 500 lb. Holstein:  $\$100.00 \times 0.85 = \$85.00$

# Coverage Availability

- Available about 5 pm to 9 am CST
  - Saturday morning until 9 am
  - Not on Sunday, Monday, Holidays
- Coverage initiated with Specific Coverage Endorsement (SCE)
- Producers have flexibility
  - Timing of purchase
  - Time length of SCE
  - Number of head covered

# Pilot Program

- Risk Management Agency
  - Pays commission of 5%
  - Administrative cost
  - 13% of premium cost
- Pays agents less than crop insurance
- Agent has incentive to sell higher coverage prices

# Insured Value and Premium Computation

1. Insured value = *No. head X target weight X Coverage Price X Ownership Share* (rounded to nearest whole dollar)

Number Head	X	Target Weight at End Date (cwt./head)	X	Coverage Price	X	Insured Share	X	Insured Value (dollar)
70	X	7						

LRP Coverage Prices, Rates, and Actual Ending Values - Report for 2/27/2008

USDA subsidizes 13 percent of total LRP premium

State	County	Endorsement Length	Commodity	Type	Practice	Crop Year	Exp. End Value	Coverage Price	Coverage Level	Rate	Cost Per CWT	End Date	Actual End Value
47 TENNESSEE	998 ALL COUNTIES	13	0801 FEEDER CATTLE	810 STEERS WEIGHT 2	997 NO PRACTICE SPECIFIED	2008	111.572	\$110.170	0.987400	0.031842	3.508	05/28/2008	
47 TENNESSEE	998 ALL COUNTIES	13	0801 FEEDER CATTLE	810 STEERS WEIGHT 2	997 NO PRACTICE SPECIFIED	2008	111.572	\$108.170	0.969500	0.024813	2.684	05/28/2008	
47 TENNESSEE	998 ALL COUNTIES	13	0801 FEEDER CATTLE	810 STEERS WEIGHT 2	997 NO PRACTICE SPECIFIED	2008	111.572	\$106.170	0.951600	0.018659	1.981	05/28/2008	
47 TENNESSEE	998 ALL COUNTIES	13	0801 FEEDER CATTLE	810 STEERS WEIGHT 2	997 NO PRACTICE SPECIFIED	2008	111.572	\$100.170	0.897800	0.007148	0.716	05/28/2008	
47 TENNESSEE	998 ALL COUNTIES	13	0801 FEEDER CATTLE	810 STEERS WEIGHT 2	997 NO PRACTICE SPECIFIED	2008	111.572	\$96.170	0.862000	0.003556	0.342	05/28/2008	
47 TENNESSEE	998 ALL COUNTIES	17	0801 FEEDER CATTLE	810 STEERS WEIGHT 2	997 NO PRACTICE SPECIFIED	2008	112.516	\$111.120	0.987600	0.036645	4.072	06/25/2008	
47 TENNESSEE	998 ALL COUNTIES	17	0801 FEEDER CATTLE	810 STEERS WEIGHT 2	997 NO PRACTICE SPECIFIED	2008	112.516	\$109.120	0.969800	0.029820	3.254	06/25/2008	
47 TENNESSEE	998 ALL COUNTIES	17	0801 FEEDER CATTLE	810 STEERS WEIGHT 2	997 NO PRACTICE SPECIFIED	2008	112.516	\$107.120	0.952000	0.023544	2.522	06/25/2008	
47 TENNESSEE	998 ALL COUNTIES	17	0801 FEEDER CATTLE	810 STEERS WEIGHT 2	997 NO PRACTICE SPECIFIED	2008	112.516	\$101.120	0.898700	0.010819	1.094	06/25/2008	
47 TENNESSEE	998 ALL COUNTIES	17	0801 FEEDER CATTLE	810 STEERS WEIGHT 2	997 NO PRACTICE SPECIFIED	2008	112.516	\$97.120	0.863200	0.006209	0.603	06/25/2008	
47 TENNESSEE	998 ALL COUNTIES	21	0801 FEEDER CATTLE	810 STEERS WEIGHT 2	997 NO PRACTICE SPECIFIED	2008	113.120	\$111.720	0.987600	0.039930	4.461	07/23/2008	
47 TENNESSEE	998 ALL COUNTIES	21	0801 FEEDER CATTLE	810 STEERS WEIGHT 2	997 NO PRACTICE SPECIFIED	2008	113.120	\$109.720	0.969900	0.033449	3.670	07/23/2008	
47 TENNESSEE	998 ALL COUNTIES	21	0801 FEEDER CATTLE	810 STEERS WEIGHT 2	997 NO PRACTICE SPECIFIED	2008	113.120	\$107.720	0.952300	0.027302	2.941	07/23/2008	
47 TENNESSEE	998 ALL COUNTIES	21	0801 FEEDER CATTLE	810 STEERS WEIGHT 2	997 NO PRACTICE SPECIFIED	2008	113.120	\$101.720	0.899200	0.014048	1.429	07/23/2008	
47 TENNESSEE	998 ALL COUNTIES	21	0801 FEEDER CATTLE	810 STEERS WEIGHT 2	997 NO PRACTICE SPECIFIED	2008	113.120	\$97.720	0.863900	0.008790	0.859	07/23/2008	

