

# Horse e-News

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## Accurate Feeding Management for Your Horse

Steven M. Jones, Associate Professor

There are a number of considerations in the husbandry or “art” of feeding horses. Once a horseman understands the nutrient requirements of various classes of horses, a certain amount of skill and sound judgment must be employed in developing a feeding management program. After feeds are selected to meet the nutritional requirements, it is important to adhere to certain principles to accurately feed the horse. These principles include a) feeding horses by class, b) feeding horses according to body weight, c) feeding adequate long-stemmed forage and d) feeding by weight not volume.

Horses require differing amounts of nutrients in their daily diets, depending on their nutritional class or status in life. Dividing horses into classes relative to nutrient requirements is the first step in designing a workable feeding management program. This approach helps a horse owner meet each horse’s nutrient requirement in the most manageable and economical fashion. Weaned foals, lactating mares and hard-working horses have the highest nutrient requirements. Mature, idle horses have the lowest nutrient requirements.

When determining body weight, the most accurate method is to weigh the horse on a scale. The least accurate method is visual appraisal or “guess.” One study reported that 88% of horsemen, many of them professionals, underestimated the weight of five horses by an average of 180 pounds. In another field study, 37% of horse owner estimates were 150 pounds below actual weights. Probably the most commonly used technique for estimation of body weight is a heartgirth tape. Heartgirth tapes are available from feed dealers or livestock supply companies. When used according to instructions, these tapes are reasonably accurate. Another method for

estimating a horse’s body weight is to use a body weight equation. One accurate formula utilizes heartgirth circumference, body length and an adjustment factor. This equation is:

$$\frac{(\text{heartgirth} \times \text{heartgirth} \times \text{body length})}{330} = \text{weight in lb}$$

Measurements should be taken and recorded in inches with a tape at least 75 inches long. A plastic tape is preferred over a cloth tape. Cloth tapes can stretch, and metal tapes may scare horses. Heartgirth is a measure of the circumference, taken by running the tape all the way around the horse using the highest part of the withers. Body length is measured from the point of the shoulder, straight along the horse’s side and to the point of the buttock. In two demonstrations conducted at Texas A&M, this equation averaged within 24 pounds of actual weight. On a 1,100-lb horse, this is close enough for making nutritional decisions.

Long-stemmed forage for horses is a necessity, not a luxury. A horse requires at least 1% body weight of long-stemmed forage to maintain normal digestive tract function. Horses grazing abundant good-quality pastures consume enough green, growing forage to meet their daily roughage requirements. Horses maintained in dry lots or stalls receive only what roughage is fed to them by their owners. When adequate long-stemmed forage is fed, horses appear satisfied and stall behaviors are normal.

Horsemen should feed by weights of feed because standard volumes of feedstuffs do not weigh the same. For example, the horse owner’s universal measuring dispenser is the 3-pound coffee can (if you can still find one). When full

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## CEM Investigation Now Includes Arkansas

Jeremy Powell, Associate Professor and Veterinarian

Nearly 40 states are currently investigating quarter horses and paint horses that may have been exposed to contagious equine metritis (CEM). According to the USDA, the state of Kentucky confirmed a case of contagious equine metritis (CEM) in a quarter horse stallion in mid-December 2008 during a routine test for international semen shipment. As of mid-January 2009, the CEM investigation now has involved over 300 horses in 39 states, including Arkansas. According to Arkansas State Veterinarian Dr. Pat Badley, two mares in Arkansas have been identified and placed under quarantine, pending further testing for the disease.

Contagious equine metritis (CEM) is a venereal disease among horses caused

by a bacteria, *Taylorella equigenitalis*. It is only spread during breeding or artificial insemination and cannot be spread by casual contact or shared boarding facilities.

CEM leads to temporary infertility in infected mares, causing an inflammation to the uterine lining. Up to 40% of affected mares may also exhibit vaginal discharge. However, stallions typically exhibit no clinical signs of the disease. Stallions and mares can become chronic carriers of CEM, thereby acting as a reservoir for future outbreaks.

