12 Months of Feeding Tips

Here's how to roll with Mother Nature through the seasons, nutritionally speaking.

BY KAREN BRIGGS

ometimes it feels as if humans have divorced themselves from the rhythms of nature. Perhaps that's part of the appeal of horses. They seem so much more attuned to the natural world than we are. And when we spend time in their company, we're brought back into an environment where we become conscious of the orbit of the Earth and the ebb and flow of the seasons again.

Although horses are creatures of habit, they do respond to the changes in the seasons, and one of the most obvious ways in which they do so is in their feeding patterns. In the wild horses thrive on green pastures through the summer months, while in winter they subsist on whatever sparse, dry forage they manage to find under the snow. We can certainly minimize this feast-or-famine lifestyle with our domestic beasties, but we still have to adjust feeding patterns to work with the seasons.

Here's a 12-month rundown of some of the year's most important feeding concerns. Keeping them in mind can help ensure your horse remains healthy and happy and in tune with Mother Nature 24/7.

January

In most parts of North America, January is the depths of winter—although that can range from positively arctic to tropical-but-slightly-less-humid. No matter where you are, keeping your horse hydrated is an important consideration. When the temperature drops, horses drink less, and in areas where water sources tend to freeze over, dehydration and impaction colic become very real concerns.

January Job One is making sure your horse always has access to unlimited amounts of fresh liquid water. Stock tank



The winter months can be difficult when it comes planning a horse's diet. In the wild horses subsist on whatever sparse, dry forage they manage to find, but domesticated horses rely on us to keep their diets consistent through the seasons.

heaters outdoors, and bucket heaters designed for horses used indoors, are the best way to accomplish this, but if you don't have that luxury, at least make sure your outdoor troughs are well-insulated, protected from the worst of the wind, and that you break any skin of ice that forms several times a day. Snow is *not* an adequate substitute for liquid water.

Studies have shown that horses drink substantially more water in the winter when it's lukewarm—not ice cold. Adding warm water to buckets before their dinner will encourage horses to drink deeply. You can also soak hay and serve pellets, roughage chunks, or beet pulp soaked in plenty of warm water to aid hydration.

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February

Time to check your horse's body condition. Is he carrying an appropriate amount of weight for his size, age, and performance requirements? It's easy to overlook winter

weight loss when your horse is hiding under a thick, fuzzy winter coat or a bulky Gore-Tex blanket. Ideally, he should be about a 5 (or "moderate") on a body condition scale of 1-9, with 1 being extremely emaciated and 9 being grossly obese. A 5 means his back is level (the spine neither protruding nor buried in flesh), the fat around his tailhead should feel slightly spongy, his withers should be rounded, and his shoulders and neck should blend smoothly into the body. If you press lightly against his rib cage, you should be able to feel his ribs beneath the surface, but not see them easily when you stand back.

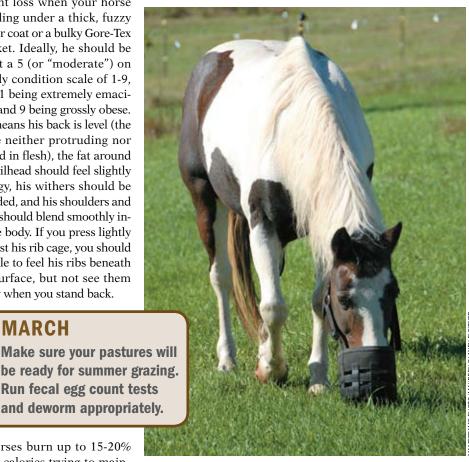


#1 Make sure your pastures will be ready for summer grazing. #2 Run fecal egg count tests

Horses burn up to 15-20% more calories trying to maintain their internal body temperatures for every 10°F drop in the temperature below 30°F.

Older horses, in particular, have to work harder to thermoregulate in the winter months. Sarah Ralston, VMD, PhD, Dipl. ACVN, of the Department of Animal Science at Rutgers University in New Jersey, recommends that in cold weather horses on the high side of 20 years be fed about 120% of the National Research Council's (NRC) recommendations for daily intake. "Some horses need even more than this," she says. "I've found some can go up to about 133% of NRC." This means that in some instances you might have to exceed 3% of your horse's daily body weight per day in feed to help him maintain his condition in winter.

The best way to help your horse keep his internal furnace burning is to increase the amount of roughage he receives rather than increasing his grain. Tough, fibrous feeds are digested in the cecum of the hindgut by bacterial fermentation, a process that generates lots of warmth. By contrast, grain is easier for the horse's system to break down, so the process creates less



Horses who are susceptible to colic, laminitis, and obesity might benefit from wearing a muzzle, as it limits the amount of grass they consume.

February Job One is to take off your horse's blanket and get your hands on him to check his body weight and condition. A weight tape is useful, but remember to pull it tight because of the dense winter coat.

