



Feeding When Hay is in Short Supply



With drought conditions in a large part of central Alberta, there is a high level of uncertainty about feed sources for horses this coming winter. Although there has been a firm belief that horses need hay, there are well researched options when hay is not readily available. These alternatives should be considered if finding hay is proving too challenging or costly in your area. No one feed program is right or wrong so do what is best for the horse.

According to Dr. Lori K. Warren, Equine Nutritionist of the University of Florida, the most significant health problems seen during drought are malnutrition and starvation. Older horses,

younger horses, pregnant or lactating mares have higher energy and protein requirements making them more susceptible to the effects of malnutrition. Allowing horses to starve is unacceptable so supplemental feed will likely need to be provided. There are alternative feed sources that can be used to extend your hay supply and ensure your horse receives an adequate diet.

The important thing to remember is that horses require a source of fibre to maintain healthy gut function. The fibre equation looks like a minimum of 1.0% of a horse's body weight and should be delivered in a source like hay, pasture or an alternative. Dr. Warren says that "at a bare minimum, most light breed horses need 7 to 10 pounds of forage per day." The average horse requires 2 tons of forage through the winter. The average round bale is around 1300 lbs and small square bales approximately 50 lbs, to give you an idea of what the relationship is between the horse and its feed requirement.



Dr. Bob Coleman, Extension Specialist at the University of Kentucky, says, "Assess your horses and group them according to their nutrient needs. When you have the horses grouped it is easier to feed them to meet their specific nutrient requirements. Feeding to meet requirements means providing the amount of feed needed, not the amount the horses will eat, as horses may consume more than they need." Find out what your specific needs are, then what the going rate is for the hay in your purchasing area, make your calculations, figure out exactly how much it will cost to feed just one horse in each area for the winter and multiply by the amount of horses that require feeding in that group. An example would be that overweight horses in the diet pen can stand to eat a bit less as opposed to the herd of pregnant broodmares. This will need to be monitored throughout the winter months by using the body condition scoring system. Further information on this can be found at [www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/agdex4830](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/agdex4830)

Dr. Coleman also recommends having your existing hay analyzed in order to understand the nutrient levels and feed it more effectively. This will help you plan any supplementation program accordingly in order to provide nutrients not supplied by the forage. There is more information available about having feed tested at [www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/faq7427](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/faq7427). There are a few companies in Alberta where you can take in feed samples to be analyzed. They are able to accurately test and provide precise numbers such as horse digestible energy figures for hay and alternatives such as grain or silage for a reasonable price. In Calgary, *Nutrilytical*, 1-888-80-NUTRI (68874) or info@nutrilytical.ca and *Mid West Labs*, 403-250-3317 or www.midwestlabs.com; in Red Deer, *Parkland Laboratory* 403-342-0404; and in the Edmonton area, *Central Testing Laboratory*, drop off at 20/20 Seed Labs in Nisku (testing done in Winnipeg) 1-877-955-7861, info@ctl.mb.ca. In the US check out www.foragetesting.org which is based in Omaha.

Some Alternatives to Hay and Their Considerations

1.



Hay Cubes

Hay Cubes: An alternative that is probably the most similar to the nutrient value of long stem hay. Hay cubes can be used to replace all or some of a hay ration and are fed similar to hay, by weight. One advantage is that cubes allow for minimal waste if stored properly; helping to stretch your dollar and allowing the full nutritional value to be attained by the horse. Cubes may be a choking hazard for some horses so soaking them is an option in that case.

2. **Last year's hay crop:** There may be some hay still left from last winter in your supply. If properly stored, it should retain most of the nutrients it had when harvested. In order to be sure of the quality, have it tested, you could be sitting on a very healthy stockpile and not know it. Even if it's not as high a quality as you would like, you can use it and supplement it with some grain to create a balanced diet for your horse.

3. **Straw:** An alternative that is probably the most similar to hay itself, straw can be used to replace all or some of a hay ration IF the horse's diet is properly supplemented with extra protein and minerals (Dr. Warren's example is 5-6 pounds of a 16% protein grain mix). Straw is best used to replace a portion of hay, which can significantly lengthen a timeline on a hay supply. Oat straw is softer and often more palatable than wheat or barley straw. One way to increase palatability is to add a small amount of corn syrup or vegetable oil; both are inexpensive and easy on a horse's system. If feeding straw, ensure there is ample water available, free choice, to reduce risk of impaction colic.

NOTE*

Dr. Warren stresses "Straw should not be fed to weanlings or yearlings because they do not have the digestive capacity or ability to utilize straw as well as mature, adult horses."

4.



Alfalfa Pellets

Alfalfa pellets: Being high in nutritional content, they can serve as the sole forage source IF the horse has slowly adapted from hay to pellets. It is recommended that small amounts of long-stemmed hay or straw also be fed; around 5 to 7 pounds.

5. **Haylage or Silage:** When properly prepared and stored, haylage can be used to replace some or all of the hay in a horse's diet. Good quality silage can replace 1/3 to 1/2 of hay rations for horses. Finding storage for haylage or silage may be tricky as it is usually made and stored in large quantities. DO NOT feed spoiled haylage or silage to horses because they are much more sensitive to moulds than cattle.

Alternative feed sources are available in the province but they need to be introduced slowly and wisely to our horses. An immediate change in a horse's diet that is not well thought out, weighed appropriately and tailored to that animal's needs, may be just as damaging as not having enough feed at all.

For more alternatives to hay and ideas about how to supplement look at Dr. Lori Warren's paper at: [www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/agdex4575](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/agdex4575)

For more in-depth ideas about how to manage winter feeding, pasture management during drought and more feed alternatives look at Dr. Coleman's article at: [www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/hrs6287](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/hrs6287)



In the event that you are having difficulty finding a quality hay or alternative hay source, look into the Alberta Government listing at www.agric.gov.ab.ca/app68/hay , or try www.hayexchange.com which connects growers and buyers in all sorts of regions. The southern Alberta regions by Lethbridge are seeing slight increases in cost for hay and average crop turnouts. With the help of irrigation and warm weather, it is predicted that the region will produce quite a nice second cut; for a price. Northern Alberta will likely see slight re-growth but not enough to cut. This may mean that a neighbour has a few extra inches of grazing available for your horse for a couple months. Coming together with your local community can help create solutions and even offset the cost of traveling further for forage by going in a group. Remember that there are also out of the box places like

www.buysell.com

,
www.craigslist.org

and

www.kijiji.com

that help people find the most interesting things; including hay.



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