

Atlantic Canada Trail Riding Association

Tales 'n Trails

Volume

www.ac-tra.ca

Sept/Oct 2012

Shouldn't we be getting a newsletter soon? I bet you guys have been saying this all summer! My apologies once again for getting this out so late and if anybody would like to take over the position, please speak up!! I can still send it out via email as long as the new editor could send me a copy first.

I was able to get to the first few spring/summer rides and then the construction began at my place. I have deep respect for the individuals who do roofing and carpentry work!! As of lately my kitchen has turned into pickling central....mustard pickles, bread & butter pickles, sour pickles, relish and now I have started zucchini relish.

Gwenn has asked me to remind all the Ride Managers to get their sanction fees into her. There is a rule that they are supposed to be in to the Treasurer within two weeks after the ride. Please send in your sanction fees!!

We have three rides left in the season and two of them being Limited Distance and an Endurance Ride. I know it is hard for people (me being one) attending the rides to find someone that will come and pitcrew for them. But please remember that the riders that due bring people to pitcrew for them are just that....pitcrew for them. Do not assume they are there to help you out on the trail, if they can they will. But the horse/people water and hay/feed they carry is for their rider and horse. The ride management will get your stuff to the halfway, but they will not be able to help you sponge, etc. So if at all possible, please try to bribe someone to come and pitcrew for you!

It is good to hear the large number of entries back at the rides again. We haven't had that for years and makes for an interesting race for the Year End Awards! Speaking of that, are any of the Sackville NB girls willing to make the arrangement for the Year Ends in Sackville or Amherst this year?

Once again I got sidelined and didn't finish this newsletter!! I'm sure I was supposed to mention some things.....

Some of the articles are more pertinent to the weather we had in July/August, but store them away until next year!!

Happy Fall Trails.....and hope to see most of you in a few weeks!!

Bev & Izzy & Dunn

The Not Camp Cheputneticook CTR/JP

Saturday Sept 29th 30 mile CTR \$35

Sunday Sept 30th 15 mile JP \$ 25

Lots of room for trailers and pens. The ride this year is at 1216 route 127.

Coming from Saint John turn right at exit 25 onto route 127 to Lawrence Station.

From Fredericton turn left on the 127 to St Andrews. The HOUSE NUMBER IS 1216.

Send entries to Susan Hovey 8961 route 3 Old Ridge, St. Stephen, NB, E3L 4W4

Judging Starts at 8 am sharp both days.

The great train robbery is Friday the 28th at Watts Junction on the 127 Highway

Any questions, email Susan at sears@nb.aibn.com

*****IT IS MOOSE SEASON SO PLEASE WEAR YOUR ORANGE AND YOUR BELLS !!!!! *****

Oct 6 Maple Ridge Ride 35 mi LD Entry fee \$45.00

Oct 7 Maple Ridge Ride 15 mi JP Entry fee \$35.00

Entry deadline Oct 1. or late fee of \$10.00 applied.

Ride location - (just down the road) Camp Roderick, Sunny Brae , at MacKinnon Lake- directions to be provided at a later date.

Cabins (woodstoves) lodge and cookhouse provided

(cabins are limited for folks without living accommodations, lodge has a large common room available)

Room for trailer parking and penning.

Turkey dinner Saturday night, lunch provided for JP (Sunday) and light supper, continental breakfast both days.

Judging 8am

Ride managers- Eric and Betty Dwyer E-mail - bettyd63@gmail.com 902-923-1921

Vet - LD -Lianne Nelson

JP- Dawn Kennedy-MacKay

Great trails, river crossings, and *Oh My God Gully* (tailing required I'd say) there is a trail around it for the faint of heart , like me.....

Mailing address for entries for the MapleRidgeRide. Directions will follow

Betty Dwyer

1 Centredale Rd

RR#1 Hopewell, NS

B0K 1C0

Nova Scotia's Autumn Run LD/Endurance Ride

Saturday, October 20, 2012

Ride Site: Stanley Mosherville Hall, NS

Hosted by Lucy, Elwood, Lynn Beazley, Troy, Tammy and Pam

30 mile LD - 50 Mile Endurance

Mandatory vet checks on Friday night for both rides.

All riders who successfully complete will receive an award.

Winner of Endurance is rider who finishes first, fit to continue.

