Using Livestock Revenue Protection (LRP) to manage market risks faced by ranchers

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Areas of risk to be managed

- Production (drought, insects, disease, earthquakes, etc)
- Market or price (changes in the price of products sold or inputs purchased)
- Human/Labor (hired, contract, family)
- Legal/Institutional (changes in laws, regulations, zoning, etc)
- Financial (profitability, solvency, liquidity)

Some alternative actions that might be used to manage market risk (selling price) include:

- Do nothing (accept what the market offers at time of sale)
- Obtain a forward contract
- Sell a futures contract
- Buy a put option
- Purchase revenue insurance

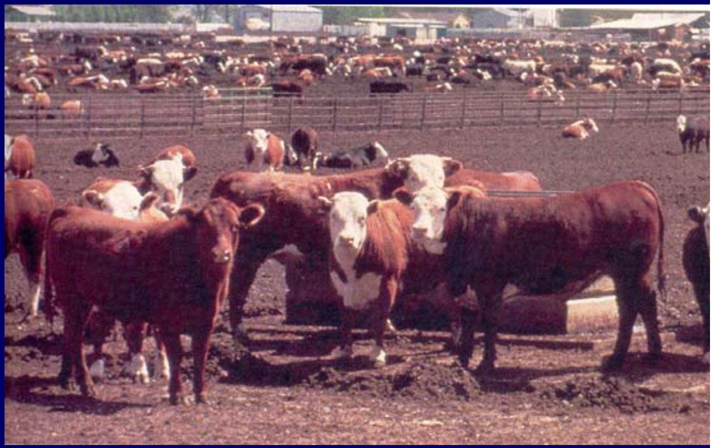
Livestock Risk Protection (LRP) Program

- Patterned after or similar to the CRC policy that has been available for crops for several years
- Introduced in April 2003
- Was modified on November 17, 2003
- Was withdrawn with the BSE scare on December 23, 2003
- Reinstated on 1 October 2004 with some major changes from the earlier policy

