## **COW/CALF CORNER**

The Newsletter

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## Can We Rebuild the Cow Herd? Part 3

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

Previous articles (Parts 1 and 2) have discussed several challenges and opportunities related to the how and where of rebuilding the U.S. cattle herd. This article discusses the most important asset of the U.S. beef cattle industry...the "who" of herd rebuilding. It is people...the cattle producers...who make it happen and are the key to rebuilding the beef cow herd and expanding cattle inventories. As with the land use and regional components, there are both challenges and opportunities with regards to the producer issues in the beef industry.

Like farmers of all types, cattle producers have been aging as a group for many years. USDA data from 2011 indicates that among the 654,000 cattle farms in the country, 37 percent are operated by producers 65 years of age or older and another 29 percent are operated by producers aged 55-64. Together these two age groups operate 64 percent of land used for cattle production. This includes 118.4 million acres by the 65+ producers, 66 percent of which are the full owners of their farms. In many cases there are no family heirs interested or able to take over the operation.

These demographics suggest that a significant amount of asset turnover is inevitable in the next decade. In the meantime, older cattle producers, like many farmers, often don't really retire and exit the industry but rather tend to "retire in place" by remaining on the farm and gradually scaling back their operations. Older producers, on average more financially secure, can afford to cut back by reducing cattle numbers or switching to less labor intensive enterprises according to their health situation and labor ability. The latest USDA data confirms that cattle producers over 65 years of age have a per farm value of production that is 43 percent less (25 percent less on a per acre equivalent basis) compared to the average value of production of all cattle farms. In the most recent data, average farm size for these older producers has dropped to roughly 75 percent of the average of all cattle farms. Previous data had indicated that farm size for the older producers was only 8-10 percent less than average. It is possible that asset turnover in the cattle industry has accelerated recently.

The combination of these producer demographics and the drought creates a unique situation in the cattle industry. The drought has forced many of these older producers to partially or totally liquidate their herds. Some of these older producers are not inclined to or will not be able to rebuild their cattle operations. The drought is forcing some producers to face the inevitable decisions about exiting the industry sooner rather than later.

At the other end of the producer spectrum are young producers trying to get started. The challenges for beginning producers have existed for many years but have arguably never been greater than now. Asset values are record high and the capital requirements greater than ever. The oversight of agricultural lenders under new regulations is considerably more stringent than in years past and adds to the difficulty of qualifying young producers for loans, even in cases where the lender is willing. Cattle producers, perhaps to an even greater extent than farmers in general, view asset ownership as preferred and one of the marks of success in the cattle business. And yet, for young producers, asset control is what is important even if asset ownership is not possible. Leasing and other business arrangements may be more feasible and necessary for a new generation of cattle producers than asset purchase. One of the impacts of the drought is that older producers who have been forced to liquidate herds may be more interested in leasing land to younger producers and that may be a key to herd rebuilding and revitalizing productivity in the cattle industry.

In between the older and beginning producers are many producers who are simply trying to survive the drought and continue with their business operations. The majority of producers who have been forced to liquidate cattle have received good prices and did not lose a great deal of value on the sales. However, high feed and other input costs in 2011 and 2012 mean that producers have, in many cases, used the proceeds of drought sales to cash flow continued operations. These producers will likely face difficulties financing herd rebuilding when the opportunity arises. Replacement cow and heifer values will be record high. Producers must be careful during the drought to preserve enough equity with which to rebuild herds. Producers who haven't yet done so should develop a drought management plan and a drought recovery plan which incorporates the business and resource requirements to survive the drought and be able to rebuild later.

The cattle industry today is smaller than it needs to be. The last two years of drought have preempted the beginning of herd rebuilding and pushed the industry to extremely limited cattle inventories. The drought holds the key to when, and to some extent how and where, herd rebuilding will take place. At the same time, the economic environment of the cattle industry has changed dramatically in recent years. New demands on agriculture and rising crop values puts a stronger forage focus on the beef industry and has significant regional implications on where cattle production will be located. The how, where and who of the cattle industry is changing in many respects but unprecedented cattle and beef prices confirm that market demand, both domestically and internationally, offers opportunities and will support rebuilding the beef cow herd, although to what level is as yet uncertain.

## **Feeding for Cold Weather**

Glenn Selk, Oklahoma State University Emeritus Extension Animal Scientist

The major effect of cold on nutrient requirement of cows is increased need for energy. To determine magnitude of cold, lower critical temperature for beef cows must first be estimated. For cows with a <u>dry</u> winter hair coat the lower critical temperature is considered to be 32 degrees F. In general, researchers have used the rule of thumb that cows' energy requirements increase 1% for each degree the wind chill is below the 32 degree lower critical temperature. Therefore the calculation example for a cow with a winter dry hair coat would be:

Step 1: Cow's lower critical temperature is 32 degrees F.

Step 2: Expected wind-chill from weather reports (let's use 4 degrees wind chill in this example)

Step 3: Calculate the magnitude of the cold: 32 degrees - 4 degrees = 28 degrees

Step 4: Energy adjustment is 1% for each degree magnitude of cold or 28%.

Step 5: Feed cows 128% of daily energy amount. (if cow was to receive 16 pounds of high quality grass (agume have then feed 20.5 pounds of hey during the cold weather event)

quality grass/legume hay; then feed 20.5 pounds of hay during the cold weather event).

Research has indicated that energy requirement for maintenance of beef cows with a <u>wet</u> hair coat is much greater. Cows that are exposed to falling precipitation and have the wet hair coats are considered to have reached the lower critical temperature at 59 degrees F. In addition, the requirements change twice as much for each degree change in wind-chill factor. In other words, the energy requirement actually increases 2% for each degree below 59 degrees F. To calculate the magnitude of the cold when the cow is wet would be the difference between 59 degrees minus 4 degrees = 55 degrees. True energy requirements to maintain a wet cow in this weather would be 2% X 55 degrees or 110 % increase in energy (which would mean that over twice the normal energy intake is needed.)

This amount of energy change is virtually impossible to accomplish with feedstuffs available on ranches. In addition this amount of energy change in the diet of cows accustomed to a high roughage diet must be made very gradually to avoid severe digestive disorders. Therefore, the more common-sense approach is a smaller increase in energy requirements during wet cold weather and extending the increase into more pleasant weather to help regain energy lost during the storm.

Cows that were consuming 16 pounds of grass hay per day and 5 pounds of 20% range cubes could be increased to 20 pounds of grass hay offered per day plus 6 to 7 pounds of range cubes during the severe weather event. This is <u>not</u> a doubling of the energy intake but by extending this amount for a day or two after the storm may help overcome <u>some</u> of the energy loss during the storm and done in a manner that does not cause digestive disorders.

The fact that it is not feasible to feed a wet, very cold cow enough to maintain her current body condition, underscores the need for cows to be in "good" body condition at the start of winter.

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