QLF QUALITY LIQUID FEEDS

CATTLE SENSE

Information that makes sense helping you make cents

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UTILIZE BCS AS AN EFFECTIVE MANAGEMENT TOOL

I'm sure you've heard a lot about "managing body condition" in beef cows. In fact, the January CattleSense touched on the importance of body condition score (BCS) at calving. As we approach that critical point in our annual production cycle, I want to address this topic in more detail.

BCS, typically expressed relative to the 9-point scale illustrated below, allows us to approximate the nutrient status and energy reserves of beef cows.

BCS	Generally Speaking		Physically Weak	Muscle Atrophy[1]	Spine Visible?	Ribs Visible	Fat in Brisket, Flanks	Hips & Pins Visible	Tailhead Fat
1	Emaciated	**Should never see**	Yes	Yes	Sharply	All	No	Yes	None
2	Poor	**Unacceptable**	No	Yes	Sharply	All	No	Yes	None
3	Thin		No	Slight	Yes	All	No	Yes	None
4	Borderline	**Production Depressed**	No	No	Barely	3-5	No	Yes	None
5	Moderate	**IDEAL**	No	No	No	1-2	No	Yes	Full but flat
6	High Moderate		No	No	No	0	Some	Yes	Spongy each side
7	Good		No	No	No	0	Full	Slightly	Thick along sides
8	Fat	**Inefficient**	No	No	No	0	Full	No	Mounded over top
9	Obese	**Should never see**	No	No	No	0	Extreme	No	Mounded & patchy

[1] *muscles of loin, rump, and hindquarters are concave, indicating loss of muscle tissue*

Researchers have shown that nutritional management during late pregnancy – manifested in BCS – can impact birth weight, calving ease, calf viability, calf performance to weaning, length of the post-partum interval (PPI) to cycling or settling, and pregnancy rate.

Inadequate nutrition prior to calving can reduce calf birth weight. Yet underfed cows have similar levels of dystocia. In fact, heifers that lost condition during pregnancy had *increased* calving difficulty, despite giving birth to lighter calves. Other studies have tied late-pregnancy weight losses to increases in calf mortality, and decreases in weaning weights.

Cows that are thin at calving are more likely to be open next fall. And those that do rebreed will take longer to resume cycling activity, meaning later, more strung-out calves next year.

In an effort to better quantify these responses, historical data was assembled from several different university herds. This analysis was based on observances of more than 3000 pregnancies/calf births, and included information on BCS at key points in the production cycle, plus subsequent calf and cow rebreeding performance.

	COW BCS AT CALVING				
	3	4	5	6	7
Weaning wt, lbs	478	513	**528**	517	478
Calf wt/day of age, lb	2.3	2.5	**2.6**	**2.6**	2.5
Calving interval, days	371	368	**364**	**364**	**364**
Likelihood of rebreeding	.91	.93	.94	.96	.97

Nutrition, reflected in BCS, remains critical to cowherd performance as cows enter early lactation. Research results have not been consistent regarding influence of post-partum diets or BCS at breeding on calf performance. This is probably due to the balance between genetic potential for milk production and the nutrients available from both the diet and body reserves.

	COW BCS AT BREEDING				
	3	4	5	6	7
Calving interval, days	375	367	365	362	359
Likelihood of rebreeding	.90	.92	.94	.95	.96

On the other hand, it has been repeatedly shown that cows that maintain at least moderate condition from calving to breeding, or which are fed to gain needed condition during this time, will exhibit shorter PPI's and greater pregnancy rates. This was clearly illustrated in the historical data set described above.

As we look towards calving season, I encourage you to take the time to evaluate the BCS of your cows. If they have maintained moderate condition through the winter, I commend you on your effective feeding management. But after the temperature extremes of the past 6-8 months, average condition – and performance potential – of many herds has been compromised.

And whether your cows are where you'd like them to be, or if they would benefit from increased condition, their nutritional needs are about to take a significant jump with the onset of lactation. Effective supplementation is going to be necessary to optimize calf performance and rebreeding activity.

QLF liquid beef supplements can be both effective and cost-effective investments for the cow/calf producer. The combination of degradable crude protein and soluble sugars enhances intake and utilization of a forage diet. With the lick tank system (plus appropriate minerals), every cow has the opportunity to obtain the protein, energy, minerals and vitamins she needs. And you can save time, labor, and feed delivery expense.