



# Managing Your Senior Horse In Winter

Nancy Adams, DVM

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Winter weather is here, and with its arrival comes special challenges for our equine companions. Older horses, in particular, may have a more difficult time maintaining their weight and staying healthy during colder months. A few simple management changes can help your senior horses get through winter happy and healthy.

**NUTRITION** As the temperature drops below freezing, horses' maintenance energy requirements increase, and conditions such as wind, rain and snow create further demand for calories to maintain weight, especially in horses that spend the majority of their time outdoors. Rain and wind decrease the natural insulating capacity of the horse's hair coat, forcing the horse to use body reserves to maintain core body temperature. This often results in weight loss if the calorie content of the diet is not increased to meet the extra demands. How you will provide those extra calories depends on the feeds available and each horse's individual needs. Older horses often have problems with dentition, such as missing teeth that make it more difficult for them to process feed, especially long-stem fibers found in hay. For this reason, regular dental examinations and teeth floating are important parts of any senior horse care program.

It's a good idea to assess your horse's body condition score (BCS) prior to the arrival of really cold weather, and periodically throughout the winter. Body condition scoring ranges from 1-9, with a score of 1 referring to an extremely emaciated horse and 9 considered very obese. (See pages 3-4 for a detailed explanation of body condition scoring.) Horses with a BCS of 5 or greater will have some extra fat stores that will provide insulation and serve as a source of energy during cold temperatures if the ration is not meeting the horse's calorie requirements. When evaluating body condition, remember to feel the horse's body, not just look at it – thick winter coats can hide weight loss, and you don't want to be surprised when the horse sheds its winter coat in the spring!

When developing your feeding program, consider increasing your horse's hay intake to meet energy needs. Hay is digested in the gastrointestinal tract by fermentation, which produces heat that the horse can use to maintain core body temperature. Most horses will consume 1.5-2.0% of their body weight per day in hay. If they can't consume enough hay to meet their caloric demand, then adding grain to the diet will provide added calories. Older horses often require supplementation, or even a complete ration, of a senior horse feed that is specifically formulated to meet the older horse's nutrient needs. Such feeds are referred to as "complete feeds" because they contain not only appropriate levels of vitamins, minerals, and protein, but also contain processed fiber that can supply all or part of a horse's daily forage requirement. Other sources of energy include beet pulp, which is an easily digested source of fiber (and is also a component of many senior feeds) or vegetable oils.

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While weight loss is the most common problem encountered in the winter for most horses, it's also important to avoid overfeeding. If your horse is out of work for the winter, less grain may be required to maintain ideal body condition. This is especially important in horses that have signs of Equine Metabolic Syndrome, a condition that predisposes horses to laminitis. Frequent assessment of BCS and consultation with your veterinarian is recommended to determine the ideal weight and feeding program for each individual horse.

**SHELTER** Our horses rely on us to provide adequate shelter and nutrition throughout the year and this becomes even more important during the winter. Ensure that older horses and hard keepers have some form of shelter to protect them from the wind, snow and rain. For the older horse that has difficulty maintaining weight, weight loss becomes a big problem, as getting that condition back during the winter is difficult or often impossible. In our climate, most horses that have been allowed to grow a full winter hair coat will not need blanketing as long as they can get dry and out of the wind. However, geriatric horses that have not needed blanketed in the past may benefit from a blanket as they age if they are having difficulty maintaining their weight.

**WATER CONSUMPTION** Another common problem encountered during the colder months is a decrease in water consumption. Horses don't like to drink cold water – as the water gets colder, horses tend to drink less, and this decreased water intake occurs long before the water actually freezes. Horses that aren't consuming enough water are at much higher risk for impaction colic. Every effort should be made to encourage horses to consume as much water as possible during the winter months. Changing the water often to prevent freezing, water heating devices, or adding electrolytes to the feed are all ways to encourage water consumption. Automatic waterers can also be helpful, but make it difficult to monitor how much each horse is drinking. Water can also be added directly to the feed to provide additional intake, and may have additional benefit for senior horses by making the feed easier for them to chew and swallow.

**EXERCISE** Many older horses have arthritic joints, and may experience more soreness during cold weather. Keeping the horse moving with turnout and self-exercise frequently helps. If you will be riding your senior horse during the winter, it is important to remember that longer warm-up and cool-down periods may be required to keep the joints as comfortable as possible, and also to avoid soft tissue injuries. Good footing is important for any horse in the winter, regardless of age, but senior horses may have more difficulty getting around and are more prone to injury on irregular, frozen or icy ground. Maintenance of footing in turnout areas or addition of shoes with borium for traction or snowball pads to prevent buildup of ice balls in the feet may be helpful.

Proper nutrition, dental care, shelter, and exercise are essential to your senior horse's health, especially in winter, when weather conditions are challenging. For more specific recommendations tailored to your individual horse, contact your veterinarian or the doctors at Kansas State University.



## KANSAS STATE UNIVERSITY VETERINARY MEDICAL TEACHING HOSPITAL

The veterinarians at Kansas State University Veterinary Medical Teaching Hospital are committed to the health and well-being of your horse. Please call 785-532-5700 if you have questions about nutrition or preventive care for your senior horse.



