



U of M Horse Newsletter

Providing research-based information to Minnesota Horse Owners

Visit our Website at: www.extension.umn.edu/horse for more information and to subscribe to the newsletter.

Volume 2, Issue 3

March 2006



Breeding with Cooled Semen By: Scott Madill, DVM, U of M

As a mare owner, cooled semen gives you access to stallions all over the country, and to some extent internationally. In addition to the stud fee, most stallion owners charge fees per shipment, typically \$250 and up, making it within your interest to only ship once per cycle when possible. Since cooled semen is only viable for about 48 hours after collection, in order to achieve a single shipment breeding you need to closely monitor your mare and have a clear understanding of the stallion's shipping schedule. When looking at your breeding contract there are several things you need to take note of:

1. *Which days does he collect?* For Quarter horses and Paints, it is common for stallions to collect every-other-day from February 15 to July 15; others may be on

a Monday-Wednesday-Friday schedule and still others might collect any day they are needed.

2. *How far in advance do you need to order?* For most horses you need to place your order for semen the day before he is collected, a few will allow you to call the morning of (typically by 8 am).

3. *How is the semen shipped?* If they ship FedEx or UPS you will get it the day after collection. With counter-counter shipment you can pick it up at a local airport the same day as collection (typically late afternoon or evening), but it typically costs more and someone has to go to the airport. If the stallion is collected on a weekend then counter-counter is your only option for those days.

4. *Does the stallion have any times when he won't be available?* Sometimes a stallion will be unavailable in a window of

time if he is off at a show, so you will need to schedule your mare around this. Monitoring your mare is best done by a veterinarian using ultrasound. When she starts her cycle, an initial exam will decide when she needs to be checked again based on the size of her follicle and the amount of edema in her uterus. Generally, once she develops good edema and has a follicle over 35 mm in diameter it is time to think about ordering semen. If the breeding was timed well, the mare is young and healthy, and the stallion is fertile and a "good shipper" you should expect at least a 60% pregnancy rate. If your mare is not pregnant she should be ready to come back into heat in approximately two weeks and the process can be started over again.

Ask the Expert

By: Julie Wilson, DVM U of M

Q: What options do I have if my broodmare is unable to provide colostrum for her newborn foal?

A: A broodmare may be unable to provide colostrum, for a variety of reasons, such as premature leakage, fescue toxicity, sudden death or mastitis. If the broodmare owner can anticipate this need, the best option is to find equine colostrum from a donor mare or farm, and administer it to the newborn foal in the first 2 hours of life. Ideally colostrum feeding should continue for at least the first 48 hours. Colostrum contains concentrated antibodies against important infectious diseases. Good quality colostrum is thick, yellow to gray in color, and very sticky. Colostrum can be collected from either healthy mares that bear a stillborn foal, or from healthy mares that have an abundance, and can be frozen in ice cube trays and stored for future need. This is a common practice, and carries only a slight risk of complications. The U of M offer the National Colostrum network that maintains a list of horse owners willing to give or sell colostrum to other horse owners in need. This 24 hour hotline can be reached at 651-647-8391. If a horse owner is unable to locate equine colostrum, 2 other alternatives are equine plasma given orally or intravenously, or bovine colostrum. Equine plasma has some of the same benefits as equine colostrum, but must be given in the first 12 hours of life. Bovine colostrum offers good protection against some of the intestinal diseases that affect both calves and foals, but may cause mild destruction of red blood cells. Lastly, if economic constraints do not allow for these interventions, every effort should be made to keep the foal as clean and dry as possible. The foal will be very vulnerable to infectious diseases until it's immune system matures sufficiently to make its own antibodies.

