

## Livestock Risk Protection (LRP) Insurance: Information Bulletin



Prepared by: Paul Mitchell, University of Wisconsin – Madison  
Bill Halfman, Agricultural Extension Agent, Monroe County  
Brenda Boetel, Livestock Marketing Specialist, University of Wisconsin-River Falls

11/2004

### What is LRP?

Livestock Risk Protection (LRP) is a new insurance policy that protects producers of feeder cattle, fed cattle and hogs from unexpected declines in the market price. LRP became available in all Wisconsin counties beginning October 1, 2004. Eligible farmers choose a coverage price and an ending period that is at least 13 weeks in the future. If the actual market price for the ending period is less than the coverage price, the farmer receives an indemnity based on the price difference.

### How do I buy LRP?

Separate LRP insurance policies are available for feeder cattle, fed cattle, or finished hogs (swine). To be eligible to buy LRP insurance, a producer must own and intend to market at the end of the insurance period feeder cattle, fed cattle for slaughter, or hogs for slaughter. Producers can only insure livestock they currently own or the share of livestock they own. Insurance will not extend to other entities having a share in the livestock unless the application clearly states that the insurance is requested for a partnership.

To qualify, a livestock producer must first file an LRP insurance application with an agent. Not all insurance companies will carry LRP; a list of certified agents in your county is available at <http://www3.rma.usda.gov/apps/agents/>. Farmers who think they may want to purchase LRP should file an application as soon as possible. Filing an application does not establish the right to LRP coverage, since the Risk Management Agency (RMA) must approve each application. Usually, only one application is needed per farmer to purchase any or all of the LRP policies. Once the RMA approves an LRP application, farmers request insurance coverage by filing a Specific Coverage Endorsement (SCE) for LRP-Feeder

Cattle, LRP-Fed Cattle, or LRP-Swine. The premiums depend on futures market prices and change daily. Premiums are due when the SCE specified price guarantee is established.

### What is a Specific Coverage Endorsement (SCE)?

The SCE specifies the coverage price and ending period the farmer selects, as well as the number of head insured and other policy provisions. Note that the RMA limits the total amount of LRP liability it has at any time, so that your coverage request will only be approved as long as the RMA has sufficient coverage available at that time. Also, the RMA limits the number of feeder cattle that an individual can insure under one SCE to 1,000 head, with the maximum number during a crop year of 2,000 head. The limitation for fed cattle is 2,000 head under one SCE, with a 4,000 head maximum per year. SCE may be purchased for up to 10,000 head of hogs, with an annual limit of 32,000 head.

The available LRP coverage levels range approximately 70%-95% of the expected ending price for the SCE's effective date. Available coverage prices change daily and are published by the RMA on the internet at [http://www3.rma.usda.gov/apps/livestock\\_reports/lrp\\_select\\_criteria.cfm](http://www3.rma.usda.gov/apps/livestock_reports/lrp_select_criteria.cfm).

The ending period is the specific date on which the policy terminates and the market price is calculated for determining indemnities. For LRP-Feeder Cattle and LRP-Fed Cattle, available ending periods range from 13 to 52 weeks by 4 week intervals. For LRP-Swine, available ending periods range from 13 to 26 weeks by 4 week intervals. Note that some combinations of ending period and coverage price may not be available on a specific date due to insufficient marketing data

to determine premiums. Farmers should choose an ending period within 30 days of the intended marketing date.

### How much are the LRP Premiums?

LRP premiums change daily and are published on the internet at

[http://www3.rma.usda.gov/apps/livestock\\_reports/lrp\\_select\\_criteria.cfm](http://www3.rma.usda.gov/apps/livestock_reports/lrp_select_criteria.cfm). Posted coverage prices and rates are valid until the next business day at 9:00 AM Central Time or as otherwise specified. In general, coverage is available Saturday morning until 9:00 AM, but not on Sunday, Monday morning, federal or market holidays, the first day after such holidays, if the RMA website is not operating, or if sales are halted. Check with your agent to determine the specific coverage prices and rates available to you at any specific time.

