

“Livestock Insurance Alternatives For Risk Management”


February 15 to March 6, 2007
Dr. Darrell R. Mark

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Livestock Insurance Alternatives For Risk Management

February 15-March 6, 2007

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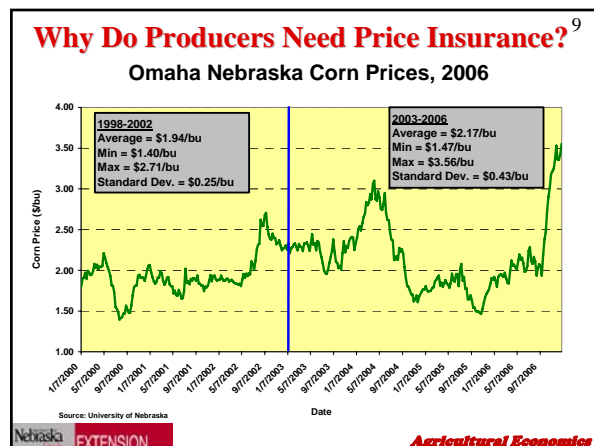
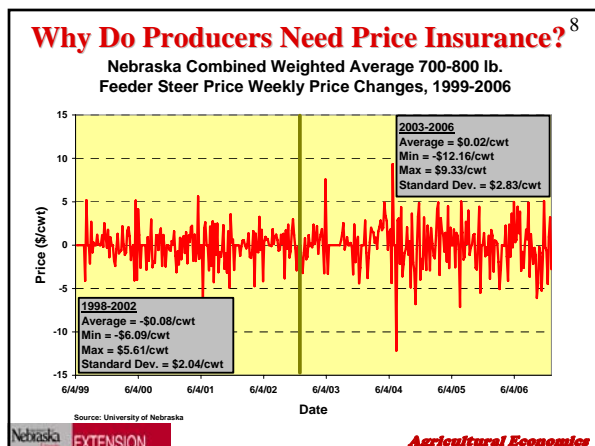
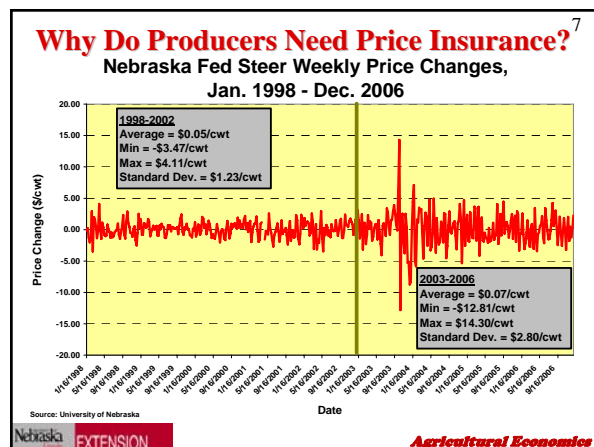
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Today's Topics

1. Brief review of futures & options
2. Livestock Risk Protection Insurance (LRP)
 - LRP is single-peril price insurance
3. Livestock Gross Margin Insurance for Cattle (LGM)
 - LGM is cattle feeding profit margin insurance (doesn't insure production losses)
4. Comparing LRP & LGM in today's market



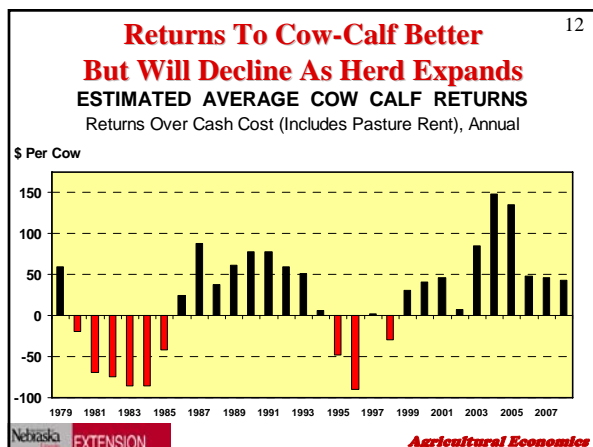
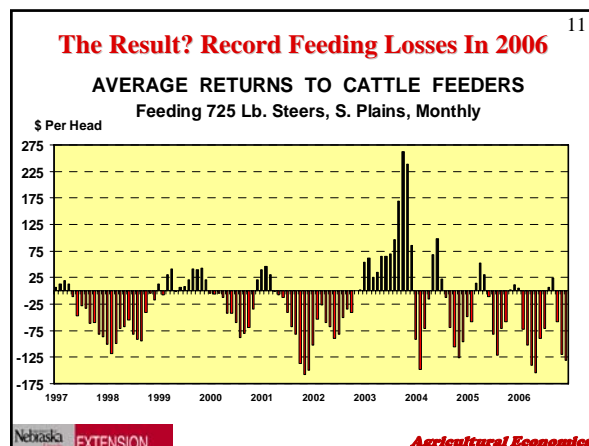
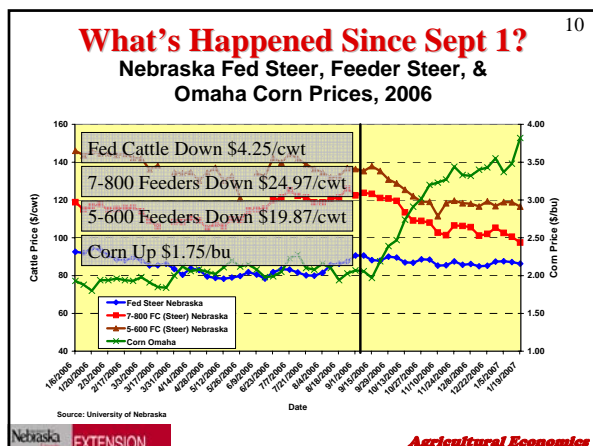
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Hedging

- Use of the derivatives market or other contract (insurance) as a temporary substitute for an intended transaction in the cash market which will occur at a later date
- Why would this be necessary?
 - ✓ Cash prices change over time

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Evaluating a Futures Hedge

- Hedging “locks in” futures price, but not basis
- Before hedging want to know expected cash price
- Exp. Cash Price = Exp. Basis + Futures Price
 - ➔ Must determine *expected* basis

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Short vs. Long Hedging

➤ **Short**

- ✓ Using futures market as a temporary substitute for a cash market **SALE** that will take place at a later date
- ✓ Start by **selling** a futures contract and, after cash market **SALE**, offset futures by buying it back

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Short vs. Long Hedging

➤ **Long**

- ✓ Using futures market as a temporary substitute for a cash market **PURCHASE** that will take place at a later date
- ✓ Start by **buying** a futures contract and, after cash market **PURCHASE**, offset futures by selling it back

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Fed Cattle Futures Hedge

➤ On February 7, 2007, producer hedges 100 head of steers he plans to sell in August 2007 at 1200 lbs

➤ August CME Live Cattle futures on Feb 7, 2007 is \$88.18/cwt

- ✓ Expect basis in August to be -\$0.52/cwt
- ✓ Commission = \$100/contract

➤ $ESP = \text{Futures Price} + \text{Basis} - \text{Commission}$

➤ $ESP = \$88.18/\text{cwt} - \$0.52/\text{cwt} - \$0.25/\text{cwt}$

➤ $ESP = \$87.41/\text{cwt}$

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Futures Hedge

$ESP = \text{Fut} + \text{Basis} - \text{Comm} = \$88.18 + -\$0.52 - \$0.25 = \$87.41$			
Date	Cash	Futures Market	Fut. Basis
2-07-2007	No action	Sell 3 Aug 07 LC futures @ \$88.18	Exp. 8-08 basis to be -\$0.52/cwt
8-08-2007	Sell 100 head of 1200 lb. steers @ \$79.48/cwt	Buy 3 Aug 07 LC futures @ \$80.00	Actual 8-08 basis is -\$0.52/cwt
	Cash price received = \$79.48/cwt	Net on Futures = \$8.18/cwt	Diff. b/w Act. & Exp. = \$0.00/cwt
$ASP = \$79.48 + \$8.18 - \$0.25/\text{cwt} = \87.41			

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Futures Hedge

$ESP = \text{Fut} + \text{Basis} - \text{Comm} = \$88.18 + -\$0.52 - \$0.25 = \$87.41$			
Date	Cash	Futures Market	Fut. Basis
2-07-2007	No action	Sell 3 Aug 07 LC futures @ \$88.18	Exp. 8-08 basis to be -\$0.52/cwt
8-08-2007	Sell 100 head of 1200 lb. steers @ \$89.48/cwt	Buy 3 Aug 07 LC futures @ \$90.00	Actual 8-08 basis is -\$0.52/cwt
	Cash price received = \$89.48/cwt	Net on Futures = -\$1.82/cwt	Diff. b/w Act. & Exp. = \$0.00/cwt
$ASP = \$89.48 + -\$1.82 - \$0.25/\text{cwt} = \87.41			

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Long Futures Hedge

➤ On February 7, 2007, cattle feeder plans to purchase 10,000 bu corn in May

- ✓ Wants to protect against price increases

➤ Hedge by buying May CBOT corn futures at \$4.12/bu

- ✓ Expect basis in May to be -\$0.20/bu
- ✓ Commission = \$100/contract

➤ $EPP = \text{Futures} + \text{Basis} + \text{Commission}$

➤ $EPP = \$4.12/\text{bu} + -\$0.20/\text{bu} + \$0.02/\text{bu}$

➤ $EPP = \$3.94/\text{bu}$

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EPP = Futures + Basis – Comm= \$4.12 + -\$0.20 + \$0.02 = \$3.94			
Date	Cash	Futures	Fut. Basis
2-07-2007	No action	Buy 2 May 2007 CBOT Corn futures @ \$4.12/bu	Exp. 5-08 basis to be -\$0.20/bu
5-08-2007	Buy 10,000 bu corn @ \$4.20/bu	Sell 2 May 2007 CBOT Corn futures @ \$4.40/bu	Actual 5-08 basis is -\$0.20/bu
	Cash price paid = \$4.20/bu	Net = \$0.28	Diff. b/w Act. & Exp. = \$0.00/bu
APP = \$4.20 - \$0.28 + \$0.02 = \$3.94			

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EPP = Futures + Basis – Comm= \$4.12 + -\$0.20 + \$0.02 = \$3.94			
Date	Cash	Futures	Fut. Basis
2-07-2007	No action	Buy 2 May 2007 CBOT Corn futures @ \$4.12/bu	Exp. 5-08 basis to be -\$0.20/bu
5-08-2007	Buy 10,000 bu corn @ \$3.60/bu	Sell 2 May 2007 CBOT Corn futures @ \$3.80/bu	Actual 5-08 basis is -\$0.20/bu
	Cash price paid = \$3.60/bu	Net = -\$0.32	Diff. b/w Act. & Exp. = \$0.00/bu
APP = \$3.60 - -\$0.32 + \$0.02 = \$3.94			

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Put Option

➤ The BUYER has the RIGHT, but not the obligation, to **SELL** the underlying futures contract at a specified strike price at any time during the life of the option

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Call Option

➤ The BUYER has the RIGHT, but not the obligation, to **BUY** the underlying futures contract at a specified strike price at any time during the life of the option

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Option Premium

➤ Option Premium is the price the buyer pays the seller for an option

➤ Premium is negotiated

- ✓ It is the price that is negotiated for the option in the open outcry market

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Option Premium

Components of a premium:

1. Intrinsic value (IV) is the value of an option if it were to expire immediately
2. Time value (TV) is the amount by which the premium exceeds the option's intrinsic value

Total Option Premium (TOP) = IV + TV

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Intrinsic Value (IV) Calculation Put Example

Prices on February 7, 2007

- \$100/cwt March CME FC put premium = \$2.63/cwt
- March CME FC futures = \$98.88/cwt
- $IV = \$100/\text{cwt} - \$98.88/\text{cwt} = \$1.12/\text{cwt}$
- $TV = \$2.63/\text{cwt} - \$1.12/\text{cwt} = \$1.51/\text{cwt}$

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Determinants of Option Premiums

- Changes in underlying futures price level
 - ✓ IV changes

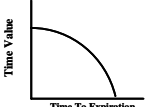
Options are a secondary market in that the options market reacts to changes in the futures market

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Determinants of Option Premiums

