BeefTalk 733: Cow Herd Expansion Needs Land

SUPPORTING MATERIALS

Some Interesting Benchmarks
North Dakota Extension Service CHAPS program

Benchmark	1995	2013
Number of Cows Exposed to the Bull	145	249
Replacement Rate %	19.2	15.3
Culling Rate %	13.8	13.5
Average Cow Age (years)	5.5	5.6

The competition for land and land use are compelling forces that will impact the cattle industry.

Why not more cows? That is a good question because the beef industry is begging for cows. To do that, the cow-calf producer needs more cows to expand, the feedlot producer needs more calves and purveyors need product.

Do I keep more cows? That is a difficult question producers must answer. Just how many more is not an easy number to grasp because most beef operations actually try to keep their carrying capacity or stocking rates stable. Stocking rate, or the cow-calf pairs that inhabit the ranch, are set based on the carrying capacity of the particular type of land. However, if land is available, individual producers have expanded.

In fact, if one looks at the long-term historical benchmark values since 1995 for the number of cows exposed to the bull for those North Dakota Beef Cattle Improvement Association beef producers involved in the North Dakota State University Extension Service CHAPS program, the benchmark for 1995 was 145 cows exposed to the bull. In 2013 and after more than 19 years, producers have increased their cows exposed to the bull to 249.

After further reflection, the long-term historical benchmark values since 1995 for replacement and culling rate for those North Dakota Beef Cattle Improvement Association beef producers averaged through those 19 years would be 17.8 percent for replacement rate and 13.9 percent for culling rate.

The more recent 2013 benchmark values for replacement and culling rate would be 15.3 percent for the replacement rate and 13.5 percent for the culling rate. These numbers are rolling five-year averages that are intended to reflect what is happening historically with CHAPS producer herds.

By presenting the continually rolling five-year average, the highs and lows are buffered and a more understandable trend line is generated. In reviewing older data back to 1995, the greatest replacement rate benchmark was 20.8 percent in 1999 and the lowest was 15 percent in 2009.

When looking at the culling percentage benchmark, the lowest was 13.2 percent in 1996 and the greatest was 14.8 percent in 2010. These are typical numbers that reflect the managerial thoughts and actions of cow-calf producers.

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The replacement rate, an indication of how many first-calf heifers are in the herd, has varied from 15 to 21 percent of the total cows exposed. As younger cows enter the herd and if there were enough of them, the average cow age would shift. However, the average cow age has not shifted through time. In fact, the average benchmark for cow age since 1995 has been 5.5 years of age. The youngest benchmark of cow age was 5.4 in 2000 and the oldest cow age benchmark of 5.7 was recorded in 2011.

One could say the cows have gotten a little older and a few less young cows have been put back in the herd since the mid-1990s. However, on a percentage bases, producers have not changed much.

More critically, how have producers culled their herds during that time frame? For the cow-calf producer, culling percentages have not varied very much (13 to 15 percent) for quite some time.

So where are new cows going to come from? It would appear that cow-calf producers cannot add cows without adding land. Even though a producer may add cows, because the stocking and culling rates are fairly constant, cattle on a given land base will be fairly constant.

Thus the dilemma. Those who determine when and how fast the base cow population expands are land people. Cattle ranchers are land people and so are others involved in agriculture. For some, their use of the land may or may not involve cattle or, in some cases, even production agriculture.

The competition for land and land use are compelling forces that will impact the cattle industry. In addition, cattle forage needs land and land needs moisture. Ultimately, Mother Nature still holds the most shares because moisture determines the ability to utilize land at a proper stocking rate. Because the stocking rate is set in a land-based cattle system, improved moisture following drought only restores cattle numbers to acceptable predrought inventories.

It is puzzling how so many cows have left the nation's cattle inventory, but just as puzzling is how there would be enough land for replacement cows. Yes, the cow herd could add replacements. However, is the incentive strong enough to negotiate enough land away from other agricultural enterprises or other land uses to provide the forage and grazing needed?

I doubt it, but I really don't know. Only time will tell.

May you find all your ear tags.

Your comments are always welcome at http://www.BeefTalk.com. For more information, contact the NDBCIA Office, 1041 State Ave., Dickinson, ND 58601, or go to http://www.CHAPS2000.com on the Internet.