Winner of LD is rider who pulses down first after completion, also fit to continue.

Maximum ride time for the Endurance is 12 hours.

Maximum ride time for the LD is 7 hours 15 minutes.

ACTRA has adopted the American Endurance Ride Conference (AERC) rules and guidelines for limited distance and endurance rides.

AERC website for Rules and Information on Endurance and LDs

Google map directions from Truro, Windsor and Halifax

Fees: \$40.00 LD, \$75.00 Endurance

Late fee after October 12th of \$10.00

Registration deadline is October 17th

Mail payment and entry form to (cheque payable to Pam Rustige):

280 Windsor, NS B0N 2T0 Phone: 902-798-3213

Or email payment and entry to:

Carrilee Eddy ernest.carrilee@ns.sympatico.ca Phone: 902-633-2297

If you have any questions please call or email Pam or Carrilee

We're also both on Facebook.

RIDE MANAGERS' FORUM

Making GPS measurements accurate

By Joe Schoech

Wow! So you want to be a ride manager and put on an endurance ride? I am not quite sure what this malady is called, but you might want to schedule an appointment with your doctor to get some drugs to cure your "What InThe World Was I Thinking?" problem. In reality, the smiling faces on the riders and their healthy horses after the event will do just fine for most ride managers and thank goodness for those of us wishing to compete, huh?

Anyone who thinks putting on an endurance ride is easy really does need a dose of "reality" from those few brave souls who help keep this sport of endurance going are the ride managers. The list of "want-tos" and "have-tos" are practically endless when a ride manager sits down to plan the ride. I guess the difference between the lists from one ride manager to another is what makes this sport as much fun as it is at each ride has its own characteristics and flavors and can appeal to each of us in a different way.

One of the "have-tos" on my list is a safe, well-marked and accurately measured trail. This is much easier said than done. The hours it takes to choose and prepare the trail for an endurance ride can be extensive and exhausting. But what kind of ride will it be for the riders and their horses if they can't find their way on it or be assured that they rode the prescribed distance?

Marking trail is an art in itself and can vary by ride and/or region. Most of us would like to not have to learn a new marking language every time we go to a ride, but variations from ride to ride should be expected.

All riders should, however, be pretty certain that if they were entered in a 25-, 50- or 100-mile event, that they rode that distance to get their completion. I certainly don't want my horse carrying my butt any farther than he has to in order to get my t-shirt and his points. On the other hand, is it fair that at one ride a horse and rider team travels 50 miles to get their completion and at another ride, they only have to travel 90% of that distance to get credit for those 50 miles?

So how can ride managers be certain that their trails are the advertised (and sanctioned) distance? As you can guess, there are numerous ways to measure a trail. We can always fall back to the "absolutely" accurate measuring wheel, right? Who has the time and the energy to walk a trail with a wheel? Wouldn't it be a lot easier to ride the trail in or on some vehicle to get the proper measurement? Well, yes, but actually, most vehicles don't have accurate (within 5%) odometers anyway. Wheel spin on most vehicles can create inaccurate measurements.

A property owner once told me that he knew the distances of his trails were correct -- after all, he drove them in his Suburban! After riding with him in his Suburban on the trails (with a death-grip on the "oh-#&@ handle") we found that there was a 5% difference between his measurement and mine. I measured the same trails with my two GPS devices while in his Suburban.

How can that be? We all know that GPS isn't accurate, don't we? They have to see all of those satellites to work properly, don't they? They just can't be accurate, especially in a Suburban or even under trees or even in mountainous terrain, right? Wrong!

GPS measurements can be correct and very accurate, if the measurements are conducted properly. Previously, there have been articles in Endurance News on how a GPS device can be used to measure trail accurately. The folks that wrote them are considered very knowledgeable and are experts. My approach measuring trails is based on some training, but mostly a lot of experience and practical applications.

The recommended methods are tried and true and have been used to measure horse, bike and hiking trails in varied terrain throughout the country.

-- First of all, just like in most things, you usually get what you pay for with GPS. The higher-end devices have better receive antennas and intuitive data processing and are getting even better with every new version.

-- I recommend tracking by distance, rather than time -- the "cookies" will be delivered in a more linear fashion. Cookies are those spots that a marker is placed with an associated latitude/longitude.