- Time remaining until option expiration
 - ✓ Probability option will expire in-the-money increases as time remaining until expiration increases
 - ✓ TV changes
 - ✓ Option premiums decrease as time remaining until expiration decreases (AKA “Time Decay”)



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Determinants of Option Premiums

- Price volatility
 - ✓ Volatility measures how much underlying futures price varies
 - ✓ Increased volatility increases option premiums
 - ✓ Decreased volatility decreases option premiums

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Determinants of Option Premiums

- Interest Rates
 - ✓ Option purchases/sales are viewed as an investment
 - ✓ Increases in interest rates lead to small decline in option premiums
 - ✓ Interest rate impacts are usually small

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Fed Cattle Options Hedge

- On February 7, 2007, producer hedges 100 head of steers he plans to sell in August 2007 at 1200 lbs
- August CME Live Cattle futures on Feb 7, 2007 is \$88.18/cwt
- Buys \$84/cwt Aug CME LC put for \$1.85/cwt
 - ✓ Expect basis in August to be -\$0.52/cwt
 - ✓ Commission = \$100/contract
- $MESP = \text{Strike Price} - \text{Premium} + \text{Basis} - \text{Commission}$
- $MESP = \$84.00/\text{cwt} - \$1.85/\text{cwt} + (-\$0.52/\text{cwt}) - \$0.25/\text{cwt}$
- $MESP = \$81.38/\text{cwt}$

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Options Hedge				
34				
MESP = Strike - Prem + Basis - Comm = \$84 - \$1.85 + -\$0.52 - \$0.25 = \$81.38				
Date	Cash	Futures Market	Put Option	Fut. Basis
2-07-2007	No action	N/A. Aug 07 LC futures @ \$88.18	Buy 3 \$84 Aug LC Puts @ \$1.85	Exp. 8-08 basis to be -\$0.52/cwt
8-08-2007	Sell 100 head of 1200 lb. steers @ \$79.48/cwt	N/A. Aug 07 LC futures @ \$80.00	Sell 3 \$84 Aug LC Puts @ \$4.00	Actual 8-08 basis is -\$0.52/cwt
	Cash price received = \$79.48/cwt		Net on Put = \$2.15	Diff. b/w Act. & Exp. = \$0.00/cwt
ASP = \$79.48 + \$2.15 - \$0.25/cwt = \$81.38				
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Options Hedge				
35				
MESP = Strike - Prem + Basis - Comm = \$84 - \$1.85 + -\$0.52 - \$0.25 = \$81.38				
Date	Cash	Futures Market	Put Option	Fut. Basis
2-07-2007	No action	N/A. Aug 07 LC futures @ \$88.18	Buy 3 \$84 Aug LC Puts @ \$1.85	Exp. 8-08 basis to be -\$0.52/cwt
8-08-2007	Sell 100 head of 1200 lb. steers @ \$89.48/cwt	N/A. Aug 07 LC futures @ \$90.00	Let 3 \$84 Aug LC Puts expire	Actual 8-08 basis is -\$0.52/cwt
	Cash price received = \$89.48/cwt		Net on Put = -\$1.85	Diff. b/w Act. & Exp. = \$0.00/cwt
ASP = \$89.48 + -\$1.85 - \$0.13/cwt = \$87.50				
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Long Options Hedge	
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<ul style="list-style-type: none"> ➤ On February 7, 2007, cattle feeder plans to purchase 10,000 bu corn in May <ul style="list-style-type: none"> ✓ Wants to protect against price increases ➤ May CBOT corn futures at \$4.12/bu ➤ Buys \$4.20/bu May CBOT corn call at \$0.19/bu <ul style="list-style-type: none"> ✓ Expect basis in May to be -\$0.20/bu ✓ Commission = \$100/contract ➤ MEPP = Strike Price + Premium + Basis + Commission ➤ MEPP = \$4.20/bu + \$0.19/bu + -\$0.20/bu + \$0.02/bu ➤ MEPP = \$4.21/bu 	
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Long Options Hedge				
37				
MEPP = Strike + Premium + Basis + Comm = \$4.20 + \$0.19 + -\$0.20 + \$0.02 = \$4.21				
Date	Cash	Futures	Call Option	Fut. Basis
2-07-2007	No action	N/A. May 2007 CBOT Corn futures @ \$4.12/bu	Buy 2 \$4.20/bu May CBOT Corn Calls @ \$0.19/bu	Exp. 5-08 basis to be -\$0.20/bu
5-08-2007	Buy 10,000 bu corn @ \$4.20/bu	N/A. May 2007 CBOT Corn futures @ \$4.40/bu	Sell 2 \$4.20/bu May CBOT Corn Calls @ \$0.20/bu	Actual 5-08 basis is -\$0.20/bu
	Cash price paid = \$4.20/bu		Net = \$0.01/bu	Diff. b/w Act. & Exp. = \$0.00/bu
APP = \$4.20 - \$0.01 + \$0.02 = \$4.21				
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Long Options Hedge				
38				
MEPP = Strike + Premium + Basis + Comm = \$4.20 + \$0.19 + -\$0.20 + \$0.02 = \$4.21				
Date	Cash	Futures	Call Option	Fut. Basis
2-07-2007	No action	N/A. May 2007 CBOT Corn futures @ \$4.12/bu	Buy 2 \$4.20/bu May CBOT Corn Calls @ \$0.19/bu	Exp. 5-08 basis to be -\$0.20/bu
5-08-2007	Buy 10,000 bu corn @ \$3.60/bu	N/A. May 2007 CBOT Corn futures @ \$3.80/bu	Let 2 \$4.20/bu May CBOT Corn Calls expire	Actual 5-08 basis is -\$0.20/bu
	Cash price paid = \$3.60/bu		Net = -\$0.19/bu	Diff. b/w Act. & Exp. = \$0.00/bu
APP = \$3.60 - \$0.19 + \$0.01 = \$3.80				
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LRP & LGM

- Related to futures & options market
 - ✓ But protection is based on cash market prices (or equivalents)
- Involve no trading of futures or options
 - ✓ Do not need broker or margin account
- May protect smaller groups of livestock
- Available through crop insurance agent system



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LRP is Price Risk Protection

- Creates A Price Floor
- Pays Producers If A Regional/National Cash Price Index Falls Below A Set Price
 - ✓ Does Not Guarantee A Cash Price Received
- Covers Feeder Cattle, Fed Cattle, & Swine



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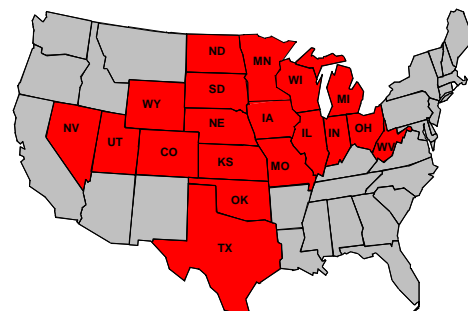
Encourage Producers To Enroll

- 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

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LRP States

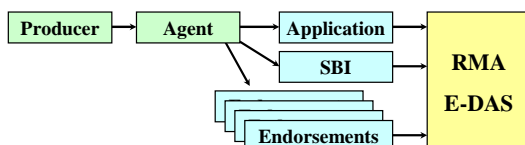


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LRP Policy, Provisions, & Forms

- Basic Policy
- Application Forms
- Substantial Beneficial Interest (SBI)
 - ✓ Must Have At Least 10% SBI In The Insured Livestock
- Specific Coverage Endorsement (SCE)
- Claim Form



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Substantial Beneficial Interest (SBI)

- Must Have At Least 10% Interest
- A Spouse Of An Applicant/Insured Will Have Substantial Beneficial Interest In The Applicant/Insured Unless Spouse Proves:
 - ✓ The Insured Class Is In A Totally Separate Farming Operation
 - ✓ Spouse Derives No Benefit From The Farming Operation Of The Applicant/Insured

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Coverage

- **Coverage Available About 5pm To 9am CST**
 - ✓ Available Sat Mornings Until 9am, But Not Sun, Mon, & Holidays
- **Coverage Initiated With Specific Coverage Endorsement (SCE)**
 - ✓ No Limit On Number Of SCEs
- **Producers Have Flexibility On The:**
 - ✓ Timing Of Purchase
 - ✓ Time Length Of The SCE
 - ✓ Number Of Head Covered

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Actual Ending Value (AEV) Fed Cattle

- 5-Area Weekly Weighted Average Direct Slaughter Steer Price
 - ✓ TX/OK, KS, NE, CO, IA/MN
 - ✓ 35-65% Choice Steers, Live Weight Basis
 - ✓ FOB Feedyard
- AMS-USDA Report LM_CT150.txt
 - ✓ http://www.ams.usda.gov/mnreports/lm_ct150.txt
- Represents National Average Cash Price
- If Insuring Heifers, LRP Insurance Contract Still Indemnified On 5-Area Steer Price

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LM_CT150
St. Joseph, MO Mon Feb 5, 2007 USDA Market News Service

5 AREA WEEKLY WEIGHTED AVERAGE DIRECT SLAUGHTER CATTLE
Texas/Oklahoma/New Mexico/S Kansas/ Nebraska/ Colorado/ Iowa/Minnesota/South Dakota
For Week Ending Sunday, 2/4/2007

This report is based on information provided by companies that agreed to continue to participate in Livestock Mandatory Reporting on a voluntary basis.

Confirmed: 176,627 Week Ago: 163,365 Year Ago: 152,180

LIVE FOB BASIS - Beef Breeds

	Head count	Weight Range	Price Range	Avg Weight	Wtd Avg Price
STEERS					
Over 80% Choice	2,132	1,275-1,455	85.00-87.25	1,430	86.23
65 - 80% Choice	5,976	1,200-1,300	85.00-89.50	1,308	86.60
35 - 65% Choice	39,009	1,075-1,475	84.50-89.50	1,276	85.32
0 - 35% Choice	2,786	1,170-1,330	84.00-89.00	1,262	86.00
Total all grades	49,903	1,075-1,300	84.00-89.50	1,293	86.00
HEIFERS					
Over 80% Choice	1,955	1,175-1,465	85.00-89.00	1,300	86.10
65 - 80% Choice	10,124	1,000-1,355	85.00-89.50	1,293	86.27
35 - 65% Choice	33,841	1,000-1,350	85.00-89.50	1,163	89.16
0 - 35% Choice	422	1,100-1,170	88.00-89.00	1,131	89.83
Total all grades	46,344	1,000-1,465	85.00-89.50	1,198	87.67

DRESSED DELIVERED BASIS - Beef Breeds

	Head count	Weight Range	Price Range	Avg Weight	Wtd Avg Price
STEERS					
Over 80% Choice	1,199	819-945	137.00-139.00	877	138.14
65 - 80% Choice	11,656	749-935	136.00-139.00	865	137.64
35 - 65% Choice	17,456	709-935	135.00-142.00	860	138.16

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Actual Ending Value (AEV) Feeder Cattle

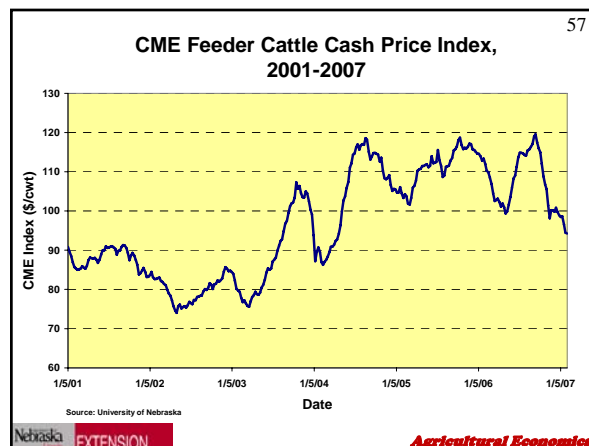
- CME Feeder Cattle Cash Index Price
 - ✓ National Average Cash Market Price
 - ✓ 650-850 lb. Steers
 - ✓ Reported Index Is 7-Day Average
- http://www.cme.com/trading/dta/hist/cash_settled_commodity_prices.html
- If Insuring Heifers Or Different Weight Range, LRP Insurance Contract Still Indemnified On CME Index (650-850 lb. Steer Price)
 - ✓ But An Adjustment Factor Is Used

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CME Feeder Cattle Index

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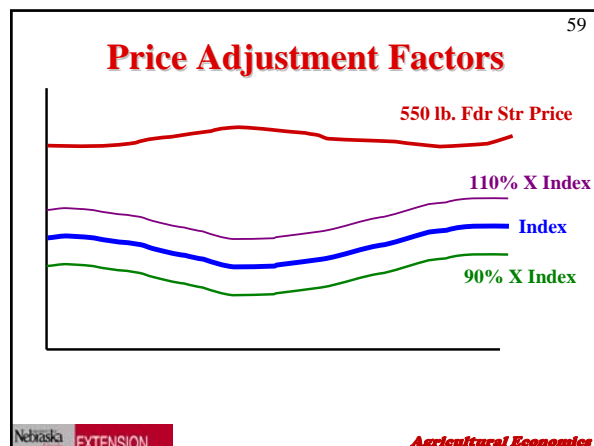
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Price Adjustment Factors

Weight	Steers Weight 1	Heifers Weight 1	Brahman Weight 1	Dairy Weight 1
< 600 lbs	110%	100%	100%	100%

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

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Actual Ending Value (AEV)

Swine

- 2-Day Volume Weighted Average Of “Negotiated” & “Swine Or Pork Market Formula” Average Net Price
- AMS-USDA Report LM_HG201
 - ✓ http://www.ams.usda.gov/mnreports/lm_hg201.txt
- Represents National Average Cash Price
- Same As CME Lean Hog Index
 - http://www.cme.com/trading/dta/hist/cash_settled_commodity_prices.html

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LM_HG201
Des Moines, Iowa Thu, Feb 08, 2007 USDA Market News

This report is based on information provided by companies that agreed to continue to participate in Livestock Mandatory Reporting on a voluntary basis.

