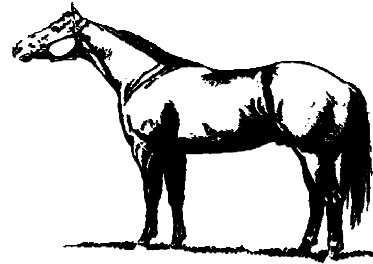


## **Animal Science Horse Information Series**

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### **SOME HORSE OWNERS CONCERNED OVER HAY SHORTAGE**

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**Cold winter weather and hay shortage in some areas have horse owners concerned. Lack of rain this past summer resulted in inadequate hay supplies in some areas. This situation has been worsened with less fall pasture and recent cold weather. These conditions have made a dent in the hay supplies. Another factor for horse owners is that some hay is of lower-quality.**

**Horse owners need to evaluate their horses and hay supply. Next, they need to match each horse with an appropriate quality of hay and determine the amount of hay to feed each horse. If quantity or quality of hay is undesirable to feed horses through the winter, an alternative feed source and/or management practices must be implemented.**

**Horses are generally in a maintenance (idle), growth, reproduction, lactation or**

performance stage. Each of these stages result in different nutritional requirements and the need to be fed differently.

Many mature horses will be idle in the winter, so they can be fed a maintenance diet. Generally in maintenance horses, about 2 percent of grass hay is fed per 100-pounds of body weight. So a 1,200-pound mature horse would need 24 pounds of grass hay. If a legume hay, such as alfalfa hay, is fed, less is required; about 1.75 percent of body weight or 21 pounds.

Even those that are ridden sporadically or occasionally in winter do not have a great increase in or need for energy or additional feed.

Hay quality is always an important consideration for horse owners. Hays can be classified as excellent, very good, good (average), fair or poor. As a general observation, going from an excellent to the poor category, the hay has less green color and is browner, there are fewer but coarser leaves, the stems become larger, there are fewer leaves to stems and the hay is coarser or rougher to the touch.

Currently, there is not a lot of excellent hay available. Most of the available hay will be above average (very good), average or fair. In some areas, it will be mostly fair and poor-quality hay. Poor-quality hay should not be fed to horses.

Owners of idle or maintenance horses can feed fair-quality hay along with an appropriate grain mix to balance the ration. Such a grain mix will likely need to be a 12 percent protein feed.

Weanlings, yearlings, lactating broodmares and moderate performance horses need above average hay. Average quality hay can be fed to two-year-olds, light performance horses and pregnant broodmares in their first or second trimesters. When hay is evaluated,

put back enough above-average hay for the last trimester of pregnant mares, and especially those that will lactate before spring pasture. Mares in late pregnancy have a reduced capacity to eat, so hay must be of higher quality. At around 270-days of pregnancy, mares begin using stored body fat as an energy source. Protein cannot be stored in the body to the same extent as energy. At this stage, mares should have a 12-14 percent protein grain mix.

Not many horses do moderate or intense performance in winter.

Over a five-month hay feeding winter period, a 1,200-pound horse will need about 4,000 pounds of hay.

If it is determined that there is not enough hay of proper quality for winter feeding, owners need to make some management changes. One of the logical changes is to feed less hay. It is not advisable to feed less than one pound of hay per 100 pounds of body weight. A 1,200 pound horse would be fed 12 pounds of hay rather than 24 pounds.

Reducing the amount of hay normally fed requires the feeding of more grain to replace lost nutrients due to lower hay intake. One pound of grain will replace two pounds of average or better quality hay, while a pound of grain will replace 3 pounds of fair or below average hay.

Idle horses in winter would normally be fed 24 pounds of hay and 1-2 pounds of grain. To save hay, that horse now can be fed 12 pounds of hay and an additional 4 pounds of grain. It is not advisable to feed more than 6 pounds of grain at one time.

Oats may be a good feed for horses in winter time. Oats are a high fiber feed that has the advantage of offsetting the fibrous nature of hay, if it is reduced. Oats are a higher energy and protein feed than grass hays. There is not advantage of feeding crimped oats to

**mature horses.**

**Some horse owners feed corn in winter, thinking it is a heat-producing feed. This is not correct. A pound of oats will produce more body heat to keep a horse warm than a pound of corn.**

**Alfalfa cubes are readily eaten by horses and have been observed to be preferred over long stemmed alfalfa hay. Weanlings gained satisfactorily when fed alfalfa cubes. Alfalfa cubes can replace hay pound-per-pound.**

**All-in-one-feeds contain extra forage or fiber sources. The addition of high fiber feeds, such as beet pulp or soybean hulls which are a good source of highly fermentable fiber, can be an advantage. Beet pulp can replace about 25 percent of the hay fed pound-per-pound. Soybean hulls can make up 20 percent of the grain mix.**

**Cool-season winter pastures such as fescue or orchardgrass, if not grazed below 2-3 inches, can provide additional nutrition. One may need to rotate horses and pastures to protect and better utilize winter pasture forages.**

**It has been shown that vitamin A and phosphorus may be deficient in winter pastures, so grain mixes should contain adequate levels of vitamin A and phosphorus.**

**Body condition scoring every 30 days in winter is a good tool to insure that horses are getting adequate energy from winter pasture, alternative feeds or other feeding practices during the winter hay feeding period.**

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