-- Make sure you mount the device so that it can "see" the sky and therefore the most satellites available. Every obstacle reduces the devices ability to see satellites.

-- Carry extra batteries so that you don't lose power in the middle of the track.

-- Create a map with your results! When GPS-ing trails, I use two GPS devices simultaneously (I prefer Garmin and Delorme). I like these two different manufacturers so that I can use their respective mapping programs when uploading the tracks from the devices. I can compare the tracks of the two devices to confirm the accuracy of tracks and create topographical maps from the data.

Both Garmin MapSource (and BaseCamp) and Delorme Topo have very manageable mapping programs. I "clean up" the erroneous or missing tracks to create a completely accurate map of the trails. Mileage from the tracks and trails will now be accurate as a result of this detailed review of your GPS data because the "cookies" from the device tracks have been laid onto a terrain map, which takes into account any elevation change that may have been inaccurately recorded by the GPS device. In my view, this is what makes GPS-ing a trail accurate and true.

In conclusion, one can measure trails in a number of different ways: drive them in your Suburban, walk them with your "wheel," believe the land manager's measurements, etc. While just reading the GPS device on your wrist or in your pouch can give you some idea of the correct measurement, you will not get the most accurate measurement unless you take the time to create a map from your GPS tracks.

An added benefit of creating the map is that you now actually have a detailed map of your trails that you can use for clearing, spotters, water locations, emergency services, etc. I have found that land managers also like to know where these trails are and will appreciate your effort in providing them the maps.

In the end, more accurate trail information can help make riders, land managers and ride managers happier and better informed

GOOD EXAMPLE OF A BRAIN STUDY. IF YOU
CAN READ THIS YOU HAVE A STRONG MIND.

7H15 M3554G3
53RV35 7O PR0V3
H0W 0UR M1ND5 C4N
D0 4M4Z1NG 7H1NG5!
1MPR3551V3 7H1NG5!
1N 7H3 B3G1NN1NG
17 WA5 H4RD BU7
NOW, ON 7H15 LIN3
YOUR M1ND 1S
R34D1NG 17
4U70M471C4LLY
W17H 0U7 3V3N
7H1NK1NG 4B0U7 17,
B3 PROUDI ONLY
C3R741N P30PL3 C4N
R3AD 7H15.
PL3453 5H4R3 1F
U C4N R34D 7H15.

Heat Stress in Horses

by: Nancy S. Loving, DVM
July 01 2003, Article # 4492

Beneath your helmet, your head feels hot and sweat drips off your face as you ride. Your horse's neck is soaked, and your reins are slippery and lathered. The more you call for an effort from your horse, the more sluggish he seems. Despite moving across firm ground, it's as if his legs suddenly are mired in deep footing, with the ground holding him down. Your horse has run out of steam--or more correctly speaking, his body is boiling over with too much heat. He has reached a dangerous state of exhaustion. You pull him up, yet his muscles remain quivering, he's panting, and his nostrils are flared. Could you have foreseen this development? Could you have prevented your horse from pushing the red line into the danger zone? Let's examine how heat stress develops, what signs you can monitor, and how you can prevent it.

The Buildup of Heat

A distinction can be made between heat stroke and heat stress. Heat stroke can occur over a relatively short period of time, as in the case of an unfit athlete worked strenuously in high ambient temperatures or horses confined in poorly ventilated, hot trailers. Heat stress, also known as heat exhaustion, usually results from protracted fluid and electrolyte loss during exhaustive exercise. The exercise might become exhaustive as a result of high ambient temperature, poor conditioning, lack of normal sweating, etc. A sunny day contributes to high ambient temperatures. Warm air temperature and high humidity prevent a horse from adequately dissipating internal heat from his body (i.e., the mechanisms of heat dissipation are overwhelmed and/or inadequate).

With each stride, the muscles of an exercising horse flex and strain from the effort--vast amounts of heat accumulate from the metabolism of working muscles. Over half of the energy used for muscular activity and locomotion (movement) in a horse is converted to heat.

Left unchecked, continued heat buildup stimulates a decline towards exhaustion. If increased metabolic and oxygen demands cannot be met, muscles fatigue. At higher temperatures, muscles (and all body tissue) demand more oxygen for energy utilization. If the horse gets too hot, the body's demand for oxygen can exceed the amount available via respiration (more on this later).

