

Tips for Feeding Horses During a Drought

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Drought can propose challenges to horse owners even when they foresee the conditions and have a plan in place. The rule of thumb to follow in this particular region is 1 adult horse per 2 acres or 1 acre for a yearling or two year old. One of the most important factors in feeding a horse is keep any changes in feed gradual – this includes both forages and concentrates (grains, pellets, oats, etc). Horse do not accept a change in forage very well and the shortage of hay and increase in expense of concentrates has caused many horse owners to evaluate current feeding programs and seek alternatives. Here are some facts and helpful suggestions for feeding horses during a drought or during dry season conditions:

1. Roughage is most important facet of a horse's diet. The owner should strive for approximately 50% of the horse's daily intake to be forage based (should be 1 -2% of total body weight).
2. Roughages provide essential sources of digestible energy, protein, and some vitamins and minerals.
3. Employ rotational grazing. During months when rain is more prevalent, use a fencing system that will allow for sections of the pasture to not be grazed.
4. Plant winter annuals – such as rye, ryegrass, or wheat. While the initial cost may be high, this option could possibly be less expensive than hay purchase over the course of a winter and early spring
 - a. Ryegrass can be planted as early as late August. Typical planting times for planting on a tilled seedbed begin in early September through early November. The typical planting period for sod-seeding either by no-till or broadcast methods, begins in late September through early November. Early-planted ryegrass (September) can provide grazing in late fall. Late-planted ryegrass (November) will not provide significant grazing until late winter (March) except during warm winters such as 2011-12. (See University of Arkansas Fact Sheets: **FSA3051**, **FSA3064**, **FSA3063**, and **FSA3066** for more detail on winter grazing or consult with Dr. John Jennings – U of A Forage Specialist)
5. Only feed hay when the previous feeding has been “cleaned up” completely.
6. Weigh each hay feeding to prevent over-distribution.
7. Foaling, mares should be kept away from fescue because of concerns over foal death at time of birth and the complete absence of milk production in some mares provided access to fescue.
8. Horse owners who have access to round bales (or the equipment to handle them) can save costs over the course of a dry season.
 - a. Keep the bale covered and out of access to horses
 - b. Limit each feeding by:

- i. limiting access to the bale to 2 hrs each day
- ii. Use a pitch fork to pull each daily feeding off the bale

The loss of crude fiber in *not* feeding hay can be found in other sources. Some common feedstuffs that can replace a *portion* of the roughage portion of the diet or can be given in a supplement form (crude fiber = 11-15%, usually approximately 1 cup per feeding is sufficient – starting with a small handful on the first feeding):

1. Rice bran (high in fat and phosphorus, may need to supplement calcium if not balanced by manufacturer).
2. Wheat bran (high in phosphorus, may need to supplement calcium if not balanced by manufacturer).
3. Oats (considered safe to feed, contains more fiber than other grains). Can be mixed with other concentrates in a higher volume than others listed above. *Crimped oats are more easily digested.*

Some common alternative roughage that can be a replacement or a *partial* replacement for hay (high fiber feeds, > 15% crude fiber):

- Other hay sources:
 - Alfalfa
 - Oat hay
 - Straw (Oat straw is more palatable than wheat or barley straw and should serve as last resort)
- Alfalfa hay cubes (May require soaking to make more palatable)
- Alfalfa pellets
- Beet pulp (May also require soaking to make more palatable)

It is tempting during a drought to increase what is most available, and many times that is concentrates (grains, oats, pellets, etc.). These types of increases should be limited or avoided completely. However, if they are increased, keep in mind:

1. Feed smaller meals more frequently – (ex. once in the morning, noon, and late evening).
2. Concentrates should consist between .5 - 1% of body weight (1000 pound horse would receive between 5 and 10 pounds of concentrate per day).
 - a. This amount should be divided up into 3 equal feedings per day.
3. When increasing concentrates, it becomes more and more important to check feed for insects.
4. Feed concentrates by weight not volume. Weigh the feed and determine amount to be fed by weight of the horse.
5. Concentrates should not exceed 50% of the horse's total diet.

Others items to consider: there is hay available to south and east of Arkansas. Group up with other horse owners to split the costs of having the hay transported by someone else or go and

purchase hay as a group to reduce costs. Also, if your horse is chewing on trees, fence posts, or eating weeds, this may be an indication you are not meeting your horse's nutritional needs.

Sources: Clemson University, Colorado State University, University of Arkansas, and Texas A&M University. Dr's Paul Sciliano, Lori Warren (2010), Dr. John Jennings (2012) and Dr. Pete Gibbs (2006).

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