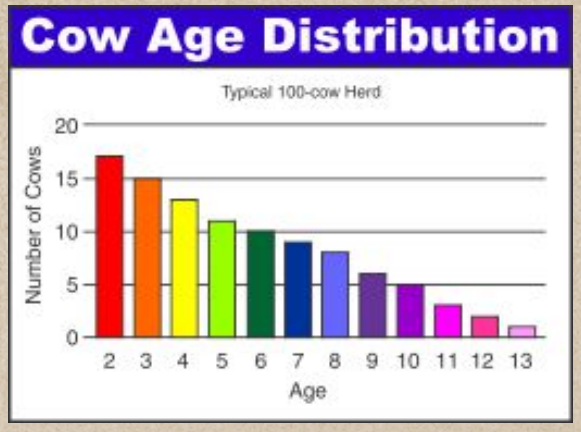
BeefTalk 737: Age and Weight Are Cow Herd Dynamics

SUPPORTING MATERIALS



The cow herd averages 5.6 years of age. Does this mean that all the cows should be managed as 5-year-old cows?

Most producers seem to refer to cows as "the herd." In reality, that herd is split into several age groups that often are overlooked. In fact, managers usually look at averages to guide managerial applications.

For instance, given the current production benchmarks for those North Dakota Beef Cattle Improvement Association beef producers involved in the North Dakota State University Extension Service CHAPS program, the cow herd averages 5.6 years of age. Does this mean that all the cows should be managed as 5-year-old cows? The answer obviously is no.

However, what is the target? I could not help pulling out some data I put together a few years ago. At that time, the average cows enrolled in the CHAPS program averaged 5.4 years of age. Interestingly, average cow age has not changed much during the last few decades.

Of course, the replacement rate is projected to go up because the low number of cows in the inventory begs for more cows. Currently, the replacement rate benchmark is 15.3 percent, but the example I had worked out was for a 20 percent replacement rate because you have to keep in mind that not all replacement heifers breed.

So what does this all mean in terms of the distribution of the cow herd? Assuming a typical herd of 100 cows, one would anticipate the inventory to be made up of 17 first-calf heifers, 15 second-calf heifers, 13 that are 4 years old, 11 that are 5, 10 that are 6, nine that are 7, eight that are 8, six that are 9, five that are 10, three that are 11, two that are 12 and one that is 13 or older.

The distribution of age is slanted dramatically to the younger cows. Of the total cows, 45 would not be considered mature cows. Only six of the cows would be more than 10 years old.

Managing cows means keeping in mind the various groups of cows that are in the herd and then meeting their nutritional needs, not the nutritional needs for the average age of the cows. What this means is the cows need to be sorted.

Full Color Graphic
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Grayscale Graphic
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To meet each group's needs, a separate pen for the 17 first-calf heifers should be set and then add the 10-year-old and older cows. If the pastures were short or winter feed supplies challenging, the second-calf heifers and any thin cows (condition score 4 and under) should be added.

Essentially, the special needs group easily could be 43 cows based on age, plus a few thin cows from the mature group of cows. Half the herd needs to be on a stepped-up plan of nutrition designed to put some weight on the cows. The other half could follow a typical maintenance, hold-your-own type of plan.

Another way to look at that example is to look at what different ages of cows weigh in the fall. In this example, those first-calf heifers (2 1/2-year-olds) are always the lightest in the fall coming in at 1,082 pounds. The weight is taken in the fall when the cows are approximately half a year older than when they calved in the spring. The most logical time to weigh the cows is at weaning, so that is the weight that is discussed.

Now for the weights with the condition score in parenthesis. The 2-year-old weighed 1,082 pounds (4.9), 3-year-olds 1,184 (5), 4-year-olds 1,255 (5), 5-year-olds 1,279 (5.1), 6-year-olds 1,301 (5.2) and the 7-year-olds 1,304 (5.2).

One should note that cows keep growing until they reach 7 years of age in this data set. Body condition is more constant and levels a year earlier at 6 years of age.

The important point to remember is that cows are not fully grown as heifers and have seven years of growth before they start to decrease in weight. The 8-year-olds weighed 1,299 pounds (5.2), 9-year-olds 1,286 (5.1), 10-year-olds 1,265 (5), 11-year-olds 1,267 (4.9), 12-year-olds 1,236 (4.7), 13-year-olds 1,232 (4.5) and 14-year-olds 1,180 (4.3).

Cows slowly work themselves up to a peak weight when they are 7 years old and then start to lose weight until they leave the herd. The 14-year-old cows weigh the same as the 3-year-old cows in the fall of the year. Body condition is held more constant and 6-, 7- and 8-year-old cows all have similar body condition scores. However at 11-years-old, cows drop back to body condition scores more typical of 2-year-old cows.

The moral of the story is that young and old cows need to be treated similarly and fed separately from the main body of cows. That is, if you want excellent performance from all ages of cows.

Understanding the dynamics of the herd is critical to proper management.

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.