Eyeball to Eyeball, It's Never Too Late to Speculate

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BEEFTALK

There are two major driving forces behind change: money and correcting missed opportunities. The cattle industry is no different, although change is sometimes hard to detect.

The biggest incentive for change is money. As the constant effort to better understand the beef cow and the products produced expands with more data, real producer implementation and acceptance will be accomplished with value rewards in the marketplace. The second incentive for change is simply correcting missed opportunities. For whatever reason, plan A didn't work and an alternative or plan B needs to be activated.

The Dickinson Research Extension Center initiated plan B this fall. Normally, we usually ultrasound 70 to 90 days after bull turnout or artificial insemination dates to pregnancy check the cows. This opportunity was missed during the hectic pace of ranching.

Calf cranial width from day 50 to day 100 of the pregnancy is accurate and easy to collect. Fetal calf body length can be obtained on calves ranging from 25 to 50 days of age. A conception day can be calculated by using the body length and cranial width and comparing these numbers to a fetal age chart.

DREC data, however, suggests the conception chart is not an accurate predictor of calving date. Of cows conceived on the same day, approximately 80 percent should calve within an 11-day window, 95 percent in a 19-day window and 98 percent within a 28-day window, finishing in 32 days.

The most practical reason for the spread is the biology of the cow. That answer, however, did little to solve the center's need for an estimated conception date. The absence of data triggered a change in the operation, so the DREC switched to plan B.

As the fetal calf ages, the calf settles further down in the cow's abdominal cavity, making cranial or body length measurements impossible. The assumption is that those calves that are unreachable are older than those calves still physically reachable.

The process seemed logical; however, additional assurance was needed to determine the age of the calves. At this point, we decided to go eyeball to eyeball with the calf. We measured the fetal eyeball and will note at calving if the measurement was indicative of age.

The cows were all bred by AI on June 17 and 18 and were tested with ultrasound on Nov. 15. The AI pregnancies should have been 150 to 151 days old. Since the cows were all synchronized, the second-cycle calves should have been 129 days old, with the third- cycle calves 108 days old, give or take a lot of variables that late in the breeding season.

Our guess that 100- to 110-day-old calves potentially could have cranial widths was correct, with four calves predicted to be 96, 98, 100 and 108 days post conception. Their average eyeball diameter was 15.1 millimeters.

Of the remaining calves, one calf had an eyeball diameter less than 15 mm, six calves were 15 to16 mm, 12 calves were 17 to 18 mm, 10 calves were 19 to 20 mm, three calves 21 to 22 mm and two calves were 23 mm. These calves were smaller and not presenting themselves for an accurate cranial width. We assumed they were not AI calves.

Thirty-three larger calves were detected, the majority in a breech presentation. Of these calves, two were able to have their eyeball diameter measured. They measured 44.0 mm and 43.6 mm. The assumption is these are AI calves.

As with most data sets, trends or patterns lead to speculation for later study. We are within an eyeball of a reasonable measurement to group the cows.

A search for other data sets will help, but in the end, calving time will tell. For now, plan B is an eyeball as we speculate how to make up for a missed management objective. Stay tuned.

May you find all your USAIP ear tags.

Your comments are always welcome at *www.BeefTalk.com*. For more information, contact the North Dakota Beef Cattle Improvement Association, 1133 State Avenue, Dickinson, ND 58601 or go to *www.CHAPS2000.com* on the Internet. In correspondence about this column, refer to BT0225.