LRP is available for

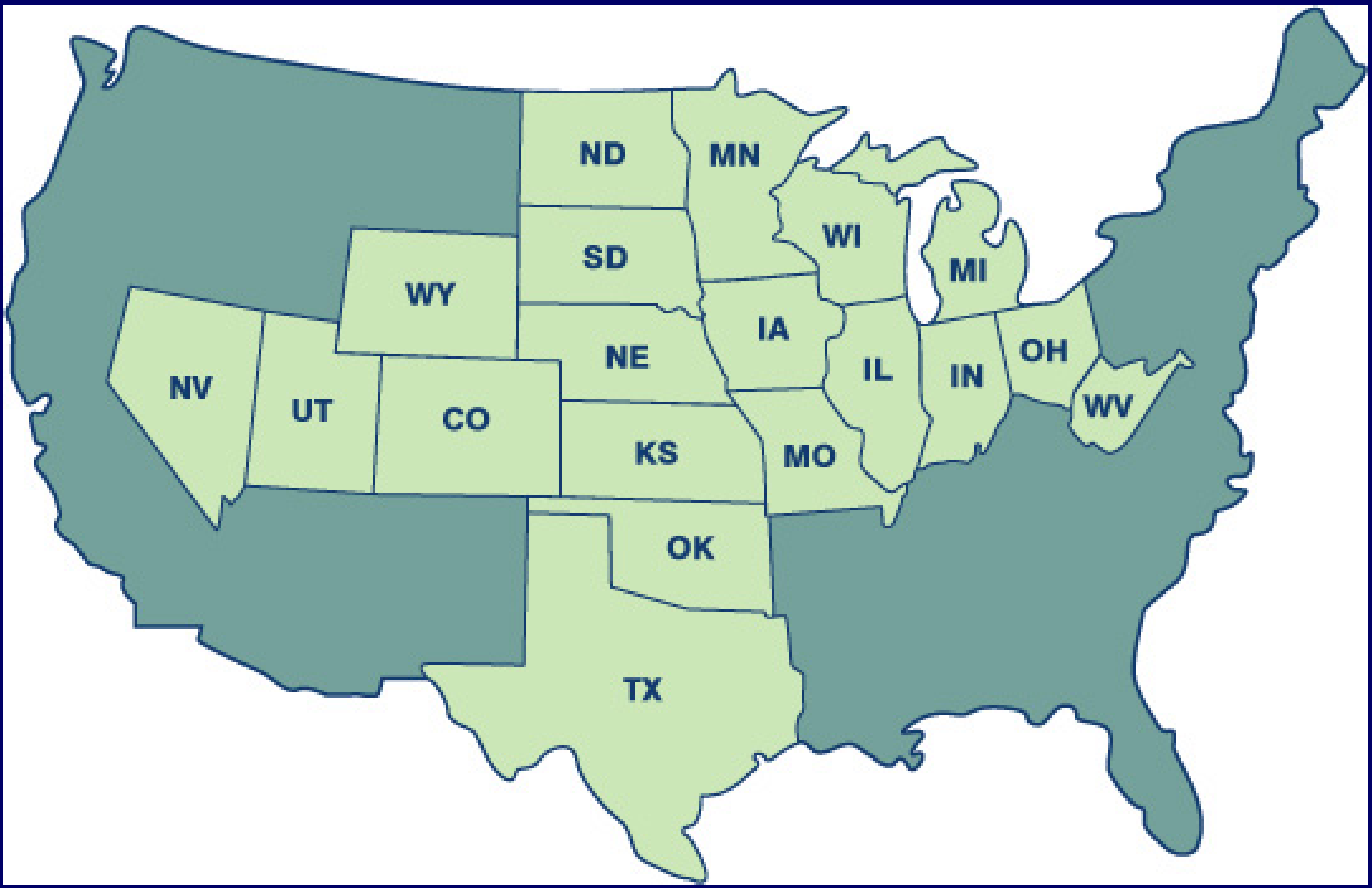
Feeders

Swine



Fed
Cattle

LRP eligible states



What does LRP do?

- Provides coverage to protect against a decrease in selling price
- Does not cover against any other peril such as:
  - Mortality
  - Disease
  - Individual marketing decisions

Policy for

- Original basics for policy:
  - Market steers within a range of 6.5 to 9.0 cwt.
  - Live weight basis.
  - Maximum number.
    - 1,000 head per specific coverage endorsement.
    - 2,000 head during any one crop year.
- The above has been modified (not just steers, other weights, length of contract, dairy, etc)

Limitations of LRP program

- FCIC limits amount of livestock insurance that may be reinsured each year.
- Sales will be closed when underwriting capacity has been met.
- Can not legally hold an LRP policy and futures contract (or option) on the same cattle

LRP coverage limitations

- Coverage <u>is not</u> available for purchase:
  - – On weekends or Federal holidays; or,
  - – If web site or premium calculator is not operational;
- Coverage <u>may not</u> be available if:
  - – Any of required data for establishing coverage prices or rates is not available; or,
  - – Futures do not continue trading at end of day or for any other reason specified in policy.

Coverage prices and levels

- Coverage price:
  - Is the price that can be insured by the producer;
  - Will change daily;
  - Must be obtained from RMA website; and,
  - Will have a premium rate that corresponds to the coverage price chosen. Similar to a put option.
- Coverage Levels:
  - Based on chosen price coverage; and,
  - Will range from 70% to 95% of expected (futures) price at time livestock are sold.

Termination of policy occurs

- If the insured disposes of any portion of his share of the insured livestock prior to the last 30 days of coverage. Note: owned animals are not insured, it is a policy for an estimated insured value.
- An exception is allowed for transfer of coverage.