A tired horse presents graver risk than simply sore muscles the next day; loss of muscular control and strength from fatigue can lead to serious accidents. An exhausted horse might stumble and fall, placing both horse and rider in jeopardy. Left untreated, a horse with heat stress might exhibit neurologic signs including seizures and suffer serious damage to his heart, muscles, and kidneys.

Hours of protracted exercise or high-intensity exercise for short periods are conditions that particularly tax the ability of a horse to move heat out of his body quickly. To remove muscular heat, your horse sweats, pulling heat from the interior of his body to his skin in a process known as evaporative cooling. Around 70% of the heat of locomotion is normally dissipated from the body using this process.

Hot weather, particularly if it's humid, compromises a horse's ability to shed heat from his body. He sweats, but it's not always enough to stay ahead of the heat buildup.

The inherent problem in prolonged exertions is the persistence and duration of your horse's sweating process. A horse suffers body fluid losses and electrolyte imbalances with sweat. A horse which sweats during a mile-long track race loses lots of body water and some small degree of electrolytes, but the exertion is quickly over. In a

short time, he easily replenishes what was lost. But a horse which exercises for protracted periods continues to dehydrate as heat from the continually working muscles is eliminated through sweat and evaporative cooling.

Heart and Respiratory Rates

As internal body temperature rises, sweat is not the only means to dissipate heat. Rapid breathing is a far less effective mechanism, but it can eliminate up to 15% of the heat load in your horse. Your panting dog uses this route almost exclusively to rid his body of heat. As your horse breathes rapidly, warmed blood flowing from heated skeletal muscles circulates to the heart and through the lungs. With each incoming breath, cool air (and oxygen) is exchanged for warm, exhaled air.

Heart and respiratory rates might remain elevated for a short period once exercise stops; blood flow coursing through his body flushes the bulk of heat to the skin, while respiration serves a minor role in cooling.

Fitness and good circulation are essential for efficient heat dissipation. If the horse isn't fit, his heart rate and respiratory rates are high following an intense effort. His nostrils continue to flare and his flanks rapidly move in and out with each breath, giving the impression that he is "panting." When the number of your horse's respirations is faster than his heart rate per minute, this is called an inversion. This is a sign of high internal body temperature and the respiratory tract is attempting to dump some of the heat load. (For more on normal heart rates after exercise, see "Is Your Horse Fit for the Task?" in the April 2002 issue, article #3406 at www.TheHorse.com. For more on normal respiratory rates after exercise, see "Recharge Your Horse's Batteries" in the June 2002 issue, article #3618.)

A fit horse that is performing aerobic exercise returns to a heart rate below 60-64 beats per minute (bpm) within 10-15 minutes. No matter the intensity of an exercise effort, both heart and respiratory rates should recover to below 64 beats/breaths per minute within 30 minutes following cessation of exercise. Dehydration notably slows heart rate recovery.

Persistent elevation of heart rate indicates that the horse is not coping well with the demands of the effort and could be in metabolic distress. Poor recovery often signals an impending metabolic collapse due to the combined effects of dehydration, energy depletion, electrolyte losses, and heat buildup in the muscles.

Horses with heat exhaustion might exhibit irregular heart rhythms as well as high heart rates. Affected horses might develop synchronous diaphragmatic flutter (SDF, also known as thumps). During episodes of SDF, the horse's flank twitches with every heart beat. Thumps occurs during heat stress, and is associated with acid-base and electrolyte abnormalities, namely alkalosis and low blood calcium concentrations.

Conditioning

Many of us spend time strengthening our own bodies for the athletic demands of riding. Whether we accomplish this foundation through aerobic sports, jogging, biking, or riding, we take pride in our stamina and fitness. Our horses deserve no less of a conditioning program, and might even require a more tailored approach.

Training often concentrates on skills essential to the intended discipline. Yet, another training ingredient is essential to the success and well-being of any athletic horse: Fitness of the cardiovascular system. As the muscles train to better efficiency, less work is needed to achieve a certain level of athletics, with less heat generated by the body.

Risk Factors

Hot weather is not the only factor contributing to developing inversion (higher respiratory rate than heart rate), dehydration, or other signs of heat stress. A horse ridden at too fast a speed for his level of condition generates

excess body heat. A horse being asked to climb a particularly intense hill or mountain, or to put forth an extraordinary work effort in jumping or galloping, will tend to overheat. A horse which is ridden too long without a rest also can build up an excess heat load in his muscles.

