Estimating a Horse’s Body Weight

Dr. Mark Russell, Assistant Professor – Equine Extension

Knowing a horse’s body weight can help you determine how much feed it needs daily. Once the weight has been determined, you can measure your feed to determine the exact amount needed to be given in effort to maximize a healthy nutrition plan. There is a simple formula that exists that can be used to estimate fairly accurately the body weights of individual horses.

The formula uses heart girth circumference, body length measurements, and an adjustment factor. The adjustment factor in the equation is 330.

\[(\text{Heartgirth} \times \text{Heartgirth} \times \text{Body Length}) = \text{Weight (pounds)} \div 330\]

The process

1. Take measurements with a measuring tape at least 75 inches long.
   a. Plastic measuring tapes are preferred over cloth
   b. Metal measuring tapes are the least desirable, as they can cut the horse
   c. Have someone hold the horse rather than tie it up. If the horse begins to act up, the handler can calm him.
2. To measure the heartgirth, run the tape all the way around the horse, using the highest part of the withers. The handler can stand on the other side and assist the person measuring.
3. Measure body length from the point of the shoulder straight back along the horse’s side, and to the point of the buttock.
   a. The tape should go around the corner of the hip and the actual point of the buttock, which is essentially half the distance from the corner to tail.
   b. When measuring the body length, a third person is needed to measure to accurately make the measurement (one person to hold the horse and two people to make the measurement).

When learning to use this weight estimation system, it is often useful to weigh the horse on a scale for comparison. Most veterinarians have a scale at their vet clinic. It is important that the horse stand somewhat square during measurements. The body length and heartgirth size can be affected by a horse that does not want to stand still, thus offering an inaccurate weight measurement. If you take the measurement of a horse to compare changes in weight over time, always take them at the same time of day. The best time is in the morning before feeding.
This particular equation is more reliable than simply making a visual observation in estimating weight. Additionally, this procedure may not be highly accurate for pregnant mares or for horse with extreme conformational irregularities.