NATIONAL DAILY DIRECT HOG PRICE DAY REPORT - SLAUGHTERED SWINE
Slaughter Data for Wednesday, February 7, 2007

Barrows and Gilts (Live and Carcass Basis): 372,226

	NEGOTIATED	OTHER MARKET OR FORMULA	SWINE MARKET FORMULA	OTHER	TOTALS/ WTD AVG
Head Count	26,495	27,323	141,284	49,347	244,449
CARCASS BARE PRICE	49.75	57.34	49.79	49.40	49.09
AVERAGE NET PRICE	49.28	49.09	49.24	49.15	49.05
LOWEST NET LOT	48.09	48.09	48.09	48.09	48.09
HIGHEST NET LOT	50.51	50.51	50.51	50.51	50.51
AVERAGE LIVE WT	259.52	274.44	245.42	259.05	259.76
AVERAGE CARCASS WT	239.08	259.23	221.42	235.23	233.79
AVERAGE DRESS PERCENT	92.42	92.87	92.42	92.39	92.39
AVERAGE LOIN DEPTH (LD)	2.34	2.41	2.32	2.33	2.34
LOINME AREA (LD COMPOSITE)	7.05	7.48	7.08	7.01	7.41
AVERAGE LEAN PERCENT	53.77	54.92	53.00	54.44	54.72

(Packer Buying Programs)

Barrows and Gilts (Live and Carcass Basis): 372,226

	NEGOTIATED	OTHER MARKET OR FORMULA	SWINE MARKET FORMULA	OTHER	TOTALS/ WTD AVG
Head Count	26,495	27,323	141,284	49,347	244,449
CARCASS BARE PRICE	49.75	57.34	49.79	49.40	49.09
AVERAGE NET PRICE	49.28	49.09	49.24	49.15	49.05
LOWEST NET LOT	48.09	48.09	48.09	48.09	48.09
HIGHEST NET LOT	50.51	50.51	50.51	50.51	50.51
AVERAGE LIVE WT	259.52	274.44	245.42	259.05	259.76
AVERAGE CARCASS WT	239.08	259.23	221.42	235.23	233.79
AVERAGE DRESS PERCENT	92.42	92.87	92.42	92.39	92.39
AVERAGE LOIN DEPTH (LD)	2.34	2.41	2.32	2.33	2.34
LOINME AREA (LD COMPOSITE)	7.05	7.48	7.08	7.01	7.41
AVERAGE LEAN PERCENT	53.77	54.92	53.00	54.44	54.72

(Packer Buying Programs)

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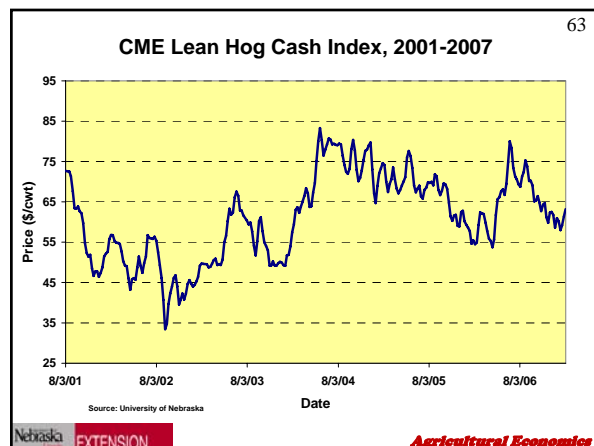
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CME LEAN HOG INDEX

Tue, 02/06/07

Date	Day	Cours	Negot. Avg	Negot. Avg	Negot. Avg	SPHF Avg	SPHF Avg	SPHF Avg	Daily Weighted	CME Lean Hog Index	Net Change
02/06/07	Tue	28,495	65.43	197.67	134,261	65.84	202.70	65.80	65.80	65.67	0.75
02/05/07	Mon	33,431	65.52	200.59	113,519	65.44	201.22	65.53	65.53	65.67	0.75

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“Livestock Insurance Alternatives For Risk Management”

February 15 to March 6, 2007
Dr. Darrell R. Mark

The Fed Cattle Hedge With LRP

➤ On February 7, 2007, Producer Selects Fed Cattle LRP Policy With:

- ✓ Expected Ending Value = \$89.07/cwt
- ✓ Coverage Price = \$84.14/cwt
- ✓ Cost = \$2.06/cwt (After 13% Subsidy)
- ✓ End Date = August 8, 2007

➤ MESP = Coverage Price – Premium + LRP Basis

➤ MESP = \$84.14/cwt – \$2.06/cwt + \$0.53/cwt

➤ MESP = \$82.61/cwt

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Premium Calculation

1. 100 Head X 12.0 cwt = 1200 cwt

Insured Weight
(Production)

2. 1200 cwt X \$84.14/cwt = \$100,968

Coverage
Price

Insured
Value

3. \$100,968 X 0.028132 = \$2,840.43

Rate

1 Minus 13%
Subsidy

Total
Premium

4. \$2,840.43 X 87% = \$2,471.18

Producer's
Premium

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Indemnity Payment

➤ If AEV Is Less Than Insured Coverage Price

✓ Indemnity (\$/cwt) = Coverage Price – AEV

✓ Example: If AEV = \$80.00/cwt:

1. \$84.14/cwt - \$80.00/cwt = \$4.14/cwt

Coverage
Price

AEV

Indemnity
(\$/cwt)

2. \$4.14/cwt X 1200 cwt = \$4,968.00

Insured
Production

Total
Indemnity

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Indemnity Payment

➤ If AEV Is Greater Than Insured Coverage Price

✓ Indemnity = \$0

✓ Example: AEV = \$90/cwt

No Indemnity Paid

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MESP = CP + LRP Basis – Premium = \$84.14 + \$0.53 - \$2.06 = \$82.61

Date	Cash	LRP Insurance	LRP Basis
2-07-2007	No action	Buy LRP With \$84.14/cwt Coverage Price For \$2.06/cwt EEV = \$89.07/cwt	Exp. 8-08 basis to be \$0.53/cwt
8-08-2007	Sell 100 head of 1200 lb. steers @ \$80.53/cwt	LRP Indemnity (AEV < CP) = \$4.14/cwt AEV = \$80.00/cwt	Actual 8-08 basis is \$0.53/cwt
	Cash price received = \$80.53/cwt	Net on LRP = \$2.08/cwt	Diff. b/w Act. & Exp. = \$0.00/cwt
ASP = \$80.53 + \$2.08 = \$82.61			

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MESP = CP + LRP Basis – Premium = \$84.14 + \$0.53 - \$2.06 = \$82.61

Date	Cash	LRP Insurance	LRP Basis
2-07-2007	No action	Buy LRP With \$84.14/cwt Coverage Price For \$2.06/cwt EEV = \$89.07/cwt	Exp. 8-08 basis to be \$0.53/cwt
8-08-2007	Sell 100 head of 1200 lb. steers @ \$90.53/cwt	LRP Indemnity (AEV > CP) = \$0.00/cwt AEV = \$90.00/cwt	Actual 8-08 basis is \$0.53/cwt
	Cash price received = \$90.53/cwt	Net on LRP = -\$2.06/cwt	Diff. b/w Act. & Exp. = \$0.00/cwt
ASP = \$90.53 + -\$2.06 = \$88.47			

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**What Were The Alternatives To
This LRP Hedge?**

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➤ **Futures Hedging**

- ✓ 02/07/07 – Aug 07 LC Futures = \$88.88/cwt
- ✓ Adjust For Basis (-\$0.52/cwt)
- ✓ Higher Protected Price
- ✓ Maximum Price Also Established

➤ **Options Hedging—Buying Puts**

- ✓ Adjust For Basis
- ✓ Establishes Minimum Price, No Maximum Price

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Futures Hedge

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$$\text{ESP} = \text{Fut} + \text{Basis} - \text{Comm} = \$88.18 + -\$0.52 - \$0.25 = \$87.41$$

Date	Cash	Futures Market	Fut. Basis
2-07-2007	No action	Sell 3 Aug 07 LC futures @ \$88.18	Exp. 8-08 basis to be -\$0.52/cwt
8-08-2007	Sell 100 head of 1200 lb. steers @ \$79.48/cwt	Buy 3 Aug 07 LC futures @ \$80.00	Actual 8-08 basis is -\$0.52/cwt
	Cash price received = \$79.48/cwt	Net on Futures = \$8.18/cwt	Diff. b/w Act. & Exp. = \$0.00/cwt

$$\text{ASP} = \$79.48 + \$8.18 - \$0.25/\text{cwt} = \$87.41$$

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Futures Hedge

72

$$\text{ESP} = \text{Fut} + \text{Basis} - \text{Comm} = \$88.18 + -\$0.52 - \$0.25 = \$87.41$$

Date	Cash	Futures Market	Fut. Basis
2-07-2007	No action	Sell 3 Aug 07 LC futures @ \$88.18	Exp. 8-08 basis to be -\$0.52/cwt
8-08-2007	Sell 100 head of 1200 lb. steers @ \$89.48/cwt	Buy 3 Aug 07 LC futures @ \$90.00	Actual 8-08 basis is -\$0.52/cwt
	Cash price received = \$89.48/cwt	Net on Futures = -\$1.82/cwt	Diff. b/w Act. & Exp. = \$0.00/cwt

$$\text{ASP} = \$89.48 + -\$1.82 - \$0.25/\text{cwt} = \$87.41$$

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Agricultural Economics

Options Hedge

73

$$\text{MESP} = \text{Strike} - \text{Prem} + \text{Basis} - \text{Comm} = \$84 - \$1.85 + -\$0.52 - \$0.25 = \$81.38$$

Date	Cash	Futures Market	Put Option	Fut. Basis
2-07-2007	No action	N/A. Aug 07 LC futures @ \$88.18	Buy 3 \$84 Aug LC Puts @ \$1.85	Exp. 8-08 basis to be -\$0.52/cwt
8-08-2007	Sell 100 head of 1200 lb. steers @ \$79.48/cwt	N/A. Aug 07 LC futures @ \$80.00	Sell 3 \$84 Aug LC Puts @ \$4.00	Actual 8-08 basis is -\$0.52/cwt
	Cash price received = \$79.48/cwt		Net on Put = \$2.15	Diff. b/w Act. & Exp. = \$0.00/cwt

$$\text{ASP} = \$79.48 + \$2.15 - \$0.25/\text{cwt} = \$81.38$$

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Options Hedge

74

$$\text{MESP} = \text{Strike} - \text{Prem} + \text{Basis} - \text{Comm} = \$84 - \$1.85 + -\$0.52 - \$0.25 = \$81.38$$