The transmission rate is relatively high when natural mating occurs with an infected individual. Semen collected for artificial insemination and other breeding equipment

may also be indirect sources for infection.

According to the USDA, a total of eight stallions have now been confirmed as positive for CEM. Four of the infected stallions are located in Kentucky, three are in Indiana and one is in Wisconsin. A total of 334 horses have been investigated, including 43 stallions and 291 mares located in a total of 39 states. The 43 positive or exposed stallions are located in 11 states, and the 291 exposed mares are in 37 states. There are 43 additional exposed mares still actively being traced.

A horse is considered "exposed" by one of two circumstances: it must have been bred, either naturally or via artificial insemination, to a CEM-positive horse, or it

must have been epidemiologically linked to a CEM-positive horse, as determined by state or federal veterinary health officials. Once horses have been identified as exposed, they are quarantined and further testing protocols are enforced. Currently, Arkansas has two horses that are considered exposed, but no known positive CEM infections exist. CEM was first detected in the U.S. in 1978 and again in 1979. In both instances, the outbreaks were eradicated.

CEM can be treated with disinfectants and antibiotics over a period of several weeks. Following a course of successful treatment and reevaluation, horses can be certified CEM-negative and released from quarantine. CEM is not known to affect humans.

## Let Your Voice Be Heard

Jeremy Powell, Associate Professor and Veterinarian

The horse slaughter ban legislation has raised some problematic issues with unwanted or abandoned horses. However, very little scientific data has been collected concerning public opinion and input about unwanted horses. The Unwanted Horse Coalition (UHC) with help from

equine veterinarians, breed associations, horse owners, and state and local law enforcement organizations has created an online survey to gather more data about overall public opinion concerning unwanted horses.

According to their web site, the UHC is "a

broad alliance of equine organizations that have joined together under the American Horse Council to educate the horse industry about the unwanted horse issue." Since little information currently exists about neglected, abandoned and unwanted horses in the U.S., the UHC is conducting the

online survey to gather input and suggestions from anyone involved with horses. You can fill out the online survey at <http://survey.ictgroup.com/uhcsurvey>. Or, for more information about UHC, visit <http://www.unwantedhorsecoalition.org>.

## Feeding Management (cont.)

of 32 lb/bu oats, the can weighs 2½ pounds; 38 lb/bu oats, weighs 4 pounds; pelleted feed, about 4 pounds; and whole corn, may weigh 5 pounds or more. Concentrates do not weigh the same! There is even a difference in weights of hay due to type of forage and dry matter in the bales. Always check feed weights, especially when new or different feeds or hays are purchased. Mark cans and other feed dispensers to standardize amounts of feed being fed.

The basic concept of designing a horse feeding program is to know the nutrient requirements of the various classes of horses and nutrient contents of the available feedstuffs. After these elements are established, then we combine "art" and science by feeding horses according to body weight, feeding adequate long-stemmed forage and feeding by weight not volume. This is the most economical method for feeding horses plus it's the best method for the horse and its health.

## Every Day Is a Training Day

Steven M. Jones, Associate Professor

At my horsemanship clinics, the audience often asks me what to do when their horse exhibits a particular problem. These problems include balking at objects, being chargey, not backing, not going into the arena, etc. In the short term, you must do whatever it takes to get through the situation safely. However, I suggest that these problems are symptoms of a greater problem.

Taking a developmental approach is a more permanent solution. What we consider problems are often actually symptoms. Anytime we are around our horses, we are reinforcing positive behavior or inadvertently reinforcing nonuseful behavior. Problems often arise because the human is unaware of his role in creating or reinforcing these undesired behaviors. If you buy into the alpha/beta theory, then you must be alpha all the time, not just when it is convenient. If you establish with the horse that you are in charge, then act like it or the horse becomes confused and resorts to the “fright and flight” instincts.