## Body Condition Scoring

Body condition scoring is a helpful tool to objectively assess a horse's body fat. The system used by most veterinarians today was developed in the 1980s by Dr. Don Henneke. This system has served to provide a standard scoring system for the industry that can be used across breeds and by all horse people. The system assigns a score to a particular body condition (1 through 9) by assessing fat deposition as it occurs in various places on the horse's body. The system works by evaluating fat both visually and by palpation (examination by touch) in each of six areas. Fat is assessed in the following areas: A) crest of neck; B) along the withers; C) crease down the loin; D) tailhead; E) ribs; and F) behind the shoulder. A numerical value is assigned based on the cumulative fat in all 6 areas.

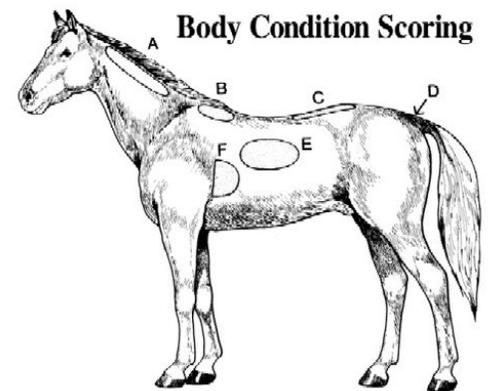
**LOIN** An extremely thin horse will have a ridge down the back where the spinous processes project up. However, this is one of the first areas to fill in as a horse gains weight. As the horse gets fatter, an obvious crease forms down the back due to fat accumulation.

**TAILHEAD** In a very thin horse, up to BCS 3, the tailhead is prominent and easily discernible. Once the horse starts gaining weight, fat fills in around the tailhead. Fat can easily be palpated, and as the horse becomes obese, the fat feels soft and begins to bulge.

**WITHERS** Conformation of the withers may affect your assessment of body condition. Prominence of withers may vary between breeds. However, if a horse is very thin, the underlying bony structure of the withers will be easily visible. At a level 5, withers will appear rounded; at levels 6 through 8, varying degrees of fat deposits can be felt along the withers.

**NECK** The neck allows for refining the assessment of body condition. In an extremely thin horse, you will be able to see the bone structure of the neck, and the throatlatch will be very trim. As the horse gains condition, fat will be deposited down the top of the neck.

**SHOULDER** The shoulder will also help you refine the condition score. As a horse gains weight, fat is deposited around the shoulder so that it blends smoothly with the body. At increasing condition scores, fat is deposited behind the shoulder, especially in the region behind the elbow.



BCS 1



BCS 5



BCS 8

*Please see the following page for a detailed body condition scoring chart!*



## Body Condition Scoring Chart

Condition	Neck	Withers	Loin	Tailhead	Ribs	Shoulder
<b>1 Poor</b>	Bone structure easily noticeable, animal extremely emaciated, no fatty tissue can be felt	Bone structure easily noticeable	Spinous processes project prominently	Tailhead (pinbone) and hook bones project prominently	No fat cover over ribs.	Bone structure easily noticeable
<b>2 Very Thin</b>	Faintly discernable, animal emaciated	Faintly discernable	Slight fat covering over base of spinous processes. Transverse processes of lumbar vertebrae feel rounded. Spinous processes are prominent.	Tailhead prominent	Slight fat cover over ribs. Ribs easily discernable.	Shoulder accentuated
<b>3 Thin</b>	Neck accentuated	Withers accentuated	Fat buildup halfway on spinous processes but easily discernable. Transverse processes cannot be felt.	Tailhead prominent but individual vertebrae cannot be visually identified. Hook bones appear rounded but are still easily discernable. Pin bones not distinguishable.	Slight fat cover over ribs. Ribs easily discernable.	Shoulder accentuated
<b>4 Moderately Thin</b>	Neck not obviously thin	Withers not obviously thin	Negative crease along back	Prominence depends on conformation; fat can be felt. Hook bones not discernable.	Faint outline discernable	Shoulder not obviously thin
<b>5 Moderate</b>	Neck blends smoothly into body	Withers rounded over spinous processes	Back level	Fat around tailhead beginning to feel spongy	Ribs cannot be visually distinguished but can be easily felt	Shoulder blends smoothly into body
<b>6 Moderately Fleishy</b>	Fat beginning to be deposited	Fat beginning to be deposited	May have slight positive crease down back	Fat around tailhead feels soft	Fat over ribs feels spongy	Fat beginning to be deposited
<b>7 Fleishy</b>	Fat deposited along neck	Fat deposited along withers	May have positive crease down back	Fat around tailhead is soft	Individual ribs can be felt, but noticeable filling between ribs with fat	Fat deposited behind shoulder
<b>8 Fat</b>	Noticeable thickening of neck	Area along withers filled with fat	Positive crease down back	Tailhead fat very soft. Fat deposited along inner buttocks	Difficult to feel ribs	Area behind shoulder filled in flush with body
<b>9 Extremely Fat</b>	Bulging fat.	Bulging fat	Obvious positive crease down back	Building fat around tailhead. Fat along inner buttocks may rub together. Flank filled in flush	Patchy fat appearing over ribs	Bulging fat