Date	Cash	Futures Market	Put Option	Fut. Basis
2-07-2007	No action	N/A. Aug 07 LC futures @ \$88.18	Buy 3 \$84 Aug LC Puts @ \$1.85	Exp. 8-08 basis to be -\$0.52/cwt
8-08-2007	Sell 100 head of 1200 lb. steers @ \$89.48/cwt	N/A. Aug 07 LC futures @ \$90.00	Let 3 \$84 Aug LC Puts expire	Actual 8-08 basis is -\$0.52/cwt
	Cash price received = \$89.48/cwt		Net on Put = -\$1.85	Diff. b/w Act. & Exp. = \$0.00/cwt

$$\text{ASP} = \$89.48 + -\$1.85 - \$0.13/\text{cwt} = \$87.50$$

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Put Options vs. LRP

75

1. Both protect floor selling prices
2. Strike prices are not directly comparable
3. Expiration dates are not exactly the same
4. Puts are American options & LRP is European type option
5. K-State research indicates that, after correcting for these differences, the premiums are about the same

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Coverage Limitations

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- Policy Provides Coverage To Protect Against Price Declines During Insurance Period
 - Policy Does Not Cover Any Other Peril, Including Mortality, Condemnations, Physical Damage, Disease, Individual Marketing Decisions, Local Price Aberrations, Or Any Other Cause Of Loss Other Than Stated
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Offsetting Transactions

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- The Use Of Futures Or Options To Negate The Benefits Of The LRP Coverage
 - Producers Must Certify That They Have Not Entered Into Offsetting Transaction
 - Producers Can Still Use Futures & Options
 - Examples Of Offsetting Transaction:
 - ✓ Writing A Put On Covered Livestock
 - ✓ Buying A Futures (Going Long) On Covered Livestock
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Verification of Ownership

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- Upon Company Request Or Request Of Any USDA Employee, Insured Must Provide Documents Verifying Ownership Of Insured's Share Of Livestock Identified In SCE
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Verification of Ownership

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- Documents Proving Ownership
 - ✓ Bills Of Sale From Prior Owners Or Others
 - ✓ Financing Documents Covering Insured Livestock
 - ✓ Written 3rd Party Statements
 - Feed Suppliers Or Veterinarians
 - Must Have Visited The Farm Or Ranch, Visually Identified The Livestock & Can Attest To Insured's Ownership
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Indemnity Payments for Losses

81

- To Receive Indemnity (Loss Payment) You Must Submit Claim Form Within 60 Days Following End Date
 - Indemnity Payment Shall Be Made Within 60 Days Following Company Receipt Of Properly Executed Claim Form
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Availability

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- Sales Will Be Suspended When:
 - ✓ At Least 4 Of The Underlying CME Live Cattle Futures Contracts Trade To The Daily Price Limit For Two Consecutive Days
 - ✓ Events Occur That May Change Market Conditions That Were Used To Rate LRP
- Sales Will Be Resumed When:
 - ✓ There Have Been At Least 2 Consecutive Days Without There Being 4 Or More Of The Underlying CME Live Cattle Futures Contracts Trading To The Daily Price Limit

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Expiration of Coverage

83

Coverage Under SCE Continues Until The End Date If You:

- Dispose Of Any Part Of Your Insured Share During Last 30 Days Of Coverage; And,
- Provide Written Notice Within 72 Hours Of Occurrence, Of:
 - ✓ Livestock Seized, Quarantined Or Destroyed By Order Of Any Government Agency
 - ✓ Livestock Not Deliverable Due To Death Or Disease

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Termination Of Coverage

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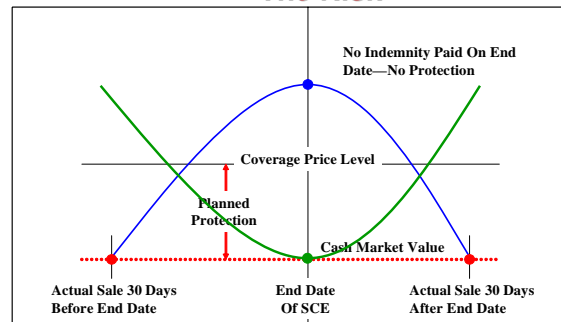
- If Any Portion Of Insured Livestock Is Disposed Of Prior To Last 30 Days Of Coverage, Then
 - ✓ That Portion Of The Coverage Will Terminate
 - ✓ No Indemnity Will Be Paid For That Portion
 - ✓ No Premium For That Portion Will Be Refunded
- An Exception Is Allowed For Transfer Of Coverage

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End Date vs. Actual Sales Date – The Risk

85



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Change In AEV Relative To 30 Days Ago (2001-2006)

86

	Average (\$/cwt)	Largest Decrease (\$/cwt)	Largest Increase (\$/cwt)
Swine AEV (CME Index)	-0.16	19.10	16.14
Fed Cattle AEV (5-Area Price)	0.13	25.56	18.57
Feeder Cattle AEV (CME Index)	0.14	15.26	10.01

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Basis To Consider For LRP

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- Futures Basis = Local Cash Price – Futures Price
- LRP Basis = Local Cash Price – AEV
 - ✓ Difference Between Local Selling Price & Actual Ending Value Of LRP Insurance Contract
- AEV
 - ✓ Feeder Cattle – CME Feeder Cattle Cash Index
 - ✓ Fed Cattle – 5 Area Weighted Avg Weekly Steer Price
 - ✓ Swine – CME Lean Hog Cash Index (2-Day Volume Weighted Avg Of Negotiated & Swine/Pork Market Formula Price)

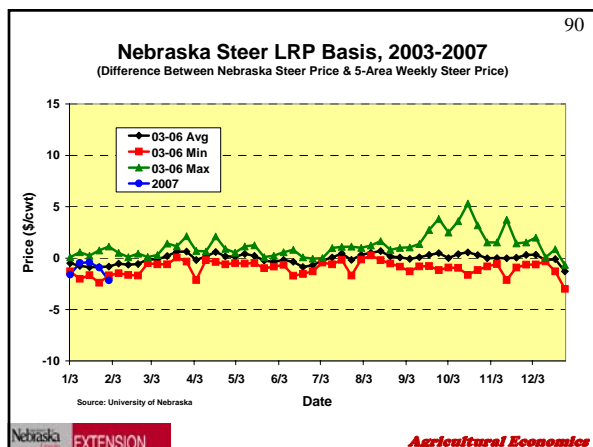
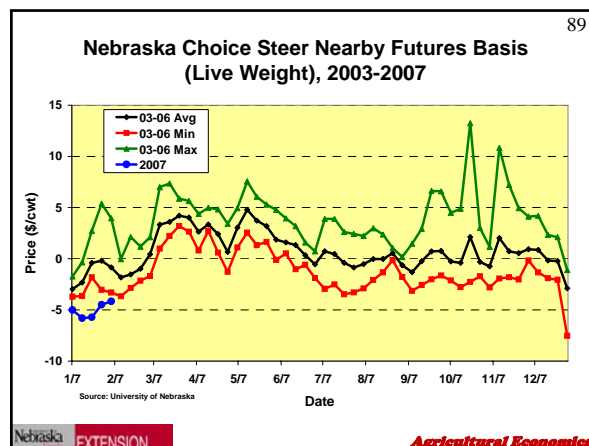
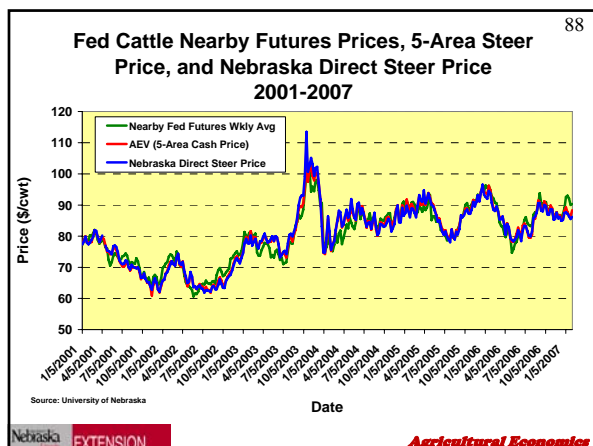
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Average Standard Deviation Of Weekly Futures & LRP Basis (2002-06)

	Futures Basis	LRP Basis
Nebraska Direct Steer Price	2.34	0.90
Nebraska Direct Heifer Price	2.20	0.83

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Nebraska Direct Steer & Heifer LRP & Futures Basis, 2002-2006

	LRP Basis (\$/cwt)	Futures Basis (\$/cwt)	LRP Basis (\$/cwt)	Futures Basis (\$/cwt)
	<i>Steers</i>		<i>Heifers</i>	
Mean	-0.10	0.20	0.04	0.34
Minimum	-2.99	-7.52	-2.34	-4.85
Maximum	5.32	13.24	4.17	12.09
Std. Dev.	1.01	2.97	0.90	2.80

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Basis Risk Conclusion

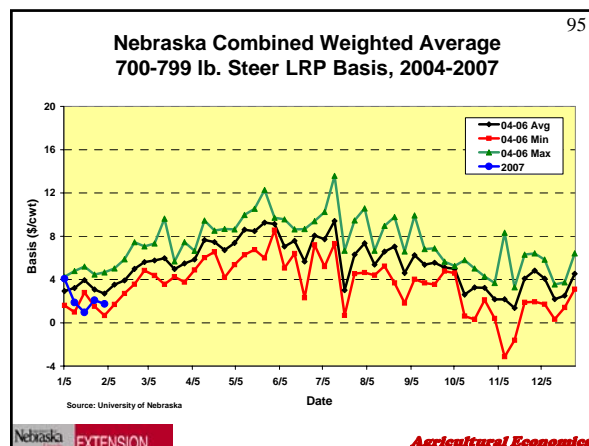
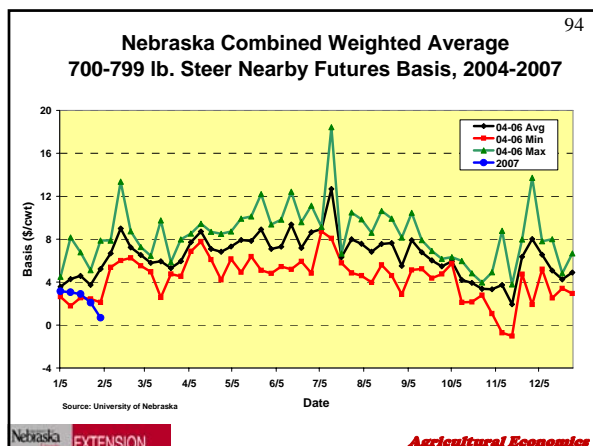
- LRP-Fed Cattle Users Can Reduce Some Exposure To Basis Risk
 - ✓ It Reduces The Basis Risk By Changes Between Futures & The 5-Area Price
 - ✓ But Retains Risk Of Changes Between Your Selling Price & The 5-Area Price (AEV)
 - ✓ Still Exposed To LRP Basis Risk
- Weekly Variation In LRP Basis Less Than Weekly Variation In Futures Basis
- Over Time, Nebraska Steer & Heifer LRP Basis Appears Less Variable

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**Average Standard Deviation Of
Weekly Futures & LRP Basis (2004-06)**

	Futures Basis	LRP Basis
Neb. 500-600 lb. Steer	4.25	3.75
Neb. 600-700 lb. Steer	3.04	2.76
Neb. 700-800 lb. Steer	2.15	2.06
Neb. 800-900 lb. Steer	2.64	2.17

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**Nebraska Feeder Steer LRP &
Futures Basis, 2004-2006**

	Mean (\$/cwt)	Minimum (\$/cwt)	Maximum (\$/cwt)	Std. Dev. (\$/cwt)
500-600 lb.				
LRP Basis	13.74	-0.13	32.13	7.35
Futures Basis	25.70	11.82	47.13	7.23
600-700 lb.				
LRP Basis	13.49	3.06	23.48	4.67
Futures Basis	14.63	5.02	26.60	4.72
700-800 lb.				
LRP Basis	5.30	-3.13	13.58	2.78
Futures Basis	6.43	-1.02	18.43	2.81
800-900 lb.				
LRP Basis	-0.28	-7.78	7.18	2.69
Futures Basis	0.86	-7.69	12.03	3.17

