## Livestock Risk Protection: Decision Aid for Cow-Calf Producers

#### Historic Performance of March Endorsements

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LRP purchase decisions should use information on current market conditions, management priorities, and historic LRP performance. Tables 1 and 2 show average performance of LRP between 2007-2020 for 26 and 34-week feeder cattle endorsements purchased in March, which was selected to correspond to March calving.<sup>1</sup> Figures 1-6 provide a visual guide of year-to-year performance of LRP during that period. These estimates of historic performance were calculated using the *Understanding Markets Tool* developed by Bozic LLC.

The green bar on the graphs (Figures 1-6) represents the gross indemnity (payout) received during those years. The red bar represents the premium (cost) incurred for purchasing those endorsements. Finally, the black bar is the net indemnity average (gross indemnity minus premium) for those years. The results represent hypothetical historical outcomes, with the current government premium subsidy of 35% and 40%.<sup>2</sup>

The first set of graphs (Figures 1-3) represent a producer that calves in March and sells weaned calves in September (Class 1, <600lb steer calves). We assume that an LRP endorsement is purchased in March, with an endorsement length of 26 weeks. The coverage level varies from a range of 97.5%-100% (high coverage) in Figure 1, 95-97.49% (medium coverage) in Figure 2, and 90-92.49% (low coverage) in Figure 3. The data presented is an average of all endorsements available within that time period for each year for each coverage range. Table 1 shows average performance for each coverage level, from 2007-2020.

<sup>&</sup>lt;sup>1</sup> LRP endorsements do not have to be purchased around calving; endorsements can be purchased up to 13 weeks before the intended marketing date. Longer LRP endorsements provide more risk protection, are more likely to have payouts, and typically have higher premiums.

<sup>&</sup>lt;sup>2</sup> The premium subsidy at the highest levels of LRP coverage was 13% until mid-2019, when it increased to 25%. In late 2020 the subsidy rate increased to 35% at the highest level. Currently premium subsides range from 35% at the 100% coverage level to 55% at the 70% coverage level.

Coverage level	Gross Indemnity	Premium	Net Indemnity
Higher Coverage: 97.5-100%	\$6.19	\$4.35	\$1.84
Medium coverage: 95%-97.49%	\$4.13	\$3.10	\$1.03
Low coverage 90-92.49%	\$1.80	\$1.63	\$0.16

#### Table 1. LRP average outcomes for 26-week feeder cattle endorsements purchased in March

Figures 4-6 represent a producer that calves in March and sells feeders in November after two months of backgrounding<sup>3</sup> (Class 2, >600lb steer calves). We assume that an LRP endorsement is purchased in March, with an endorsement length of 34 weeks. The coverage level varies from a range of 97.5%-100% (high coverage) in Figure 4, 95-97.49% (medium coverage) in Figure 5, and 90-92.49% (low coverage) in Figure 6. The data presented is an average of all endorsements available within that time period for each coverage range. Table 2 shows the average performance for each coverage level, from 2007-2020.

#### Table 2. LRP average outcomes for 34-week feeder cattle endorsements purchased in March

Coverage level	Gross Indemnity	Premium	Net Indemnity
Higher Coverage: 97.5-100%	\$7.15	\$4.61	\$2.54
Medium coverage: 95%-97.49%	\$3.95	\$3.59	\$0.36
Low coverage 90-92.49%	\$1.28	\$1.97	\$-0.69

