



THE RIDE & TIE ASSOCIATION

November 2022

This issue features a number of articles about and/or by that special group of people who make our sport safe and fun: VETERINARIANS.



Our first head vet was Dr. Jim Steere.

Left: Dr. Steere, the “hippie vet,” finishes the first Championship in 1971 in St. Helena, CA.

Middle: Carrie Steere and her dad are both hugged by Dawn Damas after the 1972 Championship in Alturas, CA.

Right: Thom Steere and his dad finish the 2010 Championship Short Course in Mt. Adams, WA.



Our second and current head vet is Dr. Greg Fellers.

Left: Dr. Fellers vetting in a horse at the 2016 East Coast Championship in Clemson, SC. His wife Kathy was his scribe.

Right: Dr. Fellers at the 2011 Championship in Cuneo Creek, CA



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Greg Fellers

Board Member Elections

In accordance with our By-Laws, the Ride and Tie Association's Board Member election will begin on May 5, 2023 and end on August 31, 2023. There are three open seats on the board for a three year term beginning on September 23, 2023. Anyone wishing to run and/or nominate someone must submit a nomination along with ten current Ride & Tie members' signatures to Carrie Baris, Secretary (carriebaris@hotmail.com) before March 16, 2023. In addition to the ten signatures, nominations must include a picture, a brief biography, and the reasons you wish to serve/nominate this person.

Renew Your Membership for 2023

Anyone renewing online or postmarked prior to Jan 1, 2023 will be entered into a drawing to win a R&T hoodie. NOTE: If already a lifetime or founding member, submit a membership form (online or hard copy) to validate or update your contact information prior to the deadline, and your name will also be entered. Go to www.rideandtie.org/membership to renew.

For More Information about Ride & Tie

Ride & Tie Rules: www.rideandtie.org/rules
 Ride & Tie Schedule: www.rideandtie.org/race-schedule
 Ride & Tie race results/points/individual stats: www.rideandtie.org/ride-results
 Ride & Tie Store: www.rideandtie.org/store
 Help for Race Managers: www.rideandtie.org/resources/ride-manager
 Past Ride & Tie Newsletters: www.rideandtie.org/resources/newsletters
 To Join or Renew your Membership: www.rideandtie.org/membership

Educational and fun videos:

Search for "The Ride and Tie Association" on YouTube

Questions and community:

Join the Ride and Tie and/or East Coast Ride and Tie Folks pages on Facebook



When a Vet and a Letter Saved Ride & Tie

by Courtney Krueger

The first Ride & Tie race in history was sponsored by the Levi Strauss Company in 1971. The sport was invented by Bud Johns, their Public Relations Director. That first race featured \$3,250 in prize money which attracted a number of people who brought horses not physically capable of 28 hard miles in the 100 degree California heat. Tragically, two horses died on the trail that day. By all rights, their deaths should have killed Ride & Tie as well. Detractors were already calling it "Ride & Die" when a veterinarian who was a competitor that day stepped forward.

In his book, *"What is this Madness"* Bud Johns writes about meeting Dr. Jim Steere that hot day in 1971, *"I was walking away from the post-race activity, wondering what the future was for my sport, when a short, stocky man with long graying hair came up to me. 'I'm the vet who cared for those two horses. I wouldn't want to be in your shoes the next couple of weeks but you've got to keep this race going and I'd like to help you protect the horses. I've been a vet for 20 years and I've been an endurance rider for years and I never before understood my relationship with a horse the way I did today. This race is wonderful and has to be continued.'" (p. 10)*

Dr. Steere was true to his word. Just three days after the race, he wrote a letter to Bud Johns cc'ing Peter Haas, the president of Levi's, with whom he had already spoken about the race. Dr. Steere's passion and letter saved Ride & Tie.

He began the letter, *"Thought I'd better get this off to you while my impressions of the 'Ride and Tie' are still vivid – also I'm so damned sore today I'm mostly immobile, so it's a good time to get it done!*

First of all the ride was great! Sore as I am, Mary [Tiscornia] and I plan to be back next year – in better shape. You had an original idea that got all of us turned on. The congeniality and spirit of the riders, officials, and spectators made for a fun day. In spite of the intense competition, most of the contestants felt as we did – our reward was doing the 'Ride and Tie' and completing it.

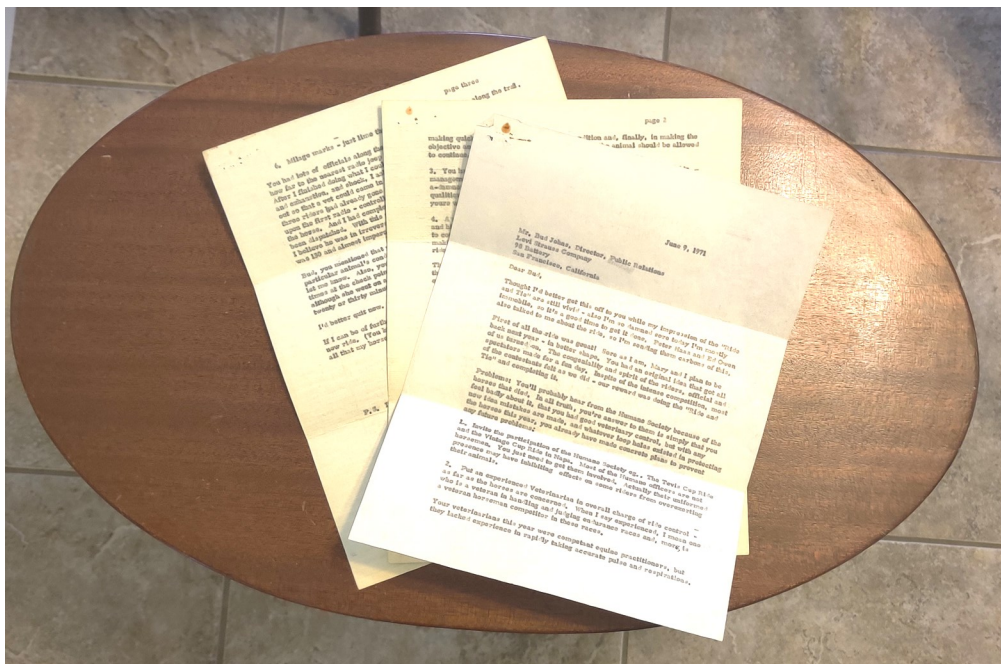
Problems: You'll probably hear from the Humane Society because of the horses that died. In all truth, your answer to them is simply that you feel badly about it, that you had good veterinary control, but with any new idea mistakes are made, and whatever loop holes existed in protecting the horses this year, you already made concrete plans to prevent any future problems."

