Livestock Risk Protection Insurance: How Does It Work

James Mintert, Ph.D.

Professor & Extension State Leader

Department of Agricultural Economics

Kansas State University

www.agmanager.info/livestock/marketing

jmintert@ksu.edu

LRP-What Is It?

- Livestock Risk Protection Insurance
- LRP for feeder cattle available in KS
  - Provides protection against a decline in CME Feeder Cattle Price Index while you own cattle
  - CME Feeder Cattle Price Index is a 7 day weighted average of cash feeder cattle prices across the U.S.
- LRP for slaughter cattle is also available in KS
  - Provides protection against a decline in the 5 Area Weighted Average Price reported by USDA

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LRP
Similar to Buying Put Options

- CME Feeder Cattle Index is used to cash settle Feeder Cattle Futures
  - Since both CME Feeder Cattle futures and LRP use the CME Feeder Cattle Index to settle, purchase of LRP for Feeder Cattle is similar (but not identical) to purchasing a CME Feeder Cattle put option
- USDA’s 5 Area Weighted Average Price is used to settle LRP for Slaughter Cattle
  - Purchase of LRP for Slaughter Cattle is similar (but not identical) to purchasing a CME Live Cattle put option

Restrictions On Cattle Eligible For Coverage

- Feeder cattle must weigh less than 900 lbs. at the end of the insurance period

- Fed cattle must weigh between 1,000 and 1,400 lbs. at the end of the insurance period

What's Eligible for Coverage?

- Can insure steers, heifers, Brahma and dairy breeds
- Coverage is now available for 13, 17, 21, 26, 30, 34, 39, 43, 47, or 52 week periods
- Cattle weighing less than 600 lbs. (at end of insurance period) can now be insured and will receive a 10% price adjustment to reflect the fact that lighter weight cattle generally trade at a premium to heavier cattle

How Does LRP Work?

To use LRP to protect against a price decline,

- you would purchase LRP insurance for a particular set of cattle (# of hd. & ending wt.)
- you must choose
  - Coverage Price (this is similar to an option's *Strike Price*)
  - End Date (e.g., the date coverage ends)
- Price you pay is known as LRP premium

Definitions

- Specific Coverage Endorsement (SCE)
    - is an endorsement to the insurance policy necessary to provide coverage
- Expected End Value
    - The expected ending live weight times expected end price
- Coverage Level
    - The percent of the expected end value that is covered by the policy

Definitions

- Coverage Price
    - Level of protection provided by policy on a dollar per cwt basis
        - Expected End Value X Coverage Level = Coverage Price
- End Date
    - The date that coverage period ends for each contract (SCE)
    - LRP buyer selects weeks of coverage desired within limits set by RMA

Definitions

- Actual ending feeder cattle value equals steer weight times CME Feeder Cattle Price Index
- CME Feeder Cattle Price Index based upon sale prices for Medium and Large Frame #1-2 steers weighing from 700-849 pounds (changing to 650-849 pounds next summer)
- CME Feeder Cattle Price Index is available at

  http://www.cme.com/trading/dta/hist/cash_settled_commodity_prices.html

- Actual Fed Cattle End Value equals steer weight times USDA 5 Area Weighted Average Price
- Prices reported by USDA at

  http://www.ams.usda.gov/mnreports/lm_ct100.txt

LRP Feeder Cattle Premium

- To calculate actual LRP premium you must know
  - Number of cattle ready for market (weighing less than 9.0 cwt) on End Date
  - Target Weight per head
  - Ownership share in cattle

LRP Feeder Cattle Premium

- Insured Value Equals
  - Number of Head x Target Weight (cwt) x Coverage Price x Ownership Share (%)
- Total Premium Equals
  - Insured Value x Rate
- Producer Premium Equals
  - Total Premium minus USDA Subsidy
  - USDA Subsidy = 13% of Total Premium

LRP Premium Calculation Example

- An operation has 100 head of feeder cattle
- Expects to market the feeder cattle at a target weight of 7.00 cwt each
- Insured share is 100 percent
- Assume Expected End Price (updated daily by RMA on its website) is $109.25 per live cwt

Premium Calculation Example

- Producer selects a coverage price which is a % of the Expected End Price published by RMA
- Assume producer selects $100 per cwt. coverage price (e.g., 92% of RMA's expected ending price)
- For this coverage price, the rate is 1.449%
- The premium subsidy is 13 percent

Premium Calculation Example

- 100 head * 7 cwt = 700 cwt.
- 700 cwt. * coverage price ($100) = $70,000
- $70,000 * insured share (1.00)
  = $70,000 Insured Value