When there is a problem, it is easy to focus on what is going wrong rather than why it is going wrong. However, getting away from the problem and working on things that build a foundation toward overcoming the problem helps the horse and rider become more in tune with one another. In essence the horse must have trust in the rider (alpha). Then, when faced with the problem, the horse has more recent, positive experiences to build upon. Instead of resistance or flight, the horse learns to rely on the human (alpha) for direction and self-preservation.

Developing more trust, confidence and respect when riding will carry over into problem solving. Putting more time and effort into preparation shortens the time it takes to solve the problem. Notice I said “shorten” not eliminate problem solving. Every horse will have their “demons” that they must

overcome, just like people. As the rider becomes more proactive, the horse will begin to willingly wait and look for guidance from the human, staying in a learning, attentive state of mind. The horse learns to go with the rider’s flow, and the rider learns to go with the horse’s flow. This is horsemanship as it should be.



Horses need a job! Make every ride an adventure, have fun and stretch both you and your horse out of your comfort zones. Practice building your horse’s confidence by incrementally increasing your expectations. As your horse becomes comfortable with new situations, add another dimension. Both you and your horse will gain new confidence.

Too many riders stay in a familiar routine or spend too much time making their horse practice their chosen event. If you believe you must practice, think in terms of improving the basic maneuvers required for you to be successful in your chosen event. For example, a team roping horse does not have to work 25 steers in the arena. Instead, lope some circles and work on collection, do some suppling exercises, go on a trail ride to relax his mind, work some cattle in the pasture or log an object outside. All of these elements contribute to the team roping, but the new perspective may make it new for the horse.

Now, some suggestions on how to put all this theory into practice. There are six rules I try to follow in a training

program. These rules work for young horses, old, problem horses and the really broke ones.

1. Have a plan. Know your goals for the day and focus on how to get the horse to willingly respond.
2. Never get angry, frustrated, forceful or tentative. If your horse gets troubled, resistant or afraid, you must stay relaxed, positive and confident. Be willing to adjust to fit the individual horse and situation.
3. Maintain impulsion. Keep life in your horse’s feet and the drive coming from the hindquarters. Without impulsion, everything is more difficult, if not impossible.
4. Use your seat. Subtly communicate speed, direction, gait, slow down and stop through your seat, pelvis and lower torso.
5. Use your legs. Communicating lateral movement with the legs is a skill often underdeveloped.
6. Avoid using the reins to stay balanced in the saddle. Being able to ride through all your horse’s gaits and back down to a halt on a loose rein is important to develop confidence and control. Minimizing rein pressure keeps your horse’s feet free, and he will stay mentally soft and light.

Give your horse a job. Allow him to build his trust and respect for you, while you develop your feel, timing and balance. When a problem arises, you are in a better position to know how much to ask to solve the problem. Every day is a training day. Horsemanship is about continuing the development of a strong foundation of trust, confidence, respect, communication, response and control. These elements are fundamental to improving your horse and for problem solving.

## Calendar of Events

<b>DATE</b>	<b>EVENT</b>	<b>LOCATION</b>
March 7-8	State 4-H Horse Conference	Arkansas 4-H Center
March/April	Horsemen of Excellence Program	Mountain Home
March 28	U of A Horse Festival	Pauline Whitaker Arena, Fayetteville
April 3-5	4-H High Adventure Horseback Training	Pine Grove Trails, Leslie
April 14	4-H Horsemanship Clinic	Russellville
April 18	The Horsemen's Workshop	Hurley's Arena, Clarksville
April 25	4-H Packing School	Harrison
May 14-16	Annual Horsemanship School	Pauline Whitaker Arena, Fayetteville
June 27	4-H Horsemanship Clinic	Stone County, Mountain View
July 6-9	Arkansas 4-H Horse Show	State Fairgrounds, Little Rock
July 28 - August 2	Southern Regional 4-H Horse Championships	State Fairgrounds, Little Rock
August 4-12	4-H High Adventure Horseback Trip	Pecos Wilderness, New Mexico