

## **Beef talk 756: Commercial Beef Production Benchmarks for 2014**

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What is beef production? That question often is asked, and the answers are very varied because of a very diversified beef industry that encompasses vast amounts of space.

The saying that “one size fits all” is not pertinent to the beef industry. However, there are valid answers that define beef production within similar production environments.

The North Dakota State University Extension Service, through the North Dakota Beef Cattle Improvement Association (NDBCIA), calculates the typical performance of beef cattle herds by analyzing those herds that utilize the Cow Herd Appraisal of Performance Software (CHAPS) program.

The NDSU Extension Service has been keeping records since 1963 through the NDBCIA and presents these annual evaluations as five-year rolling benchmark values for average herd performance for several traits.

Each year, I look forward to the analysis that generates these average values for beef traits. These averages are put into the CHAPS program for use by commercial cattle producers. This year, the benchmarks were fine-tuned because the data was analyzed through statistical analysis software, which often is referred to as SAS and was developed by the SAS Institute. The refined analysis allows for further pondering on how cattle production changes through the years.

For today, a few of the simple averages across years are provided for 265 individual herd years and 74,172 cow records. A herd year is a year’s worth of records for one herd. Each herd would have five years of data and generate a record for each cow each year.

Cattle production responds to the environment, which can create significant swings in production measurements. Although individual year averages are good, the concept of a rolling five-year average provides a firmer benchmark by buffering those yearly ups and downs in the data.

The beef industry is a long-term business, so producers certainly need to gauge their production against solid indicators that can help them set or modify production goals. Understanding normal performance allows producers to better understand how to guide their herd goals. The data is presented in percentages or actual values, depending on the trait.

Today, overall reproductive traits expressed in percentages of cows exposed and some basic growth traits are presented. Herd reproduction is the driving force behind overall production if a herd is to be evaluated based on cows exposed.

The first question a producer needs to ask is: Are the cows breeding, conceiving, calving and weaning calves as expected? No excuses because below-average reproduction will raise several questions about the management and genetics involved in a cow herd.

The typical CHAPS producer has 93.1 percent of his or her cows that were exposed pregnant in the fall, with 92.5 percent calved in the spring. Last fall, 89.8 percent of the cows exposed weaned a calf. How does one compare to the numbers?

In addition, during a typical calving season, 61.1 percent calved during the first 21 days, 86.4 percent during the first 42 days and 96 percent calved within the first 63 days.

These cows had an average age of 5.5 years. For calf age and growth, the average weaning age was 191 days, weight was 558 pounds and frame score was 5.6. These growth numbers translated into almost 3 pounds of

weight gain per day of age. The typical average daily gain for CHAPS calves was 2.5 pounds of gain per day. The adjusted 205-day weight was 627 pounds.

As the NDBCIA evaluates traits to measure cow performance, the trait for “pounds weaned per cow exposed to the bull” factors in the management and genetics involved in a herd of cattle. For every cow exposed, typical CHAPS producers weaned 495 pounds of calf.

Knowing these numbers allows for the appropriate modification through management or genetics. There are no absolute answers to what a particular ranch should produce. However, as cattle producers approach spring and are replacing bulls, knowing how the herd performs certainly is an advantage.

If poor performance is evident, obvious managerial issues must be resolved. After that, a good look at the overall ranch environment is needed to ultimately decide if the genetics of the herd fit the environment.

Each producer must answer the question based on data that tell the producer the actual status of the operation. Have fun buying bulls, but buy the right bulls.

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.

### **Current CHAPS Production Benchmarks**

Number exposed	280 cows
Average cow age	5.5 years
Pregnancy percentage	93.1%
Calving percentage	92.5%
Weaning percentage	89.8%
Calving 1st 21 days	61.1%
Calving 1st 42 days	86.4%
Calving 1st 63 days	96.0%
Average weaning age	191 days
Average weaning weight	558 lbs
Average frame score	5.6
Weight gain per day	2.95 lbs.
Pounds weaned per cow exposed	495 lbs.
Replacement percentage	15.7%
Culling percentage	14.0%