The steps for calculating premiums can be summarized as follows:

- 1) Determine the anticipated market date and target weight (cwt per head) on that date. For LRP-Swine a lean weight conversion factor of 0.74 is used in converting live weight.
- 2) Choose the LRP ending period that is within 30 days of the anticipated market date.
- 3) Choose the coverage price from those available for the chosen ending period.
- 4) Determine the number of head that will be ready on the market date at the target weight.
- 5) Determine your ownership share.
- 6) The total premium paid is then calculated in three steps:
  - i) Number of Head X Target Weight X Coverage Price X Share = Insured Value
  - ii) Insured Value X Rate = Rounded Total Premium
  - iii) Rounded Total Premium X (1 - 0.13) = Producer Premium

The coverage price is the percentage of the expected ending price that you are choosing as your minimum guaranteed price. The higher the coverage price, the larger the premium. The rate determines your premium using the chosen coverage price and expected ending price for the

chosen ending date. Coverage prices and associated rates are updated daily on the internet: [http://www3.rma.usda.gov/apps/livestock\\_reports/lrp\\_select\\_criteria.cfm](http://www3.rma.usda.gov/apps/livestock_reports/lrp_select_criteria.cfm). Finally, multiplying by (1 - 0.13) accounts for the 13% premium subsidy provided by the RMA.

Because rates of gain differ, the LRP-Feeder Cattle policy differentiates between target weight classes (< 6 cwt and 6-9 cwt), between steers and heifers, and between traditional beef breeds and predominately Dairy and Brahman breeds. As a result, your agent will determine whether you need to file separate SCE's to insure all the feeder cattle in your herd.

### Example 1

#### LRP Premium Calculations for Fed Cattle

Assume Ron Lejones has a 75% owner's interest in 300 cattle, which he plans on selling as fed cattle 3 months from today. His anticipated target weight is 1200 pounds or 12 cwt. The Expected Ending Value is \$89.525 per cwt. Mr. Lejones chooses to insure at the 82% coverage level for \$0.455 per cwt. This coverage level has a coverage price of \$73.43.

To determine the Total Producer Premium, one must first calculate the Insured Value and the Total Rounded Premium. The first step is to multiply the number of head times the Target Weight times the Coverage Prices times the Insured Share to get the Insured Value. For Mr. Lejones this calculation is as follows:

$$300 \times 12 \times \$73.43 \times .75 = \$198,261 \text{ Insured Value}$$

Secondly, take the Insured Value times the rate to get the Rounded Total Premium. Mr. Lejones would calculate this as follows:

$$\$198,261 \times 0.006196 = \$1,228 \text{ Rnd Tot Prem.}$$

Finally, take the Total Rounded Premium times (1-.13) to get the Total Producer Premium. In our example this is as follows:

$$\$1,228 \times (1-.13) = \$1,068 \text{ Total Producer Premium}$$

## Example 2

### LRP Premium Calculations for Feeder Cattle

Ms. Johnson has a beef cow calf operation with 60 cows. Thirty steers and thirty heifers are born. She plans to keep 8 of the heifers for replacements and sell the remaining calves when they weigh about 550 pounds in October.

The Expected Ending Value for the steers is \$108.90 and for the heifers is \$99.00. Ms. Johnson decides to insure the steers and heifers at the 88.89% coverage level for at a 0.041432 rate. This amounts to a \$4.011 per cwt rate for steers and a \$3.646 per cwt rate for heifers. This level gives a coverage price of \$96.80 and \$88.00 for the steers and heifers, respectively.

To determine the Total Producer Premium, one must first calculate the Insured Value and the Total Rounded Premium. The first step is to multiply the number of head times the Target Weight times the Coverage Prices times the Insured Share to get the Insured Value. Ms. Johnson will have two SCE's (one for steers less than 6 cwt and one for heifers less than 6 cwt). Her premium calculation is as follows:

$30 \times 5.5 \times \$96.80 \times 1 = \$15,972$  Ins.value of steers  
 $22 \times 5.5 \times \$88.00 \times 1 = \$10,648$  Ins. value of heifers

Secondly, take the Insured Value times the rate to get the Rounded Total Premium. Ms. Johnson would calculate this as follows:

$\$15,972 \times 0.041432 = \$662$  Rnd Tot Prem for steers  
 $\$10,648 \times 0.041432 = \$441$  Rnd Tot Prem for heifers

Take the Rounded Total Premium times (1-.13) to get the Total Producer Premium. In our example this is as follows:

$\$662 \times (1-.13) = \$576$  Tot. Prod. Prem. for steers  
 $\$441 \times (1-.13) = \$384$  Tot. Prod. Prem. for heifers

Finally, Ms. Johnson's total premium is the sum of that paid for the steers and heifers.