Premium Calculation Example

- $70,000 * rate of .01449= $1,014 Total Premium
- $1,014 * .13 (subsidy) = $132 subsidy
- $1,014 (total premium) minus $132 subsidy

  = producer premium of $882

  = $1.26/cwt. producer paid premium

Calculating Indemnity

- Indemnity is payable if actual ending price is less than coverage price

- Calculate indemnity by:
  - Multiplying number of head by target weight (in live cwt.)
  - Subtract actual ending price from coverage price
  - Multiplying total weight by difference between actual ending & coverage price

Indemnity Calculation Example

- An operation has 100 head of fed cattle
- Has a target weight of 7.00 cwt. per head
- Insured share is 100 percent

Indemnity Calculation Example

- Expected End Price for appropriate insurance period is $109.25 per live cwt.

- Producer selects a coverage price of $100 per cwt. (e.g., 92% of Exp. End Price)

- Actual End Price is $80 per cwt. (e.g., CME Feeder Cattle Index = $80 on End Date)

Indemnity Calculation Example

- 100 head * 7.00 cwt = 700 cwt.
- Subtracting actual ending price of $80 from the coverage price of $100 = $20/cwt.
- Multiplying 700 cwt. by $20/cwt = $14,000
- Multiplying $14,000 by insured share of 1.00 = indemnity payment of $14,000

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Indemnity Calculation Example

- What happens if actual ending price = $105?
- Subtracting actual ending price of $105 from the coverage price of $100 = neg. $5/cwt.
  - Therefore, no indemnity payment is made to producer
  - This is analogous to a feeder cattle put option that *expires worthless*

LRP Coverage Availability

- Available from about 5 p.m. until 9 a.m. Central Time during the week
- Not Available on Federal holidays
- Not Available if RMA web site is down

LRP Coverage Prices & Levels

- Price guarantees change daily
- Premiums change daily
- Coverage available ranges from 70% to maximum of 95% of Expected End Price, but maximum guarantee on most days is less than 95%

Premium

- Producer may obtain premium quotes via RMA's Premium Calculator available on USDA-RMA's web site
- Premium must be paid on day LRP insurance is purchased for coverage to be provided
- Rates available at

http://www.rma.usda.gov/tools

Under livestock reports

Or use link on AgManager

www.agmanager.info/livestock/marketing

Livestock Reports v1.03 - LRP Coverage Prices, Rates, and Actual Ending Values - Report for 02/ - Microsoft Internet Explorer

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Address http://www3.rma.usda.gov/apps/livestock_reports/criteria_flow.cfm

Select Criteria | Main Menu | Formatted Print 02/12/2005 10:51:50 AM

LRP Coverage Prices, Rates, and Actual Ending Values - Report for 02/11/2005

USDA subsidizes 13 percent of total LRP premium.

