



U of M Horse Newsletter

Providing research-based information to Minnesota Horse Owners

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U of MN Equine Center By: Stephanie Valberg, DVM, PhD, U of M

Exciting news for horse lovers across the Midwest, groundbreaking for the U of M Equine Center is just months away! The large complex will be a focal point for equine research, teaching, and clinical care. Facilities include an indoor arena, high-speed treadmill, custom spaces for lameness and reproductive evaluations, and the Nutrena Conference Hall. Rafferty Rafferty Tollefson (RRT) Architects (www.rrtarchitects.com) will be the executive architect. Their clients include Saint John's University and Gustavus Adolphus College. RRT's reputation for a cooperative team approach, keen design skills, and creative management style is the basis for their success. Gralla Architects

(www.grallaarchitects.com) will be the primary designers. Gralla has elevated equestrian facility designs to uncompromised levels of functionality, safety, and efficiency. Gralla Designs include the animal science and research facility at Mississippi State University and Equicenter at Kansas State University. Construction of the Equine Center represents a new era in which the growing importance of horses is celebrated through the development of a comprehensive equine program. The Center has been identified as a "program of excellence" within the College of Veterinary Medicine in conjunction with the University's initiative to become one of the top three public research universities worldwide. The Center will bring together diverse

disciplines within the university and experts from industry to foster a culture of innovation and high performance. The researchers at the Equine Center will utilize exclusive resources available at the University to produce meaningful, innovative advancements. Ultimately, these collaborations will produce uniquely trained professionals, who are familiar with innovations in biotechnology, equine health, equine genetics, and the general industry. For more information, visit the Equine Center's website at <http://www.cvm.umn.edu/umec>. Please contact Stephanie Pommier (612-625-8480) to make a donation and Lisa Borgia (612 624 7414) with all other questions regarding the Equine Center.

Ask The Expert

By: Roger Moon, PhD, U of M

Q: Is it safe to fog my barn for flies if my hay is stored inside the barn?

A: There are many kinds of insecticides on the market that can be applied as space sprays inside closed barns. Most available products for this use contain active ingredients that are botanical pyrethrins or pyrethroids. These chemicals kill the adult flies that are exposed directly to the spray. In general, these chemicals can be used safely inside horse barns, because they are relatively non-toxic to animals and people, and their active ingredients break down rapidly. Some product labels state clearly that application to animals or their feeds should be avoided, while others are less restrictive. Whichever material you choose, you should read the package label carefully and follow its instructions. Look for statements about how to apply the material, and for statements that would restrict the kinds of places where the product can be used safely. You should avoid direct application to feeds and animals, unless the labels state otherwise. Benefits of fogging closed barns are likely to be temporary. Time required for fly numbers to return will depend on how much fly breeding is occurring inside the barn, and how well the barn is screened to exclude flies from outside.

Inside This Issue

U of M Equine Center	1
Ask the Expert	1
Feeding Fat	2
Colic Exams	2

Up Coming Events

- Rotational Grazing Demo
Medina, August 4th
6:30-8:30 pm
Contact 612-596-1175
- Horse Info Booth
August 13th
10 to Noon
Hennepin Coop
Maple Plain, MN
Contact 612-596-1175
- U More Park Open House
"Pasture Management"
August 18th
4:00 to 8:00 pm
www.umorepark.umn.edu
- Rotational Grazing Demo
Medina, September 22nd
6:30-8:30 pm
Contact 612-596-1175
- October 28th.
Equine Reproduction.
St. Paul Campus
Contact 612-624-2268.
- November 1st
Horse Pasture Management
Watertown/Mayer HS
5:30 pm to 8:30 pm.
Contact Aaron at
952-955-0214.



Fat is a calorically dense, readily available and easily digestible source of energy for the horse. Although a combination of the more common feedstuffs used in the horse's ration might contain 3 - 5 % fat, a horse can easily utilize up to 20% fat in its diet. Among the horses that might benefit the most from having some of their grain replaced with fat or having extra energy as fat in their diets are horses that are exercised intensively, older horses that have difficulty maintaining their body

When your veterinarian arrives to examine a colic, she/he will try to determine the severity and the general type of colic. It is very unusual to be able to diagnose the exact cause of colic, but she/he may be able to determine if it is more likely to be an impaction or gas colic, or if it may involve damaged bowel or toxemia. A routine physical examination will help determine the horse's cardiovascular status and identify signs of shock or toxemia. If the horse is very uncomfortable, the veterinarian may give a s h o r t a c t i n g analgesic/tranquilizer to aid in performing the examination. Depending upon the situation, the veterinarian may then pass a nasogastric tube (from the nostril to the stomach), perform a rectal examination and/or evaluate the abdominal fluid by doing a "belly

Feeding Fat to Horses

By: Marcia Hathaway, PhD, U of M

weight and/or horses that have foundered in the past. It is possible to increase the fat content of a horse's diet in a couple of different ways. You can select feedstuffs that are naturally higher in fat content e.g., rice bran or flax seed or you can add supplemental fats, e.g., vegetable oils, hydrolyzed animal fats or dry granular fats. Feedstuffs that are naturally higher in fat contribute other nutrients

that must be taken into account. In contrast, the supplemental fats are greater than 98% fat and do not contribute other nutrients. The vegetable oils tend to be more palatable than animal fats and have less likelihood of containing impurities. Probably the most common method of increasing the fat content is to top dress the grain with corn oil or soybean oil. Increasing the fat

content of the horse's diet should be done gradually. It takes approximately 3 weeks for a horse to become adapted to a high fat diet. There have been no reports of adverse effects of feeding a high fat diet to a horse for an extended period of time, although it is important to not provide excess energy in the diet which will result in an obese horse.

Colic Examinations

By: Erin Malone, DVM, U of M

tap". The nasogastric tube is passed to make sure there is no fluid build-up in the stomach. If there is fluid, this can be a life-saving measure (to prevent rupture of the stomach). If there is minimal fluid, the tube can be used to give mineral oil to the horse to lubricate any impaction. It may also be used to give water to the horse if it seems to be dehydrated. This has the added benefit of stimulating gut motility. A rectal examination allows the veterinarian to palpate structures in the caudal half of the abdomen. Sometimes an impaction can actually be felt. A rectal examination is always somewhat risky, because of the potential for tearing the rectum. Finally, if your veterinarian is concerned about infection in the abdominal cavity or about damage to

the intestines, she/he may stick a needle in the abdomen and try to collect fluid for analysis. This test is most useful for determining if the horse needs surgery and is often not performed unless there is a problem getting the horse to a referral institution or if the colic persists. If you have taken your horse to an equine hospital, other bloodwork and tests (such as ultrasound and radiographs) may also be performed.

Some people believe that it is important to take a horse's temperature if they think the horse is colicking. The general thought is that if the horse has a temperature, then they shouldn't be walked, if he doesn't, then it's ok to walk him. However, this is not really the case. Some types of colic are associated with fevers and it is okay to walk

the horse to keep him comfortable while waiting for the veterinarian to arrive. However, diseases such as pleuritis, tying up, and laminitis may show signs similar to colic and walking is contraindicated. Pleuritis is inflammation of the chest cavity (pleurisy). It can be detected by pain when the ribs are pressed. Tying up is due to muscle trauma. Muscles (especially in the hindquarters) may look swollen and feel firm. Laminitis or founder leads to heat in the foot and the horse is often reluctant to pick up either foot since it hurts to stand on the opposite limb. In general, if the horse feels better walking, do it. If walking seems to make the horse worse or if you detect signs of rib pain, foot pain, or muscle pain, then stop.