



## News Release

College of Veterinary Medicine

Michigan State University

# Attention Horse Owners!

The 2008-2009 winter in Michigan has been unusually cold with temperatures well below freezing for many days in a row. This extreme cold weather can be particularly dangerous to animals that live outdoors and the MSU Veterinary Teaching Hospital is reporting an increase in the number of animals presenting with starvation and exposure-related problems.

During the winter it is imperative that you monitor your horse's body weight by putting your hand on them frequently!

Furry coats make visual assessment of body condition impossible - the **ONLY** way you can assess your animals condition is by touch.

As temperatures continue to remain unusually cold, it is important to remember that your animals require **MORE** calories to maintain body temperature and body weight. Once an animal's body condition has deteriorated it may no longer be strong enough to eat enough food to survive.

Remember older animals with poor dentition and young animals may require more feed, and be fed separately from other horses to ensure adequate intake.

### Points to remember!

1. The average inactive horse needs to eat 1.5 to 2 percent of its body weight in food per day to just maintain weight without any other energy demands. In the winter, the amount

needed will increase as the demand to keep warm will increase the amount of energy the horse expends.

This means that the average 1,000-pound horse in good condition needs at least 20 pounds of hay during normal weather and may need as much as 35 to 40 pounds of hay and grain products during cold weather.

If your horse is considered underweight, the amount of feed needs to be calculated based on his ideal weight, **NOT** his current weight. While hay diets are ideal, certain animals will require grain, complete feeds or fat supplements to maintain body weight.

2. Separate young, old or debilitated horses as the dominant horse will frequently eat most of the food provided, resulting in some horses being healthy and others facing malnutrition.

3. Blankets and shelters will help decrease energy demands. However, remember a blanket hides the body condition so it is important to place your hands under the blanket and remove it at least every week or so to assess body condition.

4. Old horses with poor dentition (teeth) may require **complete pelleted feeds\*** that are easily broken down, as they may be unable to adequately chew fiber (hay). For the average horse that should weigh about 1000-pounds, at least one-third of a fifty-pound bag needs to be fed daily just to maintain the body weight, and

more will be needed if severe energy demands are present.

5. Water intake is also very important during the winter. Many horses will suffer from impaction colics due to inadequate water intake. Older horses may require the water to not only be frost free, but warmed due to older horses having sensitive teeth.

6. Remember, during extremely cold weather, to provide extra (free choice) hay, as this will generate more energy and comfort than just increasing the grain (concentrate) portion of the diet. Just the physical aspect of moving and eating will make the horse more comfortable. The hay fermenting in the large intestinal tract will generate heat and finally, the horse will utilize the calories absorbed from the feed.

**Body condition score-** The body condition scoring (BCS) system is based on a 1 through 9 scale and is designed to assess a horse's overall condition. Horses with a BCS less than a 4 are at increased risk of hypothermia and starvation, especially when the weather conditions cause an increase in energy demands just to maintain weight. If an individual is already thinner than desired (BCS < 4), they will not have adequate body mass (fat) to help with insulation from the cold or provide a supply of energy when the diet is lacking and demands are higher than expected.

To determine your horse's BCS you must touch your horse, especially in the winter, as winter hair hides a horse's true BCS, often until it is too late to successfully correct the weight loss. Feel over the ribs, neck, shoulder area, mid-spine, hips and tail head. If your horse's ribs over the widest part of the barrel are easily felt with little or no tissue between the skin and ribs, the BCS is below 4. This horse is suffering from malnutrition and is at a high risk

of hypothermia when the temperature drops, particularly if the wind chill is high and little to no shelter is available.

For more information on body condition and feeding horses during the winter, please contact your veterinarian. The website [www.extension.org](http://www.extension.org) is also a very good site to visit for information on feeding, care and body condition scoring.

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\*A **complete pelleted feed** is a product that contains at least 15-percent crude fiber and can be fed as the sole source of nutrition for horses. Horses that are routinely fed a **complete pelleted feed** are senior horses that are lacking teeth or have severe dental problems. A **complete pelleted feed** can also be used as part of the diet when hay is in short supply (a hay extender) or fed to horses that have certain digestive disorders.

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