State	County	Endorsement Length	Commodity	Type	Practice	Crop Year	Expected End Value	Coverage Price	Coverage Level	Rate	Cost Per CWT	End Date	Actual End Value
20 KANSAS	998 ALL COUNTIES	13	0801 FEEDER CATTLE	810 STEERS WEIGHT 2	997 NO PRACTICE SPECIFIED	2005	98.311	$92.290	0.938800	0.013122	1.211	05/13/2005	
20 KANSAS	998 ALL COUNTIES	13	0801 FEEDER CATTLE	810 STEERS WEIGHT 2	997 NO PRACTICE SPECIFIED	2005	98.311	$90.290	0.918400	0.011264	1.017	05/13/2005	
20 KANSAS	998 ALL COUNTIES	13	0801 FEEDER CATTLE	810 STEERS WEIGHT 2	997 NO PRACTICE SPECIFIED	2005	98.311	$88.290	0.898100	0.009174	0.810	05/13/2005	
20 KANSAS	998 ALL COUNTIES	13	0801 FEEDER CATTLE	810 STEERS WEIGHT 2	997 NO PRACTICE SPECIFIED	2005	98.311	$86.290	0.877700	0.006490	0.560	05/13/2005	
20 KANSAS	998 ALL COUNTIES	13	0801 FEEDER CATTLE	810 STEERS WEIGHT 2	997 NO PRACTICE SPECIFIED	2005	98.311	$84.290	0.857400	0.005920	0.499	05/13/2005	
20 KANSAS	998 ALL COUNTIES	13	0801 FEEDER CATTLE	810 STEERS WEIGHT 2	997 NO PRACTICE SPECIFIED	2005	98.311	$82.290	0.837000	0.005043	0.415	05/13/2005	
20 KANSAS	998 ALL COUNTIES	13	0801 FEEDER CATTLE	810 STEERS WEIGHT 2	997 NO PRACTICE SPECIFIED	2005	98.311	$80.290	0.816700	0.004484	0.360	05/13/2005	
20 KANSAS	998 ALL COUNTIES	17	0801 FEEDER CATTLE	810 STEERS WEIGHT 2	997 NO PRACTICE SPECIFIED	2005	98.704	$92.430	0.936400	0.017678	1.634	06/10/2005	
20 KANSAS	998 ALL COUNTIES	17	0801 FEEDER CATTLE	810 STEERS WEIGHT 2	997 NO PRACTICE SPECIFIED	2005	98.704	$90.430	0.916200	0.013613	1.231	06/10/2005	
20 KANSAS	998 ALL COUNTIES	17	0801 FEEDER CATTLE	810 STEERS WEIGHT 2	997 NO PRACTICE SPECIFIED	2005	98.704	$88.430	0.895900	0.010517	0.930	06/10/2005	
20 KANSAS	998 ALL COUNTIES	17	0801 FEEDER CATTLE	810 STEERS WEIGHT 2	997 NO PRACTICE SPECIFIED	2005	98.704	$86.430	0.875600	0.007289	0.630	06/10/2005	
20 KANSAS	998 ALL COUNTIES	17	0801 FEEDER CATTLE	810 STEERS WEIGHT 2	997 NO PRACTICE SPECIFIED	2005	98.704	$84.430	0.855400	0.006100	0.515	06/10/2005	
20 KANSAS	998 ALL COUNTIES	17	0801 FEEDER CATTLE	810 STEERS WEIGHT 2	997 NO PRACTICE SPECIFIED	2005	98.704	$82.430	0.835100	0.005386	0.444	06/10/2005	
20 KANSAS	998 ALL COUNTIES	17	0801 FEEDER CATTLE	810 STEERS WEIGHT 2	997 NO PRACTICE SPECIFIED	2005	98.704	$80.430	0.814900	0.004911	0.395	06/10/2005	

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LRP Summary

- LRP protects against a decline in
  - Feeder cattle price level as measured by CME Feeder Cattle Price Index
  - Fed cattle price level as measured by USDA's 5 Area Weighted Average Price
- LRP does NOT guarantee the basis
- LRP does not guarantee a cash price
- Policy does not cover any other peril

LRP Summary

- Insure the exact number of head that you choose
- Flexible contract size matches “small” operations vs.
  - Feeder cattle futures that represents about 67 steers weighing 750 pounds
  - Live cattle futures that represents about 33 steers weighing 1200 pounds
- Can incrementally minimum price a few head at a time