$\$576 + \$384 = \$960$  Total Producer Premium

## Example 3

### Alternative method of LRP Premium Calculations

This example utilizes the same situation as in example 2. Ms. Johnson can compute her Total Producer Premium with an alternative method. Instead of utilizing the rate, she can compute her Rounded Total Premium by using the cost per cwt information provided on the RMA website. Thus, the Rounded Total Premium can be calculated in the following method:

$30 \times 5.5 \times \$4.011 = \$662$  Rnd Tot Prem for steers  
 $22 \times 5.5 \times \$3.646 = \$441$  Rnd Tot Prem for heifers

She then proceeds as example 2. Take the Rounded Total Premium times (1-.13) to get the Total Producer Premium. In our example this is as follows:

$\$662 \times (1-.13) = \$576$  Tot. Prod. Prem. for steers  
 $\$441 \times (1-.13) = \$384$  Tot. Prod. Prem. for heifers

For a more detailed description of LRP premium calculation, see the following RMA website: <http://www.rma.usda.gov/policies/2005LRP.html>.

The RMA maintains a web page (<http://www3.rma.usda.gov/apps/premcalc/>) that provides premium quotes for all federally endorsed crop and livestock insurance policies. Note that your final premium will be determined by the agent selling the LRP policy.

### When do I receive an LRP indemnity?

If the reported market price, called the Actual Ending Value (AEV), for the termination date specified in the SCE is less than the selected coverage price, the farmer receives an indemnity. Note that the indemnity payment is not based on the actual price received for the livestock.

The Actual Ending Value for the ending date is a weighted average price index reported by the USDA-Agricultural Marketing Service (AMS) or the Chicago Mercantile Exchange using AMS data. After ending periods have been completed, the RMA publishes Actual Ending Values for

LRP policies at [http://www3.rma.usda.gov/apps/livestock\\_reports/lrp\\_select\\_criteria.cfm](http://www3.rma.usda.gov/apps/livestock_reports/lrp_select_criteria.cfm).

Individuals have 60 days to file a claim for an LRP indemnity. Your agent can help you determine if you are eligible for an LRP indemnity.

### **How does the RMA determine the Actual Ending Value for LRP policies?**

For LRP-Feeder Cattle, the market price used to determine the Actual Ending Value is the Chicago Mercantile Exchange (CME) Feeder Cattle Reported Index. The index is a 7-day weighted average of prices for medium #1 and medium to large #1 steers weighing 700-849 pounds. Prices are reported by the USDA-AMS for feeder cattle sales in 12 Midwestern and Great Plains states (Wisconsin is not among these states). The price index is a weighted average that assigns the same importance to every pound of feeder steer sold in the reporting area during the 7 days. Note that an LRP Price Adjustment Factor adjusts this CME price index to account for the target weight of the insured feeder cattle, whether they are steers or heifers, or whether they are predominantly Dairy or Brahman. As a result, you may need to file separate SCE's to insure all the feeder cattle in your herd.

For LRP-Fed Cattle, the pertinent market price is the 5 Area Weekly Weighted Average Direct Slaughter price for live steers, 35-65% choice. The AMS constructs this price using prices reported for Texas/Oklahoma, Kansas, Nebraska, Colorado, and Iowa/Minnesota. Again, the price is a weighted average that assigns the same importance to every pound of fed live steers, 35-65% choice, sold in the five reporting areas during the week.

For LRP-Swine, the pertinent market price index is the CME Lean Hog Index. This index is a two-day weighted average constructed from negotiated and market formula prices and slaughter data reported in the USDA-AMS National Daily Direct Hog Prior Day Report-Slaughtered Swine.

### **Example 1**

#### **LRP Indemnity Calculations for Fed Cattle**

Using the above example with Mr. Lejones, there are 300 cattle for market. Mr. Lejones owns 75% of them and the Target Weight is 12 cwt. The selected Coverage Price is \$73.43 per cwt at the 82% Coverage Level.

