



Winter 06-07

## **Feeding and management of Horses in Winter**

*Amy M. Gill, Ph.D.*

Cold, blustery, wet winter weather can present some tough feeding and management situations for horse owners and their horses. No one enjoys hiking up to the barn when the weather outside is miserable, and horses seem particularly crabby and uncomfortable when the temperature dips below their comfort zone. Fortunately, good planning in conjunction with quality feeds and facilities can make the transition from warm autumn days into wintry nights a little less difficult for all involved.

One of the most productive ways of keeping horses warm and comfortable is to provide free choice, good quality hay. As a grazing herbivore and hind gut fermenter, the horse has an internal furnace that can continually produce heat for maintaining body temperature so long as the source of that heat, fiber, is available. The heat of fermentation when the hay is digested by microbes in the horse's hindgut is the main source of warmth for the horse. The heat is produced during the biochemical conversion of fiber into volatile fatty acids (VFA's). During a very cold spell, it is even OK to feed a lesser quality hay than normal, as the higher fiber content of this type of hay provides more fuel to the microbial populations. This is a great time of year to use up some of that older more mature hay that got a little too long before it was harvested!

Some horses will require additional supplementation to keep condition. Be sure to choose a concentrate that is specifically designed for the type of horse being fed, and always introduce a new feed slowly over a 7 -10 day period. It is also very important to group similar types of horses in a field so that feeding time is less stressful. All horses should be treated as individuals and amount and type of feedstuffs utilized should be customized for each horse.

Some type of shelter to provide protection from wind, rain and ice should be available to pastured horses. Wet horses lose body heat very quickly as the wind increases and temperatures drop. Snow is not as hard on horses as an icy rain because a layer of snow on the horses back acts as an insulator. Horses that are continuously exposed to wet weather are very hard to keep weight on since much of the energy derived from feed is diverted to producing body heat. If you notice a horse shivering, it is doing all it can to

try to keep its body heat constant. Bring the horse inside for a while, throw a wool blanket over it and feed it some hay. Feeding hay in shelters is a great way to train horses to come in out of the weather to eat. Using hay bags or racks helps to keep the forage off the ground where it can get wet and trampled.

Make sure the source of water in a pasture remains viable. Horses prefer tepid water to ice cold or slushy water, so tank heaters should be used if automatic heated waterers are not available. Colic occurs more often in winter when horses are eating a lot of forage and then not drinking much water. It is imperative that timid horses out in large herds are not run off by more dominant pasture mates. If more than five horses share a water source, setting up another tank may be beneficial, to ensure all horses have access to water at all times.

Blanketing helps older or infirm horses to maintain body weight. Blanketing is mandatory for horses that have been body clipped. Blanketed horses should have the blanket removed and be groomed on a DAILY basis. Horses get very itchy from wearing blankets continuously and sores can develop from dirt, grit, stones etc.

With a little foresight, good quality forage and concentrates, shelter, water and some blankets, horses and humans alike can weather the winter!