



U of M Horse Newsletter

Providing research-based information to Minnesota Horse Owners

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UNIVERSITY OF MINNESOTA

EXTENSION

2008 Regional Horse Owner Programs

The University of Minnesota Horse Team is offering five regional horse owner education programs throughout Minnesota in 2008. Each program offers unbiased, researched based information and knowledgeable speakers identified specifically for that region by a committee of local horse experts and enthusiasts.

Speakers for these programs include University of Minnesota faculty and staff and local veterinarians and horse professionals. Programs are held on Saturdays and begin at 10:00 am (registration at 9:15 am) and end at 3:00 pm. The dates, locations and topics are (multiple topics presented at once, choose three or four of the following):

- **Saturday, February 2** at the U of M Leatherdale Equine Center on the St. Paul Campus. Topics include: Poisonous Plants, Colic, Hoof Care, Rehabilitation Therapies, Pasture Management, Disaster Preparation, Fly & Pest Control, Vaccinations & Deworming, Dentistry, Vitamins & Minerals, Research Updates, Hoof Care, Lameness, and 1st Aid.
- **Saturday, February 9** at South Central College in North Mankato. Topics include: Poisonous Plants, Facilities Management, Pasture Management, Nutrition, English & Western Saddle Fitting, Dentistry, Hoof Care, Hay, 1st Aid, Lameness, Bits, Dermatology, Eye Care, Rehabilitation Therapies, and Emerging Diseases.
- **Saturday, March 1** at the UM-Morris Science Building in Morris. Topics include: Pasture Management, 1st Aid, Nutrition Roundtable, Hoof Care, Lameness, Dentistry, Bits, Vaccinations & Deworming, Equine Behavior, Trail Riding, Facilities Management, Disaster Preparation, Fly and Pest Control, Emerging Diseases, and Unwanted Horse Discussion.
- **Saturday, March 8** at Northwest Technical College in Bemidji. Topics

include: Dermatology and Allergies, Nutrition, 1st Aid and Wound Management, Care of the Broodmare and New Born Foal, Unwanted Horse Roundtable, Elderly Horse Care, Trailer Safety and Hauling, Pasture Management, Selecting Your First Horse, Hay, Emerging Diseases, Dentistry, Lameness, and Facility Management Roundtable.

- **Saturday, March 15** at the U of M Leatherdale Equine Center on the St. Paul Campus. **Advance Program** (\$50 registration fee). Topics include: Forage & Weed ID, Glycemic Response, Hay Analysis, Advanced Reproduction, Performance Horse Nutrition, Allergies, Performance Related Lameness, New Imaging Techniques, Managing Muscle Problems, Evaluating Difficult Lameness, Emerging Diseases, and Facility Safety.



Figure 1. Hay Presentation at 2007 Crookston Horse Owner Program.

The cost to attend the program is \$35/person/location, with the Advanced Program being \$50. The fee includes lunch and a printed proceedings. Lunch and proceedings are sponsored by Nutrena and the MN Horse Council.

On-line registration is available at: www.cvm.umn.edu/outreach/events/horseowner.

For more information visit www.extension.umn.edu/horse. Contact Kristi at 888-241-0719 with questions or to register by mail. In case of inclement weather, call 888-241-0719. Programs recommended for ages 13 & up.

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Up Coming Events

2008 Regional Horse Owner Programs

St. Paul, MN
Equine Center
February 2

North Mankato, MN
South Central College
February 9

Morris, MN
UM - Morris Science Bld.
March 1

Bemidji, MN
Northwest Tech. College
March 8

St. Paul, MN
Advance Program
Equine Center
March 15

Contact Kristi for more information or to register by mail at 888-241-0719.

Registration Available On-Line At:

www.cvm.umn.edu/outreach/events/horseowner
Pre-registration is required and space is limited. Advance program registration fee is \$50, all others \$35.