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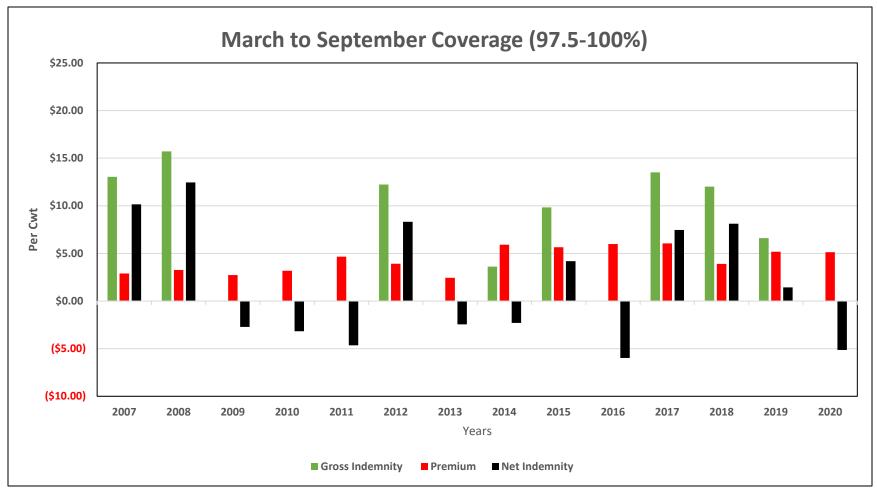




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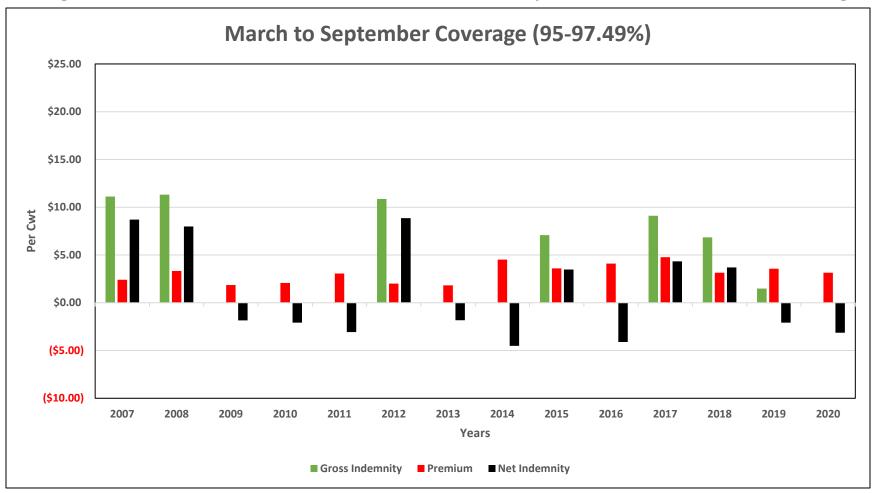
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<sup>&</sup>lt;sup>3</sup> The costs associated with backgrounding are not considered.



### Figure 1: LRP Outcomes: sell feeders in September, high coverage

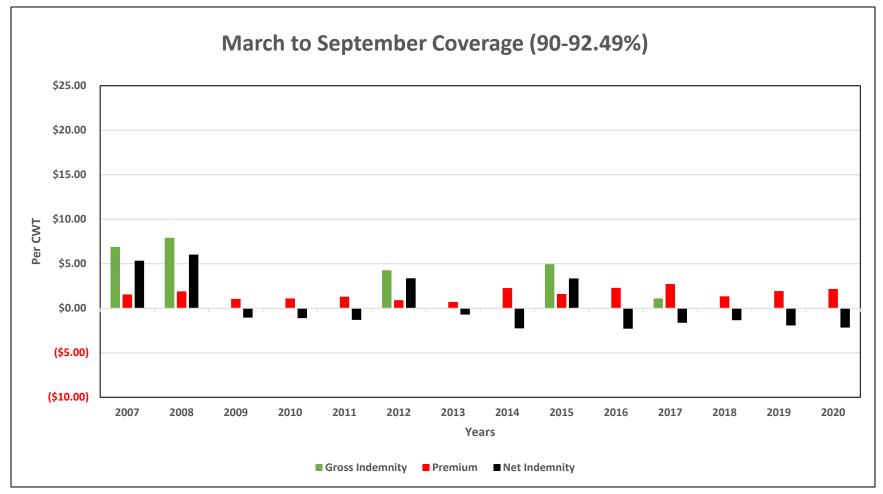
Note: This graph shows LRP gross indemnities, premiums, and net indemnities (gross indemnity minus premium) for LRP endorsements purchased for a producer that calves in March and sells in September at wean. This data is the average of all endorsements available at the 97.5 to 100% coverage level, with an endorsement length 26 weeks. Gross indemnity is the LRP payment per cwt, calculated using the difference between coverage price (expected/futures price times coverage level) and the actual price, when actual price is less than the coverage price. Premium is cost for purchasing the LRP endorsement.



