Cattle Slaughter: What is at Play?
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Cattle slaughter numbers are important values in the cattle industry for several reasons. The first reason the number of cattle slaughtered is important is because it impacts total beef production. Beef production is a factor of the number of head slaughtered and weight at slaughter which is further impacted by the class of animal being harvested (steer, heifer, or cow). The second reason the number of head slaughtered is important lies largely in heifer and cow slaughter which influences cattle herd expansion and contraction. A third reason cattle slaughter numbers are important is related to overall slaughter capacity which is only discussed during times of under and over capacity.

As of this writing there were 42 weeks of federally inspected cattle slaughter data available for 2018. Through that time period, 13.52 million steers, 7.30 million heifers, and 2.43 million beef cows had been harvested in 2018. The aforementioned slaughter numbers represent a 1.1 percent decline in steer slaughter compared to the same 42 weeks in 2017 while heifer slaughter is up 7.0 percent and beef cow slaughter increased 10.3 percent compared to a year ago. One aspect that also has to be considered is dairy cow slaughter which totaled 2.53 million head through 42 weeks which is an increase of 4.4 percent compared to 2017.

The increased slaughter numbers has led to 22.4 billion pounds of beef production through the end of October which is an increase of 2.7 percent compared to 2017. Total beef production over this time period could have been vastly different had carcass weights been heavier or lighter. Steer carcass weights the first six months of the year averaged about six pounds heavier than the same six months in 2017, but weights moderated in the third quarter leaving average steer weights through the first 42 weeks at about 4 pounds heavier than 2017. A difference of two pounds seems small but it becomes large when multiplied by 13.52 million head. Heifer carcass weights in 2018 have been above year ago weights 40 out of 42 weeks resulting in heifer dressed weights averaging eight pounds heavier than the previous year. The increased heifer weights are likely due to higher quality heifers entering the feedlot instead of being retained as replacement heifers.

Whether the animal is a steer, heifer, or cow also impacts beef production. Steers carcass weights have averaged about 64 pounds heavier than heifer carcass weights through 42 weeks. Similarly, slaughter cow weights tend to be even lighter which means each cow harvested has a smaller relative impact on beef production than do steers and heifers.

Moving to the second stated reason slaughter numbers are important is expansion and contraction of the beef cattle herd. As profitability in the beef industry declines, heifer and cow slaughter tend to increase as producers make the decision to market more animals. Alternatively, when profitability is strong, heifer retention increases and cow culling is reduced. The most recent example of retaining heifers and cows took place from 2014 through 2016. However, the market has been trending to sending more heifers to the feedlot and culling the cow herd deeper.

From 1990 to 2010, heifer slaughter as a percentage of the beef cow herd ranged from 27 to 35 percent while cow slaughter as a percentage of the beef cow herd ranged from just below 8 percent to just over 11 percent. During the rapid expansion phase, heifer slaughter as a percentage of the beef cow herd ranged from 25 percent to 28 percent while cow slaughter ranged from 7 to 9 percent. If 2018 heifer and beef cow slaughter levels persist at the current rate then heifer slaughter will be between 28 and 29 percent and cow slaughter will be between 9 and 10 percent as a percentage of the beef cow inventory. These levels of slaughter do not point towards contraction in the beef cow herd. These numbers simply point to much slower expansion in the industry.

Lastly, slaughter capacity becomes a topic of discussion when cattle inventory grows and slaughter levels increase. The beef industry lost some slaughter capacity in the past several years and
some of that reduced capacity occurred during the rapid expansion phase as there were fewer cattle to harvest. At this time, there is not tremendous concern in slaughter capacity.