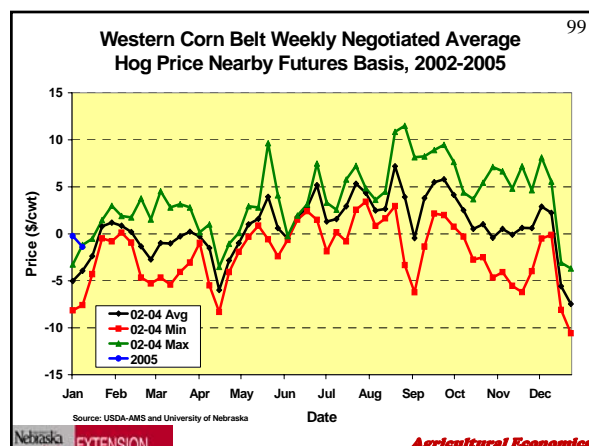
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Basis Risk Conclusion

- LRP-Feeder Cattle Users Still Exposed To Basis Risk
 - ✓ It Reduces The Basis Risk By Changes Between Futures & The CME Index
 - ✓ But Retains Risk Of Changes Between Your Selling Price & The CME Index (AEV)
 - ✓ Still Exposed To LRP Basis Risk
- Weekly Variation In LRP Basis Slightly Less Than Weekly Variation In Futures Basis
- Variation In LRP Basis Over Time About Same As Variation In Futures Basis Over Time
 - ✓ Less Variation In LRP Basis For Heavier Weights

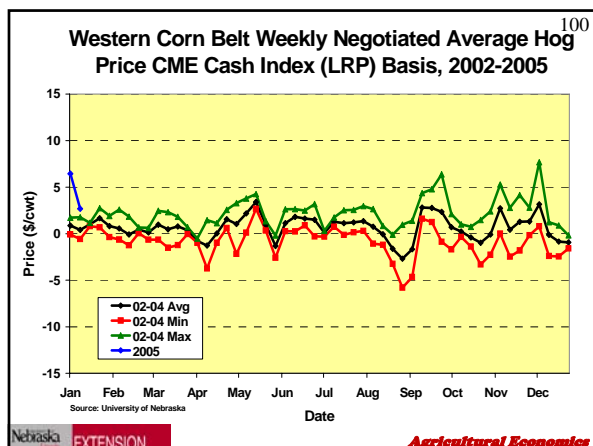
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Average Standard Deviation Of Weekly Futures & LRP Basis (2001-04)

	Futures Basis	LRP Basis
IA/S. Minn Base	2.49	1.18
IA/S. Minn Net	2.52	1.16
WCB Base	2.48	1.04
WCB Net	2.56	1.26
ECB Base	2.28	0.96
ECB Net	2.39	1.16
National Base	2.59	0.82
National Net	2.68	1.09

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Swine LRP & Futures Basis, 2001-2004

	Mean (\$/cwt)	Minimum (\$/cwt)	Maximum (\$/cwt)	Std. Dev. (\$/cwt)
WCB Base				
LRP Basis	-2.73	-7.89	1.62	1.43
Futures Basis	-2.83	-12.93	8.42	3.64
IA/S. Minn Base				
LRP Basis	-2.91	-12.37	1.31	1.75
Futures Basis	-3.01	-15.87	8.29	3.93
ECB Base				
LRP Basis	-3.13	-8.48	-0.24	1.23
Futures Basis	-3.23	-12.66	9.22	3.63
National Base				
LRP Basis	-1.48	-3.94	2.52	1.15
Futures Basis	-1.59	-9.75	10.37	3.59

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Basis Risk Conclusion—Swine

- LRP-Swine Users Can Reduce Exposure To Basis Risk
 - ✓ It Reduces The Basis Risk By Changes Between Futures & The Cash Index
 - ✓ But Retains Risk Of Changes Between Your Selling Price & The CME Cash Index (AEV)
 - ✓ Still Exposed To LRP Basis Risk
- Weekly Variation In LRP Basis Less Than Weekly Variation In Futures Basis
- LRP Basis Over Time Is Less Variable
- To Further Reduce LRP Basis Risk, Utilize WCB, Or ECB Base Price

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Basis Risk Reduction With LRP

- Swine and Fed Cattle Get Biggest Reduction In Basis Risk
- Little Basis Risk Reduction For Feeder Cattle

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LRP Benefits for Producers

- Guaranteed Cost & Coverage
 - ✓ Set For Day & No Bid/Ask Spread
- “After Hours” Price Protection
- No Commission Costs, Brokerage Accounts
- Partial Basis Risk Coverage
 - ✓ Indemnifies On A Cash Index
- Any Number Of Head Can Be Covered
 - ✓ Even 1 Head (Up To Program Limits)
- LRP Is An Insurance Policy & Not A Derivative (Preferred By Bankers)

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LRP Disadvantages

- Some Basis Risk Still Exists
- Policy Settled On Ending Date Regardless Of When Livestock Ready For Market
- Options May Be Sold Prior To Expiration Date If Livestock Sold Or Price Opportunity Exists
- Offsetting Transactions Restrictions Could Limit Common Marketing Strategies

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Livestock Gross Margin Insurance For Cattle



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Livestock Gross Margin Insurance For Cattle

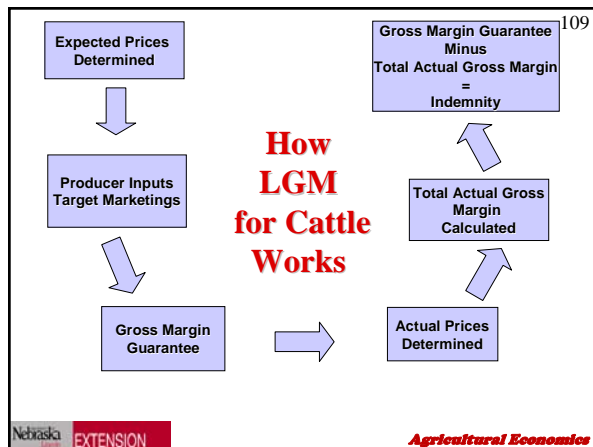
- Offers protection against decline in feeding margin
- Gross Margin = market value of fed cattle less feeder cattle and corn costs



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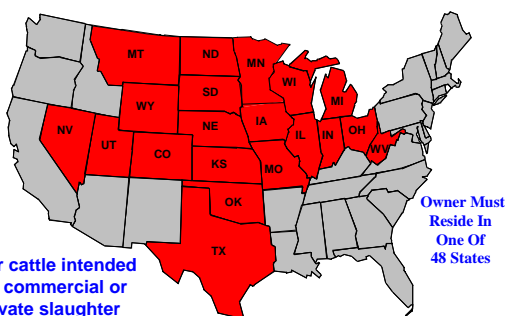
How LGM for Cattle Works



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LGM for Cattle Available in 20 States



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Substantial Beneficial Interest (SBI)

- Must Have At Least 10% Interest
- A Spouse Of An Applicant/Insured Will Have Substantial Beneficial Interest In The Applicant/Insured Unless Spouse Proves:
 - ✓ The Insured Class Is In A Totally Separate Farming Operation
 - ✓ Spouse Derives No Benefit From The Farming Operation Of The Applicant/Insured

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LGM for Cattle Available For:

1. Yearling Finishing Operation
 - ✓ Finished weight = 1250 lbs
 - ✓ In-weight = 750 lbs
 - ✓ 5 months on feed
 - ✓ Corn price = price 2 months prior to cattle finished sales month
2. Calf Finishing Operation
 - ✓ Finished weight = 1150 lbs
 - ✓ In-weight = 550 lbs
 - ✓ 8 months on feed
 - ✓ Corn price = price 4 months prior to cattle finished sales month

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LGM Sales Period

- Sold on last business day of every month
 - ✓ RMA must first validate price data used to calculate Gross Margin Guarantee (GMG)
 - ✓ Validation occurs after the futures market closes on last day of price discovery period
- Sale period ends at 9:00 am CST the next business day

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LGM for Cattle Insurance Period

- 12 monthly insurance periods per calendar year
- Each runs for 11 months
- No cattle insurable in first month

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LGM Limitations on Number of Head Insured

Per Insurance Period	5,000
Per Crop Year July 1-June 30	10,000

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LGM Premium

- Determined by simulation of losses
- Calculated using RMA's online calculator
 - ✓ <http://www.3rma.usda.gov/apps/premcalc/>
 - ✓ Need a user ID and password

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LGM Deductibles

- \$0 to \$150 per head at the insured's option
 - ✓ In \$10 per head increments

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February 15 to March 6, 2007
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LGM Indemnity

- **Difference between the Gross Margin Guarantee (GMG) and total Actual Gross Margin (AGM), if positive, at the end of the insurance period**
- **LGM for Cattle uses adjusted futures prices to determine expected and actual gross margins**
 - ✓ Includes state- and month-specific basis levels

Agricultural Economics

LGM Example

- **January 31, 2007 sales closing date**
- **Yearling finishing operation in Nebraska**
- **August 2007 target marketing month**
- **Determine the indemnity that would be due to producers for that month**
 - ✓ **Total indemnity determined based on sum of target marketings in 11-month insurance period**

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Expected Gross Margin (EGM)

- **Yearling Finishing Operation**
 - $EGM_t = (12.50 \text{ cwt} \times \text{Live Cattle Price}_t)$
 - $(7.50 \text{ cwt} \times \text{Feeder Cattle Price}_{t-5})$
 - $(57.5 \text{ bu} \times \text{Corn Price}_{t-2})$
- **Calf Finishing Operation**
 - $EGM_t = (11.50 \text{ cwt} \times \text{Live Cattle Price}_t)$
 - $(5.50 \text{ cwt} \times \text{Feeder Cattle Price}_{t-8})$
 - $(54.5 \text{ bu} \times \text{Corn Price}_{t-4})$

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Table Columns	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9
	Yearling Finishing				Feed Cattle				
Sales Closing Date	Insurance Period	Insurance Month	Live Cattle	Feeder Cattle	Corn	Live Cattle	Feeder Cattle	Corn	
January 31	February-December	March	March	October	January	April	July	November	
February 28	April	April	November	February	April	August	December	February	
	May	May	December	March	May	September	January	February	
	June	June	January	April	June	October	February	March	
	July	July	February	May	July	November	March	April	
	August	August	March	June	August	December	April	May	
	September	September	April	July	September	January	August	September	
	October	October	May	August	October	February	June	October	
	November	November	June	September	November	March	July	November	
	December	December	July	October	December	April	August	December	
	April	April	November	February	April	August	December	January	
	May	May	December	March	May	September	February	March	
	June	June	January	April	June	October	March	April	
March 31	July	July	February	May	July	November	March	December	
	August	August	March	June	August	December	April	January	
	September	September	April	July	September	January	May	February	
	October	October	May	August	October	February	June	March	
	November	November	June	September	November	March	July	April	
	December	December	July	October	December	April	August	May	
	January	January	August	November	January	May	September	June	
	February	February	September	December	February	June	October	July	
	March	March	January	January	March	July	November	March	
	April	April	February	February	April	August	December	April	
	May	May	March	March	May	September	January	May	
	June	June	April	April	June	October	February	June	
April 30	July	July	February	May	July	November	March	December	
	August	August	March	June	August	December	April	January	
	September	September	April	July	September	January	May	February	
	October	October	May	August	October	February	June	March	
	November	November	June	September	November	March	July	April	
	December	December	July	October	December	April	August	May	
	January	January	August	November	January	May	September	June	
	February	February	September	December	February	June	October	July	
	March	March	January	January	March	July	November	March	
	April	April	February	February	April	August	December	April	
	May	May	March	March	May	September	January	May	
	June	June	April	April	June	October	February	June	

Agricultural Economics

Expected Live Cattle Price

- **Expected August Live Cattle Price as of Jan**
- **August 2007 CME LC Futures Price:**
- | | |
|-------------|----------------|
| ➤ 1-29 | \$87.65 |
| ➤ 1-30 | \$87.45 |
| ➤ 1-31 | <u>\$88.00</u> |
| ➤ 3-day Ave | \$87.70 |
- **Nebraska August LC Basis (LGM) = ??**

