## Are Your Cows Ready to Breed?

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Spring is long in coming this year. I'm sure for most of the country, thoughts of green grass are almost old news. The cool, dry weather probably has caused us at the North Dakota State University Dickinson Research Extension Center, and I's sure many other producers, to ask the ever difficult question, "Do I have enough feed?"

The year has not been predictable. The weather was warm when the calves weren't being born, and cold when the bulk of the cows were calving. Ice and snow welcomed the cows into May, adding challenges for the cows and calves. Winter effects where evident on the center's cows dedicated to evaluating raising cattle away from the protection of the farmstead or ranch site. Early test data showed the cows started the winter trial gaining 1.5 pounds per day Nov. 19 to Jan. 23.

According to research scientist Doug Landblom, on Jan. 23 the cows averaged 1,355 pounds body weight, had a body condition score of 5.9 with 0.47 mm of back fat and 0.70 mm of rump fat. These cows were conditioned for calving having enjoyed mild weather and a three month ration of 29 pounds of hay per day (primarily crested wheat grass and brome grass with approximately 20% alfalfa).

Calving began in mid-February, with later-bred cows finishing up in April. Changes in cow weight and condition score would be expected after calving. The birth of the calf, milk production and environmental effects take their toll.

Associated calving weight loss would be 92 pounds of calf (average birth weight) and, according to work done at Oklahoma State University, 20 pounds or more of uterus and placental membranes and almost 2 gallons of placental fluid. Total calving weight loss, for the "outwintered cows" would be estimated at 130 pounds. The real question is, "Are these cows maintaining their actual weight and condition after calving?" If not, nutritional adjustments would need to be made to assure adequate breed back.

Data collected on May 3 showed the cows averaged 1,167 pounds body weight, a condition score 5, with 0.26

mm of back fat and 0.36 mm of rump fat. In reality, the cows have lost almost a full condition score (.85 actual) and 188 pounds. Remember, 130 pounds of the weight loss was associated with calving, so the cows have lost approximately 60 pounds of actual body weight. Their estimated mature weight should be 1,275, based on their fall weight, so the cows have lost almost 5 percent of their body weight. Various studies indicate that one body condition score is equal to 60 to 80 pounds of actual weight.

Now for a managerial time out. From a producer perspective, I suspect there are a number of situations that will develop as researchers develop cattle management systems under the concept of "Out Wintering." In reviewing the feed data in this case (average feed delivery 32-33 pounds per cow per day), these cows should be in suitable condition. However, if cows are losing condition, the current nutritional protocol is not meeting their needs. The cows are either milking more than predicted or the environment has been rougher than thought. The real answer is probably somewhere between the two.

Either way, now is the time to provide a 20 percent increase in nutrition (pre-breeding flush) to prepare for breeding. It's also time to sort off the condition score 3 and 4 cow-calf pairs and feed them separately so you can give them the nutritional attention they need.

There is nothing unique about this set of cows. The bottom line is monitor your cows and avoid surprises. And if you need to, whistle for the feed wagon. May you find all your 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 BT0092.

## These Cows Need A Pre-Breeding Nutritional Flush

Date	<b>Body Weight</b>	Condition Score	Back Fat	Rump Fat
January 23	1355 lbs.	5.9	.47 mm	.70 mm
May 3	1167 lbs.	5.0	.26 mm	.36 mm
Difference	-188 lbs.*	-0.9	21 mm	34 mm

<sup>\*</sup> Calving weight loss is 92 pounds of calf (average birth weight) and 20 pounds or more of uterus and placental membranes and almost 2 gallons of placental fluid. Weight loss due to calving is estimated at 130 pounds Actual body weight loss is estimated at 58 pounds