A horse sporting a full winter coat is at risk of overheating since the hair that keeps body heat in during cold weather also keeps in excess body heat from exercise. Hairy horses should be clipped to accommodate taxing weather conditions. Heavily muscled horses, such as Warmblood breeds and Quarter Horses, are at greater risk of retaining heat in the working muscles than leaner-breed horses such as Arabians or Thoroughbreds (thus the preference for these breeds in endurance racing). This is because they have a lower ratio of body surface area for cooling relative to their body mass that's generating the heat.

An overweight horse with abundant fat layers beneath his skin cannot dissipate heat effectively. Not only does excess body weight interfere with normal cooling processes, but it reflects a lack of fitness. Adequate preparation and training develop a horse into a sleek physique, building muscle where once there was fat. Conditioning also expands capillary beds (the networks of tiny blood vessels linking arteries and veins) and blood flow within skin and muscles to improve circulation of oxygen in the tissues and flushing of heat to the skin surface.

Transporting a horse in an enclosed van in hot weather can contribute to dehydration and heat stress. Additionally, a horse which was shipped to a warmer climate and has not been acclimated to exercise in hot and humid conditions is ill-prepared to deal with the added stress of the new environment no matter how fit he is. Most horses need at least three weeks in a warmer climate to allow their bodies to adapt and dissipate heat more efficiently. Some horses shipped to hotter climates experience anhidrosis, an inability to sweat normally.

Monitoring the Cardiovascular System

Some basic physical parameters can be examined to monitor how well your horse is coping with the stress of exercise. Heart rate recovery is an important one. In addition, a horse's hydration status is a good indication of how he's handling exercise.

A racehorse running one mile in two minutes can lose as much as 2 1/2 gallons of sweat as he "cools" his body. Consider, then, the dramatic fluid loss in an unfit horse which is in sustained work under adverse climatic conditions. Even a well-conditioned horse loses as much as two to three gallons of fluid per hour with exertional demands in the face of high heat and humidity.

A rough estimate of dehydration can be made by gently pinching up a fold of skin on the point of the shoulder or an eyelid, then noting how quickly it snaps back into position. It is considered normal for the skin to snap back immediately. Skin that remains "tented" and refuses to return to its normal position represents serious dehydration of 7-10% of body fluids. There are many levels in between.

Mild dehydration of 2-3% might be accompanied by a dry mouth and dry mucous membranes. At about 5% dehydration, eye sockets appear sunken, skin elasticity is markedly reduced, and the horse is weak with a dull, listless attitude and posture.

A peek at mucous membrane color and capillary refill time of the gums provides a good impression of blood perfusion throughout the body. The gums should be a healthy pink color. After pushing on the gums with a fingertip, this color should return within two seconds. A normal pink color with a normal capillary refill time indicates an adequate cardiovascular state, confirming pumping of blood throughout the body tissues. With poor circulatory perfusion, gums appear darker pink, implying stagnant blood, and capillary refill time slows.

The moistness of the gums and a skin pinch test are but crude assessments of hydration status. It is easy to be fooled that all is well simply by measuring capillary perfusion time, gum color, or skin tenting. You might not

be able to obtain a clear picture of mild clinical dehydration using only these physical inspections. Mild dehydration of as little as 2-3% is associated with a decrease in performance. Your horse might not be in direct danger of metabolic collapse, but his ability to compensate for further dehydration, electrolyte losses, or heat buildup becomes taxed as exercise continues.

Rectal Temperature

Rectal temperature is another valuable parameter for monitoring a horse's well-being. As a mammal, an internal set point is regulated in a horse's midbrain to maintain body temperature within a very narrow range. Part of the body's temperature control process relies on losing heat generated by working muscles and normal digestive metabolism.

An exercising horse typically works within a rectal temperature range of 101-103°F. Should rectal temperature surpass 103.5°F, the horse is overheating.

Once a horse has been pulled up to rest, rectal temperature should decline steadily over 20 minutes back to the normal resting value of 99-100°F. Initially in the workout, as internal temperatures rise, the bulk of blood from cardiac output is diverted to the skin away from the working muscles to facilitate heat dissipation. Internal heat continues to rise if surface evaporation (sweating) is no longer able to keep pace with the heat buildup. As muscle temperature elevates, contractile function of the muscle fibers is impaired, further contributing to fatigue and exhaustion.

