

BODY CONDITION Scoring

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Body Condition Scoring of a cow herd is a quick and easy way to facilitate management and address potential problems timeously. It can be used to identify adapted animals, improve pregnancy rates and even reduce calving problems. Recording body condition scores is a tool to improve production and therefore profit.

How to do body condition scoring

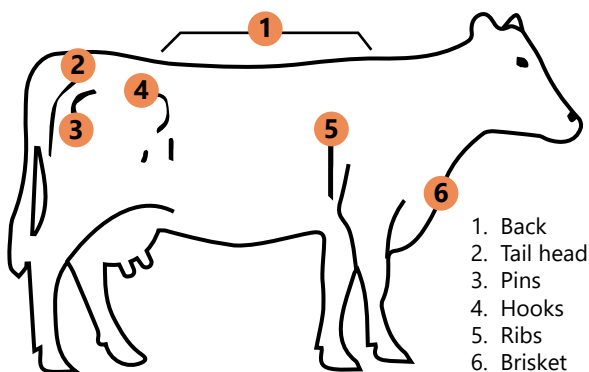


Figure 1: Areas useful for visually determining BCS in beef cows. (Oklahoma State University)

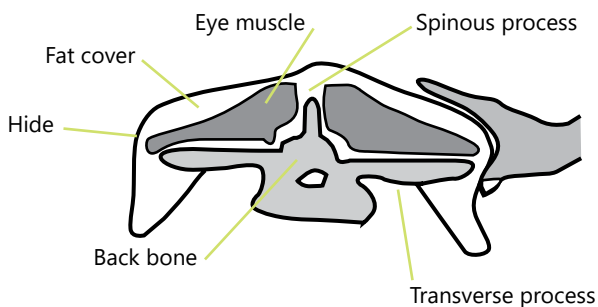


Figure 2: Specific anatomical areas used in determining BCS in beef cows. (Adapted from Herd and Sprott, 1986.)

Body Condition Score (BCS) is an indication of the total amount of fat on the animal. The animals' fatness is visually scored on a scale of 1 to 9, where thin (lean) cows appear thinner, sharper and more bony, while fat cows appear smooth and blocky without visible bones. The Body Condition Score is therefore an indication to what degree the spine, pelvic bones, tailhead and brisket are covered with fat (Figures 1 & 2). Some breeders also use the 1 to 5 scale of scoring, with half scores in between, which can easily be converted to the 1 to 9 scale. It is a subjective measure, so different people may give the same animal a different score. It is therefore advisable to hone a scorer's skills by practicing regularly and be subjected to the skills of other trustworthy scorers.

In times of abundance, animals store excess energy as fat. This is nature's protective mechanism. When feed becomes scarce, animals will first use fat reserves and then muscle tissue as an energy source. The first source of fat energy that is utilized is normally the fat around the organs and then subcutaneous fat. Differences in subcutaneous fat are therefore a good indication of the total fat energy available to animals before the breakdown of muscle tissue starts, which can have very serious disadvantages, and even cause permanent damage.

Body condition scoring is determined by palpating or visually assessing the quantity of fat and muscle over bony prominences in animals (see Table 1). The evaluation of fat reserves is conducted independently of factors such as pregnancy, rumen fill, age, coat length, season, or stage in the production cycle.

Class	Score (1-9)	Score (1-5)	Visible spine	Visible ribs	Tail head	Visible pelvic bones	Brisket fat	Muscling
Lean	1	1	Yes	Yes	Deep dents, no fat	Yes	No	No
	2	1.5						
	3	2						
Normal	4	2.5	Some	Front	No fat	Yes	No	Yes
	5	3	No	No				
	6	3.5			Some			
Fat	7	4	No	No	Fat	Some	Fat	Yes
	8	4.5			Obese	No	Obese	
	9	5						

Table 1: Description of Body Condition Scores. The easiest way to do condition scoring on a herd is to first assess each cow as lean, normal or fat. Each animal within the group can then be divided into 3 again to determine the final condition score.

Lean: Body Condition scores between 1 and 3

Animals appear lean and bony, with little to very little fat and the ribs are visible. On the right is a cow with deep dents around the base of the tail due to no fat.



Average: Body Condition scores between 4 and 6

This is the optimum condition score and can vary depending on production cycle and season. These animals are in optimum condition, and indicate good genetics and/or good management.



Fat: Body Condition scores between 7 and 9

Overfat cows appear smooth and blocky with no visible bones. A condition score of 7 is sometimes acceptable, while cows with condition scores of 8 and 9 are mostly animals that have skipped calving. Fat also gathers around the base of the tail.