March

With the first hints of spring in the air in most parts of North America, a horse owner's thoughts turn ... to pasture management. Consult with your local agricultural extension specialist to see whether your grazing could be improved by fertilizing, overseeding, or spraying for weeds.

The spring sun also encourages parasite eggs to hatch on your pastures. Because worms can have a dramatic impact on your horse's digestive health and nutrient absorption, March is an ideal time to get a fecal egg count test done on each horse in your care. The results will help you and

your veterinarian decide who needs deworming, which drug is best to use, and when you should repeat the treatment.

March Job One is to make sure your pastures will be ready for summer grazing.

> **Job Two** is to run fecal egg counts and deworm appropriately.

April

Colic alert! Be careful when turning your horse out on pasture after a winter of hay—that sweet spring grass can be a shock to his system. Of particular concern are plant sugars called fructans, which accumulate in some species of grasses when temperatures are cool, but the skies are sunny. The concentrated sugars can be particularly dangerous to insulinresistant horses (including most pony breeds and Morgans, for instance).

Researcher Kathryn Watts, BS, whose Web site, www.safergrass. org, is a great source for pasture management and fructans information, suggests that the safest time for horses to graze in spring is in the early morning, after nights when the temperature dropped no lower than 40°F. The most dangerous time is in late afternoon or evening, especially when temperatures the previous night dipped below 40°F.

Even if your horse is not insulin-resistant, it's important to recognize that spring grass repre-

sents a major change in his diet. To avoid triggering a case of colic or laminitis, reintroduce him to spring grazing slowly. You might have to restrict horses and ponies that have previously foundered, or are at risk, from spring grazing entirely, or fit them with grazing muzzles.

April Job One is to get out the grazing muzzles and make sure they are clean and in good shape for those horses who need to wear one in the fight against colic, laminitis, and obesity.

May

If you're a breeder, your mares will likely have foaled out by May, which means their bodies are now doing the hardest work of their lives. When a mare is lactating, her energy needs shoot up a full 80% over her usual maintenance requirements, her protein needs more



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than double, and her requirements for calcium and phosphorus almost triple. The first eight weeks of nursing are as strenuous an activity as your mare will ever undertake and will have a lasting impact on how well her foal develops and matures.

Make sure you're providing your broodmares with the nutritional support they need by feeding a commercially balanced grain ration designed for pregnancy and lactation. Unless your pasture is of really excellent quality, your mares will also benefit from the addition of some high-protein legume hay while they're nursing.

May Job One for those of you who *aren't* breeders is to check your horse's weight and saddle fit. Remember that normal seasonal changes in nutrition (gaining and losing weight) can alter saddle fit.

June

It's haying season, one of the most pivotal times for your horse's dietary program. The hay you harvest or purchase now will affect his nutritional balance for the next year, so get informed and choose wisely.

Good-quality hay isn't about being first or second cut, or legume versus grass. Whatever the varieties of plants in the hay, it should be green and fragrant, not moldy or dusty, and a bunch squeezed in your hand should be soft, not prickly. (Tough, stemmy hay is not only more difficult for horses to chew and digest, it's lower in nutrients because it was cut when the grasses were overmature and gone to seed.)

The ideal strategy is to get all of your hay from a single source so you know the nutrition it delivers is likely to be consistent from bale to bale throughout the winter. Your local feed store or agricultural extension agent can help you get a nutritional analysis of your hay done, usually for \$50 or less. This information can be invaluable when it comes to correctly balancing your horse's diet over the next year.

June Job One is to make arrangements for your winter hay supply. **Job Two** is to clean out the hay shed so it will be ready to store your next crop.

July

Summertime, and the living is sweaty. Horses can lose substantial quantities of some minerals in sweat. Every horse should have access to loose salt or a salt block in pasture and stall, and high-performance animals that sweat profusely during work might benefit from the addition of electrolytes to their diets. Studies at Cornell have

determined that horses voluntarily consume an average of about 50 g of salt a day if a salt block or loose salt is made available to them.

Laurie Lawrence, PhD, of the Department of Animal Science at the University of Kentucky, notes, "When you consider the use of an electrolyte, remember that horses do not store sodium, potassium, or chloride in their tissues from one day to the next. (So) a high level of electrolyte supplementation is a good idea only when horses sustain high sweat losses every day."

If you're lucky, you might have put your

year's supply of hay in your barn by July, but that doesn't mean you should forget about it. Periodically inspect your hay for signs of mold or heat, particularly if you suspect it might have been rained on or given inadequate time to cure.

Hay that is baled wet tends to generate heat. Chemical reactions in bales can actually cause temperature to rise to ignition point—448-527°F. If enough oxygen is present, you run the risk of spontaneous combustion! Bales that feel or smell warm should never be stored anywhere near a barn, and regular checks with a thermometer (slipped down between bales in your stack) are an excellent safety precaution. Any hay that registers 140°F or more should be removed from the barn slowly, as

even throwing or moving the hay quickly

could be enough to cause it to burst into

July Job One is to clean off that old salt block, and replace it if necessary. Put salt blocks in each run-in shed so horses don't have to compete. Job Two is to confirm that all your automatic waterers are still working well to ensure an ample supply of water. Year-round, all waterers and troughs should be checked daily so horses always have access to clean water.