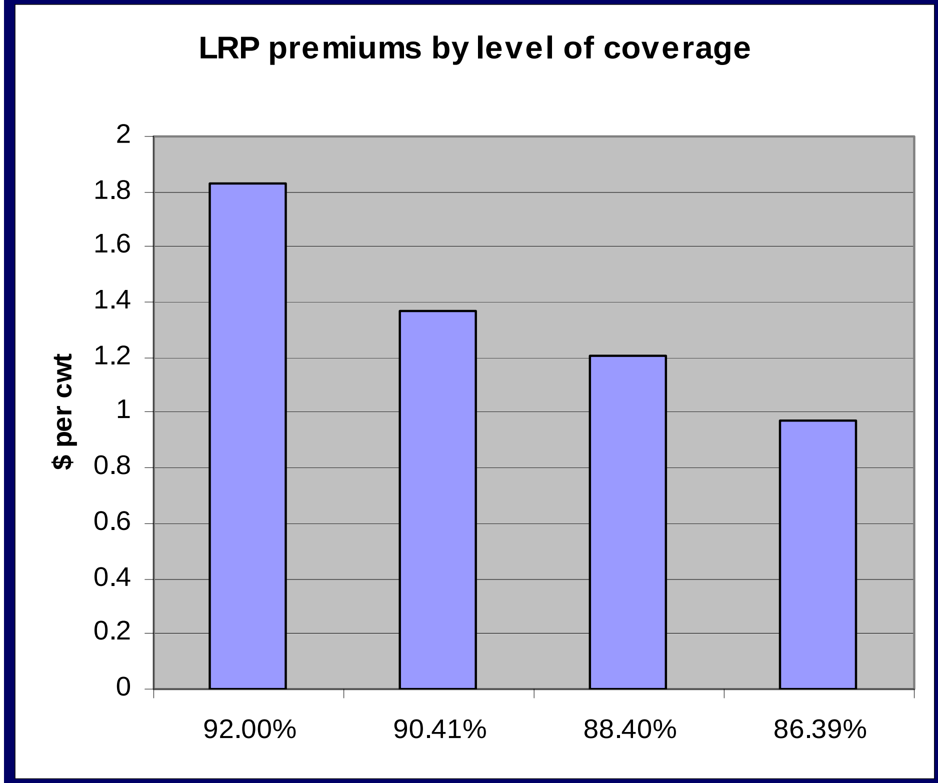
Coverage ends when

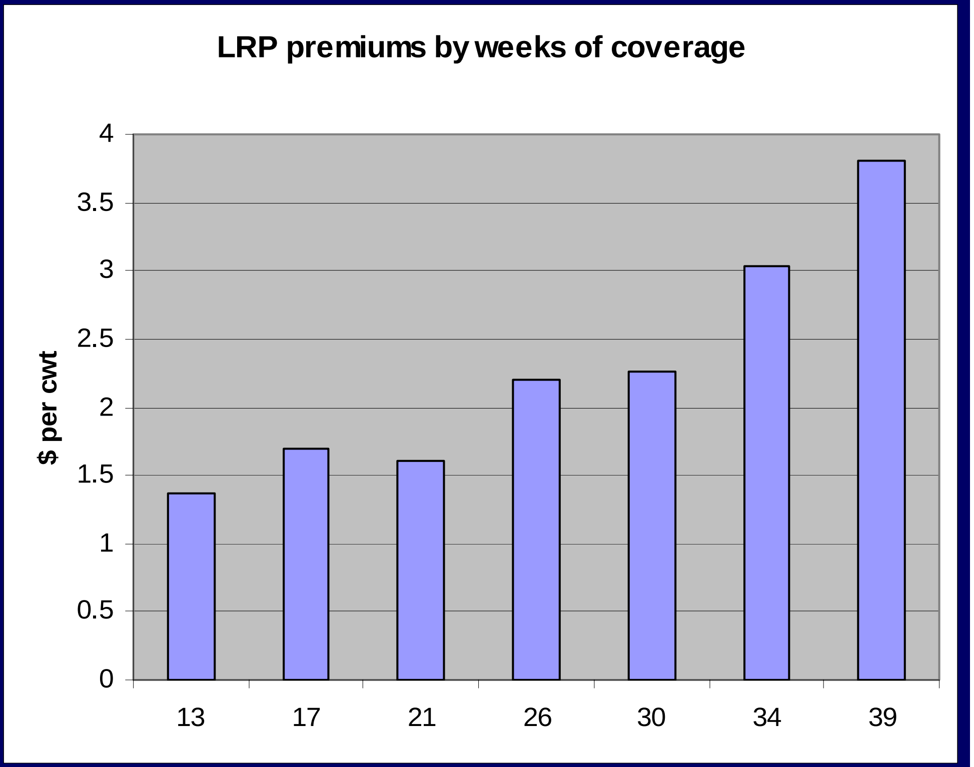
- Coverage expires on the end date if insured:
  - Disposes of any part of insured share during the last 30 days of coverage; or
  - Provides company written notice within 72 hours of:
    - Livestock being seized, quarantines or destroyed by order of any government; or
    - Livestock not being deliverable due to death or disease.