He then went on to list ten concrete ways Levi's could ensure the safety of the horses including vet checks before, during and after the race, inviting the Humane Society to monitor the next event, and providing well-informed officials to guide and, if necessary, chastise riders.

Bud Johns writes that when he made the long trek to president Peter Haas's office to talk about the future of Ride & Tie, Haas said, *"Just make sure I don't get any of those calls [from people angry about the horses' deaths]."* Haas then gave the green light for the 1972 Levi's Ride & Tie World Championship. (p. 12)

Dr. Steere then became the first Ride & Tie head veterinarian, a post he held for nearly forty years. He competed in the short course at the 2010 World Championship at 85 years old. Less than two months later he passed away and his role of head vet passed to Dr. Greg Fellers. Dr. Fellers remains the second head veterinarian in the more-than-50 year history of the sport. How thankful we are for Dr. Steere saving Ride and Tie in its infancy and the decades he spent making contributions which keep Ride & Tie alive and thriving to this day.

Ride & Tie remembers Dr. Steere with our annual "Jim Steere Memorial Veterinary Student Scholarship."



Mary Tiscornia's original CC copy of the letter that saved Ride & Tie

The Prepurchase Exam: Tips and Tricks for a Successful Assessment

by Kelly Zeytoonian DVM, CERP

Finding the perfect horse can take what seems like forever. Once you have a prospect in mind, the financial and emotional investment really kicks in. *Is this horse the right fit? Can you afford it? Will it be able to do the job you are asking?*

Some of these questions can be answered by your trainers and friends, (and your bank account), but the suitability of a new horse — for a particular job — is harder to assess. A thorough veterinary evaluation of general health and soundness is recommended before the purchase of your next equine partner. In the following article, I will outline the prepurchase evaluation process and give you tips for extracting and evaluating the information available to you.

What to Do Before the Exam

Accessing as much historic information (e.g., medical records, show records, farrier schedule, diet, exercise routine, etc.) prior to scheduling a veterinary evaluation is a **must**. Not only will the information be invaluable should you purchase the horse, but it may also help to identify **red flags** that will stop an exam before it has even started (read: save yourself the expense and upset by doing your homework). Red flags that warrant consideration and further explanation from the seller include but are not limited to:

- * Repetitive lameness
- * Multiple colic episodes
- * “Special” shoeing
- * Missing veterinary care (e.g., skipped routine care visits may suggest the patient was leased out, seen by another vet, or even gone for rehabilitation)
- * For Endurance/Ride & Tie horses, large gaps in the horse’s race schedule or frequent DNFs

The PPE Process

While each individual veterinarian may have a slightly different approach, the general goals of a PPE are consistent. The veterinarian strives to assess all body systems and identify any abnormalities present. It is not their intention to say “buy” or “don’t buy” and is rather an opportunity to educate you on potential veterinary concerns should you purchase the patient. For example: arthritis in a patient may not stop the exam from continuing but will open a conversation about general joint support and therapeutic exercises to prevent compensatory injuries.

Caveats

It is extremely important to understand the limitations of a pre-purchase evaluation. The examination gives us information about the patient’s health on a given day and does not guarantee future soundness or freedom from health issues. You should look at the information given as an opportunity to understand the health management likely needed to support your new horse and allow them to do the job you are seeking.

While there is no 100% guarantee, the investment in a prepurchase evaluation will help to mitigate risks and ensure you start off on the right hoof with your equine partner.



Comet's Comeback

by Carrie Baris

Editor's note: the last two newsletters featured humans who had to comeback from injury to compete. This issue we have the story of an equine athlete who came back to Ride & Tie after nearly dying.

Comet is my ten year old Arabian gelding. I bought him just over three years ago in the spring of 2019. His short stature, and sassy attitude, makes him perfect for ride and tie – though sometimes his sassiness is a little too dramatic, and we call him “bad pony, good horse”. Comet is my first horse, though I have wanted one of my own since I started riding as a young kid. My lifestyle has never been compatible with owning a horse, but with the help of the Krueger family, I have been able to make it work. The Kruegers offered to keep my pony at their farm and take care of him, while I pay what we call “Comet Keep” every month to cover his bills. In exchange, Comet regularly ends up working with groups of people in outreach organizations along with the other horses on Lea Lane Farm.