August

flames.

Late summer is prime time for drought conditions in many parts of North America. When pastures turn brown and crispy, it's time to break out another fiber source to supplement the poor grazing. Feeding hay, beet pulp, roughage chunks, or another fiber alternative can help them maintain their weight during the dry season.

Keep in mind that some toxic weeds, such as hoary alyssum and buttercup, can flourish in drought-stricken and overgrazed pastures. Most toxic plants are of limited appeal to horses under normal conditions, but when there is little else to eat horses might sample them, to dangerous effect. If your pasture is infested, remove your horses from it and consider using an herbicide on the fields to eradicate the problem plants.

August Job One is to clean up all your hay feeders and replace them if necessary. Ground or low trough feeders work well to

keep the dust out of horses' respiratory systems, although horses will pull hay out of them and waste some on the ground. Consider installing rubber mats around your hay feeders that can be swept and hosed off

regularly and allow horses to eat fallen hay without ingesting dirt or sand.

JULY Clean off any old s

#1 Clean off any old salt blocks, and replace if necessary.#2 Confirm that your automatic waterers are in good repair (these should be checked daily year-round).

September

This can be a volatile time of year for grain supplies. Depending on the harvest, grain prices can fluctuate wildly, and availability sometimes becomes a problem. If you have concerns, it's better to buy a few extra bags of your usual feed and stock up.

September can be a good time to address bare spots in your pasture. Seeding these patches now with cool-season grass seed gives you a better chance of success in September than in early spring or late winter. Keep your horses off the seeded area until the new grass has had time to establish.

September Job One is to determine if you need a dry lot or sacrifice area to help salvage your pasture and feed those horses that need it a little extra hay without competition. This can be accomplished with temporary electric fence.

October

Those falling leaves might be pretty, but they can also be toxic. The wilted leaves of the red maple and most varieties of oaks can be quite poisonous to horses, and if pasture gets sparse, horses might consume those leaves. Try to locate pastures well away from such trees if possible.

October is often the month when the last foals are weaned, a process which is made less painful if the babies are already

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well-habituated to solid feed. Cynthia McCall, PhD, a professor in the Department of Animal Sciences at Auburn University, completed her doctoral studies at Texas A&M, and she says she found "a creep-fed foal will often gain more weight than one who only nurses, and that extra weight can help make any that he does lose during weaning less critical. In addition, because solid food is already a familiar routine to him, he'll have less trouble adapting to his new life." A high-protein legume hay and a balanced feed designed specifically for young growing horses are the best choices for your new weanlings.

October Job One is to make sure you have your records in order to ensure you (or anyone who helps you care for your horses) knows how much each horse is fed (hay and concentrate), when, and what supplements each gets.

November

In some parts of North America, November is when the first hard frost, or "killing frost," occurs. This not only frizzles the vegetables in your garden, but it can do away

with many equine parasites in the environment, including the botflies whose larvae cluster in your horse's digestive system. After the killing frost, therefore, can be the ideal time to deworm your horse because, once cleaned out, he is likely to remain more-or-less parasite-free until spring.

As days grow shorter and temperatures drop the nutritional value of your pasture will plummet. But late-fall conditions can trigger a resurgence in fructans, so if you have an insulin-resistant horse, don't put away that grazing muzzle just yet!

Some horses have trouble adjusting, digestively speaking, to the change from pasture to hay, and they might be at higher risk of impaction colic. Keep your eyes peeled for signs of discomfort at this time of year.

November Job One is to make sure you deworm with a product that kills bots and tapeworms after the first killing frost. This will help keep the parasite eggs off the pastures and the horses from competing with parasites for their winter nutrition.

December

When temperatures get frosty, serving

a warm meal can please both horse and human. A fragrant bran mash is a great treat, but because wheat bran has a serious calcium-to-phosphorus ratio imbalance, don't serve it more than once a week. For daily feeding, soak beet pulp shreds or pellets in hot (not boiling) water a few hours before feeding and let it cool until you can touch it without discomfort. Mix it with your horse's usual grain ration. The water content will help keep your horse hydrated on winter nights when he might not drink enough.

December Job One is to ensure each horse is getting his fair share of hay for nutrition and warmth. If you have just one hay feeder, sacrifice a few flakes around the field to allow those lower in the pecking order to avoid fights to eat. **♣**

ABOUT THE AUTHOR

Karen Briggs has authored six books, including the newly revised Understanding Equine Nutrition, available at ExclusivelyEquine.com or by calling 800/582-5604. She's written thousands of articles on subjects from guttural pouch infections to composting manure. She is a Canadiancertified riding coach, an equine nutritionist, and works in media relations for the harness racing industry.













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