

COW/CALF CORNER

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Regional Changes in Cow-Calf Production: 2012 Census of Ag Summary, Part 2

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The U.S. beef cow herd decreased by 11 percent from 2007 to 2014, dropping from 32.6 to 29.0 million head. Drought has been responsible for large beef cow inventory decreases in Texas (down 25 percent); Oklahoma (down 12 percent) and New Mexico (down 16 percent). Most of the decrease in these states has occurred since 2011 and significant rebuilding of the beef cow herd in these states is expected when conditions permit. However, decreases in the beef cow herd in much of the eastern half of the country appear to be more structural and long term in nature due to changes in forage production. For example, from 2007 to 2014, the beef cow herd decreased significantly in Iowa (down 12 percent); Illinois (down 16 percent); Indiana (down 18 percent); Missouri (down 14 percent); Kentucky (down 16 percent); Tennessee (down 23 percent); Minnesota (down 14 percent); and Georgia (down 18 percent).

A comparison of the 2012 and 2007 Census of Agriculture shows that total pasture acreage in the U.S. declined by 3.6 percent. This decrease was due to a 64 percent decrease in cropland used as pasture. This pasture category decreased significantly in all states but, since cropland pastured represents a much larger proportion of total pasture in some regions, the impact on total pasture varied widely across states. In the eastern half of the country, including the Midwest, Great Lakes, Appalachian, Gulf and South regions, pastured cropland, which accounted for 21 percent of total pasture land in 2007, dropped to less than 7 percent in 2012. By contrast, in the Rocky Mountain and Plains regions, cropland pastured represented less than 6 percent of total pasture in 2007 and dropped to 2 percent in 2012. The result is an average decrease in total pasture of 12 percent in the eastern half of the country compared to a 2 percent decrease in the Rocky Mountain and Plains regions.

The implications of regional loss of cropland used as pasture is considerably more than the acreage alone would indicate. The average number of pasture acres per beef cow in the eastern half of the country is less than 5 acres per cow while in the Plains and Rocky Mountain regions the average is over 22 acres per cow. Although this is a broad measure of stocking rates, it is indicative of the forage productivity in the two regions. As a result, while there is only 17 percent as many pasture acres in the east, the number of cows in the eastern half of the country was 75 percent of the number of cows in the Plains and Rocky Mountain regions in the 2012 census. This percentage is similar in the 2007 census, but the 2012 census includes the impacts of the drought. Drought recovery at some point is likely to result in herd rebuilding in the west, particularly in the Southern Plains, while the loss of pasture acreage likely means that cow inventories in the east will be permanently reduced.

Economic Advantages to Implanting Nursing Calves

Glenn Selk, Oklahoma State University Emeritus Extension Animal Scientist

Many new technologies have been made available to the beef industry over the last 75 years. Few have the potential return on investment as do growth promoting implants for nursing calves. The term implant is used to refer to a group of products used in the cattle industry that increase rate of growth. Each type or brand of implant has its own specific applicator, which is used to properly administer the implant. Implants contain natural or synthetic anabolic compounds that produce physiological responses similar to hormones that are already produced in varying quantities in the body. **Calves intended for “natural” or “organic” markets can not be implanted.**

Implants cleared for use in nursing calves contain a lower dose of the active ingredient compared to products cleared for use with older cattle. These “calf” implants are typically administered when calves are between 2 and 4 months of age. Research summaries have shown that implants given during the suckling phase will increase average daily gain of steer calves by 0.1 pound per day. The response in heifer calves is slightly higher at 0.12 to 0.14 pound per day. Over 150 days of the remaining nursing period, this additional gain can amount to 15 pounds in improved weaning weights in steers and 18 to 21 pounds in weaned heifer calves.

The value of this additional weight gain is difficult to accurately predict. Heavier calves often are priced slightly less per pound than lighter calves. In today’s 2014 market, an estimate of \$1.30 per pound of added gain should be appropriate to evaluate the efficacy of implanting. Assuming a cost of \$1.00 to \$1.50 per implant, a \$13 to \$27 return on each implant dollar invested can be expected.

Producers often raise the question, “Is it safe to implant replacement heifers?” Research has shown that heifer calves implanted one time at about 2 months of age had very little, if any impact on subsequent conception rates. However, heifers that were implanted at birth, after weaning, or multiple times had lower reproductive rates than non-implanted heifers. Heifers that are known at birth, or at calf-working time, to be replacement females should not be implanted. There is nothing to gain. Bull calves that may remain as bulls to become herd sires

should not be implanted. Once again, the key is to follow label directions precisely. (Source: [Selk, G. E., 1997. Implants for Suckling Steer and Heifer Calves and Potential Replacement Heifers. Symposium: Impact of Implants on Performance and Carcass Value of Beef Cattle. P-957. Oklahoma Agricultural Experiment Station.](#))

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