On a routine training ride in July 2021, Comet snorted and blood came out of his nostrils. When the bleeding persisted, we paid a visit to our vet, Lee Bancroft. Using a scope, he offered a potential diagnosis of an ethmoid hematoma. Since this condition occurs in the upper airway and nasal passages, and is often found because of bloody nasal discharge, this diagnosis made sense. After placing Comet on antibiotics, Dr. Bancroft recommended we take Comet to the University of Tennessee Veterinary Medical Center. This first visit led to months of uncertainty and fear.

At UT, the vets ruled out an ethmoid hematoma through endoscopy and radiographs, but found swelling and suspected an abscess with a foreign body. The decision was made to take Comet off of antibiotics to allow the mass to fester so that he could hopefully expel whatever the foreign body was. Unfortunately, things got worse. Comet was lethargic and was not eating normally, so therefore he was losing weight. He seemed to be breathing heavily and with difficulty. On recheck a couple of weeks later, the vets at UT suggested a CT scan and a tracheostomy. Swelling had increased and the opening into the trachea was half the normal size.



Carrie and Comet complete their miracle ride at Ride in the Pines

The CT revealed a solid mass, rapidly expanding, and no foreign body was found. The mass was sent off for biopsy and Comet was placed back on antibiotics and phenylbutazone (AKA “bute”). I was told that the mass presented like cancer, and we prepared ourselves for the worst.

Once the biopsy results returned, instead of cancer, they showed a fungal infection. The suspect was pythium. Pythium is often referred to as swamp cancer, because it is a fungal infection found in swampy areas. Where Comet lives in Tennessee is not a swampy area, so it was a very confusing diagnosis, and pretty rare, with uncertain treatment options. One vet was hopeful, another told us there was not much hope for survival. More tests were needed so Comet went back to UT. He was placed on an anti-fungal medication and given a pythium vaccine. The vaccine had to be administered weekly in five doses, so we were sent home with four after the initial dose was given. The anti-fungals were very expensive through UT, but Lea (one hero in our story) was able to find them at a compounding pharmacy (at the suggestion of the vet) for much cheaper. The vets also changed his antibiotics to attack the secondary infection differently. In the meantime, the vets also debrided the mass and tried to remove as much as possible.

At home, Comet improved. Breathing through the trach hole in his neck actually gave him more energy because the mass was not blocking that. He was energetic enough to argue about his medicine, and Sarah Krueger was often covered in his various meds after dosing him. He whinnied to his buddies in the pasture, as he was stuck in lockdown in a small pen. His whinnies were made through his new hole, which caused us to laugh at his silly noises – kind of like a whale through a blowhole. As the vets continued to struggle with various test results, and an official diagnosis, it seemed as if Comet was improving. Since the air was passing through his trach hole, and not by the mass, potential outside contaminants were more limited. On his next visit to UT, the vet told me that there was no more evidence of the mass in his throat anymore. But (there was ALWAYS a but), there were hardened granules in his guttural pouches leftover from the mass. Comet spent the night at UT while they twice more scoped and dug for those granules. Finally, finally the granules were gone. Comet came home and we were told to rest him for a couple more weeks, trying to put weight on him. At some point, he also developed a reaction that presented as lumps on his back, that seemed to migrate down his body. He was extremely shy about being touched and seemingly in pain. By the time the vets saw him, they had diminished significantly, and we never knew exactly what caused them. Comet's illness in general is still somewhat of a mystery, but the UT team certainly saved his life.

At the end of November, I was able to get on Comet's back again. We took a short ride around the arena at the farm, and though all the humans present were emotional, Comet acted as if no time had passed instead of the four months it had been since he had been ridden. We were back on the trail beginning slow conditioning in December. In April, at Ride in the Pines in South Carolina, he made his ride and tie return. Barb Mathews and I took him in the 27 mile race, and we babied him through, but still moved along at a good pace. When we got our completion from the vets, I teared up. This was a horse we thought was dying, and here he is, sassy as ever, finishing a race! Since then, he has completed several races successfully, and returned to his normal, excitable manner. Comet tends to be very excited and impatient in camp, as well as buddy sour – all things we are working on, though he moves down the trail well and is used to being tied. But whenever he passes a vet check, or the vets ask questions about him, they will hear this unbelievable story.

There are a lot of thank yous necessary to this tale. Sarah Krueger stepped up and dosed Comet twice a day for many, many weeks with his various medicines. Lea Krueger drove all over the area to find cheaper anti-fungal medicines and generally loved on my boy, fattening him up once he was able to eat better. Courtney Krueger and Lea both drove back and forth from Lea Lane Farm in Cleveland, Tennessee to the UT Vet Hospital in Knoxville, an hour and a half drive one way many times. At one point, their truck broke down on the way home from UT, and we sat on the side of the highway awaiting rescue while their other horse, Coda, stood in the trailer. He had been to UT too for a checkup. When their truck was stuck in Knoxville getting repairs, they lined up trucks to borrow to haul Comet home. Our local vet, Dr. Bancroft and the vets at UT certainly deserve thanks as well, for not giving up on my boy, and figuring out a way to treat him that was ultimately successful. Dr. Collar, Dr. Rifkin, and Dr. Jones were especially helpful, and answered texts and phone calls way outside of their office hours. To everyone who consoled me, and offered me horses to ride while Comet was ill, thank you. Riding was one of the only things that brought me peace during Comet's illness. Ultimately, the Krueger family saved Comet's life for me, administering medicine and driving him constantly to the vet. To them, I owe a debt beyond words.



