

In The Cattle Markets

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Un-reflected Uncertainty

This issue was supposed to contain a synopsis of the *Cattle* report. Assuming the USDA remains open, the report has been rescheduled for release on February 28. Knowing inventory levels such as cattle grazing wheat pastures, calf crop levels and replacement heifer levels helps producers make better-informed decisions. It does not seem like the trade became overly concerned about the lack of or lag in getting fundamental information. The futures markets for live and feeder cattle have not been overly volatile and the forward-looking volatility remains low. Here is a breakdown of the volatility and its implications for protection strategies.

Volatility in this context is how much a price fluctuates over a period of time. One can look back and see how much a futures price has changed over the past 20 or 60 days. One can also look ahead and surmise how much a price may change over a period of time. That is where implied volatility is often examined. The implied volatility is the volatility level that is consistent with observed or known market parameters. One can observe futures prices and interest rate levels. One can also look at options on futures and observe strike prices and premium (or option price) levels. For a given option, the implied volatility can be backed out of these observed parameters and would reflect a consensus level expected by the trade. Thus, implied volatility is specific to a contract expiration date and option strike price. Often, at-the-money options are used or referenced because such options are more likely to have trading volume and better or more current information.

What is the current volatility level? Various brokerage and trading platforms provide a calculation of current and implied volatility, but it helps to know what they use. Consider the August 2019 Feeder Cattle contract. This contract and its options will trade until August 29, 2019. The August futures contract has been trading slightly above \$148 per cwt. Thus, a put option with a 148 strike price would be at-the-money, and was recently trading at \$5 per cwt. There are about 210 days until expiration and interest rates are about 2%. Using Black's option pricing model, the volatility implied by these parameters is 12%, the lowest since 2014 for this time of year. If the volatility were high (low), at-the-money options would trading at \$10 per cwt (\$4 per cwt). The low volatility is prevalent across months and for the live cattle contracts also. Thus, market uncertainty is not driving up the cost to lay off price risk when using options.

A related tool, Livestock Risk Protection (LRP), is also affordable at this time when measured using the implied volatility. LRP is currently available on feeder cattle with end dates into late October of 2019. The premiums move with option prices, so they would also be relatively low. During fiscal year 2018 there were 102,033 feeder cattle insured with LRP. Volume in

fiscal year 2019 is not keeping pace with that level. Thus, even though the cost of LRP is low, demand has fallen.

The Markets

In the cash market, fed cattle traded higher for the week. Feeder cattle traded steady at the heavier weights and higher for the lighter weights. Corn was higher for the week. On the futures side, live cattle finished fairly steady for the week, with large fluctuations this past Thursday. Feeder cattle futures finished generally lower. The extreme cold temperatures had producers concerned about cattle gains in the feedlot. There was a few mentioning calving had started.

<i>Data Source: USDA-AMS Market News</i>		Week of 2/1/19	Week of 1/25/19	Week of 2/2/18
5-Area Fed Steer	all grades, live weight, \$/cwt	\$123.87	\$123.29	\$125.91
	all grades, dressed weight, \$/cwt	\$198.34	\$197.22	\$199.90
Boxed Beef	Choice Price, 600-900 lb., \$/cwt	\$216.65	\$216.71	\$209.51
	Choice-Select Spread, \$/cwt	\$4.00	\$4.96	\$5.35
700-800 lb. Feeder Steer	Montana 3-market, \$/cwt	\$140.79	\$142.78	\$152.68
	Nebraska 7-market, \$/cwt	\$149.44	\$150.84	\$157.19
	Oklahoma 8-market, \$/cwt	\$140.86	\$141.56	\$147.96
500-600 lb. Feeder Steer	Montana 3-market, \$/cwt	\$177.16	\$173.99	\$185.05
	Nebraska 7-market, \$/cwt	\$182.74	\$182.38	\$198.83
	Oklahoma 8-market, \$/cwt	\$169.82	\$167.32	\$176.54
Feed Grains	Corn, Omaha, NE, \$/bu (Thursday)	\$3.64	\$3.60	\$3.44
	DDGS, Nebraska, \$/ton	\$147.00	\$151.00	\$150.00