

USE OF BODY CONDITION SCORING IN ANIMAL WELFARE INVESTIGATIONS



This brochure was produced by the Vermont Livestock Care Standards Advisory Council.

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For more information and a copy of this brochure go to: https://agriculture.vermont.gov/animal-health/animal-welfare

BODY CONDITION SCORING IS A SYSTEM

used to describe the body fat reserves of many types of animals, including companion animals and livestock species. Body Condition Scoring (BCS) systems assign a numerical value to body condition, usually with a "1" being extremely thin and "5" or "9" being obese. BCS systems are useful because body fat reserves can serve as a direct indicator of the adequacy of an animal's caloric intake over a relatively extended period of time.

The system relies on observation of the animal's tailhead, hip bones, back, ribs, and brisket, which become rounded or filled-in as the animal gains body fat (see Figure 1). With experience, you will begin to notice the soft, smooth appearance of the hip bones in a

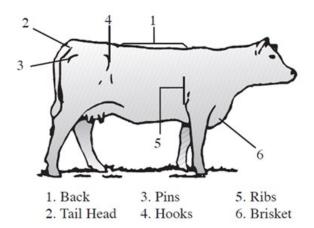


Figure 1. Areas useful for visually determining BCS in beef cows. (Oklahoma State University)

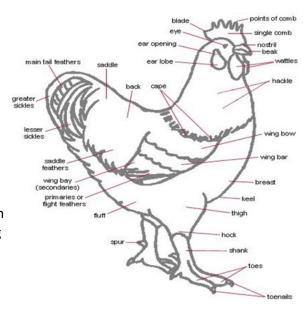
beef cow with adequate body condition vs. the sharp, angular appearance of the same bones in a beef animal in poor body condition. Dairy cattle are naturally more angular, and adequate body condition will look different than the same for a beef cow. Most horses should be in a body condition score of 5-6 on a scale of 1-9. Pregnancy, lactation, breed type, and work level can affect horses' body condition scores, and feed rations and types must be adjusted to ensure adequate condition.

Backyard poultry can be scored for body condition by feeling (or "palpating") the keel bone, which is located between the breast muscles. Undernourished birds have keels that protrude sharply from the breast. In an appropriately conditioned bird, the keel is easily palpable between rounded muscle and fat tissue on both sides. In an obese bird, the keel is barely palpable.

Body condition score estimates can usually be obtained by visually observing animals. It is best to physically handle sheep, however, because thin body con-

dition can be masked by long fleece. Long winter hair coats in beef cattle or horses may make it difficult to determine body condition by visual observation alone during certain times of the year.

Use of a BCS system can also help you evaluate groups of animals. The BCS scores of individual animals within a herd or flock under a single management strategy may vary. This may be due to an underlying medical condition that affects only one or two individuals. For instance, dental problems or chronic disease can affect body condition even if adequate feed is being provided. Animals may also have low BCS scores because of neglect or they may be "outliers" in a population of



animals which is otherwise well-maintained. This is why observation of the entire group of animals is useful. Ideally, fewer than 15% of animals in the group should be very thin, and very thin animals may need to be further evaluated to determine the cause of low BCS scores.

OTHER CONSIDERATIONS

In general, animals receiving adequate amounts and quality of feed will have desirable body condition scores, but the adequacy of an animal's diet depends on multiple factors. These include physiologic factors such as growth, pregnancy or lactation and environmental factors such as extreme cold. For example, a dairy cow producing 8 to 10 gallons of milk per day needs to consume much more energy than a pregnant or lactating beef cow. Dairy cattle often lose a full point of BCS in the first 2 – 3 months following calving but regain that weight in later lactation if nutrition is otherwise adequate. Livestock kept outside in the winter can withstand relatively cold temperatures but require additional feed calories to maintain themselves.

BODY CONDITION SCORING RESOURCES

The following on-line materials may help you determine whether body condition of animals is low (thin), adequate, or high (obese). Note that nutritionists and animal owners often use BCS to "fine tune" the feeding and management of their animals, and as described in some of these videos, they may score animals to the 0.25 or 0.5 BCS "point." When assessing animal welfare, it is more important to learn how to recognize an animal with desirable body condition vs. one which is very thin or obese.

DAIRY CATTLE

https://www.uaex.edu/publications/pdf/FSA-4008.pdf

5-minute video: https://www.youtube.com/watch?v=-1evp2wLw7o
12-minute video: https://www.youtube.com/watch?v=wASXNn CTCU

BEEF CATTLE

Body Condition Scoring Beef Cows | VCE Publications | Virginia Tech (vt.edu)

6-minute video: https://www.youtube.com/watch?v=GrcMiCeqp70

7-minute video: https://www.youtube.com/watch?v=OjbekWP1rHs (slightly

more technical)

HORSES

https://thehorse.com/164978/body-condition-scoring-horses-step-by-step/

5-minute video: https://www.youtube.com/watch?v=MoLRjMHHnBs

SMALL RUMINANTS

https://goats.extension.org/goat-body-condition-score-introduction/ https://www.agric.wa.gov.au/management-reproduction/condition-scoring-sheep

POULTRY

https://www.dummies.com/home-garden/hobby-farming/raising-chickens/how-to-give-your-chickens-a-physical-examination/

https://www.tandfonline.com/doi/pdf/10.1080/00288233.1998.9513338