Otis Schmitt is a well-known and loved retired vet in the Southeast.

Lea Krueger wrote this about him after this year's Big South Fork Endurance Ride and R&T.

It was wonderful to see Otis at BSF this weekend! On our way home, Courtney, told me this story:



"Several years ago I was riding the LD at Biltmore. I came in 8th, but had never been in the top ten in Endurance before. Otis vetted my horse for completion, and then he told me, 'I want you to stand for best condition and I will help you understand what to do and get through it.' We didn't win, and he probably knew up front we wouldn't. But it was so affirming for him to make sure I got the experience." I'm so very thankful for Otis and all of our other vets who go the extra mile when they can! He didn't say to Courtney, "It's not my job to help you stand for BC." Instead, he was encouraging. I know sometimes the vets are swamped and can't take extra time with us, but when they can, it makes such a huge difference!

Otis in a Ride and Tie T-shirt at the 2022 BSF Ride. Photo: Becky Pearman

2022 Jim Steere Memorial Veterinary Student Scholarship Winner

Caroline Kornegay

North Carolina State University class of 2025



Caroline is a 2019 graduate of NCSU in Animal Science with a Veterinary Bioscience Concentration.

She grew up in Raleigh, NC and is an avid equestrian. In her free time she spends time with family, friends, and competing/training her young investment horse Cora.

Horse Owner's Nightmare

You walk into the barn on the first cold day of winter to feed your horse dinner. While walking down the aisle you see a flash of your horse's face in the distance and his lip is curled up. As he disappears into his stall the barn echos with the sound of his pawing. Your heart drops. Before you reach the stall your mind has already gone through a million scenarios of what could happen in the next several hours.



Colic, a term most horse people have heard, is often associated with a nightmare amongst horse owners. Statistically however, 90% of colic cases are treatable by your local veterinarian and do not require referral to an emergency hospital or surgery. Understanding and recognizing the signs of colic and when to call your veterinarian is a crucial skill to learn as a horse owner.

What is colic?

Colic is a generic term that is equivalent to abdominal pain. The horse's digestive tract is mostly free moving, very expansive, and is enveloped in a large open area in the abdomen. The mobility of the intestines and the inability of horses to vomit can cause an array of problems. There are a multitude of different types of colic, but the most common include: gas, impaction, sand, and displacement colic. Gas colic is the most prevalent and occurs when there is a build up of gas that is unable to be expelled. Typically, this is seen when there is a sudden change in diet or the horse's routine has been altered. Impaction colic refers to a blockage in the intestines that does not allow the emptying of the contents. This can occur due to a decrease in water availability in the gastrointestinal tract impeding the contents ability to pass. Sand colic occurs when a horse ingests sand as it is eating and over time creates a buildup of sand that is unable to pass through the gastrointestinal tract due to its nature to sink to the floor of the intestines. Lastly, displacement colic occurs when the contents of the gastrointestinal tract move into positions that are not typical, causing a disruption in multiple processes. This is mainly due to the anatomy of the horse's gastrointestinal tract and how it is positioned in the abdomen.

How do I know if my horse is colicking?

It is very important to understand the signs of colic because quick medical treatment can improve the outcome of any colic. There are numerous signs of colic and they can vary greatly depending on type of colic, pain level, and the individual horse. As a horse owner it is best to be familiar with most signs so that you easily recognize when a horse starts feeling uncomfortable. The most common signs are biting at sides, stretching out, kicking at stomach, excessive rolling or lying down, pawing, lip curling, and disinterest in food.



Looking or biting at sides
www.extension.umn.edu



Stretching out
www.acvs.org



Kicking at belly
www.centenarycollege.edu



Excessive rolling
www.thehorse.com



Pawing
www.fineartamerica.com



Lip curl
www.extension.org



Not eating
www.naturahorse.com



Excessive lying down
www.myhorse.co.uk

My horse is colicking, what now?

Collecting vital signs is always helpful prior to calling your vet. This is something that anyone can learn how to do. First, look at your horse's gum color and feel them: are they pink, light pink or white; are they moist, tacky, or dry? Next, place a thermometer in the rectum and obtain a temperature. If you have a stethoscope place the end in the crease of the elbow at the abdomen and take a heart rate. Lastly, place the stethoscope on the horse's abdomen near the flank and listen for gurgling noises. If you do not have a stethoscope, one can easily be found at a local pharmacy and is a good tool to have in your first aid kit. Now it is time to call your veterinarian. Share all of the information you just obtained and this will help him decipher the degree of colic and what the next steps need to be. At this time, you can also consult with your veterinarian on administering medications such as Banamine. When your vet arrives, he will do a physical exam. Next, two procedures will be performed: nasogastric intubation and a rectal exam. Typically, both of these procedures require sedation. For nasogastric intubation, he will insert a tube that will be placed into your horse's nose and passed to his stomach. If no liquid is produced from the horse the vet may pump fluids and other substances into his stomach. The rectal exam includes the vet inserting his arm into the rectum to feel for structures in the gastrointestinal tract. After completing the physical, nasogastric intubation, and rectal exam your vet will share the findings, recommendations, and treatment options for your beloved companion.