Loss of vital fluids through the skin causes a steadily progressive state of dehydration unless this "water" is replenished. Blood flow diminishes to the subcutaneous layers of the skin to reduce sweat fluid losses, further limiting sweating action in an effort to conserve body water. If exercise continues and water isn't offered, heat continues to build in the horse with no outlet.

A rectal temperature above 105°F is abnormal in any horse and poses a dangerous situation; rapid cooling measures should be initiated at once. The higher the internal temperature, the more metabolic demands are placed on the system; this metabolism needs to be fueled by oxygen. If body temperature exceeds 106°F, the body's demand for oxygen might surpass the amount that can be supplied by the respiratory system. An oxygen deficit then occurs in the tissues (hypoxia), potentially leading to kidney, heart, liver, and brain damage.

At temperatures greater than 107°F, a horse in severe heat stress can go into convulsions or a coma, then die. The objective is to avoid these scenarios.

Cooling Techniques

Under any exercise conditions, following some simple strategies will assist your horse in cooling out. As you finish a workout, bring your horse to a walk. Hop off and spend a minute or two walking him so blood flow continues to flush metabolic waste products and heat from his muscles. If an overheated horse abruptly ceases working, blood pools in the muscles (decreasing that in the circulation), contributing to relative dehydration. A fatigued horse might refuse to move. Provided he is not tied-up with muscle spasms, you can assist circulation in the muscle by massaging major muscle groups in rhythm with the heartbeat.

If the heart rate returns to 64 bpm or below within 30 minutes, but the respiratory rate remains elevated, such an inversion does not necessarily imply your horse is in danger. It means he needs help ridding his body of the extra heat. Both the respiratory rate and heart rate should return toward resting rates within 10 minutes of stopping exercise. You can assist your horse in cooling in a couple of ways.

In warm weather, copiously bathe his head, neck, and legs with cool water. Large blood vessels in these locations flush heat to the skin surface, and rapid evaporative cooling is achieved by continual sponging of these areas. Apply cool water and as it heats up, scrape it off of major muscle groups, such as over the loin and hindquarters. Draping wet towels over the head and neck might be counter-productive to cooling as the towels serve to insulate the horse rather than allowing heat to escape, particularly if the water on them remains warm.

Continuously apply and scrape water away until the horse's skin feels cool to the touch. His respiratory rate should decrease as his internal body temperature descends into the normal range. All horses will need some assistance with cooling in the summer months even if the respiratory rate is not inverted or elevated.

Ideally, the body temperature of an overheated horse should be decreased by 1°F every 30-40 minutes by bathing his head, neck, and back with water. Cooling him down too rapidly can cause him to chill.

Keep monitoring rectal temperature with a thermometer, and muscle tone, as you cool out your horse. Once the rectal temperature reaches 101°F, you can stop and see if he stabilizes without further assistance.

In hot and humid climates, cold or ice water can be applied to the entire body with less risk of muscle cramping. The danger in cooling these large muscle groups too rapidly lies in the tendency of blood vessels to constrict away from the surface while retaining metabolic by-products that need to be carried out from deep muscle tissues. Diminished blood flow to the skin surface further allows heat to persist within deep muscles, causing heart and respiratory rates to remain elevated.

Besides exhibiting poor metabolic recoveries, the horse might develop "tying-up" syndrome, with sudden cramping and muscle spasms (more on this shortly). An affected horse might refuse to move, or exhibit colic-like signs due to painful cramps. Heart and respiratory rates further climb in response to pain, and as muscles spasm and contract, more heat is generated in a horse's already overheated muscles.

Offer a bucket of water to your horse immediately following exercise. Traditionally, horse owners have avoided letting "hot" horses drink because of a perceived risk of colic and cold-water founder (laminitis). However, with the possible exception of very hard galloping exercise (e.g., racing), horses can safely drink right after exercise. He'll want more water at this time than he will later, so give it to him to best rehydrate him. Offer water as soon as is practical and let him drink up to two or three gallons during the initial 15 minutes of recovery.

