Knowing Your Horse’s Vital Signs: The Basics

The Normal
Horse health is an important part of being a horse owner. In order to accomplish good health in our horses it is important to “know the normal.” All horses are not the same so it is important to understand what is the usual for each independent horse you own. Once you know the “normal” for your horse you’ll be able to recognize if something is wrong.

To understand a horse’s “normal” the owner must be very observant, taking in all activity patterns including: eating, drinking, contentment, alertness, eyes and skin, defecation and general appearance.

In addition to understanding and knowing each horses daily routines there are three excellent indicators of the health of any animal referred to as vital signs. These include temperature (degrees F), pulse (beats/min) and respiration (breaths/min). A good horsemen should be able to take these readings and report them to a veterinarian if necessary. To the right is a list of ranges that are considered “normal” for an average horse. These ranges are taken at rest in healthy animals. Exercise, temperature, stress, age—foals will have higher values for vital signs, anxiety and other environmental factors may affect these readings.

Normal Ranges for Healthy Adult Horses

<table>
<thead>
<tr>
<th></th>
<th>Adult</th>
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<tbody>
<tr>
<td>Temperature</td>
<td>99-101.5</td>
</tr>
<tr>
<td>Pulse</td>
<td>32-44</td>
</tr>
<tr>
<td>Respiration</td>
<td>8-16</td>
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Temperature

Temperature is taken rectally in horses using either a conventional thermometer or a digital thermometer. If using a conventional thermometer be sure to shake it down prior to insertion and it should be left in place a minimum of two minutes. Prior to inserting the thermometer a string should be tied to the end so the thermometer does not become lost in the rectum. If using a digital thermometer it will usually signal with a beep that the temperature is complete. Prior to inserting any thermometer it is a good idea to apply a small amount of lubricant to the bulb end. Be sure to stand to the side of the horse and insert the thermometer slowly with a rotating motion.

Respiration

One common way to measure your horses respiration rate is to place your hand on their flank, or observe the rise and fall of their flank. Count the rise and fall as one movement and count the number of movements in one minute, or count for 15 seconds and multiply by four.

Remember each horse is different and will have a slightly modified “normal.” Also, exercise, stress, age and temperature will affect these numbers so be sure to evaluate your horse when they are at rest and in familiar situations.

through the body. One common way of measuring the pulse is to place a stethoscope behind the elbow along the girth line on the left side of the horse and listen for the “lub dub” sound of the heart. Another way to take the pulse is by placing your fingers along the facial artery which can be found by rolling your fingers along the inside curve of the jaw. Normally the number of beats will be counted for 15 seconds and then multiplied by four to get the beats per minute.
Goat Tying

Goat Tying is an event that is unlike other 4-H timed events. This event requires more than just the horse and rider. It involves a third entity being a goat and also requires “ground work” from the rider. There are proper event steps, rules, and penalties for horse, rider and goat. Please read all of the rules in the designated show rule book before competing so you will know the exact rules, regulations, and possible penalties for your event. You can refer to the North Dakota 4-H Horse Show Rules and Judging Guide.

Goat Tying can be broken down into three basic steps: 1) Dismount; 2) Flank; 3) Tie.

Dismount
Dismounting is just that, getting off your horse. However, this is a timed event, so the faster the rider can do this, the better the time will be.

Flank
Flanking a goat is basically picking a goat up off his feet and laying it on the ground. The softer and smoother this can be done the better so the goat stays quiet and does not want to kick.

Contestants must enter the arena mounted on a horse at a walk until the arena gate is closed. The contestant can then walk, trot, canter, or run (pick a speed you feel safe at) from the starting line to a short distance away from the goat. Dismount from the horse, run up the staked rope, flank the goat and cross, wrap, and tie by hand at least three of the four goat’s feet together.

Then from the dismount, continue running up the staked rope.

Contestants can grab the staked rope, run along the rope, or straddle the rope to get to the goat. Once the goat has been caught, the contest-ant will flank the goat to the ground.
Goat Tying Continued

The contestant will have their left knee on the goat to keep it on the ground and their right knee cupping the back legs to squeeze the goat's back legs towards the front leg.