VITAL SIGNS IN HORSES

- HEART RATE**
28-40 Beats Per Minute (Depending on the Horse's Size)
To Check: Place your hand's palm flat on the side of the horse's chest on the side of the rib cage. Feel for 15-20 beats. Counting 45-60 beats. (Count 60 seconds and multiply by 4.)
- RESPIRATION**
10 - 24 Breaths Per Minute
To Check: Watch your horse's chest rise and fall. Or place your hand on the side of the horse's chest and feel for the rise and fall.
- TEMPERATURE**
99.5°F - 101.5°F Normal
To Check: The best way to take the horse's temperature is rectally with a digital thermometer. Clean the thermometer before use. Environment factors can affect reading. Exercise, stress or infection can raise temperature.
- MUCOUS MEMBRANES**
The Horse's Gums Should Be Moist And Healthy Pink
To Check: Lift your horse's upper lip and observe that the gums are moist and healthy pink color.
- CAPILLARY REFILL TIME**
Firmly Press Your Finger Against The Horse's Gums. The Point of Pressure Should Return To A Pink Color Within 1-2 Seconds.
To Check: Lift your horse's upper lip and firmly press your thumb against the gums for 2 seconds to create a white mark.
- INTESTINAL SOUNDS**
Normal Gurgling, Gas-Like Gurgles, Tinkling Sounds and Occasional Roars are Normal. No Intestinal Sounds or Decreased Intestinal Sounds Can Be A Sign Of Colic.
To Check: Press your ear up against your horse's belly just behind his last rib. Be sure to check from both sides. Get the horse relaxed in a quiet place.
- DEHYDRATION**
Horses Drink A Minimum of 5.25 Gallons of Water / Day.
Horse's In Heavy Exercise or Hot Conditions Can Drink Up To 18.5 Gallons of Water / Day.
To Check: Pinch the skin on your horse's neck. It should return to its normal position.

Horse's Vital Signs Can Be Early Indicators of Problems. Horse That Are Exposed To It's A Warm Day, The Heart and Respiratory Rates Can Be Slightly Elevated.

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poulingrain.com | 800.254.6731

How can I prevent colic?

Since there are many causes of colic (many unknown) even the best preventive methods sometimes fail. As a horse owner, we all want to avoid having the scary moment when we realize our horse is colicking. There are several preventatives that you can do to ensure the best outcome for your horse. The main preventative method is to keep your horse hydrated, especially when the temperature falls. Tricks for hydrating your horse include adding molasses, electrolytes, or gatorade to the water. Also making a salt lick available will make him feel the need to drink more often. Secondly, make slow transitions in his diet, especially with hay changes. Additionally, if your horse goes out in a sandy area, consider feeding him off the ground so that he does not ingest as much sand. Lastly, it is always a good idea to proactively use a gastro-protectant for competition horses or when your horse is traveling. This will help protect the stomach against gastric ulcers that can lead to a colic episode.

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Overview of Colic in Horses- Digestive System. (n.d.). Merck Veterinary Manual . Retrieved from <https://www.merckvetmanual.com/digestive-system/colic-in-horses/overview-of-colic-in-horses?query=colic>

Gonzalez, Liara; Blikslager, Anthony; Equine Colic Selective. North Carolina State University College of Veterinary Medicine. 2021

Healthy Lungs

Endurance exercise depends on cardio-respiratory fitness. Fitness depends on how much oxygen can be consumed to meet the muscle's needs for oxygen. A human Olympic athlete that engages in aerobic exercises such as marathons, cycling or Nordic skiing, as a few examples, can maximally consume 80ml/kg/min of oxygen. The horse however can consume 200 ml/kg/min of oxygen and run at speeds in excess of 30 miles per hour. To accomplish the oxygen demands of such intense exercise, the horse's minute ventilation will increase from 60 L/min to 1800 L/min, a 30-fold increase. Meeting these ventilation demands is further aided by higher airflow rates through diaphragmatic contractions. It may come to no surprise then that the horse becomes exercise limited by its lung rather than the heart, like it is in other athletic animals. If the horse's lungs are not properly functioning, then peak performance becomes jeopardized. Sometimes, a horse may not give any clues about an underlying disease because when at rest, the horse acts normal and is breathing comfortably. It is only until the lungs are being challenged and more alveoli are recruited for consuming oxygen that pathology may become suspect.

One particular way that gas exchange becomes compromised is through inflammation. Inflammation is nefariously good. It is necessary for healing and protecting, but it can also create harm. Within the lungs, inflammation will cause constriction of the airways, mucus accumulation/edema, tissue damage and fibrosis. Inflammatory airway disease is a well-recognized problem among performance horses characterized by an increase in tracheal mucus and neutrophilic inflammation in the lower airways (bronchi and bronchioles). Recent research suggests that horses with mild to moderate tracheal mucus accumulation perform worse than horses without mucus; horses with a mucus score of 0 – 1 were twice as likely to place better in a race than horses scoring 2 – 4.



This relationship is best explained through physiological measurements as mucus accumulation will impair gas exchange. Impaired gas exchange results in lower arterial PaO₂, higher heart rates and higher blood lactate concentrations. The ventilation-perfusion mismatch that occurs from inflammation will limit ventilation and reduce athletic performance.

Why do the lungs become inflamed? Environmental insults appear to be the likely etiology. Poor ventilation, aerosolized particles, inorganic dust, noxious gases, bacteria, molds or even endotoxin are all triggers for inflammatory airway disease. Depending on how long a horse is breathing within an antigenic environment is another component to this multifactorial disease complex. In asthmatic humans, clinical signs and bronchoconstriction are seasonally related and exacerbated by high exposure to pollen and aeroallergens. In one study, horses breathing organic dust had increased number of cells, histamine release and airway resistance within 20 minutes when compared to horses breathing fresh air. The risk for developing inflammatory airway disease then increases with how long a horse is housed in a dusty, indoor environment.