Assume the Actual Ending Value is \$72.00 per cwt. Because the \$72.00 AEV is less than the Coverage Price there will be an indemnity paid to Mr. Lejones. The calculation is as follows:

$$300 \text{ head} \times 12 \text{ Target Weight} = 3,600 \text{ cwt}$$

$$\$73.43 \text{ Cov. Price} - \$72.00 \text{ AEV} = \$1.43 \text{ per cwt}$$

$$3600 \text{ cwt} \times \$1.43 \text{ per cwt} = \$5,148$$

$$\$5,148 \times .75 \text{ Share} = \$3,861 \text{ Indemnity Payment}$$

### **Example 2**

#### **LRP Indemnity Calculations for Feeder Cattle**

Using the above example with Ms. Johnson, there are 30 steers and 22 heifers for market. The Target Weight is 5.5 cwt. The selected Coverage Price is \$96.80 per cwt and \$88.00 per cwt for the steers and heifers, respectively.

Assume the AEV for the steers \$95 and the AEV for the heifers is \$89. Ms. Johnson can collect an indemnity payment for the steers because the AEV is below the Coverage Price; however she cannot collect an indemnity payment for the heifers as the AEV is greater than the Coverage Price. The calculation of the indemnity payment for the steers is as follows:

$$30 \text{ head} \times 5.5 \text{ Target Weight} = 165 \text{ cwt}$$

$$\$96.80 \text{ Cov. Price} - \$95.00 \text{ AEV} = \$1.80 \text{ per cwt}$$

$$165 \text{ cwt} \times \$1.80 \text{ per cwt} = \$297 \text{ Indemnity Payment}$$

Note: In this example, Ms. Johnson received an indemnity payment for the SCE on her steers but not the SCE on her heifers. However, she would have been better off not having bought the

Livestock Risk Protection on either the steers or the heifers as her Indemnity Payment for the steers was less than the Total Producer Premium for the steers.

### **Can I offset the premium cost using futures and options contracts?**

Producers are not allowed to enter into any transaction that would convert the premium into funds available for use. Therefore, a producer cannot cover insured livestock by taking an offsetting position in the futures market or the options market.

### **What are some of the benefits to think about before buying LRP?**

Producers who sell their livestock on the daily cash market, or receive prices using formulas based on the daily cash market, can use LRP to guarantee a minimum price. In addition, LRP does not tie the producer to any specific packer to receive the price guarantee.

LRP does not have a lower limit on the number of livestock—one steer can be insured. Thus smaller producers can use LRP to obtain some of the risk management benefits of using futures contracts or the options market without using standard contract sizes or meeting volume requirements. Besides this flexibility, LRP does not have margin money deposits or delivery requirements. Thus, LRP is generally a straightforward and flexible way to guarantee a minimum price.

Your actual selling dates and weights can differ from the selected LRP ending date. You are under no obligation to sell the livestock on or by the LRP policy ending date, nor to sell them at the target weight. For example, you can decide after buying an LRP-Feeder Cattle policy to not sell the insured cattle, and then after the policy terminates, to purchase another LRP-Feeder Cattle or LRP-Fed Cattle policy for the same animals.

### **What are some of the concerns to think about before buying LRP?**

The LRP premium depends on futures market prices and so takes into account all expected price changes. Thus, LRP only protects against drastic

price declines not anticipated by the futures market, such as an unexpectedly large supply of livestock going to market and overwhelming processing capacity.

LRP has limits on the number of animals that a producer can insure at any one time and during any given crop year.

If you sell an insured animal earlier than 30 days prior to the selected ending period, you lose your LRP coverage and forfeit the premium.

LRP indemnities are paid based on cash price indexes that more closely follow prices in areas other than Wisconsin and, hence, may differ from local prices. Because Wisconsin cattle or hog prices are not used to determine these price indexes, producers in Wisconsin are potentially exposed to more risk.

LRP does not pay indemnities for slower than expected rates of gain, for example due to disease, weather, or poor feed or forage quality. Similarly, LRP does not pay indemnities for the value of any livestock lost during the insurance period, for example due to disease, accidents, or theft. However, you can still continue your LRP coverage and receive the price guarantee for the lost animal. If you report the animal's death to your insurance company within 72 hours after you know of the death, you maintain coverage for that animal and can then receive an indemnity for the animal if your LRP policy pays an indemnity.

### **Where can I find more detailed information concerning LRP?**

If you have more specific questions, contact your agent. In addition, the RMA has published several documents for each LRP policy and are available on the following websites.

#### **LRP website**

<http://www.rma.usda.gov/policies/2005LRP.html>

#### **LRP Fact Sheets, Specific Coverage Endorsements (SCE's), and Basic Provisions**

<http://www.rma.usda.gov/FTP/Policies/2005/lrp/pdf>