

FACT SHEET



Department of Animal Science,
University of Connecticut

Effective Horse Management – Horse Management Series

Transitioning Your Horses from Winter to Spring

Jenifer Nadeau, M.S., Ph.D
Associate Professor Equine Extension Specialist
Department of Animal Science

The days are growing longer, the snow has melted and it's time to pick up the reins again. Not so fast! Here are some ideas for getting your horse ready for spring.

To Blanket Or Not To Blanket

Some days it's below 30, other days it gets up to 50 degrees F. One thing to keep in mind when determining what, if any blanket, a horse needs as spring approaches, is that horses prefer temperatures lower than humans. Research has shown that a horse's preferred ambient temperature, that which it is most comfortable, is 50 degrees Fahrenheit.

To take the guesswork out of blanketing, particularly if several people will be involved with blanketing decisions, consider using a chart that exists somewhere, made by experts or making your own chart that indicates which types of blankets to use at different temperatures.

It is a good idea not to procrastinate, but to clean and properly store blankets at the end of the blanketing season. Blankets should be cleaned once a year to kill bacteria and be kind to

your horse. Washing and handling your blanket will give you the chance to inspect it and see what repairs, if any, have to be done to make it last another season.

To help out your cleaning service, brush or vacuum as much of the caked dirt and hair off the blankets as possible. If you have many blankets to clean and repair, don't send them all at once. Send the heavy blankets first, once you've switched the horses to lighter sheets. It may be a good idea to put your blanket in a normal sized trash bag with your name and contact information included.

Charges vary, but expect to pay around \$55 for heavy turnouts and less for stable blankets. Sheets will be even less. Repairs costs vary, but you should ask for a quote and ask if the blanket is worth repairing.

If you are washing a blanket yourself, you should use a machine without a center agitator. The new front loading machines are designed to save water and probably won't get the blanket clean even if you wash it two to three times. Going to a laundromat with large capacity industrial washers is advised. Once the blankets are clean and dry, keep them in an air tight container stored in a cool place to keep animals and moisture out.

Shedding

It has been found that beyond applying lots of elbow grease, there is not much you can do to lessen the amount of time needed for a horse to shed its winter coat. Plenty of supplements on the market advertise the advantages of their products for shedding, but beyond aiding in a good quality coat, they don't help loosen hair. That is because shedding is a melatonin triggered response through the brain directly related to the length of daylight. You can use brushes with large rubber, finger-like projections as these do a good job of stimulating oils (for a sleek coat) and loosening hair.

Interestingly, blanketing a horse can slow the shedding process down. Even though the light needed to trigger shedding is received through the horse's eye, there seems to be some other effect the light has on the body that is not yet understood. Perhaps the blanket blocks the weather the horse needs to experience in order to complete the shedding process. Regardless of the reason, be aware that blanketed horses, although growing less of a winter coat, may not shed out as much by that first performance as their un-blanketed stable mates.

Grazing

Horses fed hay through the winter should not suddenly be turned out to pasture for hours on end. The diet change must be done gradually to avoid colic and health issues. Fructans (types of sugars) are present in both grass and hay and they have been linked to triggering laminitis episodes in horses, particularly those that are insulin resistant. These horses have cresty necks, high amounts of fat, and are commonly referred to as 'easy keepers.' Research has shown that the fructan content goes up very high when grass grows rapidly. In the spring, if you get heavy rain, be careful because that's when the grass will start growing fast and the fructan count will increase. The fructan content is highest when the plant undergoes photosynthesis and the most active time for this is early in the morning. Therefore, you'd want to keep the horses off the green grass in the morning. Late afternoon, and even early evening, would be a much better time to introduce horses to pasture.

Grass can actually be tested to check the levels of sugars and starches. You simply cut off the parts that the horses would eat, never lower than they'd graze. Take random samples from around the pasture and send it off to a forage analysis lab. The tests will tell you how much

sugar, starch, protein, and energy are in your grass. A good reason to have this test is so you can take that analysis to your feed company and get a grain that complements your grass. If you do this, be sure to analyze the grass at different times of the year, starting in April or May, as the nutrient content can be quite variable depending on the weather and stage of growth.

Another consideration when introducing horses to pasture is whether your grass has had sufficient time to establish itself prior to being subjected to grazing and hooves. You really want the grass to have 6" to 8" of initial growth. Grass of this height will have good root formation which is important in pastures. When horses graze, they crop the grass close to the soil and when they do, it will pull the grass out by the root if the plant hasn't been able to establish itself. Never allow horses on pasture when the grass is below 3" to 4" as that is the absolute minimum length grass needs to withstand grazing horses.