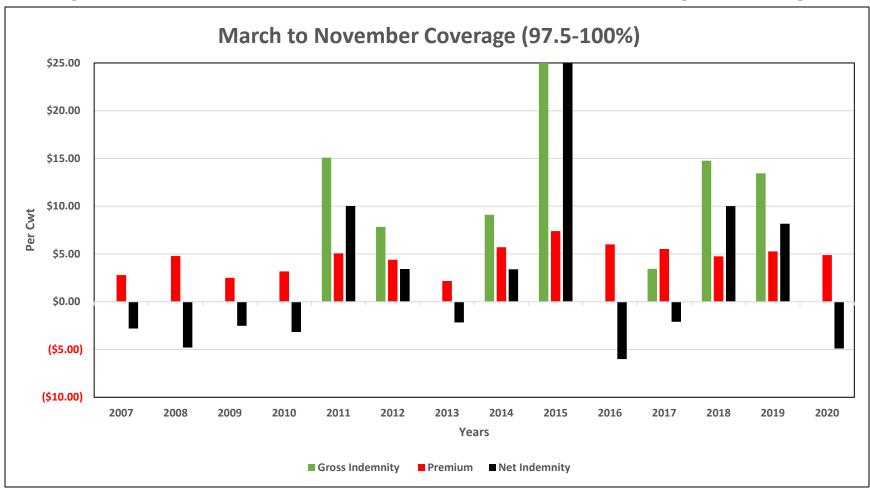
#### Figure 2: LRP Outcomes: sell feeders in September, medium coverage

Note: This graph shows LRP gross indemnities, premiums, and net indemnities (gross indemnity minus premium) for LRP endorsements purchased for a producer that calves in March and sells in September at wean. This data is the average of all endorsements available at the 95 to 97.49% coverage level, with an endorsement length 26 weeks. Gross indemnity is the LRP payment per cwt, calculated using the difference between coverage price (expected/futures price times coverage level) and the actual price, when actual price is less than the coverage price. Premium is cost for purchasing the LRP endorsement.

### Figure 3: LRP Outcomes: sell feeders in September, low coverage



Note: This graph shows LRP gross indemnities, premiums, and net indemnities (gross indemnity minus premium) for LRP endorsements purchased for a producer that calves in March and sells in September at wean. This data is the average of all endorsements available at the 90 to 92.49% coverage level, with an endorsement length 26 weeks. Gross indemnity is the LRP payment per cwt, calculated using the difference between coverage price (expected/futures price times coverage level) and the actual price, when actual price is less than the coverage price. Premium is cost for purchasing the LRP endorsement.