While the pathogenesis may be difficult to define, the treatment is simple in theory but sometimes difficult to implement in practice and that is, improve air quality. Methods to do so include soaking hay or wetting dusty grain before feeding. Feeding hay from the ground and not from a hay net. Preventing stored hay dust from trickling down on horses by laying a tarp underneath the hay. Wetting aisle ways before sweeping, or removing horses from the barn while cleaning stalls, moving hay or removing cobwebs and/or other dust collectors. Modifying a horse's environment is often the primary treatment choice for reducing the risk of lower airway inflammation. For horses that do not respond favorably to improved air quality more aggressive treatments such as non-steroidal anti-inflammatories, corticosteroids, antimicrobials or nebulization therapy are warranted.

In summary, the horse is a spectacular athlete with a superior cardiorespiratory system to other athletes. Any small changes however that impact lung function can result in poor performance of this athlete. Protecting the horse's lungs from inflammation is essential if we want to practice good horsemanship and participate in events or competitions that are designed for healthy lungs.

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Patrick is a 4th year veterinary student with an interest in general large animal medicine. During his veterinary school training, he spent considerable time in both applied research of herd health and general practice for the equine practitioner. Endurance sports are a personal passion of his and he is particularly interested in the physiology of endurance training as is evident by this essay topic.



2022 Jim Steere Memorial Veterinary Student Scholarship Runner Up

Sarah Yonker

Michigan State University College of Veterinary Medicine Class of 2025

Equine Myth Busters

If you spend time with horses, you recognize routine health maintenance is key for comfort and performance. Providing the best care for your horse involves continually growing and assessing your knowledge. This essay includes three “myth busters” to test your skills while considering important aspects of horse health.

BAD BREATH:

Myth or fact? All horses need routine veterinary dental exams.

Test your knowledge: What is “floating” and “quidding?”



Figure 1: Each tooth in a horse's mouth has a unique number for identification (*Equine Dental Care*).

FACT: Every horse requires a routine dental exam, not just older horses. Foals are examined to correct issues such as a cleft palate or crowded incisors (*Equine Dentistry*). The first routine procedure is performed at a year of age when sharp enamel points are reduced, and wolf teeth can be removed prior to training. Horses between two and five years old may need up to three dentals per year to evaluate tooth eruption, overgrown incisors, and abnormal wear. During this time horses lose up to 24 teeth and erupt 36-44 new teeth! (*Equine Dentistry*). Horses 5-20 years old require a dental one to two times per year to treat potential tartar, gingivitis, periodontal disease, fractures, and diastemas (spaces between teeth). Horses over 20 years of age also need frequent dental exams to help maintain a healthy weight. Older horses experience the above issues in addition to calcification, oral growths, and gradual onset diseases such as tooth resorption (*Equine Dentistry*). Painful dental problems occur at any age, impacting performance and causing additional health issues. A veterinarian should examine the entire mouth every 6-12 months under sedation, allowing for early detection of subtle changes (Figure 1).

COLIC CORNER:

Myth or fact? If a horse can pass manure, colic is not a concern.

Test your knowledge: What is an “enterolith?”



Figure 2: Signs of Colic in Horses (*Recognizing Colic*).

Fact: Colic is a broad term for abdominal pain or discomfort. Causes include sand impaction, lipomas, stress, and environmental changes. A lack of manure production often indicates colic but occasionally a colicky horse will still pass manure (Malone, Erin). It may appear abnormal, such as mucus-lined, or an issue could develop “upstream” in the gastrointestinal track, allowing the horse to pass manure during early stages. Withholding feed and walking with periods of rest may help resolve a mild colic (Loving, Nancy). However, be sure to seek veterinary assistance immediately and follow recommendations for treatment or referral.

Colic Prevention Tips: Minimize stress during trailering and in new situations. Maintain a regular feeding schedule, offering hay and grain in smaller portions throughout the day (*Colic Prevention*). To benefit the digestive system, maximize pasture turnout and minimize concentrates fed while maintaining a healthy weight. Avoid grazing horses on stressed pasture, rotating if possible to prevent overgrazing. In addition, place hay on a mat or in a feed tub to decrease sand ingestion (*Colic Prevention*). Encourage water intake by providing a clean, easily accessible water source that remains ice free in cooler weather. A heavy intestinal parasite load also increases the risk of colic (*Colic Prevention*). Submit a fecal sample to determine the appropriate deworming schedule for your horse each year. Finally, keep a list of emergency contacts and be able to recognize subtle signs of colic (Figure 2). Horse owners and barn staff are the first line of defense when noticing a problem to initiate communication with a veterinarian.

PERFORMANCE PROBLEMS:

Myth or fact? The most common reason for horse elimination in long-distance events is compromised metabolic status.

Test your knowledge: What should you do if a horse steps on a nail?

Fact: Researchers conducting a study with endurance horses found that metabolic factors such as heart rate, respiration, hydration, gut sounds and capillary refill time accounted for only 10.8% of eliminations analyzed (Nagy 2010). In contrast, lameness caused 69.2% of eliminations (Nagy 2010). Lameness results from injury to bones, joints, nerves, and soft tissue, as well as endocrine and vascular disorders. Many conditions originate in the hoof and lower leg (Thal, Doug). If lameness is a common issue for sport horses, how can competitors reduce risk?

