

# BODY CONDITION SCORING

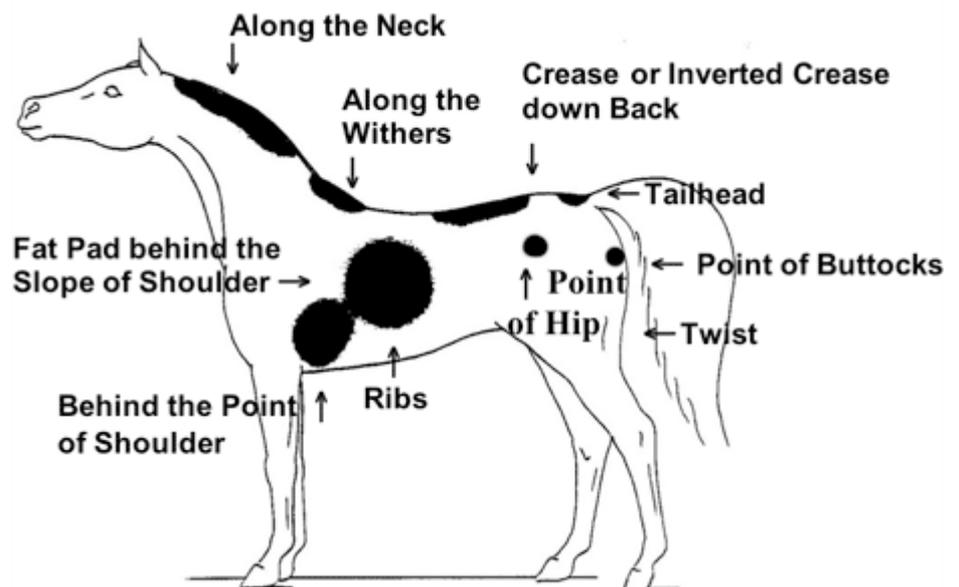
## WHAT'S THIS ALL ABOUT?

Debbie Grull

Condition score is an important factor in the ability of a horse to complete an endurance ride.<sup>1</sup> Body condition score is a more important factor in endurance performance. Susan Garlinghouse and Melinda Burrill studied endurance horse body condition and performance at a 100 mile endurance ride. They found that body condition score is a more important factor than the weight of the rider, or the rider weight in relation to the weight of the mount. They also found that the distance successfully completed increased 31.81 km for each incremental increase of 1 in condition score. Within the group of unsuccessful horses, there was a significant difference in condition score between horses who failed due to metabolic and nonmetabolic factors.

A horse that scores too low (below 2), and a horse that scores too high (4 and above) can have difficulty in completing an endurance ride.

Body condition score that is below a score of 2 is likely to compromise a horse's welfare.



**Figure 1** The areas to look at to assess body condition

## **There are many good reasons to get a grip on condition scoring your horse.**

- Condition scoring provides a useful and objective method of monitoring body condition.
- Body condition (fatness) is the most reliable indicator of the suitability of a horse's diet.
- Body condition scoring and therefore weight estimation is necessary for assessing feed requirements and for determining the correct dosage of worm treatments.
- A change in body condition can indicate that the balance between the amounts of work your horse is doing and what it is getting to eat is not quite right, and needs adjustment on either side of the scale. That is a change in work level or a change in feed level or both is required.



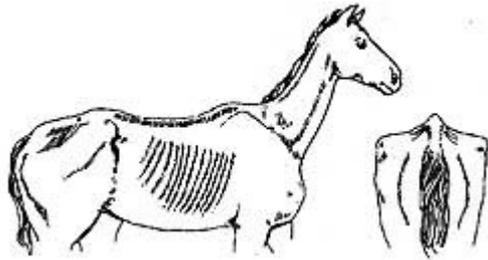
Accurate estimation of a horse's bodyweight is an art that requires a lot of experience. One way to really get a handle on this is to spend time in the vet ring and pencil for a vet pre-ride. Look at the horse yourself, and score it, and pay attention the score the vet gives.

## **How to assess body condition score of your horse.**

- 1 . Look at your horse and run your hands over its neck, ribs, back rump and pelvis.
- 2 . Check out Figure 2 and Table 1.
- 3 . Give each area an individual score using a scale of 0 (very poor) to 5 (very fat).
- 4 . Get an average of those scores.

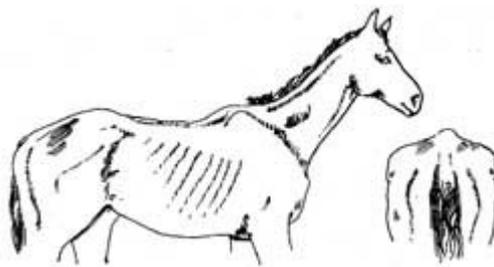
Figure 2. Body Condition Scoring (adapted from Carroll C.L. and Huntington P.J., *Body Condition Scoring and Weight Estimation of Horses*)

