MARKET ADVISOR

by Tim Petry, North Dakota State University Extension Service

Cyclical Beef Cow Herd Expansion Peaked

USDA NASS released the annual CATTLE inventory report on Jan. 31, 2020.

To begin with, the USDA National Agricultural Statistics Service (NASS) revised downward several Jan. 1, 2019, numbers that were released last year. The 2019 U.S. beef cow numbers were adjusted downward 75,000 head from 31.77 million to 31.69 million. Beef replacement heifers went down 40,000 head from 5.93 million to 5.89 million. Some 2019 statelevel estimates were also revised to reallocate the U.S. total.

As expected, cyclical beef cow herd expansion peaked in 2018 with liquidation occurring during 2019. U.S. beef cows on Jan. 1, 2020, at 31.32 million head were down 374,000 from the 31.69 million on Jan. 1, 2019. That followed increases of 376,000; 833,000; 1,007,000; 276,000; and 245,000 head in the previous five years. The total fiveyear increase in beef cows since the last cyclical low recorded on Jan. 1, 2014, was 2.7 million head. The U.S. had the largest number of beef cows on Jan. 1, 2019, since 2009.

A number of factors likely led to the decline in beef cows during 2019 even with generally favorable grazing conditions. The rapid expansion from 2014 through 2018 meant many cow-calf operations were near fully stocked. Fewer beef replacement heifers entered the herd and beef cow slaughter was relatively high. Harsh winter weather conditions and flooding, particularly in some Northern Plains states; some reports of more than normal open cows; and narrowing margins likely contributed to the increased slaughter.

Inventories by state

Declines in the beef cow herd centered in the Southern Plains. Kansas lost the largest number of cows at 96,000 head, followed by Texas losing 85,000, Oklahoma declining 51,000, and Arkansas dropping 20,000. Other states with declines include South Dakota, declining 45,000 head; and Colorado, Illinois, Iowa and Montana with 20,000 or more declines.

But not all states showed contraction. California increased beef cows by 35,000 head, followed by Missouri increasing 24,000, and Georgia, North Dakota, and Wisconsin all adding 20,000 head.

States not listed showed slight changes up or down.

Major beef cow contraction is not expected to continue, even though beef replacement heifers on Jan. 1, 2020, declined almost 2% from 5.89 million in 2019 to 5.77 million. About 3.5 million of those are expected to

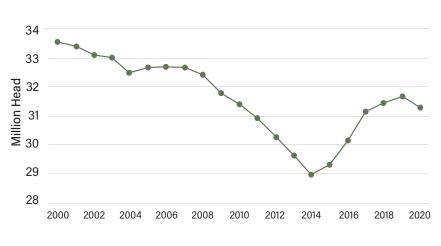


Figure 1: U.S. Beef Cows

Figure 2: Beef Cows That Have Calved, Jan. 1, 2020 (1000 Head)

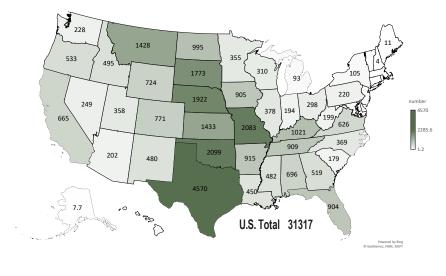
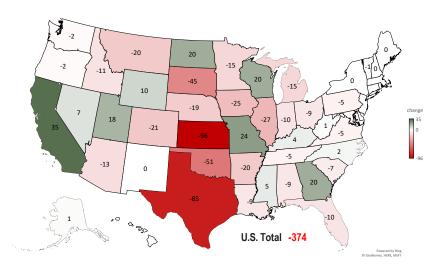


Figure 3: Change in Beef Cows from 2019 to 2020 (1000 Head)



that both domestic and export meat demand will need to be strong to support prices.

USDA is projecting record beef and pork exports in 2020. But issues with African Swine Fever (ASF) in hogs and the Coronavirus in humans are causing uncertainty in markets. *Editor's note: Tim Petry is a livestock marketing economist with the North Dakota State University Extension Service. The USDA NASS annual CATTLE inventory report is available at* https://usda.library.cornell.edu/concern/ publications/h702q636h.

calve in 2020, down less than 1%.

Of course, weather and summer pasture conditions are always the wild card affecting changes in beef cow numbers. Late-season drought conditions in several Appalachian states caused some forced liquidation of beef cows in 2019. But conditions can change rapidly as ample rains with even flooding are occurring in that area now.

The 2019 U.S. calf crop (including beef and dairy calves) declined 0.7% at 36.07 million head. Fewer beef cows will mean another calf-crop decline in 2020. Fewer calves should help support fall 2020 calf prices, but corn prices are also a wild card. A general rule of thumb is that a 10-cent-per-bushel change in corn prices will cause a \$1 change in fall calf prices in the opposite direction.

USDA is currently projecting 4.3 million more corn planted acres and a record-high 15.46-billion-bushel corn crop in 2020 with lower prices. But many questions remain including 2019 corn yet to be harvested in the Dakotas and Wisconsin.

U.S. beef production in 2019 was record high at 27.15 million pounds (lb.). The previous record was 27.09 million lb. in 2002. The number of cattle on feed for the slaughter totaled 14.7 million head on Jan. 1, up 2% at almost 300,000 head more. So, record beef production will likely occur again in 2020. That along with continuing record pork and chicken production will mean