Find a shady spot for an overheated horse, preferably with decent air circulation from a light breeze or fan. An enclosed space with stagnant air adds to heat retention. Fans are helpful for convective cooling--as the air flows across the horse's body, it pulls heat off the skin. Periodic, short walks also help the muscles pump heat out of deeper tissues.

A dangerously overheated horse might need to be dunked into a nearby pond, or soaked entirely with a hose or buckets of water. Intravenous fluids might be necessary to treat severe dehydration and shock, and also to cool the internal organs and muscles. Severely affected horses need to have their acid-base balance and electrolyte status evaluated and their deficits corrected using oral and intravenous fluid therapy. Administration of the non-steroidal drug Banamine might be helpful to decrease inflammation and to prevent endotoxemia in very debilitated patients.

Anhidrosis

Some horses in hot, humid climates lose the ability to sweat--a syndrome known as anhidrosis. It is thought that overworked sweat glands exhaust their ability to sweat. During exercise, such a horse loses the ability to cool himself. In addition to a reduced tolerance to exercise, you might notice that your horse's skin is dry and hot to the touch. There might be a damp area of sweat beneath the mane and saddle or in the groin region, but no moisture is felt elsewhere. He pants with the slightest effort, and seems fatigued. Rectal temperature will rise.

Exercise must be stopped immediately, the horse moved to a cool location, and aggressive cooling techniques implemented immediately. Such horses are in great danger of heat stroke. Early recognition is important to restrain the horse from further physical exertion and so appropriate medical attention can be initiated.

Horses need to be acclimatized over a period of several weeks to high heat and humidity. Some simply stop sweating for no specific reason. There is no way to avoid this if the horse's body fails to turn on his sweat glands. Affected horses need to be moved to a different environment either to an air-conditioned barn, or out of the geographic area. Some horses benefit from electrolyte administration. One electrolyte/ nutrition supplement containing the amino acid L-tyrosine was developed specifically for horses with anhidrosis.

Seek More Knowledge

Using these guidelines, you can help keep your horse out of trouble. Pay close attention to your conditioning program, and use cardiac and respiratory recoveries to guide advances in speed and intensity. If your horse is laboring under the effort you ask, rethink your training strategy, learn more about equine cardiovascular conditioning, and use appropriate cool-down techniques during training and competition.

Bombproof Your Horse the Mounted Patrol Training Way with Horse Desensitization

By Jayme Feary

Ever wonder how mounted patrol training teaches horses to stay calm, even in the face of chaos? Here, we pull back the curtain to show you horse desensitization techniques used in mounted patrol training by the Jackson Hole Police Citizens' Mounted Unit, made up of volunteers who patrol downtown streets and special events.

We'll show you how to incorporate elements of the mounted patrol training, including horse desensitization, into your own program to teach your horse to stay calm when he encounters a scary situation. We'll give you ground rules, training basics, and step-by-step techniques learned from mounted patrol training using horse desensitization.

Ground Rules

- Put safety first. If you feel in danger, dismount from your horse. Work your horse from the ground until he's comfortable. Note that some exercises and disciplines should be taught only by a professional mounted patrol trainer.
- Watch your pace. Expose your horse only to what he can handle. Proceed at a pace that helps him succeed.
- Never train alone. When you train, make sure someone is around, even if it's a neighbor watching from afar.
- Be patient. Mounted patrol training is an ongoing process, not a one-time event. Practice these steps as often as your schedule allows.

Training Basics

As you work with your horse, keep these training basics in mind to optimize your success.

- Be positive. Your mind-set, outlook, energy, and anxiety level affect your horse more than any other tool or technique. Ride over and through obstacles as if they're no big deal, and your horse will adopt the same attitude. If you have fun and view the training as a game, your horse will, too.
- Focus on your destination. When you're in the saddle, your horse will follow your gaze. Pick out a tree, a sign at the far end of the arena — any object in the direction of your destination — and focus on it.
- Use the principle of pressure and release. With all forms of equine training, the basics of pressure and release apply. Maintain pressure (e.g., hold the lead rope taut, maintain pressure on the bit, or apply a leg cue) until your horse gives you the slightest approximation of what you want. Then release the pressure, and reward him with a rub.
- Pause for the moment of learning. Learning happens when you release the pressure at a specific response from your horse. Then pause long enough for the lesson to sink in.
- Use your horse's sense of smell. When approaching a new obstacle, horses may pause for a sniff. This is part of the acceptance process. Smelling an object indicates that he's willing to consider dealing with it. After he seems satisfied, ask him to continue forward across or through the obstacle.