This will make it possible for the contestant to gather the legs together to begin the tie. Ideally the two back legs should cross over the top front leg.

Once the legs are gathered, start your tie.

To qualify as a legal tie, the contestant must make at least one complete wrap around at least three legs and a half hitch, hooey or knot. The contestant must tie the goat by hand with a leather string, pigging string (boy's only), or goat rope. No pre-made wraps, coils, knots, hooeys or half hitches may be used.

Finishing

After the run is complete, the contestant then must back away from the goat at least 3 feet and then wait for 6 seconds to elapse on the judges stop watch. After all of this is completed, then the only thing left is to listen for your time.

Hope this helps out and Good Luck!!

Judge’s Certification Date Set

The date for the fall judge’s certification has been set for Saturday September 19, 2009. The location and schedule will be released in the near future.

This is just a reminder, in order to be listed as an approved North Dakota 4-H Judge you must successful complete the certification program. Successful completion includes passing a closed book written rulebook test with a score of 80% or higher and judging three classes with a score of 75% or higher. Judges must be recertified every three years. Please remember new classes have been added to the rulebook, so if you do not have an updated rulebook which includes goat tying, western pleasure and hunter under saddle please get these additions from your extension office or see the following website. This website also includes the rulebook and current list of approved judges.

http://www.ndsu.edu/4h/projects/plants_animals/#c56890.

Look for more information coming soon.
Summer Horse Care Tips

With summer here and temperatures starting to climb there are some changes we as horse owners may need to make to our daily horse routine. You will find some helpful hints about summer horse care following.

1. Light colored horses and horses with white on their face are prone to sunburn. To prevent this human sunscreen can be used, but it should be at least SPF 30-50 and applied regularly throughout the day if possible. Fly masks are also a handy tool to protect horses with white around their eyes.

2. Always be sure your horse has plenty of fresh clean water and monitor the water trough to be sure they are drinking. A horse's body is made up of approximately 70% water so it is very important that they consume adequate amounts of water. Remember horses usually consume 10-12 gallons of water per day. This amount will vary with weather, work and size.

3. Pay special attention to the horse's hooves as the dry summer months tend to cause cracks. If your horse is constantly in a dry area it would be beneficial to apply a hoof dressing to help manage the dry hooves.

4. Always keep a salt block available for your horse. Salt encourages a horse to drink more water.

5. Provide your horse with some kind of shelter which they can go into to get away from the sun.

6. Be sure to continue with a regular worming schedule, do not skip worming during the summer.

7. On really hot days stick to riding in the morning or late evening when temperatures are cooler.

8. There are lots of products available to deal with those pesky flies. One tip that will help to keep the population down is to get rid of the manure. Try to keep manure picked up in stalling and turnout areas and dispose of it or store it away from the barn.

9. Pasture vary greatly during the seasons and your horse may not be meeting its nutritional requirements with pasture alone, especially if they are at a heavy workload. Remember a horse should consume approximately 2% of their body weight in feed per day, this includes roughage and concentrate. This amount increases with work load and also increases in growing horses and pregnant mares, please see the NRC for proper feeding guidelines for your horse. Monitor body condition and add good quality roughage or a concentrate if body condition seems to be falling.

Remember each horse is different and has different requirements. Growth, workload, age, reproductive status and time of year will affect their requirements.
The NDSU Equine Studies Program offers a unique opportunity to local horse owners called the Loaner Horse Program. This program is a cooperative effort between NDSU and horse owners, in which horses are leased to the university in exchange for full care of the horse throughout the school year.

The program has been a huge success in the past benefitting both the Equine Studies Program as well as the horse owners. The Loaner Horse Program benefits owners and their horses because it significantly decreases the cost of horse ownership in addition to giving busy owners a way to keep their horses conditioned throughout the year. In exchange for use of the horses, NDSU takes over full care of the horses including feeding, vaccinations, farrier care, and basic veterinary costs from September to May. NDSU benefits from the program because equine classes are not offered at NDSU so this program has helped to alleviate some of the management costs, space needed and time that go into caring for horses when they are not being used for classes.

