

Forage or Pasture Quality Impact on Horse Body Condition Score

By Roy A. Johnson

Drought conditions, such as what much of the Midwest experienced in 2007, create pasture shortages and wide variations in hay quality and availability. Horses grazing the same pastures or being fed the same amount of hay per day may not maintain the same body condition as they did in previous years. Extremely wet years, such as this one, create their own set of feeding circumstances.

Body Condition Score (BCS) is a measure of the amount of fat a horse is carrying on its frame. This system was developed in 1983 by Dr. Don Henneke, *et al.*, at Texas A&M University, to standardize how body condition was evaluated. The system uses a scoring range from 1 to 9. A Condition Score of 1 is poor, which means a horse is extremely emaciated, where you can see every rib and all bones are prominent. A Condition Score of 9 is extremely fat, with a deep crease down the back and bulges.

A desired BCS for most horses is 5 to 6, which corresponds to "Moderate" to "Moderately Fleshy," where you cannot see the ribs, but can feel them when pushing slightly, and the horse appears smooth with a healthy amount of fat. The back is level or there may

be just a slight crease down the spine.

Body Condition scoring requires both looking at the horse and feeling the key areas of the body—particularly when horses have long hair coats.

Pasture and forage quality can have a major impact on how a horse maintains body condition. Poor-quality pasture or poor-quality hay contains fewer calories per pound, as well as lower protein levels. For example, immature grass hay may contain 900 calories (Kcal) per pound and be 15.1% crude protein. Mature grass hay may contain 780 calories per pound and be 9.0% crude protein. For a horse eating 4 flakes, or 16 pounds, (4 pounds per flake) of hay per day, that is a difference of about 1,920 calories per day. This can easily be the difference between maintaining body condition and losing weight, thereby decreasing the body condition score. The lower protein level, with fewer essential amino acids, may also result in poor hair coat and hoof quality.

With extremely poor-quality forage sources such as corn stalks (650 calories per pound, 4.1% crude protein) or very mature

or drought condition pasture, it may not be possible for the horse to physically eat enough to maintain body condition. This is a particular problem during cold weather, when more calories are required to maintain body temperature.

Supplemental feeding to make up for low-quality hay or pasture is essential for many horses to maintain a healthy body condition. If hay is scarce, complete feeds can be added to the diet. Horses should be fed about 1% of bodyweight in long-stem forage to maintain gut health and prevent boredom. Salt and clean water should be available at all times, including during cold weather. Horses that do not have access to salt and water may lose weight rapidly.

Monitoring body condition is an important way to determine if horses are getting enough energy (calories) from forage or pasture, and it can provide useful information to help decide if additional feed is necessary.

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