**0**  
**Very poor**



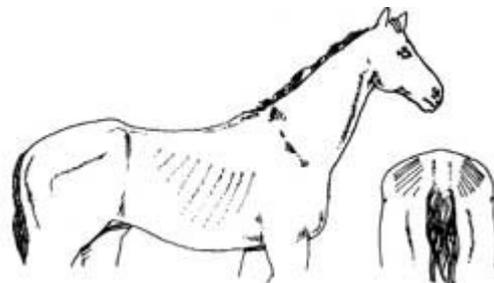
- Very sunken rump
- Deep cavity under tail
- Skin tight over bones
- Very prominent backbone and pelvis
- Marked ewe neck

**1**  
**Poor**



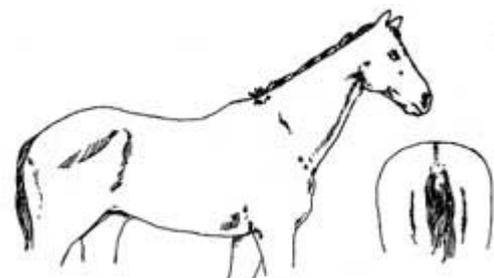
- Sunken rump
- Cavity under tail
- Ribs easily visible
- Prominent backbone and croup
- Ewe neck narrow and slack

**2**  
**Moderate**



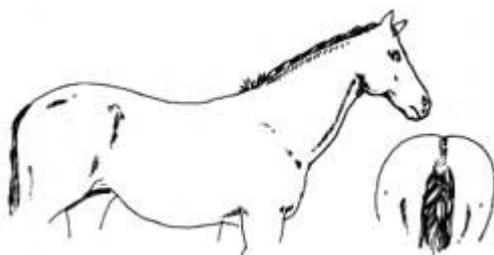
- Flat rump either side of backbone
- Ribs just visible
- Narrow but firm neck
- Backbone well covered

**3**  
**Good**



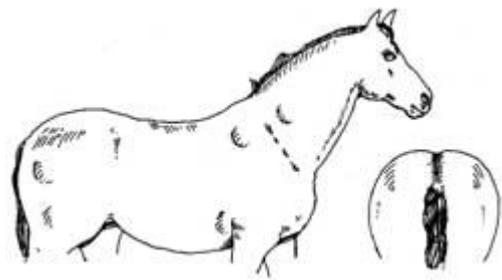
- Rounded rump
- Ribs just covered but easily felt
- No crest, firm neck

**4  
Fat**



- Rump well rounded
- Gutter along back
- Ribs and pelvis hard to feel
- Slight crest

**5  
Very fat**



- Very bulging rump
- Deep gutter along back
- Ribs buried
- Marked crest
- Fold and lumps of fat

**Table 1.** Descriptions of Anatomical Differences Between Body Condition Scores

Condition	Neck	Withers	Back & Loin	Ribs	Hind Quarters
<b>0 Very thin</b>	bone structure easily felt- no muscle shelf where neck meets shoulder	bone structure easily felt	3 points of vertebrae easily felt (see Figure 2)	each rib can be easily felt	tailhead and hip bones projecting
<b>1 Thin</b>	can feel bone structure- slight shelf where neck meets shoulder	can feel bone structure	spinous process can be easily felt - transverse processes have slight fat covering	slight fat covering, but can still be felt	can feel hip bones
<b>2 Fair</b>	fat covering over bone structure	fat deposits over withers - dependent on conformation	fat over spinous processes	can't see ribs, but ribs can still be felt	hip bones covered with fat
<b>3 Good</b>	neck flows smoothly into shoulder	neck rounds out withers	back is level	layer of fat over ribs	can't feel hip bones
<b>4 Fat</b>	fat deposited along neck	fat padded around withers	positive crease along back	fat spongy over and between ribs	can't feel hip bones
<b>5 Very fat</b>	bulging fat	bulging fat	deep positive crease	pockets of fat	pockets of fat

### What to watch out for:

During winter, a long heavy hair coat complicates visual appraisal. You need to run your hands over the horse to get an accurate score.

# Parasite infestations

Poor body condition is not always due to lack of feed but could be related to, worms and poor dental ability to forage, and more rarely, other conditions you will need veterinary advice on. Watch out for embedded cyathostomes. Regular wormers won't touch these. Try to incorporate a drench once a year that kills these worms.

## Estimating horse body weight

You can use a combination of height and body condition to get an estimate of the weight of the horse<sup>2</sup>. Or you can use a height and girth measurement to estimate weight of the horse. Height measurement should be performed on level ground when the horse is relaxed and standing squarely. Use the highest point of the withers as the measuring site. Allowance should be made for shoes. My next article will cover weight estimation methods based on body condition score, height, girth and length measurements.

## References

1. Garlinghouse, S. E. and Burrill, M. J. (July 1999) Relationship of body condition score to completion rate during 160 km endurance races. *Equine vet J* 31, 591–595.
2. Carroll, C.L. and Huntington, P.J. (1988) Body condition scoring and weight estimation. *Equine vet. J.* 20, 41–45.
3. Cureton, K.J. (1992) Effects of experimental alterations in excess weight on physiological responses to exercise and physical performance. In: *Body Composition and Physical Performance*, Eds: B.M.Marriott and J.Grumstrup-Scott, National Academy Press, Washington, p 71.