Agricultural Economics

State	January	February	March	April	May	June	July	August	September	October	November	December
Colorado	-2.49	0.25	2.42	2.77	4.24	4.99	4.47	-4.91	3.46	3.16	4.89	4.4
Illinois	1.48	-2.54	-0.78	3.66	1.12	1.21	-1.40	-1.43	-2.99	-3.53	-4.12	-1.2
Indiana	2.16	-3.42	-1.36	-0.52	0.24	0.33	-2.28	-2.31	-3.87	-4.41	-2.30	-2.1
Iowa	-1.23	-0.78	-0.68	0.06	0.06	0.06	0.06	0.06	-2.48	-3.00	-3.00	0.2
Kansas	0.12	-0.90	0.89	1.07	1.26	1.28	0.02	0.24	-0.81	-0.77	0.80	0.2
Michigan	-9.52	-9.34	-0.85	-7.85	-6.59	-4.73	-6.29	-4.48	-9.15	-11.91	-11.01	-1.1
Minnesota	-4.70	-5.47	-3.63	-2.40	-1.61	-1.15	-2.63	-3.15	-4.84	-5.82	-4.35	-3.6
Missouri	5.17	4.93	6.35	7.78	9.64	11.52	11.98	11.43	8.03	4.55	4.62	5.8
Montana	6.49	6.69	6.91	6.76	6.76	6.76	6.76	6.76	6.76	6.76	6.76	6.76
Nebraska	0.19	-1.36	1.16	1.72	1.90	2.28	0.62	1.30	-0.73	-0.59	1.68	2.3
Nevada	5.43	4.60	5.99	5.87	6.79	8.16	8.86	6.92	4.87	3.83	5.57	6.5
North Dakota	5.65	3.22	3.57	3.84	4.54	5.38	2.67	6.91	6.43	6.59	6.93	7.9
Ohio	-4.36	3.31	-3.28	-1.85	0.40	0.09	1.67	-1.72	-3.82	-5.74	-4.52	-4.7
Oklahoma	4.24	4.24	4.10	5.41	5.41	5.41	5.41	5.41	5.41	5.41	5.41	5.41
South Dakota	7.00	4.28	4.00	3.90	4.11	4.59	3.11	4.80	-8.82	-8.59	8.60	7.5
Texas	0.56	-0.16	1.41	1.76	2.18	2.77	1.71	2.64	-0.29	-1.98	0.19	1.1
Utah	-0.43	-0.80	1.04	1.59	2.06	3.17	2.50	2.86	1.45	0.10	0.83	1.1
Verh. Oregon	-5.14	-4.46	-3.33	0.01	1.16	1.16	1.16	1.16	-1.96	-1.96	-1.96	-1.2
Wisconsin	-0.68	-6.39	-4.47	-3.61	-2.61	-1.15	-3.08	-3.24	-5.02	-7.01	-4.84	-5.0
Wyoming	7.59	5.27	5.62	5.67	7.59	11.85	12.84	13.21	10.65	10.71	11.37	11.6

Agricultural Economics

“Livestock Insurance Alternatives For Risk Management”

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Expected Live Cattle Price

- Expected August Live Cattle Price as of Jan
- August 2007 CME LC Futures Price:
 - 1-29 \$87.65
 - 1-30 \$87.45
 - 1-31 \$88.00
 - 3-day Ave \$87.70
- Nebraska August LC Basis (LGM) = \$1.20
- Expected August LC Price = **\$87.70 + \$1.20**
- Expected August LC Price = **\$88.90/cwt**

Nebraska EXTENSION Agricultural Economics

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Expected Feeder Cattle Price

- Expected March Feeder Cattle Price
- March 2007 CME FC Futures Price:
 - 1-29 \$95.40
 - 1-30 \$94.85
 - 1-31 \$95.85
 - 3-day Ave \$95.37
- Nebraska March FC Basis (LGM) = ??

Nebraska EXTENSION Agricultural Economics

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Table 3. Yearling Basis (\$/cwt)

State	January	February	March	April	May	June	July	August	September	October	November	December
Colorado	1.64	2.11	5.06	4.58	2.89	0.71	-0.99	-2.12	-2.48	-1.92	-0.19	1.02
Illinois	1.74	3.62	6.67	6.95	5.05	2.02	-1.36	-2.65	-2.78	-2.16	-0.71	-0.76
Indiana	-6.71	-4.83	-1.78	-1.50	-3.40	-6.43	-9.81	-11.10	-11.23	-10.61	-9.16	-9.21
Iowa	-2.01	-1.21	0.40	0.76	-1.76	-3.65	-7.65	-8.01	-7.75	-7.87	-5.60	-4.68
Kansas	0.49	2.15	4.45	3.89	1.42	-0.84	-2.33	-4.36	-4.60	-3.29	-1.48	-1.32
Michigan	-12.03	-8.11	-4.30	-5.79	-6.91	-8.08	-11.63	-13.37	-14.20	-15.57	-14.99	-14.18
Minnesota	-6.90	-5.36	-2.46	-1.31	-3.55	-5.99	-9.97	-11.22	-11.14	-11.28	-11.04	-9.15
Missouri	1.80	4.07	6.38	6.89	5.36	4.09	3.28	0.99	-0.71	-2.52	-1.78	-0.01
Montana	5.39	6.01	7.02	6.07	4.10	2.53	0.92	0.60	0.06	2.48	3.17	4.42
Nebraska	0.70	1.51	4.63	4.35	1.73	-0.24	-3.10	-3.59	-4.51	-3.13	-1.50	1.14
Nevada	3.82	5.20	7.00	6.21	3.63	1.71	-0.54	-2.06	-2.18	-1.45	0.98	2.84
North Dakota	1.98	1.92	3.49	2.84	0.33	-1.08	-3.50	-2.32	-2.05	-0.88	0.08	1.41
Ohio	-7.37	-5.61	-3.02	-2.82	-4.51	-6.58	-10.47	-11.31	-12.35	-13.36	-11.70	-11.64
Oklahoma	2.80	4.30	5.61	4.79	2.41	3.03	2.65	1.02	-0.19	-0.50	1.61	3.75
South Dakota	5.08	4.41	5.42	4.73	2.29	2.17	-1.53	-1.26	-0.30	3.17	3.64	3.54
Texas	-0.50	2.00	4.51	3.97	1.06	-1.10	-3.04	-4.27	-4.76	-5.37	-3.28	-1.90
Utah	-1.48	0.86	3.81	3.05	-0.47	-2.12	-3.40	-3.95	-3.82	-4.45	-3.33	-3.09
West Virginia	-10.66	-8.15	-5.70	-4.33	-5.40	-7.22	-8.96	-10.85	-12.15	-13.72	-13.90	-13.32
Wisconsin	3.37	5.46	8.00	8.18	6.88	4.48	-3.30	-3.57	-3.34	-3.83	-2.38	-2.34
Wyoming	5.65	6.64	7.33	6.27	4.96	5.74	5.69	4.03	4.28	4.97	5.54	6.98

Nebraska EXTENSION Agricultural Economics

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Expected Feeder Cattle Price

- Expected March Feeder Cattle Price
- March 2007 CME FC Futures Price:
 - 1-29 \$95.40
 - 1-30 \$94.85
 - 1-31 \$95.85
 - 3-day Ave \$95.37
- Nebraska March FC Basis (LGM) = \$4.63
- Expected March FC Price = **\$95.37 + \$4.63**
- Expected March FC Price = **\$100.00/cwt**

Nebraska EXTENSION Agricultural Economics

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Expected Corn Price

- Expected June Corn Price
- May 2007 CBOT Corn Futures Price:
 - 1-29 \$4.115
 - 1-30 \$4.1625
 - 1-31 \$4.1575
 - 3-day Ave \$4.15
- July 2007 CBOT Corn Futures Price:
 - 1-29 \$4.185
 - 1-30 \$4.225
 - 1-31 \$4.225
 - 3-day Ave \$4.21

Nebraska EXTENSION Agricultural Economics

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Expected Corn Price

- Expected June Corn Price (a weighted average)
 - = (1/2 x Expected May Corn Futures Price)
 - + (1/2 x Expected July Corn Futures Price)
 - = (1/2 x \$4.15/bu) + (1/2 x \$4.21/bu)
 - = **\$4.18/bu**
- Nebraska June Corn Basis (LGM) = ??

Nebraska EXTENSION Agricultural Economics

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Table 5. Corn Basis (\$/bushel)

State	January	February	March	April	May	June	July	August	September	October	November	December
Colorado	-0.08	-0.10	-0.12	-0.13	-0.12	0.01	0.14	0.05	0.09	-0.05	-0.05	-0.03
Illinois	-0.10	-0.10	-0.10	-0.12	-0.14	-0.11	-0.10	-0.08	-0.13	-0.16	-0.13	-0.01
Indiana	-0.06	-0.08	-0.07	-0.06	-0.10	-0.08	-0.07	-0.03	-0.13	-0.22	-0.16	-0.02
Iowa	-0.25	-0.25	-0.26	-0.28	-0.31	-0.28	-0.26	-0.23	-0.21	-0.28	-0.25	-0.18
Kansas	-0.10	-0.10	-0.10	-0.12	-0.14	-0.08	-0.02	-0.06	-0.07	-0.06	-0.04	-0.04
Michigan	-0.18	-0.21	-0.18	-0.19	-0.20	-0.15	-0.10	-0.09	-0.06	-0.23	-0.25	-0.19
Minnesota	-0.35	-0.37	-0.38	-0.37	-0.42	-0.36	-0.34	-0.34	-0.33	-0.38	-0.35	-0.30
Missouri	-0.09	-0.09	-0.08	-0.10	-0.12	-0.04	-0.06	-0.08	-0.18	-0.24	-0.16	-0.09
Montana	-0.25	-0.24	-0.22	-0.22	-0.31	-0.18	-0.12	-0.11	-0.10	-0.19	-0.21	-0.18
Nebraska	-0.19	-0.21	-0.22	-0.23	-0.25	-0.18	-0.16	-0.15	-0.18	-0.20	-0.19	-0.16
Nevada	-0.08	-0.10	-0.12	-0.13	-0.12	0.01	0.14	0.05	0.09	-0.05	-0.05	-0.03
North Dakota	-0.41	-0.40	-0.38	-0.38	-0.48	-0.30	-0.28	-0.28	-0.26	-0.36	-0.37	-0.34
Ohio	-0.08	-0.08	-0.09	-0.10	-0.11	-0.04	-0.02	0.01	-0.08	-0.22	-0.17	-0.06
Oklahoma	0.06	0.06	0.06	0.04	0.02	0.08	0.14	0.09	0.09	0.10	0.12	0.12
South Dakota	-0.40	-0.39	-0.39	-0.37	-0.42	-0.30	-0.33	-0.32	-0.37	-0.46	-0.46	-0.36
Texas	0.12	0.11	0.17	0.17	0.03	0.17	0.02	0.03	0.14	0.18	0.15	0.17
Utah	0.51	0.50	0.48	0.47	0.48	0.60	0.74	0.64	0.69	0.55	0.55	0.57
West Virginia	0.30	0.28	0.26	0.26	0.32	0.36	0.42	0.43	0.33	0.12	0.14	0.26
Wisconsin	-0.26	-0.26	-0.26	-0.25	-0.31	-0.19	-0.19	-0.18	-0.14	-0.24	-0.24	-0.19
Wyoming	0.04	0.02	0.00	-0.01	0.00	0.13	0.26	0.17	0.21	0.08	0.08	0.09

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Expected Corn Price

- Expected June corn price (a weighted average)
 - = (1/2 x Expected May Corn Futures Price)
 - + (1/2 x Expected July Corn Futures Price)
 - = (1/2 x \$4.15/bu) + (1/2 x \$4.21/bu)
 - = \$4.18/bu
- Nebraska June Corn Basis (LGM) = -\$0.18
- Expected June Corn Price = \$4.18 + (-\$0.18)
- Expected June Corn Price = \$4.00/bu

Nebraska EXTENSION Agricultural Economics

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Expected Gross Margin (EGM)

- Yearling Finishing Operation
 - $EGM_{Aug} = (12.50 \text{ cwt} \times \text{Exp Live Cattle Price}_{Aug})$
 - (7.50 cwt X Exp Feeder Cattle Price_{Mar})
 - (57.5 bu X Exp Corn Price_{Jun})
 - $EGM_{Aug} = (12.50 \text{ cwt} \times \$88.90/\text{cwt})$
 - (7.50 cwt X \$100.00/cwt)
 - (57.5 bu X \$4.00/bu)
 - $EGM_{Aug} = \$1111.25 - \$750.00 - \$230.00$
 - $EGM_{Aug} = \$131.25$

