## Growing the Cattle Herd at a Quick Clip

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Growing the beef cattle herd in the state of Tennessee has taken front and center stage. The University of Tennessee Institute of Agriculture, Tennessee Department of Agriculture, and Tennessee Farmer's Cooperative have teamed up for the Tennessee Beef Heifer Development Program which is part of the "Grow the Herd Initiative." The program itself is not meant to drive herd expansion but rather demonstrate replacement heifer protocols that result in efficient and productive cows. The program is also structured in a manner to stimulate private custom heifer development which decreases the barriers that are encountered with heifer retention. It is important to understand the ultimate driver in the expansion or contraction or any industry is economic incentives. The aforementioned program will assist producers in the heifer development process and hopefully positively impact profitability.

It is likely the heifer development program will positively impact herd growth, but the key driver has and always will be cattle prices. When cattle prices increase, more heifers are retained and placed in the breeding herd which increases cattle inventory. Alternatively, when cattle prices decrease, a larger percentage of heifers are marketed into the feeding system which results in a reduced cattle inventory. Thus, in anticipation of the January 1 Cattle Inventory report, it may be useful to consider some information that may provide us an idea of what January 1, 2016 inventory will be.

U.S. beef cow inventory was just short of 29.7 million head at the beginning of 2015. It would appear inventory will increase significantly as of the first day of 2016, but how would anyone know? The first element to consider when estimating inventory in the beef herd is to consider beef cow and heifer slaughter. Through the first 42 weeks of 2015, federally inspected heifer slaughter was down 12.6 percent (856,000 head) compared to the same 42 week period in 2014. Additionally, federally inspected beef cow slaughter the first 42 weeks of the year was down 14.5 percent (300,000 head) compared to the same period in 2014. In order to get a little better grasp on the values, it may be pertinent to consider that 2014 federally inspected heifer and cow slaughter were 8.3 and 18.1 percent lower than 2013 respectively.

Year to date heifer and beef cow slaughter are much lower than a year ago, but weekly data appears to be showing some convergence to 2014 slaughter levels. The convergence toward 2014 slaughter numbers is largely due to the drastic decline in prices in late summer and early fall. The convergence shows up quickly in beef cow numbers as cows can be liquidated and harvested immediately. Alternatively, a price decline in the near term does not immediately influence the number of heifers slaughtered. Heifers generally do not move directly from the farm to harvest. Heifers leave the farm and are placed in the feedlot. Thus, it may be beneficial to keep an eye on feedlot placements.

The cattle on feed report provides a quarterly perspective on the number of cattle on feed by class. Looking at the past 4 quarters, the number of heifers and heifer calves on feed in feedlots with 1,000 head or more capacity in 2015 was 6.5 percent below 2014 and 12.1 percent below 2013. It is not evident at this point if lower feeder cattle prices the past couple of months have led to more heifers making their way to the feedlot, but it is likely the market will reveal this information in the next six months.

Given the current information, it is possible the 2016 January 1 Cattle Inventory report will show heifers for beef cow replacement nationally up 6 to 7 percent from a year ago. (Some

of these heifers are fairly low quality heifers to be placing in the breeding herd.) Similarly, it is likely beef cow inventory will increase between 1.8 and 2.3 percent. These type increases in inventory are rapid considering that in the past 20 years beef cow inventory has declined in 16 years. Furthermore, there has been only one year in which inventory increased more than 1 percent (2015: 2.1%). The story is not much different for heifers for beef cow replacement as the greatest percentage increase in the past 20 years was in 2015 at 4.1 percent.

Herd expansion is in full swing and it will be the end of January before the January 1, 2016 inventory report is released. Therefore, between now and then, the market will be in a wait and see mode. The one thing producers should be doing is keeping an eye on the Tennessee Beef Heifer Development Program. This program will prepare producers to produce high quality and profitable heifers in cattle herd expansion years and contraction years. The information learned and the markets developed from this program may be more important in contraction years than expansion years.