Poisonous Plant Book Now Available

44 pages, over 70 photos. Weed control and horse treatment discussed. www.extension.umn.edu/horse



Recommended Equine Winter Care

Horses prefer, and are better off, outdoors even in cold weather, and will acclimate to cold temperatures if given the opportunity. However, horses should have access to shelter from wind, sleet, and storms. Free access to a stable or open-sided shed works well, as do trees if a building is not available.

In the absence of wind and moisture, horses tolerate temperatures at or slightly below 0°F. If horses have access to a shelter, they can tolerate temperature as low as -40°F. However, horses are most comfortable at temperatures between 18 - 59°F, depending on their hair coat.

Keep in mind that a horse's winter coat can be an excellent insulator, but its insulating value is lost if it gets

wet, so it is important to keep the horse dry and sheltered from moisture. Blanketing the horse is beneficial when the effective of wind-chill and/or temperature is less than comfortable; however during comfortable temperatures, blanketing is not beneficial.

If you house your horse in a closed and heated stable, make sure it is properly ventilated. Poorly ventilated barns can result in respiratory problems.

In terms of feeding, energy needs for maintenance horses increase 0.7% for each degree of temperature below 18° F. It is best to provide the extra energy as forages (i.e. hay). For example, if the temperature is 0° F, a 1,000

By: Marcia Hathaway, PhD, U of M

pound idle, adult horse would need an additional 13 pounds of forage daily (about a 1/4 of a 50 pound small square bale). Much more heat is produced when forages are fermented which helps heat the horse from the inside, compared to the digestion and absorption of grains. Most data suggest that the need for other nutrients do not change during cold weather.

Water should be kept between 45 to 65° F (use of a tank heater, etc...) to maximize water consumption. Waters should be cleaned regularly (even in the winter), and clean, fresh water should always be available, regardless of temperature.

Rehabilitation Therapies

Human sports medicine has made tremendous advances in the last half century, with athletes setting new records while enjoying longer careers and faster recoveries from injury. Equine veterinary medicine is now keeping pace with these advances. Rehabilitative services offered at the U of M Equine Center focus on aiding your horse to gain strength and mobility and return to performance as quickly as possible after an injury, as well as preventing injuries from reoccurring.

A thorough evaluation, history, palpation, gait analysis, imaging, and assessment of the type of injury that has occurred will dictate the prescribed course of rehabilitative therapy. Staff members recently completed training at the Equine Rehabilitation Institute in Florida, an essential step to creating a credible program that offers a quality service. The University of Minnesota recently installed the only underwater treadmill in the region specifically for equine rehabilitation. Types of rehabilitative therapies include acupressure, stretching, massage therapy, underwater treadmill, high-

speed treadmill, electrical stimulation, and ultrasound.

Massage, acupressure, heat and cold therapies, and joint mobilization are used to reduce pain and swelling, as well as to increase joint range of motion and muscle function. **Stretching exercises and physical rehabilitation techniques** are used for treating some soft-tissue injuries. **Massage therapy** may be used to increase range of motion and gait, thus maximizing quality of life for the patient.

The **underwater treadmill** (photo 1) is used for rehabilitation and range of motion exercise, with the water acting to both support the horse and provide resistance.



Photo 1. Underwater Treadmill

Horses suffering from injuries such as tendon bows that would

Compiled By: Lisa Borgia, U of M

otherwise be unable to exercise, may be able to use the underwater treadmill for rehabilitation purposes.

The **high-speed treadmill** mimics traditional conditioning, using both slow and fast work to improve stamina, skeletal strength, and coordination in a controlled environment.

Electrical stimulation (Photo 2) increases circulation, promotes healing, can reduce pain, and is tolerated well by horses. It can also be used to improve muscle atrophy.



Photo 2. Electrical Stimulation.

Therapeutic ultrasound uses a form of acoustic energy that acts as a deep tissue-heating agent and treats musculoskeletal injuries. Therapeutic uses include joint mobility, analgesia, wound healing, edema reduction, and tendon repair.