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Gross Margin Guarantee (GMG) for August

- GMG = EGM – Deductible
- Deductible
 - \$0 to \$150 per head at the insured's option
 - Let's use a \$0/head deductible
- GMG = \$131.25 – \$0
- GMG = \$131.25

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Gross Margin Guarantee (GMG)

- This process is done for each month of the 11-month insurance period
- The sum of the target marketings times the EGM (less deductible) for each month is the Gross Margin Guarantee (GMG)
 - ✓ Deductible is the same for each month
 - ✓ Remember, can't have target marketings in the first month
 - GMG is based on 10 months of marketings

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Gross Margin Guarantee (GMG)

➤ If you have 1 head of target marketings each month:

- ✓ GMG = \$1,837.50 (\$0 deductible)
- ✓ Premium = \$278.00

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Insurance Plan Worksheet

Line	Item	Unit	Price	Total
1	Expected Gross Margin Month 1	1	\$1,837.50	\$1,837.50
2	Expected Gross Margin Month 2	1	\$1,837.50	\$1,837.50
3	Expected Gross Margin Month 3	1	\$1,837.50	\$1,837.50
4	Expected Gross Margin Month 4	1	\$1,837.50	\$1,837.50
5	Expected Gross Margin Month 5	1	\$1,837.50	\$1,837.50
6	Expected Gross Margin Month 6	1	\$1,837.50	\$1,837.50
7	Expected Gross Margin Month 7	1	\$1,837.50	\$1,837.50
8	Expected Gross Margin Month 8	1	\$1,837.50	\$1,837.50
9	Expected Gross Margin Month 9	1	\$1,837.50	\$1,837.50
10	Expected Gross Margin Month 10	1	\$1,837.50	\$1,837.50
11	Expected Gross Margin Month 11	1	\$1,837.50	\$1,837.50
12	Expected Gross Margin Month 12	1	\$1,837.50	\$1,837.50
13	Expected Gross Margin Month 13	1	\$1,837.50	\$1,837.50
14	Expected Gross Margin Month 14	1	\$1,837.50	\$1,837.50
15	Expected Gross Margin Month 15	1	\$1,837.50	\$1,837.50
16	Expected Gross Margin Month 16	1	\$1,837.50	\$1,837.50
17	Expected Gross Margin Month 17	1	\$1,837.50	\$1,837.50
18	Expected Gross Margin Month 18	1	\$1,837.50	\$1,837.50
19	Expected Gross Margin Month 19	1	\$1,837.50	\$1,837.50
20	Expected Gross Margin Month 20	1	\$1,837.50	\$1,837.50
21	Expected Gross Margin Month 21	1	\$1,837.50	\$1,837.50
22	Expected Gross Margin Month 22	1	\$1,837.50	\$1,837.50
23	Expected Gross Margin Month 23	1	\$1,837.50	\$1,837.50
24	Expected Gross Margin Month 24	1	\$1,837.50	\$1,837.50
25	Expected Gross Margin Month 25	1	\$1,837.50	\$1,837.50
26	Expected Gross Margin Month 26	1	\$1,837.50	\$1,837.50
27	Expected Gross Margin Month 27	1	\$1,837.50	\$1,837.50
28	Expected Gross Margin Month 28	1	\$1,837.50	\$1,837.50
29	Expected Gross Margin Month 29	1	\$1,837.50	\$1,837.50
30	Expected Gross Margin Month 30	1	\$1,837.50	\$1,837.50
31	Expected Gross Margin Month 31	1	\$1,837.50	\$1,837.50
32	Expected Gross Margin Month 32	1	\$1,837.50	\$1,837.50
33	Expected Gross Margin Month 33	1	\$1,837.50	\$1,837.50
34	Expected Gross Margin Month 34	1	\$1,837.50	\$1,837.50
35	Expected Gross Margin Month 35	1	\$1,837.50	\$1,837.50
36	Expected Gross Margin Month 36	1	\$1,837.50	\$1,837.50
37	Expected Gross Margin Month 37	1	\$1,837.50	\$1,837.50
38	Expected Gross Margin Month 38	1	\$1,837.50	\$1,837.50
39	Expected Gross Margin Month 39	1	\$1,837.50	\$1,837.50
40	Expected Gross Margin Month 40	1	\$1,837.50	\$1,837.50
41	Expected Gross Margin Month 41	1	\$1,837.50	\$1,837.50
42	Expected Gross Margin Month 42	1	\$1,837.50	\$1,837.50
43	Expected Gross Margin Month 43	1	\$1,837.50	\$1,837.50
44	Expected Gross Margin Month 44	1	\$1,837.50	\$1,837.50
45	Expected Gross Margin Month 45	1	\$1,837.50	\$1,837.50
46	Expected Gross Margin Month 46	1	\$1,837.50	\$1,837.50
47	Expected Gross Margin Month 47	1	\$1,837.50	\$1,837.50
48	Expected Gross Margin Month 48	1	\$1,837.50	\$1,837.50
49	Expected Gross Margin Month 49	1	\$1,837.50	\$1,837.50
50	Expected Gross Margin Month 50	1	\$1,837.50	\$1,837.50
51	Expected Gross Margin Month 51	1	\$1,837.50	\$1,837.50
52	Expected Gross Margin Month 52	1	\$1,837.50	\$1,837.50
53	Expected Gross Margin Month 53	1	\$1,837.50	\$1,837.50
54	Expected Gross Margin Month 54	1	\$1,837.50	\$1,837.50
55	Expected Gross Margin Month 55	1	\$1,837.50	\$1,837.50
56	Expected Gross Margin Month 56	1	\$1,837.50	\$1,837.50
57	Expected Gross Margin Month 57	1	\$1,837.50	\$1,837.50
58	Expected Gross Margin Month 58	1	\$1,837.50	\$1,837.50
59	Expected Gross Margin Month 59	1	\$1,837.50	\$1,837.50
60	Expected Gross Margin Month 60	1	\$1,837.50	\$1,837.50
61	Expected Gross Margin Month 61	1	\$1,837.50	\$1,837.50
62	Expected Gross Margin Month 62	1	\$1,837.50	\$1,837.50
63	Expected Gross Margin Month 63	1	\$1,837.50	\$1,837.50
64	Expected Gross Margin Month 64	1	\$1,837.50	\$1,837.50
65	Expected Gross Margin Month 65	1	\$1,837.50	\$1,837.50
66	Expected Gross Margin Month 66	1	\$1,837.50	\$1,837.50
67	Expected Gross Margin Month 67	1	\$1,837.50	\$1,837.50
68	Expected Gross Margin Month 68	1	\$1,837.50	\$1,837.50
69	Expected Gross Margin Month 69	1	\$1,837.50	\$1,837.50
70	Expected Gross Margin Month 70	1	\$1,837.50	\$1,837.50
71	Expected Gross Margin Month 71	1	\$1,837.50	\$1,837.50
72	Expected Gross Margin Month 72	1	\$1,837.50	\$1,837.50
73	Expected Gross Margin Month 73	1	\$1,837.50	\$1,837.50
74	Expected Gross Margin Month 74	1	\$1,837.50	\$1,837.50
75	Expected Gross Margin Month 75	1	\$1,837.50	\$1,837.50
76	Expected Gross Margin Month 76	1	\$1,837.50	\$1,837.50
77	Expected Gross Margin Month 77	1	\$1,837.50	\$1,837.50
78	Expected Gross Margin Month 78	1	\$1,837.50	\$1,837.50
79	Expected Gross Margin Month 79	1	\$1,837.50	\$1,837.50
80	Expected Gross Margin Month 80	1	\$1,837.50	\$1,837.50
81	Expected Gross Margin Month 81	1	\$1,837.50	\$1,837.50
82	Expected Gross Margin Month 82	1	\$1,837.50	\$1,837.50
83	Expected Gross Margin Month 83	1	\$1,837.50	\$1,837.50
84	Expected Gross Margin Month 84	1	\$1,837.50	\$1,837.50
85	Expected Gross Margin Month 85	1	\$1,837.50	\$1,837.50
86	Expected Gross Margin Month 86	1	\$1,837.50	\$1,837.50
87	Expected Gross Margin Month 87	1	\$1,837.50	\$1,837.50
88	Expected Gross Margin Month 88	1	\$1,837.50	\$1,837.50
89	Expected Gross Margin Month 89	1	\$1,837.50	\$1,837.50
90	Expected Gross Margin Month 90	1	\$1,837.50	\$1,837.50
91	Expected Gross Margin Month 91	1	\$1,837.50	\$1,837.50
92	Expected Gross Margin Month 92	1	\$1,837.50	\$1,837.50
93	Expected Gross Margin Month 93	1	\$1,837.50	\$1,837.50
94	Expected Gross Margin Month 94	1	\$1,837.50	\$1,837.50
95	Expected Gross Margin Month 95	1	\$1,837.50	\$1,837.50
96	Expected Gross Margin Month 96	1	\$1,837.50	\$1,837.50
97	Expected Gross Margin Month 97	1	\$1,837.50	\$1,837.50
98	Expected Gross Margin Month 98	1	\$1,837.50	\$1,837.50
99	Expected Gross Margin Month 99	1	\$1,837.50	\$1,837.50
100	Expected Gross Margin Month 100	1	\$1,837.50	\$1,837.50

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Gross Margin Guarantee (GMG)

➤ If you have 1 head of target marketings each month:

- ✓ GMG = \$1,837.50 (\$0 deductible)
- ✓ Premium = \$278.00

➤ If total AGM falls below \$1,837.50, an indemnity makes up the difference

- ✓ AGM is based on LGM's actual prices (not the actual prices producer receives or pays)

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Actual Gross Margin (AGM)

➤ Yearling Finishing Operation

- $AGM_{Aug} = (12.50 \text{ cwt} \times \text{Act Live Cattle Price}_{Aug}) - (7.50 \text{ cwt} \times \text{Act Feeder Cattle Price}_{Mar}) - (57.5 \text{ bu} \times \text{Act Corn Price}_{Jun})$

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Actual Live Cattle Price

➤ Actual August Live Cattle Price

➤ August 2007 CME LC Futures Price:

- 8-28-07 \$85.755
- 8-29-07 \$86.025
- 8-30-07 \$86.055
- 3-day Ave \$85.95

Let's Suppose

Expected LC Futures = \$87.70

Same

➤ Nebraska August LC Basis (LGM) = \$1.20

➤ Actual August LC Price = \$85.95 + \$1.20

➤ Actual August LC Price = \$87.15/cwt

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Actual Feeder Cattle Price

➤ Actual March Feeder Cattle Price

➤ March 2007 CME FC Futures Price:

- 3-27-07 \$103.425
- 3-28-07 \$103.725
- 3-29-07 \$103.50
- 3-day Ave \$103.55

Let's Suppose

Expected FC Futures = \$95.37

Same

➤ Nebraska March FC Basis (LGM) = \$4.63

➤ Actual March FC Price = \$103.55 + \$4.63

➤ Actual March FC Price = \$108.18/cwt

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Actual Corn Price

- Actual June Corn Price
 - May 2007 CBOT Corn Futures Price:
 - 5-9-07 \$4.2125
 - 5-10-07 \$4.23
 - 5-11-07 \$4.2275
 - 3-day Ave \$4.22
 - July 2007 CBOT Corn Futures Price:
 - 7-10-07 \$4.35
 - 7-11-07 \$4.365
 - 7-12-07 \$4.3475
 - 3-day Ave \$4.35

Let's Suppose

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Actual Corn Price

- Actual June Corn Price (a weighted average)
 - Expected Corn Futures = \$4.18
 - $(1/2 \times \text{Actual May Corn Futures Price}) + (1/2 \times \text{Actual July Corn Futures Price})$
 - $(1/2 \times \$4.22/\text{bu}) + (1/2 \times \$4.35/\text{bu})$
 - $= \$4.29/\text{bu}$
- Nebraska June Corn Basis (LGM) = $-\$0.18$ (Same)
- Actual June Corn Price = $\$4.29 + (-\$0.18)$
- Actual June Corn Price = $\$4.11/\text{bu}$

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Actual Gross Margin (AGM)

- Yearling Finishing Operation
 - $\text{AGM}_{\text{Aug}} = (\text{12.50 cwt} \times \text{Act Live Cattle Price}_{\text{Aug}}) - (\text{7.50 cwt} \times \text{Act Feeder Cattle Price}_{\text{Mar}}) - (\text{57.5 bu} \times \text{Act Corn Price}_{\text{Jun}})$
 - $\text{AGM}_{\text{Aug}} = (\text{12.50 cwt} \times \$87.15/\text{cwt}) - (\text{7.50 cwt} \times \$108.18/\text{cwt}) - (\text{57.5 bu} \times \$4.11/\text{bu})$
 - $\text{AGM}_{\text{Aug}} = \$1089.375 - \$811.35 - \236.325
 - $\text{AGM}_{\text{Aug}} = \41.70

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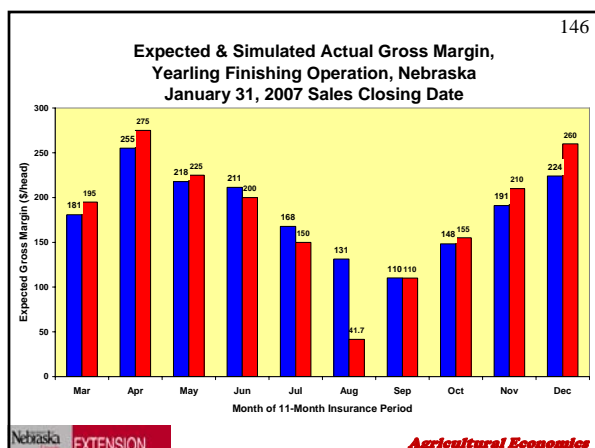
Indemnity In August...