When to body condition score

Although condition scores can be done at any time, at calving, weaning and at the beginning of the last trimester of pregnancy (3 months before calving) are the most important.

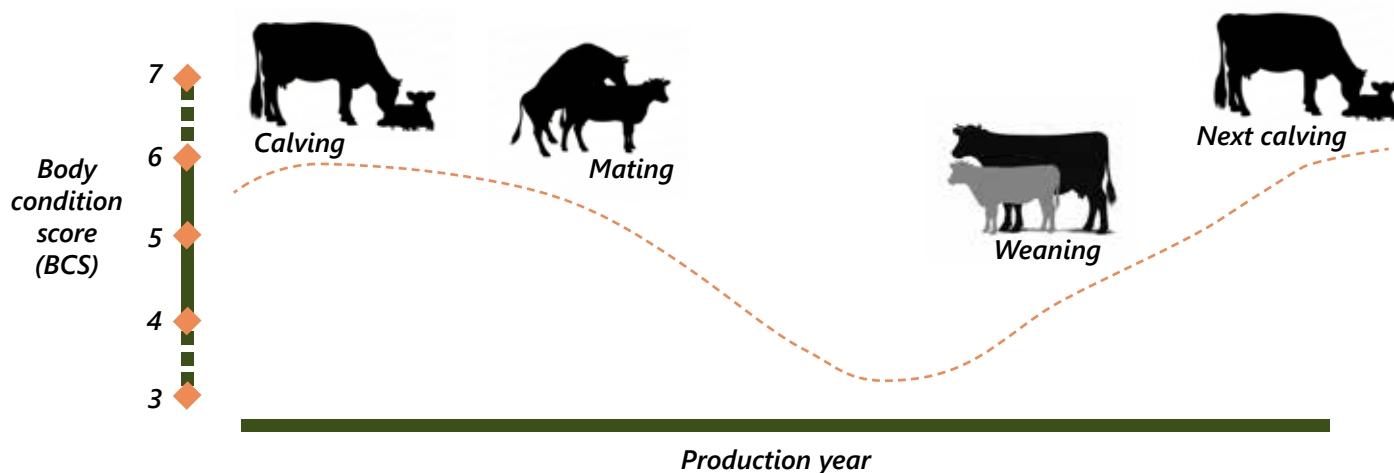
At weaning: The easiest and cheapest time to improve the condition of cows is during the dry period after she has weaned her calf.

At calving: Cows should have a condition score of 5 or 6 (out of 9) (or 3 to 3.5 out of 5) and heifers a 6 at calving. Obese cows have fat in the birth canal that can cause calves to become stuck. Cows that are too thin are too weak to give birth and this can also cause birth problems. A low condition score at calving indicates low energy reserves, which reduces milk production and delays conception. However, be careful not to change condition too quickly in late pregnancy, as the cow's condition tends to stay the same, but the unborn calf becomes heavier, which can also cause difficult births.

Mating: Low conception rates can be prevented by ensuring that cows are in acceptable condition at mating. Over-fat heifers can also develop a lifelong condition called "fatty udder syndrome" caused by permanent fat infiltration in their mammary glands.

Bulls: Condition scores on bulls are also necessary, and bulls should already be in optimum condition 6 weeks before the breeding season.

Animal condition scores vary at different production stages and seasons and can range between 3 and 7 throughout the year. After calving, cows are in a negative energy balance, which causes a drop in condition score. It also drops as the calf grows and suckles more, depending on the environment and season. Body Condition Score should improve again as the calf starts grazing and suckles less. After the calf is weaned, the cow should be late in pregnancy and her condition should increase moderately to be in optimum condition at the next calving.



Recommendations

The herd's average condition score at calving should be 5 to 6 (out of 9) for mature cows and 6 for first-calf heifers. Furthermore, the loss of condition score between calving and mating should be as little as possible. Young cows that are still using energy for growth, or are in competition with older cows, will normally have a lower score than older cows, for example. Similarly, cows with a lot of milk will also tend to have a lower body condition score and once she weans her calf, her condition improves.

Cows and heifers with condition scores of 1 and 2 will have difficulty getting pregnant. They may however become pregnant again if they are given extra vitamins and minerals and enough feed for an upward weight gain.

Differences in the body condition scores of individual animals in a herd can be a good indication of their abilities to adapt to the environmental and production conditions. Cows that are genetically better adapted to the specific environment and production system will maintain condition more easily and also gain condition more easily after the winter.

Be proactive in achieving specific goals, because drastic changes in condition score are sometimes very difficult and very expensive to manage. For example, managing calving seasons in harmony with nature, farming with genetically adapted cattle, well-managed grazing systems, strategic supplementation programs and good herd health lead to optimal body condition scores and improved production. ▲