

Now Is the Time to Sort Old Cows

A sort by age is based on the previous year's records and then fit to the current year's stocking plan.

The question of cattle numbers is always present. With the current dry conditions, cow numbers are on the minds of cattle producers.

Cattle need to eat and, usually, the available forage is directly connected to the available moisture. As unpleasant as the thought of reducing a cow herd is, a plan needs to be ready if dry conditions persist.

Cows generally are viewed as a herd, but all producers know that the herd is made up of smaller groups. The decision to reduce the cow herd really is a process of deciding what groups to keep to make up the whole herd.

In a broad perspective, one can classify cows as young, mature, old or older. There are excellent, good, fair, average, poor and bad cows. There are cows that are daughters of good, average or poor bulls. There are pregnant or open cows and ones with calves at side. And there are cows we like and those we don't like.

Next week the Dickinson Research Extension Center will sort cows on paper. The following week the calves are worked, and hauling to their respective pastures gets under way.

Age is the first sort. The sort will be based on the previous year's records and then fit to the current year's stocking plan.

Last year's calf records per cow showed we had 56 2-year-olds that weaned 530 lb. of calf per cow, 48 3-year-olds that weaned 573 lb., 44 4-year-olds that weaned 581 lb., 30 5-year-olds that weaned 627 lb., 44 6-year-olds that weaned 620 lb., 32 7-year-olds that weaned 599 lb., seven 8-year-olds that weaned 643 lb., 16 9-year-olds that weaned 607 lb., 16 10-year-olds that weaned 582 lb., one 11-year-old that weaned 534 lb., and one 12-year-old that never weaned a calf.

Young cows are more prevalent in the herd. The data also show old cows

do not produce as well as middle-aged cows. While old cows will wean calves, cow herd reduction needs to begin with old cows.

Old cows require more care and will not compete for forage against younger cows. Sort off the old cows (more than 10 years of age) and put them in a "maybe sell" pen.

Some lines of cattle perform better than others and maintain their ability to milk better. However, if pasture is short, a cow more than 10 is old.

Further review of the data shows 5-, 6-, 7-, 8- and 9-year-old cows weaned 627, 620, 599, 643 and 607 lb. of calf per cow, respectively. The 10-year-olds last year that will be 11-year-olds this year did not produce more than 600 lb. of calf and will not produce more pounds of calf this year. These cows are in their declining production years and, ultimately, as they lose their teeth, they will continue to decline.

As the old cows age within any environment, their decline will increase proportionately and the first indication of stress will be reduced milk production, which translates to a smaller calf.

Remember, the decisions to survive dry weather are decisions that will position the cattle operation better for next year, so the old cows should be the first set of cows set aside for potential sale.

While the genetics for performance may be in the old cow and calf, the nutrition will not support the pair. The cows are still up and available, so cut those older cows to the side and then see what else might fit in the hold pen.

Obviously open cows and those that lost their calves and did not accept a "within herd twin graft" already should have gone to town. With high grain prices and the prospect of escalating hay prices, there is a real term for cows without calves. It's called beef. **HW**

With Cow Size, One Can't Forget Production Potential

The Dickinson Research Extension Center recently established two sets of cattle based on body weight. Since the year was dry, the cow size question came up quickly.

What size cow is right? How does one measure inputs versus production?

These two groups of cattle were weighed in the late fall or early winter. The difference in weight was 355 lb. The first group of 52 cows averaged 1,216 lb. (856 to 1,395 lb.). The second group of 50 cows averaged 1,571 lb. (1,350 to 1,935 lb.).

Earlier discussion detailed the difference in dry-matter intake for these two groups of cows. Projections were shown for the groups if they were placed in confinement on

June 1 when the calves would be approximately 3 months old and were fed during the summer until the end of September.

The 1,216-lb. group of cattle, with milk production estimated at 20 lb. peak, would have an average daily need of just less than 28 lb. of dry matter of a ration that was 60% total digestible nutrients and 9.8% crude protein. The 1,571-lb. group of cattle, with milk production estimated at 20 lb. peak, would have an average daily need of just less than 34.5 lb. of a daily dry matter of the same ration.

By placing the two groups of cows on pasture with normal forage production in southwestern North Dakota, the land mass required for a

group of 50 cows weighing 1,216 lb. would be 529 acres. A group of 50 cows weighing 1,571 lb. would require 642 acres.

The heavier cows would require approximately 23 more tons of feed in a dry lot for 4.5 months. On pasture, the heavier cows would need approximately 113 more acres.

Does the output of the larger cows justify the extra nutrition? That is not an easy question because cow age and other factors need to be considered when calf production is estimated.

However, some idea of potential production from these two groups of cows can be estimated. For instance, since cows tend to reach peak calf production around 5 years of age, the actual previous calf production of the cows in each group could be utilized to estimate this year's production.

Performance records of body weight at weaning of cows aged 5 to 9 years and their respective calf's weaning weight were pulled and evaluated.

The older cows in the first group (current winter weight 1,216 lb.) averaged 1,272 lb. in the fall and weaned 602-lb. calves, or 47% of their body weight. The heavier group of cows (current winter weight 1,571 lb.) averaged 1,463 lb. in the fall and weaned 603-lb. calves, or 42% of their body weight.

This data trend was further examined by finding the percentage of cow weight weaned in all mature cows in the center's herd data system. The data evaluated actual weaning weight of calves and mature cows with calves of both genders.

All the cow records were allotted to 100-lb. increments and weaning percentages were calculated. The 12-weight or lighter cows weaned 50% of their fall weight (1,242 lb.) with 617-lb. calves.

Thirteen-weight cows weaned 45% of their fall weight (1,357 lb.) with 611-lb. calves. Fourteen-weight cows weaned 41% of their fall weight (1,456 lb.) with 589-lb. calves.

Fifteen-weight cows weaned 39% of their fall weight (1,549 lb.) with 598-lb. calves. Those 16-weight and above cows weaned 34% of their fall weight (1,698 lb.) with 572-lb. calves.

More food for thought! **HW**

Percentage of Cow Weight Weaned

Weight Range (pounds)	Number of Records	Average Calf Weaning Weight	Average Cow Weight at Weaning	Percentage of Cow Weight Weaned
Less than 1,300	37	617	1,242	50%
1,301 - 1,400	39	611	1,357	45%
1,401 - 1,500	38	589	1,456	41%
1,501 - 1,600	33	598	1,549	39%
Greater than 1,600	22	572	1,698	34%

Based on performance records when 5 to 9 years of age for the Dickinson Research Extension Center cows enrolled in the North Dakota Beef Cattle Improvement Association's CHAPS programs.