Important aspects include “conditioning and fitness, matching of conformation to use, hoof care and shoeing, and nutrition” (Thal, Doug). Understand which lameness conditions affect “horses of your breed, type, conformation, and discipline” (Thal, Doug). Recognizing early stages of lameness can prolong a horse’s career and improve the prognosis for return to work. Schedule evaluations with a certified saddle fitter every 6-12 months. Consider routine performance evaluations with a veterinarian for horses in rigorous training programs. In addition, occasionally record training sessions to create a record of normal movement to compare with future issues.

Check the legs and back for heat, swelling, pain or sensitivity daily. Practice taking a pulse and evaluating ease of flexion and extension in the legs and neck (Figure 3). This routine establishes a solid recognition of “normal” to identify acute or gradual changes in movement, behavior, stamina, and performance (*Keeping Horses in the Game*). Thoroughly evaluate the condition of your horse before trailering to an event. Consider weather and terrain in relation to horse and rider skill level (*Lameness is Most Common*). Sudden changes in footing, slippery terrain and fast speeds are risk factors for lameness (Nagy 2010). Proactive decisions increase success and help establish mutual trust to last a lifetime.



Figure 3: Evaluating limb flexion (*Keeping Horses in the Game*).



Sarah is currently a second-year veterinary student at Michigan State University. As a West Michigan native, she attended Hope College to earn a B.A. degree in biology. She plans to become an equine and canine general practitioner after graduation, with a special interest in reproduction. In her free time, she enjoys reading, riding her horse, Jaxsen, and hiking with her two Golden Retrievers by Lake Michigan.

“Test your knowledge” (Answers)

- 1) Floating a horse’s teeth reduces sharp points and abnormal ramps caused by regular wear. Quidding refers to a horse dropping partially chewed feed due to dental pain.
- 2) An enterolith is a stone resulting from mineral buildup around a foreign object such as a pebble or piece of baling twine in the large colon of a horse.
- 3) Do not remove the nail without contacting your veterinarian. Taking radiographs to evaluate structural damage before removal often directs the treatment plan.

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Equathon: Gateway Drug into Ride & Tie!

Stories of first Equathons



I had a dream come true in August at the Iron Mountain Jubilee by completing my first Equathon. I rode my sister's horse, Shooting Star, a \$100 rescue. We got her back in 2011. This was her first Equathon, too. I didn't expect to finish 17 miles in 2 hours in order to keep up with the big leaguers! I just wanted to finish strong. I ended up having to run 8 miles instead of 6. I did finish strong though a little sore. We did it in a little under 3 hours. I'm excited for next season. I can't wait to come back stronger and better. Hannah Dollyhite

Photos: of Hannah and Shooting Star: Becky Pearman



Back in the spring Nicole Gonzalez Hatfield heard about Ride & Tie from a “Horses in the Morning” podcast interview with Rufus Schneider. Nicole has been riding for more than eighteen years, but has never entered any equine competition. That interview changed everything. She read up on Equathon and decided she wanted to try. She talked with her friend Lola Alapo about partnering with her at Big South Fork’s Equathon. Lola said, “I can’t do it this year. I am training for the New York Marathon and need to stay on a tight training schedule.”

About a month before Big South Fork, Lola brought it up. Nicole said, “Yeah, it will be next month. I was planning to do the 4 mile Equathon.” Lola brightened saying, “Only 4 miles, I thought it was 25 or something. I can do that as a warm-up.” Nicole then thought, “I hope my horse and I can get fit enough because that’s not a warm-up for us!”

Nicole says, “I contacted Joanne Mitchell, the Ride & Tie/Equathon manager and signed up. Once we got there, O my goodness, those were the nicest group of people I have ever met. Everyone helped us out, showed us where to go. I would just say, ‘I’m new’ and everyone was like, ‘Here, I’ll show you.’”

Nicole found out that even a four miler can have some adventure. “The most exciting part was when I came to this patch in the woods and smelled something that my brain told me was bear! My cute little pony became a fire-breathing dragon and we got out of there!



(L-R) Lola and Nicole

But, there was a turn-around and we had to come back by that same spot! The smell was still there and then I heard a crash on the trail next to me. I was like, ‘O gosh, I’m going to talk really loud and trot away from here.’ I got back to the start and everyone is like, ‘Did you see the two bear cubs hanging out by the trail?’ I thought, ‘So that IS what that was. I’m so glad my horse didn’t dump me!’ I was at the vet check getting the pulse taken and couldn’t talk to Lola. As soon as we hit our pulse everyone was yelling, ‘Go Lola!’ She starts without knowing there are bears on the trail! Lola comes back and finishes the race and everyone is talking about the bears. She said, ‘You guys, if anyone had told me, I would have turned around and we would not have finished that thing. I am not about that!’”



(L-R) Race manager Joanne Mitchell and Nicole

Nicole says that she is already planning to do another Equathon. “I’m not interested in doing the running portion, but I caught the itch for sure.” To that, all of us who have also gotten a taste of that gateway drug say, “Good luck with that!”

To hear Nicole interviewed about her experience, go the September 12, 2022 episode of the *Horses in the Morning* Podcast



The Ride & Tie Association announces our 2023 Jim Steere Memorial Veterinary Student Scholarship. Dr. Steere was the first Ride & Tie head veterinarian. To learn a little more about him, consult the article on page 3 of this issue. We are proud to offer this scholarship in his memory.

All currently enrolled veterinary students (including international students) are invited to apply by writing an essay appropriate to Ride & Tie. A total of \$3000 in scholarships will be awarded. The award may be given to a single essay or split among more than one at the discretion of the scholarship committee.