# Insured Value and Premium Computation

1. Insured value = *No. head X target weight X Coverage Price X Ownership Share* (rounded to nearest whole dollar)

Number Head	X	Target Weight at End Date (cwt./head)	X	Coverage Price	X	Insured Share	X	Insured Value (dollar)
70	X	7	X	107.12	X	100	X	52,489

# Insured Value and Premium Computation

2. Total Premium = *Insured Value X Rate*  
(rounded to nearest whole dollar)

Insured Value	X	Rate	=	Rounded Total Premium (Dollar)
52,489	X	.023544	=	1,236

# Insured Value and Premium Computation

3. Subsidy = *Total Premium* X .13 (rounded to nearest whole dollar).

Total Premium (Dollar)	X	Subsidy (percent)	=	Rounded Subsidy (Dollar)
1,236	X	.130	=	161

# Insured Value and Premium Computation

4.  $\text{Producer Premium} = \text{Total Premium} - \text{Subsidy}$ .

Total Premium (Dollar)	-	Subsidy (percent)	=	Producer Premium (Dollar)
1,236	-	161	=	1,075

# Insured Value and Premium Computation

## 5. Projected Minimum Sale Price

Coverage Price (dollar)	-	Basis (dollar)	-	LRP Cost (dollar)	=	Projected Minimum Sale Price (dollar)
107.12	-	2.00	-	2.19	=	102.93

# LRP Indemnity: Falling Market

- Feeder Cattle Price index = \$100
  - Indemnity payment

Coverage Price	\$107.12
- Actual Ending Value	<u>100.00</u>
Indemnity Per Cwt.	\$ 7.12

$$490 \text{ cwt.} \times \$7.12 = \$3,489$$

# LRP Indemnity: Falling Market

- Actual Sale Price \$98.00

Total Sale Value (490 cwt. X \$98)	\$48,020
+ Indemnity	<u>3,489</u>
Total Sale Value +Indemnity	\$51,509
- LRP Premium Cost	<u>1,075</u>
Actual Sale Value	\$50,434
Actual Sale Price /cwt.	\$102.93

# LRP Indemnity: Rising Market

- Feeder Cattle Price index = \$115
  - Indemnity payment = 0

Total Sale Value (490 cwt. X \$113)	\$55,370
- LRP Premium Cost	<u>1,075</u>
Actual Sale Value	\$54,295
Actual Sale Price /cwt.	\$110.81

# Basis Must Be Considered

- The difference between the cash price of the cattle and the Feeder Cattle Price Index.

Feeder Cattle Price Index	\$105
- Cash Price of Cattle	<u>103</u>
Basis	\$ 2

# Summary

- Outcome of LRP can be affected by price level and actual basis
- Sales can be suspended
  - If markets trade to limit consecutive days
  - If significant event occurs that might affect markets
- Price Insurance not Price Enhancement
- Does not guarantee a cash price
- Does not cover any other peril

# Web Sites

- Tennessee Beef Cattle Improvement Initiative  
<http://www.tnbeefcattleinitiative.org>
- University of Nebraska  
<http://livestockinsurance.unl.edu>
- USDA Risk Management Agency  
<http://www3.rma.usda.gov/apps/livestock-reports/main.aspx>