- $\text{Indemnity} = \text{GMG}_{\text{Aug}} - \text{AGM}_{\text{Aug}}$ (if positive)
- $\text{Indemnity} = \$131.25 - \$41.70 > 0$
- $\text{Indemnity} = \$89.55 \text{ per head}$

Important Note...

- Indemnity is actually figured for whole 11-month insurance period
 - $\text{Indemnity} = \text{GMG} - \text{total AGM}$
 - This averages margins out over entire year

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Indemnity?

- Again, this example assumes one head of target marketings each month
- $\text{GMG} = \$1,837.51$
- $\text{AGM} = \$1,821.70$
- $\text{Indemnity} = \$15.81$ (total, not per head)

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- **If less than 75% of total target marketings for the 11-month insurance period are sold, the indemnity is reduced by the percent actual marketings fall below target marketings**
- **If 75%+ are sold in the 11-month period, even in different months than specified under target marketings, indemnity remains the same**

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- **12 monthly insurance periods per calendar year**
- **Can insure target marketings in any/all month (except first) and have multiple sales closing months**

Jan 31 Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
Feb 28 Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan
Mar 31 Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb

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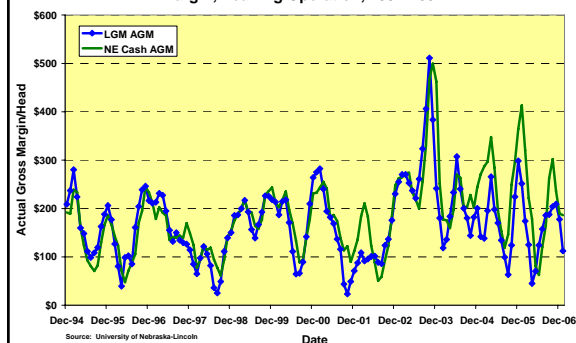
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- LGM indemnities determined based on futures prices and fixed basis
- Producers will realize a different basis for fed cattle, feeder cattle, and corn than the LGM basis (which is derived from 10-year historical NASS cash prices)
 - ✓ Producers' realized AGM is different than LGM's AGM
- LGM's margins don't account for differences in feed amounts and other costs
 - ✓ LGM doesn't insure net feeding profits

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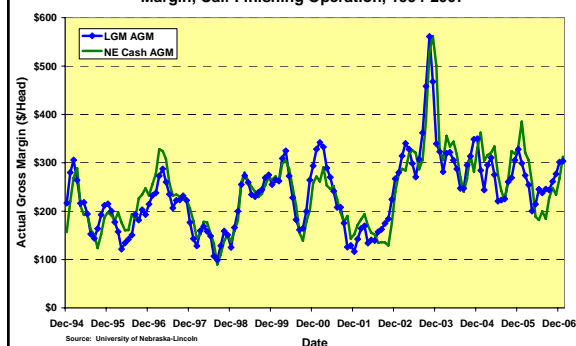
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Source: University of Nebraska-Lincoln

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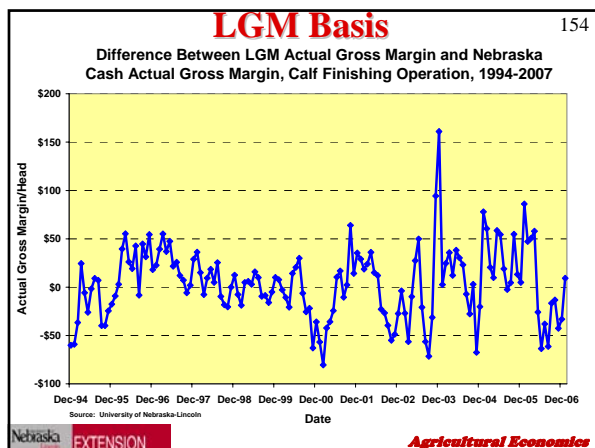
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LGM Benefits for Producers

- Convenience
 - ✓ Producers can sign up 12 times per year and insure all of the cattle they expect to market over a rolling 11-month insurance period
 - ✓ Do not have to decide on the mix of options to purchase, the strike price of the options, or the date of entry into various option contracts
- Customization
 - ✓ Can be tailored to any size farm
- Partial basis risk coverage

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LGM Disadvantages

- Does not insure against:
 - ✓ Unexpected changes in basis
 - ✓ Death loss
 - ✓ Other production loss
 - ✓ Other costs
 - Energy??

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Futures? Options? LRP? LGM?

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	Futures	Options	LRP	LGM
Protect Downside Price Risk?	Yes	Yes	Yes	Yes
Prevent Upside Price Potential?	Yes	No	No	No
Basis Risk Protection?	No	No	Some	Some
Brokerage Account Needed?	Yes	Yes	No	No
Hedge Sale Prices?	Yes	Yes	Yes	In the Margin
Hedge Purchase Prices?	Yes	Yes	No	In the Margin

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	Futures	Options	LRP	LGM
Can Hedge Be Lifted Early?	Yes	Yes	No	No
Have To Own The Livestock?	No	No	Yes	Yes
Contract Sizes?	Fixed	Fixed	Variable	Variable
Insurable Limits?	No	No	Yes	Yes
Availability?	Regular Market Hours	Regular Market Hours	5 pm - 9 am, Tues-Sat	Last Day of Month
Price/Premium Slippage?	Possible	Possible	No	No
Can Margin Be Hedged?	Requires Multiple Positions	Requires Multiple Positions	Only In Tandem With Futures/Options	Yes

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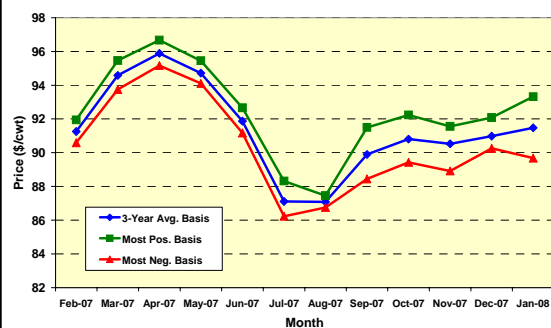
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Can I Buy LRP and LGM Insurance During the Same Crop Year?

- Yes → If it is NOT on the same cattle at the same time
- No → If it is on the same cattle at the same time
- A producer could have feeder cattle LRP, and once the SCE expires and it is cancelled with the insurance company, producer could then purchase LGM insurance

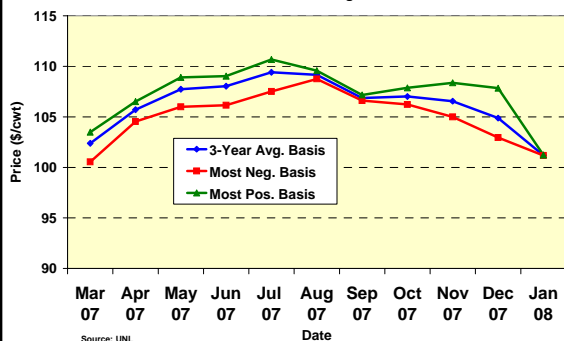
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2/07/07 Futures Based Price Forecast, Nebraska Direct Steers



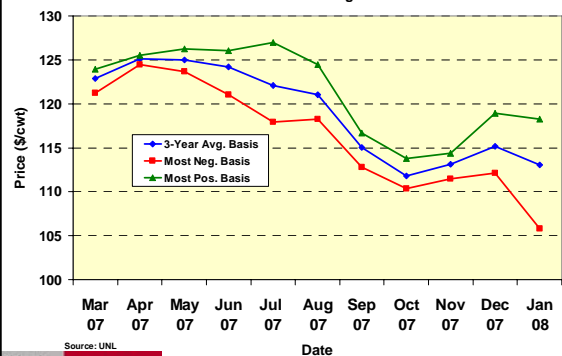
Source: UNL. Nebraska EXTENSION Agricultural Economics

02/07/07 Futures Based Price Forecasts Nebraska 700-800 lb. Med. & Large Feeder Steers



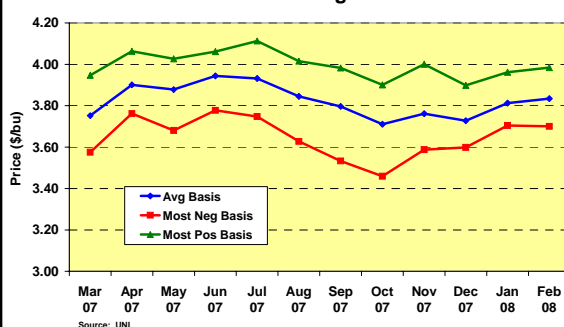
Source: UNL. Nebraska EXTENSION Agricultural Economics

02/07/07 Futures Based Price Forecasts Nebraska 500-600 lb. Med. & Large Feeder Steers



Source: UNL. Nebraska EXTENSION Agricultural Economics

2/07/07 Futures-Based Price Forecasts Nebraska State Average Corn Price



Source: UNL. Nebraska EXTENSION Agricultural Economics

Feeding Yearling Steers

➤ Feb 7, 2007 → At \$3.75/bu Corn

- 750 lb × \$100/cwt \$750
- 500 lb gain × \$71.34/cwt \$357
- Total Cost \$1,107
- Break-even $\$1,107 \div 1,250 =$ \$88.54

➤ Feb 7, 2007 → At \$4.00/bu Corn

- 750 lb × \$100/cwt \$750
- 500 lb gain × \$73.84/cwt \$369
- Total Cost \$1,119
- Break-even $\$1,119 \div 1,250 =$ \$89.54

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Feeding Steer Calves

➤ Feb 7, 2007 → At \$3.75/bu Corn

▪ 550 lb × \$120/cwt	\$660
▪ 650 lb gain × \$70.67/cwt	<u>\$459</u>
▪ Total Cost	\$1,119
▪ Break-even $\$1,119 \div 1,200 =$	<u>\$93.28</u>

➤ Feb 7, 2007 → At \$4.00/bu Corn

▪ 550 lb × \$100/cwt	\$660
▪ 650 lb gain × \$73.84/cwt	<u>\$476</u>
▪ Total Cost	\$1,136
▪ Break-even $\$1,136 \div 1,200 =$	<u>\$94.63</u>

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Can You Hedge The Cattle You Fed?

➤ Yearling Steers

▪ In-Date	2/7/2007
▪ Breakeven	\$88.54-89.54
▪ Out-Date	7/6/2007

➤ Steer Calves

▪ In-Date	2/7/2007
▪ Breakeven	\$93.28-94.63
▪ Out-Date	9/4/2007

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What Should You Do?

1. Calculate breakeven cost of production
2. Determine what prices are risky to you
3. Identify which tools can protect against those risks
4. Evaluate how much of the risk can be offset by the tool(s) you select
5. Decide whether you need protection & implement hedge if you do

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More Information On Livestock Insurance



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