

Bluestem Breezes
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Maintaining Your Cows' Body Condition Score

Last weekend was flat cold. Every time we headed outside layers of clothing were applied, the coffee mugs were refilled, and there were likely a few extra groceries we ate throughout the day to replenish our energy levels. If we treat our own bodies differently during extreme weather, how are we adjusting the cows' groceries? This week, K-State Beef Specialist Chris Reinhardt discusses body condition scores and thermoneutral zones (a favorite topic in our house, remind me to tell you about it sometime).

The "optimum" or "target" body condition score for beef cows, at the time of calving, is a Body Condition Score (BCS) of 5 on a 9-point scale. BCS of 1-3 and 7-9 are rarely seen in most herds. A "5", or moderate body condition, is typically considered an ideal target BCS at the time of calving. A BCS 5 shows no obvious fat deposits, but shows full expression of muscle through the round and shoulder, and has only 2-3 ribs obviously visible prior to morning feeding.

The reason this level of body condition is important to lifetime productivity is that energy is the first limiting nutrient when the cow's biological systems are trying to determine whether there are sufficient nutrients available after calving to: (1) maintain her own body, (2) provide milk for the calf, and (3) begin to cycle prior to the breeding season.

A BCS "4" typically has no obvious fat deposition anywhere on her body, has less than complete muscle deposition in the round and shoulder, and clearly has 4-5 ribs showing prior to morning feeding. A cow in BCS "4" will typically delay cyclicity and may breed late in the breeding season. Unfortunately, if a thin cow calves late in the calving season she may miss the breeding season entirely. This is possibly the primary cause of infertility in the beef herd.

A BCS "6" is what most producers would consider a slightly "fleshy" cow. This cow has small but obvious fat deposits around the tail head, in the brisket, and in her flanks. She will have sufficient fat cover over the round and shoulder so that separate muscle groups are not clearly defined. The reason a cow is a BCS "6" at the end of the grazing season would be an "easy keeper". But a cow that maintains a BCS "6" throughout the winter feeding season is probably a boss cow and is probably eating more than her given allotment of supplemental energy and protein every day.

Young cows often do not winter well for a number of reasons. Two-year-olds are still growing so some of the nutrient intake is going to growth of frame and muscle, in addition to maintenance. Also, they do not have the size, strength, or social status to out-compete older cows for feed and may be pushed out of the supplement line or the feeding area. Older cows may come out of the grazing season in poor body condition, and may lack the strength to compete in the feeding area. For these reasons, it is often recommended to find a way to separate thinner and younger cows from fleshier older cows to provide the thinner cows with additional supplemental feed.

Some producers worry about creating “welfare cows” who chronically require additional feed resources during the winter to simply stay up with their herd mates. Although this is logical, good record-keeping will help you to identify those individuals who simply cannot complete a production cycle without this “welfare”. Use good records to get one more calf out of her, then move her out of the herd. Simply allowing cows to fall out of the herd because of malnutrition cheats you out of several months of feed, and forces you to sell an open female rather than a bred female or a pair.

Finally, be prepared for the next storm or cold snap because cows can drop in body condition very quickly if we’re not prepared or vigilant. For 1,300 lb cows with a good, dry, winter hair coat, the thermoneutral zone is about 30-32°F. That’s the wind chill temperature, not simply air temperature. For every 10°F that the effective temperature (wind chill) drops below 32°, the cow’s energy needs increase by 10%. So if the effective temperature drops from 30° to 10°, we’ll need to supply an additional 5 lbs of hay. If temperature drops from 30° to 10° below zero, we need to supply an additional 10 lbs of hay. But there’s a limit to how much hay even a big cow can pack away. So be prepared to increase the supplemental feed proportionally.

Keep an eye on slipping body condition, on the weather forecast, and on the thermometer, and you’ll be able to fend off most anything Mother Nature throws at you and your herd.

I hope you’ll join us at the February 2nd Winter Ranch Management Seminar in Alta Vista. Contact our office to reserve your seat. We’ll, of course, be serving beef!

For additional information, visit the Extension Office (215 Kansas, Courthouse, Alma; kamayer@ksu.edu; 765-3821). For Bluestem Breezes archives, check out wabaunsee.ksu.edu.