Inside This Issue

Cooled Semen	1
Ask the Expert	1
Vaccinations	2
Know Your Horse	2

Up Coming Events

Visit the website for additional information

March 4, 2006

Hands-on Horse Day at the

U of M in St. Paul

Online registration available at

www.cvm.umn.edu/outreach

March 11th, 2006

Horse Owner Education Day

Norwood, MN

9:30 am - 3:00 pm

Contact Laura at

952-466-5300

March 18th, 2006

Horse Owner Education Day

Fergus Falls, MN

9:30 am - 3:00 pm

Contact Kristi at

763-767-3837



An equine veterinarian should be a key partner in planning a vaccination program for your horse, even if you plan to administer the vaccines yourself. Things to keep in mind include; breeding status, age, use, travel, and location. The following is a guideline for planning your vaccination strategies. A note of caution, there is little published data on the true efficacy of many of the vaccines, so other veterinarians may have different opinions. All horses in MN should

If you have performed your daily exam and found that something is abnormal, then the next step is to take your horse's vital signs. **Temperature.** Try to take the horse's temperature near the same time twice a day for several days in a row. The horse's temperature is typically higher in the afternoon than in the morning by a degree or so. By taking the temperature at the same time each day, a more accurate record of your horse's normal range in temperature can be made. A normal temperature for an adult horse ranges from 99-101.4 degrees F. Foals and yearlings may have a normal temperature up to 102 degrees F, especially if they are nervous or excited. Fever is a term used when a horse's temperature is above normal. Do not worry unless the horse's

Vaccinations

receive tetanus, rabies and Eastern (EEE) and Western (WEE) encephalomyelitis and West Nile virus vaccines. A tetanus booster may be recommended if more than 6 months have passed and the horse sustains a wound. It is controversial if all horses should get a rabies vaccination. West Nile, EEE & WEE may require a fall booster, 4 months later, if mosquito season is extended. In 2002, there

Know Your Horse Part II

temperature is over 102 degrees F. **Pulse.** You can take a horse's pulse anywhere you can hear or feel his heartbeat. Start by feeling an artery close to the skin such as the facial artery at the edge of the jawbone. Simply press your first and second fingers gently against the jawbone. Be sure not to use your thumb, as you may pick up your own pulse. A foal less than 1 week of age has a resting heart rate of 60-120 beats per minute (bpm); a 1week-6month old foal 40-60 bpm; and an adult 28-46 bpm. A heartbeat of more than 50bpm in a resting adult horse should be considered abnormal, especially if there are other signs of a problem such as colic, in this case, call your veterinarian immediately. **Respiration Rate.**

By: Julie Wilson, DVM, U of M

were 992 confirmed cases of West Nile, hundreds of which died. Horses going to shows or group activities should receive; strangles, influenza and rhinopneumonitis. The killed vaccine against rhinopneumonitis (Pneumabort K) is often used in broodmares to prevent abortion at 5, 7 and 9 months of pregnancy. Non-routine horse vaccines that are available include; Potomac

horse fever (diarrheal disease), equine protozoal myelitis (neurological disease spread by opossums), rotavirus (diarrheal disease of foals), equine viral arteritis (cause of abortion and respiratory disease,) botulism (only if botulism has been a farm problem or feeding baleage), and anthrax (only recommended for farms where the disease has been a problem).

By: Erin Malone, DVM, U of M

Respiration rate is measured by adding the number of breaths per minute. One inspiration and expiration is counted as one breath. It can be counted by watching the ribs moving in and out, or by watching the nostrils dilate and relax. The normal respiratory rate for an adult horse is between 8-20 breaths per minute. **Mucous Membranes and Capillary Refill Time** You can get additional information on your horse's overall health status by looking at his mucous membranes. They are usually examined by looking at the horse's gums. They should be pink and moist. If they are very pale or white, the horse is probably suffering from blood loss. If they are bright pink or red, the horse is suffering from a toxic condition. If the mucous membranes are

gray, purple, or dark blue in color, the horse is suffering from a lack of oxygen and is probably in shock. The capillary refill time can give you an indication of your horse's hydration status. Simply press your thumb against the gum above the upper teeth for a couple of seconds. When you remove your thumb, a blanched area will remain. The capillary refill time (CRT) is the amount of time it takes this blanched area to return to the normal color. Normal CRT is 1-2 seconds. In dehydrated animals, the CRT increases to 2-4 seconds. With severe dehydration, the CRT can increase to 5-6 seconds. For more information on vital signs, please visit www.extension.umn.edu/horse