Tennessee Slaughter Cow Market During COVID-19

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oronavirus (COVID-19) has had far-reaching impacts on the cattle market. The most publicized impacts have been related to the backlog of finished cattle associated with reduced slaughter rates, which resulted in lower finished cattle prices. Additionally, the reduced finished cattle slaughter resulted in lower feeder cattle prices and delayed marketing of feeder cattle and calves by many cattle producers. However, finished cattle and feeder cattle are not the only markets that influence returns for Tennessee cattle producers.

Another major income source for many Tennessee cattle producers comes in the form of slaughter cows. As cows mature and become less reproductively efficient, producers will cull them out of the herd and sell them as slaughter cows. Slaughter cow sales make up 15 to 20 percent of the gross income on most cow-calf operations (Durst et al., 2017). The relatively large percentage of gross income from slaughter cows points to the importance of this market to cow-calf operations. Therefore, it is important to evaluate the impact COVID-19 had on the slaughter cow market and its implications for cow-calf producers in Tennessee.

The slaughter cow market is driven by supply and demand for ground beef. There are three primary sources of beef that help fulfill ground beef demand, including trimmings from finished cattle, lean beef imports and slaughter cows. In addition to the three listed sources of ground beef, there are times when whole muscle cuts (i.e., chucks, rounds) from finished cattle are ground to fulfill ground beef demand. The purpose of this publication is to illustrate how slaughter cow prices in Tennessee have been influenced by COVID-19. This will be accomplished by evaluating mature cow slaughter and slaughter cow prices in Tennessee during the first five months of 2020, as compared to previous years.



W 918

Coronavirus Timeline

On January 20, 2020, the first case of COVID-19 was reported in the United States. This was followed by the World Health Organization declaring COVID-19 to be a pandemic on March 11, which was further followed by the United States government declaring a national emergency on March 13, 2020. Many restaurants and food service establishments closed temporarily and/or reduced capacity due to the virus, which shifted the flow of meat products to grocery outlets instead of restaurants and food service.

Beef Cow Slaughter

Nationally, beef cow slaughter started at a rapid pace in 2020 (Figure 1). Beef cow slaughter from January through March of 2020 was 11.7 percent (85,400 head) greater than for the same three months the previous year. However, COVID-19 slowed the slaughter rate in April and May of 2020, resulting in a 12.2 percent (65,300 head) decline in beef cow slaughter compared to the same two months in 2019. Despite the slowdown, beef cow slaughter the first five months of 2020 was still 1.6 percent (20,100 head) greater than the same time period in 2019. Though national cow slaughter is important, slaughter cow prices tend to be more regional in nature, because slaughter facilities are regional. Thus, Tennessee slaughter cow prices tend to be influenced by regional supply and demand for slaughter cows. Regional beef cow slaughter for Region 4 (AL, FL, GA, KY, MS, NC, SC and TN), Region 6 (AR, LA, NM, OK and TX), and Region 7 (IA, KS, MO and NE) for January through May of 2020 are illustrated in **Figure 2**. It would appear coronavirus had a much larger influence on slaughter levels in Regions 6 and 7 than in Region 4 from late March through late April. Region 4 appears to have maintained and actually increased beef cow slaughter during late March and early April. During March and early April, cow-calf producers were holding cattle while feeder cattle prices were low (Martinez and Griffith, 2020). In order to achieve cash flow for the enterprise, cow-calf producers seem to have culled more cows. However, Region 4 slaughter still declined in the middle of April before rebounding in late April and May. Regardless of the region, beef cow slaughter appears to be recovering, based on May slaughter rates.



Figure 1. Monthly National Federally Inspected Beef Cow Slaughter for January Through May of 2016 Through 2020.

(Source: USDA-NASS)



Figure 2. Weekly Regional Federally Inspected Beef Cow Slaughter for Region 4 (AL, FL, GA, KY, MS, NC, SC and TN), Region 6 (AR, LA, NM, OK and TX) and Region 7 (IA, KS, MO and NE) for January Through May of 2020. (Source: USDA-Market News)

Slaughter Cow Prices

Reducing slaughter rates when an ample supply of cattle is available generally results in price declines, and this was true for the Tennessee slaughter cow market. Weekly prices of Tennessee slaughter cows grading breaker, from January 2016 through May 2020, are reported in **Figure 3**. Based on this data, slaughter cow prices tend to be at their highest level the first six months of the year, before declining rapidly the last quarter of the year.

Slaughter cow prices in 2020 were outpacing the previous three year's prices for the same months through the end of March. However, slaughter cow prices declined about \$15 per hundredweight during the peak of the COVID-19 pandemic. The \$15 decline may be somewhat of an overstatement of the decline, because the last week of March resulted in slaughter cows trading over \$70 per hundredweight, which was \$7 per hundredweight higher than any of the previous weeks in 2020. The decline was short-lived, and slaughter cow prices rebounded back to February and March price levels in a matter of three weeks, barring the one week of \$70 prices. It is pertinent to note that 2020 prices were well below 2016 prices the first five months of the year. This is because the U.S. cattle industry was still in rapid herd expansion the first half of 2016, resulting in relatively low beef cow slaughter levels and hence higher prices in 2016 (**Figure 2**). Considering the relatively large supply of slaughter cows in 2020, the price for this class of animal has been strong.



Figure 3. Weekly Tennessee Breaker Slaughter Cow Prices (2016-2020). (Source: USDA-AMS)

Conclusions

The slaughter cow market was not able to escape unscathed from COVID-19. However, it has fared better and had a quicker recovery than the finished cattle and feeder cattle market. Hopefully, the slaughter cow market in addition to the Coronavirus Food Assistance Program (CFAP) payments have produced sufficient revenue for producers to support cash flow needs during a time when calf and feeder cattle prices were depressed. The particular dynamics of the heifer and slaughter cow market may also result in producers culling deeper into the cow herd and retaining heifers. This decision would generate similar up-front cash flow and reduce the average age of the cow herd. Increased cow culling without increased heifer retention could lead to a quicker than expected decline in cow herd inventory and calf price support. The calf price support would then put the cattle herd back into expansion mode within two or three years.

References

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