

# COW/CALF CORNER

The Newsletter

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## **Beef herd expansion threatened in the coming weeks**

Derrell S. Peel, Oklahoma State University Extension Livestock Marketing Specialist

It's April and pastures are, or should be, greening up in the southern half of the country. However, cold weather this spring has delayed pasture development in many areas. Winter conditions still exist in several regions in the northern half of the country where spring green-up is still a month away. From a cattle perspective, conditions fall into three categories at the current time. Moisture conditions are adequate to abundant in most of the eastern half of the country. Marginal drought conditions are the norm in the middle of the country with persistent severe drought conditions in much of the West.

Forage and crop conditions should improve rapidly in the Delta and Southeast in the next few weeks. Cool temperatures (and soil temperatures) is delaying forage growth and crop planting in the Midwest, Northern Plains and northern Rocky Mountain region. Warm and dry conditions are forecast for the Southwest and western mountain regions and the west coast. Producers in wet regions will move forward with production plans with warmer temperatures. Producers in drought areas will remain retrenched waiting for improving conditions. Texas and Oklahoma, along with California, Nevada and New Mexico have the largest areas of severe drought (D3 and D4).

It is producers in the marginal drought areas that must be prepared to move quickly to either act aggressively if conditions improve or to act defensively if drought conditions redevelop. According to the latest Drought Monitor, five states among the top ten beef cattle states have the largest areas (percent of state area) of marginal drought conditions (D1 and D2 on the D0 to D4 scale), including Iowa (57 percent); Kansas (85 percent); Nebraska (61 percent); Oklahoma (54 percent); and Texas (39 percent). With the exception of Iowa, all of these states showed strong indications of herd expansion with significant increases in beef replacement heifers on January 1, 2014. In fact, the increase in replacement heifers in Kansas, Nebraska, Oklahoma and Texas was 132,000 head, which is more than the net increase of 90,200 head of beef replacement heifers in the entire country. In addition, both Kansas and Oklahoma had 2013 increases in the beef cow

herd. These four states accounted for 31 percent of the U.S. beef cow herd on January 1 and the ability of these states to maintain herd expansion plans will likely determine the overall impact on the U.S. beef cow inventory in 2014.

Current weather predictions suggest improving moisture conditions in eastern Texas and Oklahoma, and much of Kansas, Nebraska and Iowa. Drought conditions are predicted to persist into summer from southwest Kansas to areas south and west, including western Oklahoma and Texas, as well as New Mexico, Arizona, Nevada, Utah, California and Oregon. These last six states accounted for nearly 8 percent of beef cows on January 1, 2014. An El Niño is forecast to develop this summer or fall which will likely bring some relief to much of this region but perhaps not soon enough to avoid additional liquidation in the first half of 2014. If current forecasts are realized, improved conditions in the central Great Plains and eastern Southern Plains may be enough to support limited beef cow herd expansion in 2014. However, conditions in this region will likely either improve or deteriorate with typical warm and windy spring weather in the next few weeks. Forage and water supplies will tighten rapidly and soon without moisture. Failure to sustain herd expansion plans in the central and southern plains will result in no growth or more herd liquidation for the entire country in 2014. The next few weeks will be critical in these states and has implications for the entire beef cattle industry.

## **Make a record of twins**

Glenn Selk, Oklahoma State University Emeritus Extension Animal Scientist

Estimates of the percentage of beef cattle births that produce twins vary. One estimate (Gilmore) puts the percentage at about 0.5% or 1 in every 200 births. Approximately one-half of the sets of twins should contain both a bull and a heifer calf. Make sure to write down these calf numbers of twin births while they are still nursing the cow. Be certain to **not** retain the heifer born twin to a bull as a replacement female.

Freemartinism is recognized as one of the most severe forms of sexual abnormality among cattle. This condition causes infertility in the female cattle born twin to a male. When a heifer twin shares the uterus with a bull fetus, they also share the placental membranes connecting the fetuses with the dam.

A joining of the placental membranes occurs at about the fortieth day of pregnancy, and thereafter, the fluids of the two fetuses are mixed. This causes exchange of blood and antigens carrying characteristics that are unique to each heifers and bulls. When these antigens mix, they affect each other in a way that causes each to develop with some characteristics of the other sex.

Although the male twin in this case is rarely affected by reduced fertility, in over ninety percent of the cases, the female twin is completely infertile. Because of a transfer of hormones or a transfer of cells, the heifer's reproductive tract is severely underdeveloped and sometimes even contains some elements of a bull's reproductive tract. A freemartin is genetically female, but has many characteristics of a male. The ovaries of the freemartin do not develop correctly, and they remain very small. Also, the ovaries of a freemartin do not produce the hormones necessary to induce the behavioral signs of heat. The external vulvar region can range from a very normal

looking female to a female that appears to be male. Usually, the vulva is normal except that in some animals an enlarged clitoris and large tufts of vulvar hair exist.

Freemartinism cannot be prevented; however, it can be diagnosed in a number of ways ranging from simple examination of the placental membranes to chromosomal evaluation. The cattleman can predict the reproductive value of this heifer calf at birth and save the feed and development costs if he is aware of the high probability of freemartinism. (Source: “The Causes and Effects of Freemartinism in Cattle” by Laurie Ann Lyon.)

In some cases, there are few, if any, symptoms of freemartinism because the male twin may have been aborted at an earlier stage of gestation. Hidden “freemartins” are often difficult to identify if replacement heifers are purchased. Therefore this is another good reason to cull any open (non-pregnant) replacement heifer soon after her first breeding season.

Cows that are nursing twin calves will require an estimated 13% more energy intake to maintain body condition. The additional suckling pressure on the cow will extend the post-calving anestrus period. Therefore, cows nursing twins will take longer to re-cycle to rebreed for next year’s calf crop. In some cases, producers may want to consider early weaning of the twin calves to allow the cow to re-cycle in time to stay with the other cows in the herd.

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