



U of M Horse Newsletter

Providing research-based information to Minnesota Horse Owners

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Volume 13, Issue 1

January 2017



Ask the Expert: Recipe for Senior Horse Feed

Question: I want to make a homemade feed (grain) for my senior horse. I have whole oats and corn available and would appreciate if you could share a recipe with me.

Response: Unfortunately, we do not have a recipe for a senior horse feed. Formulating a grain (and over-all diet) is complex and depends on the quality and combination of the individual ingredients (corn, oats, hay) to ensure the grain compliments the hay being fed resulting in a balanced ration.

Since this grain is for a senior horse, a major concern would be if the horse can digest and absorb nutrients from the forage. Before you use cereal grains to substitute for what should be the role of the forage in the diet, consider changing the forage source. Have you considered feeding a more energy dense forage (less mature or alfalfa hay) or a different forage type (chopped hay or alfalfa pellets)? If that does not help (or is not possible), consider a more readily consumed feedstuff that is fermented in the hindgut, especially if chewing or teeth health is an issue. The types of feeds that can substitute for forages include beet pulp, rice bran and soybean hulls. These feeds can be 'processed' in order to make it easier for the horse to eat and digest while supplying a lot of the necessary nutrients. However, you should work with an equine nutritionist to ensure you are not feeding too much and to assess the impact on other nutrients, especially the calcium to phosphorous ratio.

If you decide to design your own grain, it is important to first determine what nutrients your horse needs. This is based mostly off bodyweight and activity level. This information can be found in the book [Nutrient Requirements of the Horse](#) (NRC). Next, you will need to have your hay analyzed and determine the nutrients

provided by the individual ingredients (corn, oat, etc.). This can be done through analysis for nutritive values (similar to having your hay tested) or by obtaining general nutrient averages from the NRC or other publications (cereal grains do not vary much in nutritive values). Corn should be processed (i.e. or cracked) to ensure nutrients are available to the horse. A supplement will need to be added to ensure all vitamin and mineral requirements are met as these are not normally provided by forages and cereal grains. This is usually achieved by provided a commercially available [ration balancer](#). Finally, you'll need to develop a spreadsheet where you can adjust the amount of each individual ingredient to ensure you are meeting your horse's requirements while also keeping the appropriate ratio of minerals. While it might seem acceptable to over-feed some nutrients, toxicity can be observed with some nutrients (i.e. selenium). You'll also need to ensure your ingredient do not exceed other toxicity levels including micotoxins and nitrates.

Although not impossible, developing a grain for your horse takes extensive technical expertise, time and money and should be done in cooperation with a feeding mill with grain processing capabilities and an equine nutritionist. It is likely best to feed a commercially made grain designed for the senior horse. If you follow labeled instructions on the feed bag along with good quality hay and access to water, it is likely to result in a balanced ration. Finally, remember that designing a ration that tries to substitute cereal grains for the nutrients typically supplied by the forages is not ideal for horse health.

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Upcoming Events

Online Pasture Establishment and Management Certificate Course

An online, semi-self paced, six week certificate course. Starts January 9 and ends February 20, 2017. \$75 per person. Online registration required by January 8, 2017 and is available [here](#).

Growing and Feeding Horse Hay Online Certificate Course

An online, semi-self paced, six week certificate course. Starts January 9 and ends February 20, 2017. \$75 per person. Online registration required by January 8, 2017 and is available [here](#).

Equine Pasture Management Program

One farm visit and a customized pasture and grazing management plan. April 1 through August 1 \$650 per farm. Registration opens 4/1/17

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Costs and Considerations When Rescuing a Horse

On occasion, the horse industry relies on well-intentioned horse owners to rescue horses and other equids from negative situations. These horses rarely come with a history of their breed, age, training level, health, temperament, or disposition. Many times, rescuing or fostering these horses takes a skilled horse person with monetary resources. The goal of this article is to outline some of the common needs and costs of rescuing a horse.

Adoption or Purchase Fee. It is common for horse rescues to request an adoption fee which can range from \$100 to over \$1,000. This fee rarely covers the rescue's investment in the horse, but does provide the new owner some history of the horse. When rescuing a horse from a kill pen, it is common for the new owner to purchase or bail-out the horse; this fee can range from \$100 to \$1,000.

Transportation. Rescue horses likely need to be transported to their new location. If using a privately owned trailer, the trailer should be cleaned and disinfected after transporting the horse. Commercial haulers commonly charge \$1 to \$2 per loaded mile.

Housing. All rescue horses will need to be quarantined in a private area for 30 days. Although it is difficult to attach a price for horse care at a privately owned farm, quarantine board at a public boarding facility can range from \$200 to over \$1,000 each month.

Basic Veterinary Care. A veterinary assessment prior to rescuing a horse is rarely possible. Most rescued horses will need vaccinations, a Coggins test, and a fecal egg count and deworming. Additional care may include an examination and treatment for ulcers, castration, dental work, and

delousing. Prices for veterinary care vary greatly and depend on the condition of the horse. Average costs for basic care include: initial veterinary examination (\$100), [five core vaccinations](#) (\$75), Coggins (\$30), fecal egg count (\$25), annual deworming (\$60), ulcer examination and treatment (\$500), castration (\$250), basic dental examination (\$250), delousing (\$25 for product).

Specialty Veterinary Care. Horses in need of being rescued can suffer from a number of diseases and conditions, including lameness, laminitis, pregnancy, lacerations, broken bones, uveitis, and skin diseases, which may result in the need for medications, ultrasounds, radiographs, or even euthanasia and rendering. Some lameness issues can be resolved, while others may be long-term, untreatable, or surpass the owner's economic and management ability to treat. A recent survey determined the average costs for euthanasia and rendering in Minnesota was \$237 and \$168, respectively.

Nutrition. Many times, rescue horses are underweight. These horses will require high-quality forage and a grain concentrate. On a monthly basis, these costs can average \$75 for hay, \$150 for commercial grain products, and \$50 for additional supplements. The horse should slowly, over the course of two weeks, be introduced to the new diet. Horses that are emaciated will require a special and longer-term re-feeding program. In this case, please consult with a veterinarian or equine nutritionist.

Hoof Care. The cost of hoof care is largely dependent on the condition of the animal's hoof and the amount of prior hoof care. Costs differ greatly, but can range from a regular trim (average cost of \$40) to

corrective and specialty shoes that can cost thousands of dollars.

Training and Demeanor. Usually, the level of prior handling and training is unknown and may be limited. It is important to understand one's own abilities as an owner and handler and to seek out a reputable and knowledgeable trainer when needed. Monthly training (excluding board) can range from a few hundred dollars to over a thousand dollars with the investment lasting months to years. Care should be taken if a horse displays an aggressive or overly fearful demeanor or has a known history of biting, bucking, rearing, bolting, or kicking. Even with extensive training, some horses will not be rideable or safe to be around.

Disease. The most commonly observed disease in rescued horses is Strangles. If treated quickly, horses can recover from Strangles but costs will skyrocket if an affected horse requires hospitalization. Infectious diseases are the primary reason a 30 day quarantine period is recommended for all incoming horses.

When rescuing a horse, keep in mind your long-term goal. If an owner's goal is to rescue a horse with the intent of allowing it to live out its natural life as a pet or companion, then most horses with a kind demeanor who lack major health issues or who have minor, treatable diseases would be acceptable. If an owner's goal is to have a rideable horse with the ability to perform, then a sound, trainable, younger horse that is free of major health issues is best.

This information is not meant to deter horse owners from rescuing horses, but to better equip them with knowledge of what financial resources are needed to rescue a horse and conditions that can arise.