Determination of premiums

- Premiums are associated with a specific coverage price and endorsement period which must be selected by the producer.
- The premium will vary by:
  – Length of insurance period (13, 17, 21, 26, 30, 34, 39, 43, 47, or 52 weeks); and,
  – Coverage Price (percentage of price expected at time policy ends).

LRP premiums by level of coverage and time on January 25, 2005





Some definitions

- Specific Coverage Endorsement (SCE) - An endorsement to the policy necessary to provide coverage.
- Substantial Benefit Interest (SBI) – an interest held by any person of at least 10 percent.
- Actual ending value:
  - Weighted average price of feeder cattle as calculated by CME for cash settled commodity index prices.
  - Report is available on internet at www. cme.com/prices/cash-settled_commodity _index_prices.cfm.
  - Does not equal the price a producer receives in the cash market

Price adjustment factors for Insured and Ending Values

Weight Range	Steers	Heifers	Brahman	Dairy
Less than 600 lbs	110%	100%	100%	100%
600 to 900 lbs	100%	90%	90%	80%

Feeder cattle example

- Rancher has 100 head of steers.
- Expects to sell these cattle in about 39 weeks (October).
- Expected weight = 700 pounds.
- Coverage Level Elected = 90%.
- Expected Ending Value = $100.00 = futures price on the day the policy is purchased
- Coverage Price = $90

Feeder cattle premiums

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

Example for 100 steers that are expected to weigh 700 pounds and coverage price of $ 90

Insured Value =

(100 head) * (700 lbs per head) * ($ 90 per cwt) * 100% = $ 63,000

Total Premium = $ 63,000 * .038011 =

$ 2394.69 ($3.42 per cwt)

Subsidy = 2394.97 * .13 = $ 311.31

Producer premium = $ 2083.38
(or $ 2.98 per cwt.)

Calculating indemnity

- Indemnity is payable if actual ending value is less than coverage price.
- Calculate indemnity by:
  1. Multiplying number of head by target (not actual) weight specified in policy;
  2. Subtract actual ending value from coverage price;
  3. Multiplying #1 by # 2; and
  4. Multiplying # 3 by insured share.

Result of this example

- Actual Ending Value after the 39 week period is $ 85.00 = price of CME cash settled
- 100 head x 7.00 cwt. = 700 cwt.
- Coverage Price = $ 90.00
- Actual Ending Value = $ 85.00
- Difference = $ (5.00)
- Indemnity Due = $ 3,500
- Net return on insurance = $ 3500 - $ 2083 = $1417

The above example does not consider what the producer sold his steers for in the cash market

- If he/she sold the steers for $ 82.00 per cwt
- Gross cash market returns = $ 56,000
- The difference between the cash price ($82.00) and the "ending value" price ($85.00) is the LRP basis.
- LRP basis is expected to change daily
- LRP basis is similar to but generally not equal to the basis for futures markets (historic data will be computed and put on USU agribusiness web page)

Futures basis data for Utah

500-600 pound Heifers, October 1

Year	Cash	Futures	Basis
2003	93.38	100.53	-7.15
2002	70.75	80.950	-10.20
2001	83.94	86.384	-2.444
2000	82.2	86.496	-4.246
1999	78.13	80.526	-2.396
1998	60.94	68.332	-7.392
1997	69.63	77.602	-7.977
Ave 90-02	73.866	78.788	-5.08

LRP versus Futures and Do Nothing

	LRP	Futures	Do Nothing
Protection for downside Risk	Yes	Yes	None
Upside potential gain	Unlimited	Limited	Unlimited
Coverage based on..	Aggregate cash price	Futures price	No Coverage
Basis Risk	Not covered	Not covered	None
Cost of coverage	Set daily, guaranteed	Not set; market determined	None
At expiration, there is ..	Indemnity paid if due	Need to exit or meet contract	No action
The contract is..	An insurance policy	A contract	None
Financial costs	Premium	Margin $ & fees	None

To obtain LRP coverage

- Complete LRP application
  1. Contact licensed insurance agent
  2. Can be completed at any time
- Complete Substantial Beneficial Interest Form
- When ready to purchase insurance
  1. Complete Specific Coverage Endorsement
     a. Beginning and ending dates
     b. Weight, type, and number of animals
  2. Work with agent to complete purchase
  3. Pay premium

Summary

- A LRP policy represents a new tool that can be used to manage price risk faced by livestock producers
- It has advantages and disadvantages over other alternatives