Deworm your horses 10 to 14 days prior to turning them out so horses don't carry a heavy worm burden onto the new pasture. It usually takes three to four days to kill the parasites but some can take a bit longer and you certainly don't want horses to be shedding eggs when they are turned out.

The number of days (or maybe even weeks) it takes to build a horse up to staying out on pasture for a significant number of hours per day varies greatly depending on the individual horse. Easy keepers require the number of hours they are out on pasture to be increased much more slowly those horses that are hard to keep weight on. Other variables include how many horses will be competing for the grass and whether the pasture is full of lush, green grass or is more of a dirt turnout. General guidelines suggested are thirty minutes of grazing on the first day, and then increasing that time by thirty minutes per day. Adjust those times for the types of horses and pasture.

Finally, one thing people often neglect is when their horses are turned out in a dirt turnout. Many people simply turn their horses out in a ring or other dirt area and keep them out all day, from the first day they're turned out. But research has shown that there are certain weeds that are very high in fructans and can trigger laminitis. So if you have a lot of palatable weeds, say along a fence line, then your horses are still in danger from getting too much sugar.

Conditioning

Perhaps having taken the winter off, you may be ready to get right back into the show season and have an ambitious show schedule planned. But first, you need to get your horse back into shape. It takes about a month for a horse to show aerobic and cardiovascular improvements once a workout plan is underway. Start with lower speed and longer distance three to five days a week. You should take one day off every three or four days so the horse doesn't get fatigued. If a horse's muscles get fatigued, it will cause pain and the horse won't want to work. Fatigue also increases the risk of injury. Exercise your horse at about 135 to 155 beats per minute for optimum conditioning, that's about 60 to 80% of its maximum heart rate. You'll see fitness improving as the recovery rate (time it takes for heart rate to return to normal) improves. Once the recovery rate is less than 60 beat per minute within 10 to 15 minutes, then you can increase the level of the exercise either by increasing the duration, intensity, speed, or distance, but only increase one at a time.

Interval training, another type of conditioning where you do short, intense workouts, is a good method to alternate with the above. Interval training is anaerobic work where the horse can't rely solely on oxygen to fuel the muscles. In interval training, periods of intense training are interspersed with periods of rest in which the horse is allowed to recover back to its resting

heart rate in order to gradually increase the strength of the horse, especially its muscular and respiratory system. For interval training, you want to increase the heart rate to 180 to 200 beats per minute but be careful not to exceed two minutes in duration for this. Then go back to a trot until the heart rate is 100 beats per minute. To do this, you'd gallop the horse on the flat or make it do a long trot up a hill. It should be exercise specific.

If your horse is blowing after a workout then it needs more aerobic work. Before getting back to work, check the horse's resting heart rate; it should be less than 42 beats per minute. Under moderate work, the heart rate should be 75 to 100 beats per minute, while it can jump to more than 200 beats per minute for heavy work. After a workout, the horse should recover to less than 60 beats per minute within 10 to 15 minutes. If it takes the horse 30 to 45 minutes for its heart rate to drop, then that's a poor recovery. If after 10 to 15 minutes they've recovered to 44 to 52 beats per minute, then their work level can be increased. If the rate is more than 72 beats per minute, then it means they've been worked too hard.

When conditioning horses, too many people overlook both the warm-up and cool down. It's particularly important with horses that are out of shape. They should walk for five minutes, then trot for five minutes before moving on to something more demanding. It will raise the body temperature and increase the blood flow to the working muscles while also loosening up the muscles and tendons and improving the range of motion and help avoid pulling and tearing. It also helps them to dissipate heat better so they don't get so sweaty. The cool down should be five minutes of trotting followed by five minutes of walking. This helps remove the lactic acid from the muscles and will minimize stiffness and soreness.

Conclusion

It seems like most horse enthusiasts look forward to spring even though there are some things we need to do to make the transition from winter to spring a smooth one. It may take a little extra time and effort, but by taking the steps mentioned in this article, you will help minimize problems and make your horse's transition time to spring a happy event.

Acknowledgements:

We are grateful for the review by Dr. Debra Hagstrom of the University of Illinois, Horse Extension Specialist.

The University of Connecticut supports all state and federal laws that promote equal opportunity and prohibit discrimination.