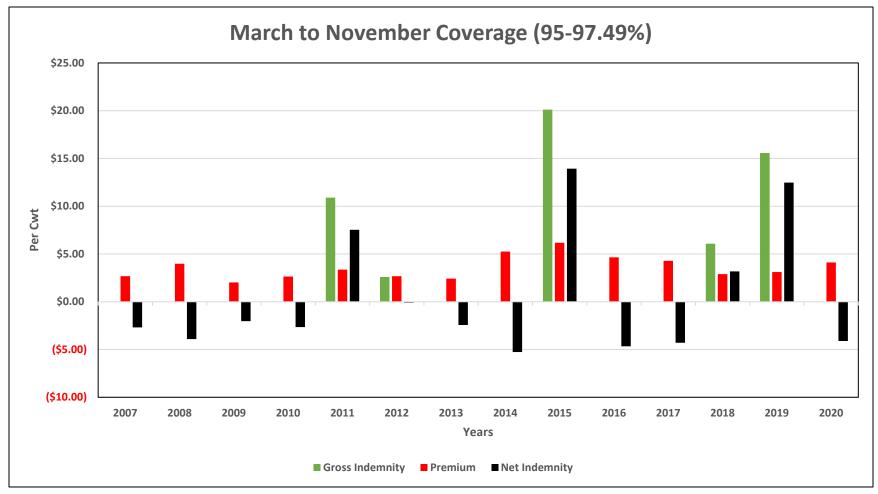


#### Figure 4: LRP Outcomes: sell feeders in November, high coverage

Note: This graph shows LRP gross indemnities, premiums, and net indemnities (gross indemnity minus premium) for LRP endorsements purchased for a producer that calves in March and sells in November at wean. This data is the average of all endorsements available at the 97.5 to 100% coverage level, with an endorsement length 34 weeks. Gross indemnity is the LRP payment per cwt, calculated using the difference between coverage price (expected/futures price times coverage level) and the actual price, when actual price is less than the coverage price. Premium is cost for purchasing the LRP endorsement.

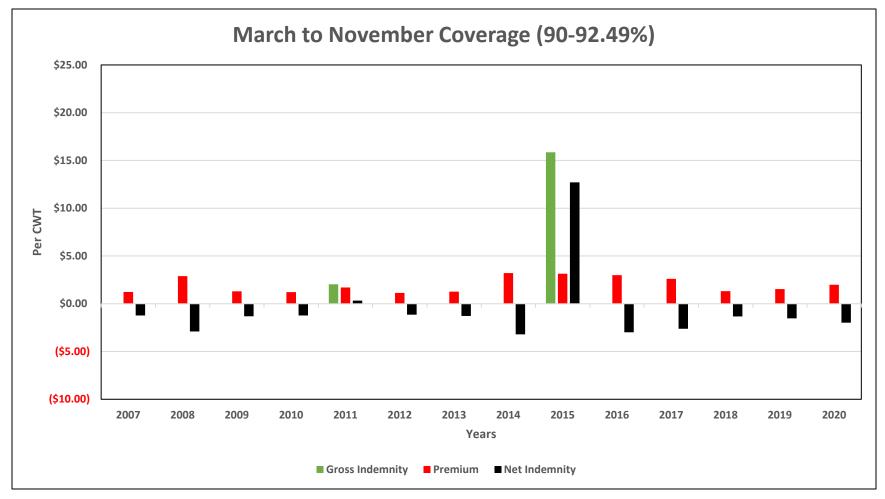
\*2015 net indemnities were \$36.41 per CWT, the y-axis maximum is set to \$25/cwt for easier comparison across years and scenarios.

#### Figure 5: LRP Outcomes: sell feeders in November, medium coverage



Note: This graph shows LRP gross indemnities, premiums, and net indemnities (gross indemnity minus premium) for LRP endorsements purchased for a producer that calves in March and sells in November at wean. This data is the average of all endorsements available at the 95 to 97.49% coverage level, with an endorsement length 34 weeks. Gross indemnity is the LRP payment per cwt, calculated using the difference between coverage price (expected/futures price times coverage level) and the actual price, when actual price is less than the coverage price. Premium is cost for purchasing the LRP endorsement.

## Figure 6. LRP Outcomes: sell feeders in November, low coverage



Note: This graph shows LRP gross indemnities, premiums, and net indemnities (gross indemnity minus premium) for LRP endorsements purchased for a producer that calves in March and sells in November at wean. This data is the average of all endorsements available at the 90 to 92.49% coverage level, with an endorsement length 34 weeks. Gross indemnity is the LRP payment per cwt, calculated using the difference between coverage price (expected/futures price times coverage level) and the actual price, when actual price is less than the coverage price. Premium is cost for purchasing the LRP endorsement.