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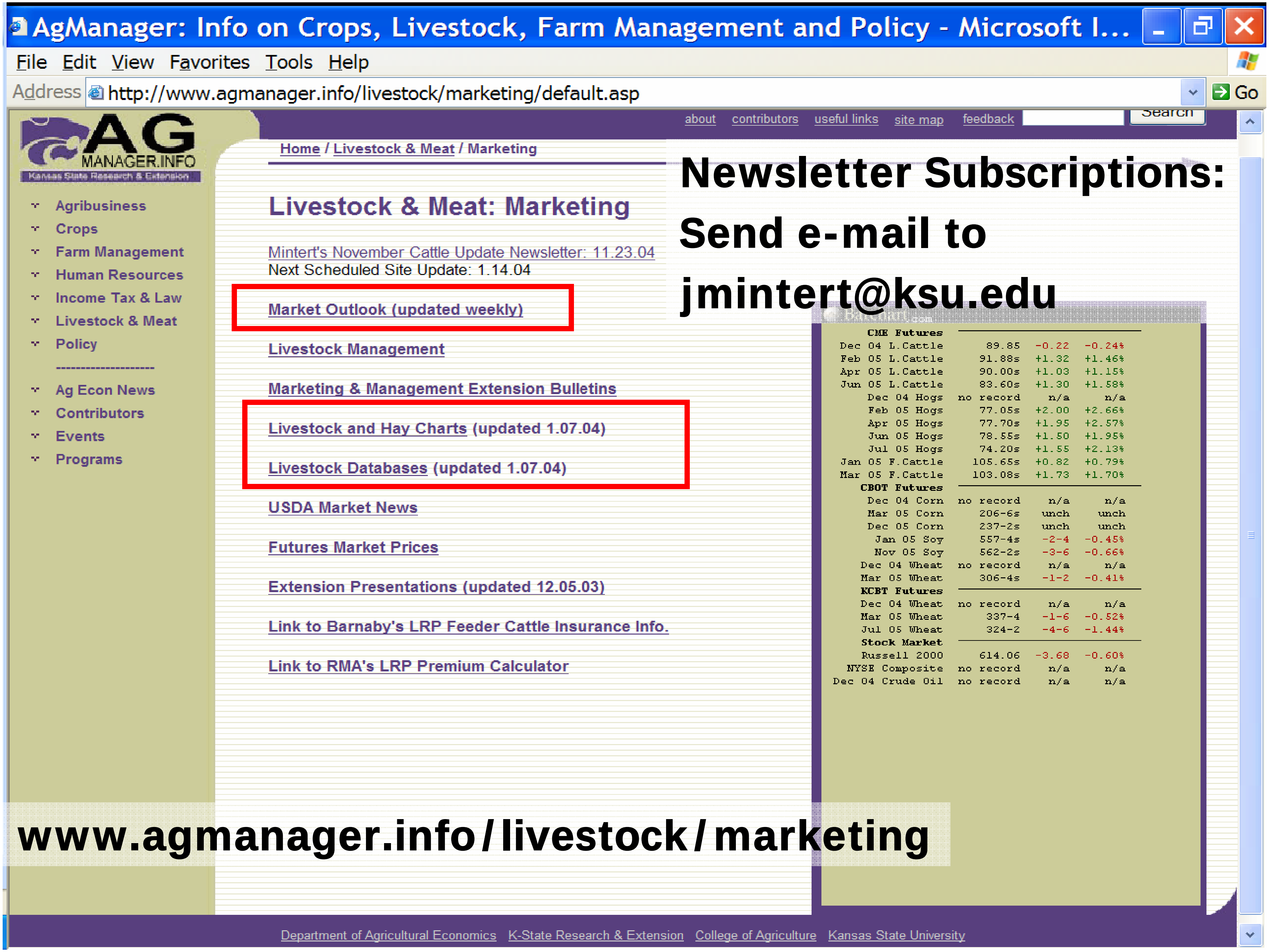

AgManager: Info on Crops, Livestock, Farm Management and Policy - Microsoft I...

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Livestock & Meat: Marketing

Mintert's November Cattle Update Newsletter: 11.23.04
Next Scheduled Site Update: 1.14.04

Market Outlook (updated weekly)

Livestock Management

Marketing & Management Extension Bulletins

Livestock and Hay Charts (updated 1.07.04)

Livestock Databases (updated 1.07.04)

USDA Market News

Futures Market Prices

Extension Presentations (updated 12.05.03)

Link to Barnaby's LRP Feeder Cattle Insurance Info.

Link to RMA's LRP Premium Calculator

CME Futures			
Dec 04 L.Cattle	89.85	-0.22	-0.24%
Feb 05 L.Cattle	91.88s	+1.32	+1.46%
Apr 05 L.Cattle	90.00s	+1.03	+1.15%
Jun 05 L.Cattle	83.60s	+1.30	+1.58%
Dec 04 Hogs	no record	n/a	n/a
Feb 05 Hogs	77.05s	+2.00	+2.66%
Apr 05 Hogs	77.70s	+1.95	+2.57%
Jun 05 Hogs	78.55s	+1.50	+1.95%
Jul 05 Hogs	74.20s	+1.55	+2.13%
Jan 05 F.Cattle	105.65s	+0.82	+0.79%
Mar 05 F.Cattle	103.08s	+1.73	+1.70%
CBOT Futures			
Dec 04 Corn	no record	n/a	n/a
Mar 05 Corn	206-6s	unch	unch
Dec 05 Corn	237-2s	unch	unch
Jan 05 Soy	557-4s	-2-4	-0.45%
Nov 05 Soy	562-2s	-3-6	-0.66%
Dec 04 Wheat	no record	n/a	n/a
Mar 05 Wheat	306-4s	-1-2	-0.41%
KCBT Futures			
Dec 04 Wheat	no record	n/a	n/a
Mar 05 Wheat	337-4	-1-6	-0.52%
Jul 05 Wheat	324-2	-4-6	-1.44%
Stock Market			
Russell 2000	614.06	-3.68	-0.60%
NYSE Composite	no record	n/a	n/a
Dec 04 Crude Oil	no record	n/a	n/a

Department of Agricultural Economics K-State Research & Extension College of Agriculture Kansas State University

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