



*FORAGE FACTOR: Forage, pasture as well as hay, help drive cattle herd expansion or contraction.*

## **Beef output may keep rising after herd expansion ends**

*Livestock Outlook: Combination of beef cow herd and beef replacement heifers may lead to larger calf crop again in 2019.*

Lee Schulz | Mar 15, 2019

The U.S. all cattle and calves inventory stood at 94.76 million head on Jan. 1, up 0.5% from a year ago. That's according to USDA's Cattle Report, released Feb. 28. The uptick during 2018 marks the fifth year in a row of growth.

Before expansion began in 2014, the all cattle and calves inventory had declined for seven years. The annual Cattle Report is USDA's one cattle report each year that includes data from all the states and for cattle operations of all sizes. It's commonly referred to as the cattle inventory report.

USDA's survey of producers show the total U.S. cattle inventory roughly matches the 2009 level. Following 2009, the cattle herd dropped to a 62-year low of 88.53 million head by 2014, and then increased 6.23 million head over the last five years. The beef cow herd was 31.77 million head on Jan. 1, up 1% from a year ago. Milk cow numbers, at 9.35 million head, were down 0.8%. USDA reported the 2018 calf crop at 36.40 million head, 1.8% larger than 2017. Peak beef production of this cattle cycle is not expected until early in the next decade.

### **Beef cow herd up in key states**

Producers in some areas of the country are still adding beef cows. Others are peaking or reducing inventories. The Southern Plains expanded its cow numbers by 197,000 head in 2018. Those cows represent about 65% of the country's expansion. Specifically, Texas cow numbers were up 135,000 head, and Oklahoma cow numbers were up 62,000, both 3% annual increases.

Other important beef cow regions and their magnitude of beef cow expansion over the past year include:

**Great Plains.** Colorado, Kansas, Montana, Nebraska, Wyoming, and North and South Dakota were up 80,000 cows, or 0.9%. South Dakota added 67,000 cows, and Nebraska added 31,000 cows. However, certain states in these regions had droughts, which trimmed forage supplies and impacted beef cow inventories. Montana's beef cow inventory dipped 49,000.

**Corn Belt.** Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio and Wisconsin were up 19,000 cows, or 0.4%. Due to drought, which trimmed forage supplies, Missouri lost 27,000 cows. The Iowa beef cow inventory remained unchanged at 950,000 head.

**Southeast.** This region led the peaking or contraction. Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North and South Carolina, Tennessee, Virginia and West Virginia were down 4,000 beef cows. Excessive moisture in the Southeast recently likely reduced or limited potential increases in beef cow numbers.

**West.** Arizona, California, Idaho, Nevada, New Mexico, Oregon, Utah and Washington were down 2,000 beef cows. Recent drought in the region likely drove reductions or limited potential increases.

Beef cow replacement heifers on Jan. 1 were 5.92 million head, down 3.0% from a year earlier. Does this mean the end of the beef herd expansion after five years? Maybe. But the combination of the beef cow herd and replacements may lead to a larger calf crop again in 2019.

While heifers kept for beef replacements are down, they're still a relatively high percent of the beef herd inventory at 18.7%. This ratio is down from 19.4% one year ago, as heifer retention moves closer to levels consistent with no herd growth.

Large heifer retention levels occurred in 2015-17, with beef replacement heifers at over 20% of the beef cow herd, which had never occurred in the history of the data back to 1965. Over the past 20 years, this ratio has averaged 18%. Dairy replacement heifers were down 1.4% to 4.70 million head on Jan. 1.

### **Feeder cattle supply up**

As of Jan. 1, the calculated available supply of feeder cattle outside feedlots was 26.38 million head, up 1% from a year ago. This calculation is made by adding all the calves under 500 pounds together with all the steers over 500 pounds and the heifers not kept as replacements, and then subtracting the "all cattle on feed" estimate.

Cattle on feed in all feedlots on Jan. 1 totaled 14.37 million head, up 1.6% from a year earlier. The 11.69 million head in feedlots of 1,000 head or more capacity were up

1.7% and make up 81% of the total. The 2.68 million head in feedlots with less than 1,000-head capacity were up 0.9% and make up 19% of the total.

Jan. 1 on-feed inventories in feedlots with a capacity of less than 1,000 head over the last 20 years have averaged 19% of the total cattle on feed from all feedlots in the United States. This suggests that nationally, small feedlots are, at least, maintaining their important role within the cattle feeding sector.

USDA's monthly Cattle on Feed Report for January for feedlots with a 1,000 head or more capacity, released Feb. 22, showed cattle on feed up 1.7%. The calculations above were derived from the total U.S. cattle on feed, 14.37 million, found in the cattle inventory report, subtracting the 11.69 million in feedlots with 1,000 or more head in capacity, found in the monthly cattle on feed report, with the remainder being in the less-than-1,000-head feedlots.

### **Texas, Nebraska lead in cattle on feed**

The cattle inventory report showed Texas and Nebraska tied for the top spot in number of cattle on feed. This was due primarily to a 100,000-head increase in the Lone Star State, while numbers for the Cornhusker State were down 50,000 head.

Higher feedlot inventories were found in the West and in the larger cattle feeding states. Colorado was up 5%, Iowa up 1.5%, California up 9.2%, Idaho up 11.3%, and Arizona up 9.5%. The survey does not distinguish between beef and dairy on-feed inventories.

California, Idaho and Arizona have the first, fourth and 13th largest dairy herds, respectively. Dairy cow numbers in these three states decreased 20,000 head over the last year. Further reductions seem likely, as dairies continue to face financial stress.

Other heifers, such as heifers that will not be bred or used as replacement animals for the milk herd, are increasingly entering feedlots. Other heifer inventories in these three states were up 31,000 head on Jan. 1. Of note, other large cattle feeding

states such as Kansas, South Dakota and Minnesota were all down in cattle-on-feed inventories.

## Tight hay supplies continue

One other supply-side story related to beef cattle inventories is the hay market situation. Dec. 1 hay stocks declined nationally for the second year in a row to 79 million tons, the smallest Dec. 1 figure since the drought-stricken year of 2012 and before that 1976.

Texas inventories were hit the hardest, losing over 2 million tons in inventory from the year before. Wisconsin and Missouri also had major reductions in stocks of 900,000 tons each. This was the smallest December figure for Missouri since 1983. Wisconsin dipped below 2 million tons, sitting at the lowest value in the data back to 1973. Iowa had 220,000 fewer tons at 2.06 million tons in inventory. In Iowa, January 2019 hay prices were \$11 per ton higher than a year earlier.

Given tight hay inventories and higher prices, hay acreage is expected to rise in the 2019-20 marketing year. As the profit margins for corn and soybeans get tighter, things should start to swing back, too, with more farmers planting wheat, small grains and hay. A lack of acreage for hay or pasture, or poor forage conditions could prompt beef cow herd reductions. Remember, cattle producers match cattle numbers to given resources. The numbers are the foundation to expanding or contracting herd numbers.

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