To learn more about Ride & Tie go to www.rideandtie.org.

Scholarship Essay Requirements

- The essay is limited to 1000 words and must be accompanied by a list of references used in the essay.
- The topic is at the discretion of the veterinary student. Examples of winning past essays can be found in this issue, requested from Dr. Melinda Newton at m.newtondvm@gmail.com, or at www.rideandtie.org/education/vet-scholarship
- A cover letter must be submitted in conjunction with the essay that includes the student's name, email, contact information, school, and year of graduation.
- Submissions and questions regarding the scholarship can be directed to Dr. Melinda Newton at m.newtondvm@gmail.com.
- All essays must be received by Dr. Newton by 1/15/2023.



The happy face of a 3,000 miler
Photo : Becky Pearman

On September 2 at the Broxton Bridge Moonlight Madness race, board member Carrie Baris joined an elite club: the over 3,000 Ride & Tie Miles club. To celebrate her milestone, she added 25 more miles to her total the next night riding her "miracle pony" Comet (profiled on pp 5-6 of this issue).

Those in this elite club are:

5,000+ Miles:

Janice Heltibridle

4,000+ Miles:

Lani Newcombe

3,000+ Miles:

Carrie Baris, Kathy Broaddus,
Barbara Matthews. Ellen Rindle,
Dave Venable, Rhonda Venable



An anonymous donor will pay the entry fee for every Junior (16 or under as of January 1, 2023) who enters the long course championship race!

Vendors/Businesses: Take advantage of our 2023 Sponsorship Program

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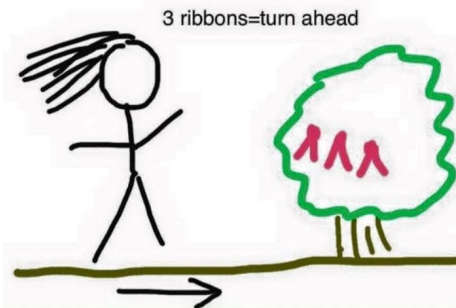
Contact Ride & Tie Treasurer Steve Anderson at steve.anderson1@juno.com

Illustrated Ride & Tie Primer

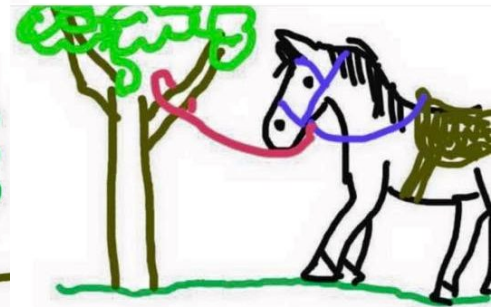
In 2016 Jennifer Monioz made this "Ride & Tie Primer" for her new partner Afsaneh Amini to help her embark on her first Ride & Tie.



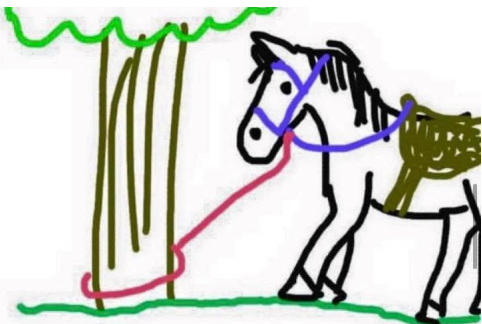
Look for ribbons that mark the course. They might be on a bush or higher up on a tree. Generally you'll see ribbons or other markings (signs, arrows, etc.) about every half mile or less. If you realize you haven't seen one in a while—go back to the last marker you saw to make sure you didn't miss a turn. We will be told the color of the ribbons at the ride meeting.



Three ribbons together tells you that a turn is coming up (usually immediately)



Good Tree to tie to—Rope is up out of the way but secure on a thick branch



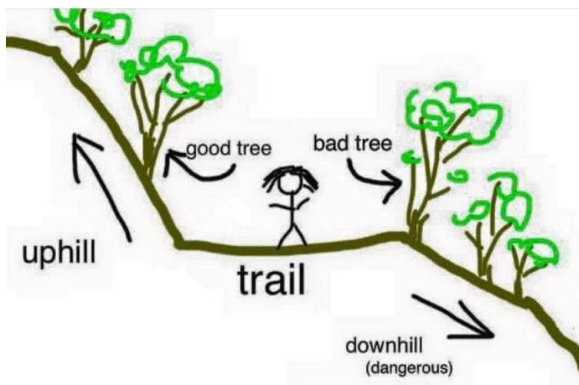
Bad Tree to tie to—Rope can slide down to the ground, horse can get leg caught in rope.



Do: Tie just off—trail so the horse doesn't get in anyone's way



Don't: Tie on or too close to the trail if possible. The horse might shift around and completely block the trail for others.



Tie the horse as level as you can for safety.



Afsaneh Amini, aka "Cactus" on board Jerry at her first Ride & Tie with Jennifer at Descanso in 2016. Her nickname is due to her falling off a horse onto a cactus during a practice ride and Jennifer having to pull needles out of her backside before she could get back on!

Thanks to Gunilla Pratt for the finish line photo.



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The “Back” cover



Mark Landers and KatieRuth Landers Tucker run past photographer Becky Pearman at Big South Fork. The rest of their family (Aleta Landers, Dan Tucker, and children, Silas and Finn Tucker) head back to the camper for breakfast and play after cheering their team on at the start!



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