- **Mounted Patrol Technique**

Here's how to begin desensitization training with your horse the mounted patrol way. (Before you begin, warm up your horse in your usual manner so he is prepared for training.)

Step 1. Introduce from the ground. When first introducing your horse to any obstacle, do so from the ground until he seems comfortable. If it takes him 45 minutes to simply place one foot on a tarp, fine. Help him win. Be confident and firm, but never force or pressure him; you don't want him to associate tension with the obstacle. The level of adrenaline is inversely proportional to learning: Adrenaline up, learning down. Adrenaline down, learning up.



Photo by Amy Jerup

Step 2. Sack out your horse. Desensitize your horse's entire body — over, under, in front, and behind. From the ground, rub his whole body with various objects, and allow him to hear all the sounds they make. Start with an inflatable toy, then graduate to plastic grocery bags, garbage bags, and tarps. (For more object suggestions, see Step 5.) When he accepts an object from the ground, repeat the sacking-out process under saddle (shown).



Photo by Amy Jerup

Step 3. Ride over the obstacles. After you've worked all the obstacles from the ground, ride your horse over them. Go easy at first, then, over time, ramp up the difficulty. Walk over the obstacles, then trot over them. If your horse refuses an obstacle, follow a more experienced horse. If your horse becomes anxious, take a break, and play a game. Toss a ball among riders, or knock a soccer ball around the arena with brooms.



Photo by Amy Jerup

Step 4. Use smoke bombs. For advanced desensitization, smoke is an exceptional tool. It teaches your horse to trust you enough to penetrate a wall he can't see through. Light two smoke bombs, place them far apart, and send your horse between them from the ground. Then ride in a line of horses between the bombs. As the horses relax, move the smoke bombs closer together, and make several passes.

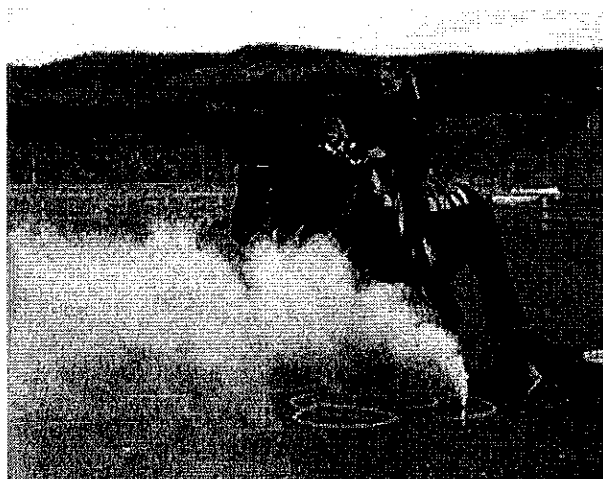


Photo by Amy Jerup

Step 5. Design your own obstacles. Build your own obstacle course using a little imagination and items from your local hardware or dollar store. Collect such items as inflatable toys, tarps, plastic garbage bags, blankets, flags, pool toys, balls, road cones/signs, lights, sirens, flares, old tires, leaf blowers, plywood, wood pallets, drums, and horns.

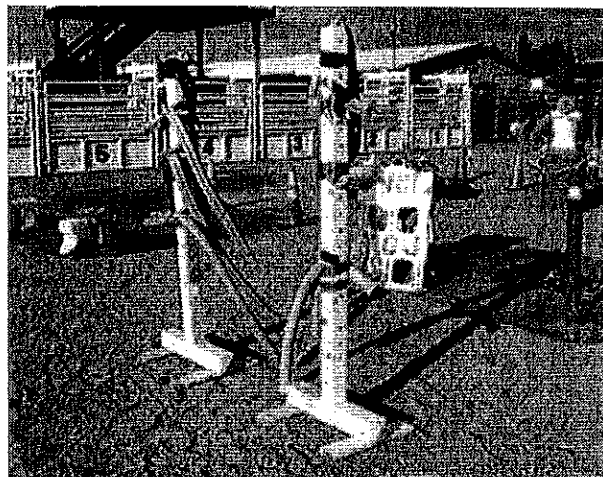


Photo by Jayme Feary

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