Requirements

Horses leased to NDSU are used for teaching purposes and utilized for classes, clinics, and demonstrations. As mentioned earlier, the lease agreement runs from September until May when the horses return home for the summer. It is the goal of the program to provide horses for the students that will help them learn a multitude of equine skills including handling, horsemanship, and general care and management. Horses in the program are ridden by beginner to advanced level riders and must be able to adapt to diverse experience levels.

Horses leased to the program must be broke, healthy, and sound. They should have good ground manners which include standing tied, picking up their feet, leading and handling easily. In addition, horses must know their leads, be able to back, pivot, sidepass, and neck rein. Horses are required to come into the NDSU Equine Center with a required list of vaccinations, their feet trimmed, and teeth checked. Horses that are accepted into the program come in on a 30 day trial period. During this time, horses are evaluated to ensure positive adaptation to their surroundings and situations presented to them. Once accepted into the program the horses are used on a regular basis for classes as well as other student learning experiences. Horse use is managed by faculty and horses are only available to students during faculty monitored classes and activities.

Contact Information

For more information about the program please contact Tara Swanson at tara.swanson@ndsu.edu or 701-231-8865. If you have a horse you feel would be a good fit for our program, please send a recent, within 1 year, videotape or DVD to the following address:

NDSU Department of Animal Sciences
Attn: Tara Swanson
Department 7630
P.O. Box 6050
Fargo, ND 58108

The tape should include the horse walking, jogging/trotting, loping/cantering, stopping, backing, pivoting, and anything else the owner would like to add. The video will be evaluated within 2 weeks of receipt and you will be contacted at that time. Thank you in advance for your interest in the NDSU Loaner Horse Program.
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**North Dakota State University**

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**For more information or to register contact:**
Tara Swanson  
North Dakota State University  
Department of Animal Sciences  
NDSU Dept. 7630  
P.O. Box 6050  
Fargo, ND 58108-6050  
Phone: 701-231-8865  
Fax: 701-231-7590  
E-mail: tara.swanson@ndsu.edu

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**Stay Informed**

Check the NDSU Equine Studies page regularly for information on upcoming events. If you click on the calendar you will find events, dates and contact information for the various equine events. In addition, click on the links to get rules, showbills and time information.

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If you are not already on the NDSU ListServe and would like to receive this newsletter and information on upcoming equine events please send your name and e-mail address to tara.swanson@ndsu.edu.

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If there is a topic you would like covered or a certain question you would like to see in future editions of the HeadTosser please forward those to me at tara.swanson@ndsu.edu and I will do my best to answer them.

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**On the web at:**
www.ag.ndsu.edu/ars/equine_studies/resources/headtosser.htm

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**Calendar of Events**

### July
- 14-15— Cass Co. 4-H Show, More info. See www.ext.nodak.edu/4h/horse/shows.htm
- 23-25— NDQHA Show, Minot, ND; For more information see www.ndqha.com
- 24— Aug 1- ND State Fair, Minot ND, For more information see www.ndstatefair.com
- 25— AEER Dressage & Jumper Show, Red River Valley Fairgrounds, For more information see www.aeerfargo.org/

### August
- 2- FM Posse Show, Fargo, ND; For more information see www.fmmountedposse.com
- 2- Eventing Clinic, Birchbury Farm, For more information see www.aeerfargo.org/
- 28-29— AEER Clinic, For more information see www.aeerfargo.org/
- 29-30— NDPHC, Valley City, ND; For more information see www.ndphc.com
- 30- AEER Clinic, For more information see www.aeerfargo.org/

### September
- 10-13— NDQHA Show, Valley City, ND; For more information see www.ndqha.com
- 11-13- 28-29— AEER Clinic, Southwind Stable, For more information see www.aeerfargo.org/
- 19— AEER Dressage & Jumper Show, North Dakota Horse Park, Fargo, ND; For more information see www.aeerfargo.org/
- 20— AEER Clinic, For more information see www.aeerfargo.org/

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