Price insurance for cattle producers

by John Lawrence, Director of the Iowa Beef Center and extension economist, 515-294-6290, jdlaw@iastate.edu

The Federal Crop Insurance Corporation's (FCIC) approved expansion of the Livestock Risk Protection (LRP) insurance policy for Fed Cattle and Feeder Cattle beginning June 2003. The LRP-Fed Cattle program is available in all counties in Illinois, Iowa and Nebraska. The LRP Feeder Cattle program is available in all counties in Colorado, Iowa, Kansas, Nebraska, Nevada, Oklahoma, South Dakota, Texas, Utah and Wyoming. Producers interested in LRP should contact a crop insurance agent and complete an application, which will be submitted through the approved insurance provider to FCIC.

What cattle are eligible?

Fed cattle are those that will be marketed for slaughter at the end of the insurance period and include cattle expected to grade select or better with a yield grade of 1-3. The insurance periods available range in approximately 30-day increments from 13 to 52 weeks. The maximum number of fed cattle that may be insured by any one entity in any one crop-year is 4,000 head.

Feeder cattle are those that will weigh 650-900 pounds and will be ready to be put into a feedlot for fattening at the end of the insurance period. Feeder cattle that are predominantly dairy or Brahma breeds are

Handbook Updates

For those of you subscribing to the *Ag Decision Maker Handbook*, the following updates are included.

2002 Costs and Returns – C1-11
(2 pages)

2002 Costs and Returns by Economic Area – C1-12 (2 pages)

2002 Costs and Returns by Specialized Farms — C1-13 (2 pages)

2002 Crop and Livestock Costs – C1-14
 (2 pages)

1993 – 2002 Trends in Efficiency Factors – C1-15 (2 pages)

1993 – 2002 Trends in Income and Returns – C1-16 (2 pages)

Please add these files to your handbook and remove the out-of-date material.

Inside . . .

IOWA STATE UNIVERSITY
University Extension

Price insurance for cattle producers, continued from page 1

not eligible for insurance. The insurance periods available range in approximately 30-day increments from 21 to 52 weeks. The maximum number of feeder cattle that may be insured by any one entity in any one crop-year is 2,000 head.

Producers must be able to verify ownership (at least the part insured) of the livestock insured to USDA employees upon request. Producers cannot take an offsetting position in the commodity futures market and there may be other limitations.

How to apply

To obtain coverage under LRP, producers must submit an application. Once an application is approved, the company will assign a policy number and the producer may activate coverage at any time by applying for a Specific Coverage Endorsement (SCE). More than one SCE may be purchased each year and different insurance periods and coverage prices may be elected. The RMA Web site that reports LRP premiums is: http://www3.rma.usda.gov/apps/livestock_reports/lrp_select_date.cfm

Contract details

Feeder Cattle Policy:

→ Settlement price is the CME Cash-Settlement Commodity Index price

→ Weight at end of the policy period in the 650-900 pound range.

→ Steers except for cattle identified as predominately dairy or Brahma breed.

→ Maximum head, 1,000 per endorsement and 2,000 head per year.

Fed Cattle Policy:

→ Settlement price is the USDA 5-Area Weekly Weighted Average Direct Slaughter Cattle price, Live Basis 35-65 percent Choice category.

→ Weight at end of the policy period in the 1,000-1,400 pound range.

→ Expected to grade Select or better and Yield grade 1-3.

→ Maximum head, 2,000 per endorsement and 4000 head per year.

The premium is determined by an equation incorporating the number of head, target weight, coverage price and level, premium rate, and the subsidy level. The example is for fed cattle, but the process is similar for feeder cattle (see box below).

The indemnity is based on target weight and head and the difference between the coverage price and the actual price at the end of the policy. If in the example above the USDA 5-Area Weekly Weighted Average Direct Slaughter Cattle price, Live Basis 35–65 percent Choice category price is $60, the difference is $5/cwt (coverage price – actual price). The indemnity is $5 × 550 cwt = $2,750 multiplied by the level of coverage which in this case is 100 percent. If 5 Area price was higher than the coverage price the indemnity would be $0.

Observations

It is expected that the cattle LRP will function the same as the swine LRP. One key difference between LRP and options on futures contracts is that the length of the coverage period and therefore the selling date is specified at the beginning of the coverage. For example, a producer may purchase coverage for 24 weeks to cover a feeding period. The policy will be settled 24 weeks from the date it was implemented regardless of whether the cattle are ready for market or not. The options have more flexibility

Premium per policy =	Example
Number of head x target weight	50×11 cwt = 550 cwt
x coverage price (selected by producer)	$550 \times \$65 = \$35,750$
x insured value (coverage, i.e., 100%)	$\$35,750 \times 100\% = \$35,750$
$\times$ premium rate (company website)	$\$35,750 \times .013990 = \$500$ premium
$\times$ 1 – subsidy level (13%)	$(1-.13) \times \$500 = \$435$ producer premium

Price insurance for cattle producers, continued from page 2

on when they are resold or exercised up to their expiration date.

Because both policies settle against the target number and weight, there is no production risk protection. The Feeder Cattle LRP settles against the Chicago Mercantile Exchange (CME) index price and will still have basis risk. ***The Fed Cattle LRP settles against the 5 area price and will provide some degree of basis price protection.*** If a producer sells at the end of the policy, the basis risk would be the amount of difference between his/her actual price compared to the 5 area price. Secondly, basis risk may result due to weather risk if the cattle are delayed or marketed earlier than the

policy end date that was picked at the beginning. Finally, many Iowa producers would have cattle that grade better than 35-65 percent Choice and may have a positive basis compared to the target price.

How does LRP compare to Options?

Both put options and LRP provide price protection at prices below the current futures market price, but allow the producer to take advantage of higher prices if they occur.

Tables 1 and 2 show the options and LRP premiums and expected floor price for a range of protection levels based on September 15 quotes. For February marketings (Table 1) the LRP coverage level is very close to the expected floor price with options and at lower premiums. The LRP premiums are subsidized 13 percent which may explain part of the difference. In the April marketings (Table 2) the LRP had lower coverage than options. Premiums were lower, but so is the coverage. For about the same premium ($1.70 v. $1.93) options will buy a $2.65/cwt higher floor ($72.20 floor with a $72 put compared to a $69.55 floor with the LRP). Obviously, this example is for one day and the relationships may change based over time, with time to maturity, and how closely they match a particular marketing date.

Table 1. February Marketings Costs and Expected Floor Price for Options and Livestock Revenue Protection ($/cwt)

Strike Price	Option Premium	Expected Floor	LRP Premium	Coverage Level
80	3.50	74.40	2.39	74.21
78	3.03	72.87	1.73	72.77
76	2.20	71.70	1.32	71.13

Table 2. April Marketings Costs and Expected Floor Price for Options and Livestock Revenue Protection ($/cwt)

Strike Price	Option Premium	Expected Floor	LRP Premium	Coverage Level
76	3.15	74.75	1.93	69.55
74	2.25	73.65	1.43	67.98
72	1.70	72.20	1.07	66.30