

**Breaking Traditions:**  
**A Veterinary Medical and Ethical Perspective**  
**On the Modern Day Usage of Steel Horseshoes**

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**Becoming students of the hoof--where we have been and where we are going:**

Traingle shaped feet ... Healthy and functioning



Breeds are Friesian cross, Standardbred and Thoroughbred

As a veterinarian studying the equine hoof for the past few years, I have found that most veterinarians, farriers, and trainers do not know what a normal horse's foot looks like, nor do these professionals have a full understanding of how a normal horse's hoof functions. From pictures in veterinary references to diagrams in farrier texts, the equine foot is represented as a structure devoid of its most beautiful and functional characteristics. The prevalence of hoof deformities in the general horse population is so common that they are looked upon and thought to be "normal"--the picture of a narrow, upright hoof, complete with a steel shoe, has permeated our modern culture so deeply that it will take decades and generations to replace it with an image of a full, round, unrestricted hoof. Listening to and depending on veterinarians, farriers, and trainers to tell you what is right and healthy for your horses shows you respect these professionals, but because most of them are not experts regarding horse's hooves, it is critical that you are at least able to recognize what a normal hoof looks like and know a deformed one when you see it. Only after you educate yourself in these matters can you have an intelligent conversation with professionals and make an informed decision regarding their recommendations.

Box shaped feet...NOT healthy or functioning fully



Breeds are Andalusian, Arabian and Warmblood

Numerous textbooks, a large number of essays, an increasing number of dissertations and an enormous quantity of clinical evidence supports the position that **when steel contacts a horse's foot, damage occurs**. As many of us all ready know, most farriers freely admit that the best possible scenario is to have a horse barefoot. Many experienced farriers encourage their clients to keep their horses barefoot for at least part of the year. Shoeing is spoken of as "a necessary evil". What we now know to be true is that shoeing is **never necessary** once one studies and becomes familiar with the amazing anatomy and physiology of the hoof. I *know* that to apply steel to a horse is extremely damaging, and what follows is a synopsis of just a few of the harmful effects of nailing steel on to hooves:

## We have been looking at our horses' deformed feet for long enough.

PAINFUL DEFORMED SHOERING SHOWCASES



MANY JOINT INJECTIONS, SURGERIES, BUTE ETC

Problems actually begin right when a farrier flattens the solar aspect of the hoof for the application of a shoe. The horse's foot evolved as a conical structure, within a set of domes and triangles in a strong *dynamic* architecture. Flattening the bottom of the equine hoof demonstrably destroys its ability to efficiently perform all of its functions, and the subsequent nailing of a rigid steel ring around its lower edges ensures a steady progression towards *dis-ease* in the entire horse. Continued shoeing leads to hoof deformation, disease, lameness, premature loss of use, painful debilitation and eventually early death in well over half of all domesticated horses in the industrial world today.

Nails driven through the hoof walls allow all manner of bacteria, fungus and filth to enter the foot. The nails and steel shoe allow concussive forces, vibrations and sudden, extreme changes of temperature to enter the hoof. Multiple holes in the walls of the hoof over successive applications lead to direct structural breakdown by causing cracks, breaks, and by physically leveraging the hoof wall away from deeper hoof structures.

CLICK TO ENLARGE



The horse's hoof is designed to handle most of the shock absorption required for traveling over any terrain; this is accomplished only if the hoof capsule is allowed to expand upon contact with the earth, passing concussive forces to the cartilages which surround the more sensitive soft tissues inside the foot. When steel is fixed to the hoof capsule, the hoof can not adequately expand and the built-in shock absorbing structures within the hoof can not do their job. Ground forces that once were directed backward and upward are now primarily directed upward, following a vector determined by the presence of the nails, leveraging the hoof wall away from the coffin bone. This is exactly like lifting on the end of your fingernail and tearing it off the nail bed at the tip of your finger. **Every horse that is shod will have some amount of laminar separation--it is a physiologic certainty.** Whether grossly visible or microscopically, every shod foot has separation. This situation sets a horse up for chronic laminitis or an acute founder should the horse overeat or become sick.

The sole is held in a vaulted position in a shod hoof and no longer allowed to flatten slightly with each footfall. It is now forced to receive a beating from the coffin bone above. All of the joints, cartilages and ligaments higher in the horse's leg, extending further up and in to the back and entire body, must now take up the task of dissipating concussive forces, a job these structures never evolved, nor are designed, to handle. The result is extra wear and tear which produces measurable damage to these areas. Back soreness and leg lameness are directly due to damage from concussive forces because the natural shock absorbing function of the hooves has been compromised by the application of steel shoes.

Maladies from shoeing include back , tendon,



ligament stress, immune system suppression...etc

### **So, let's reduce concussion to keep our horses from this damage?**

Pads fitted to the hoof between sole and steel shoe do not appreciably increase the shock-absorbing function of the hoof, as the hoof is still being clamped together, disallowing hoof mechanism. In actuality, the damage continues to occur, and even a slight increase of pressure on the soles of the hoof through pad material forces the sole up against the immobilized, unyielding solar corium within the hoof, causing bruising and reducing blood flow in these areas. The sole often responds with a "dysplastic" kind of growth. This is an abnormal growth pattern that is thicker but not as strong or durable as normal sole that forms when a horse is allowed natural hoof form in a more natural environment. Farriers often misinterpret this abnormal growth as "healing" and a good thickening of sole, when in fact it signals the early stages of hoof deterioration.

### **We get used to seeing abnormalities, not wanting to believe there is damage.**

This faulty growth does not impress or alarm most farriers because they are accustomed to seeing abnormal and deformed shod hooves and improperly trimmed bare hooves. They work with them every day, and though there are many farriers, veterinarians and other professionals that are aware of the differences, many more are *unaware* of what these changes signify. Thus, when a farrier claims that "none of my clients' shod horses have any problems", they believe what they say. However, once educated in proper hoof form and function, they have been able to point out exactly where many of the deformities exist in a shod hoof.

The use of pads also increases the presence of moisture next to the horse's soles, providing a breeding ground for hoof-rotting bacteria and fungi that soften the soles into a cheesy consistency devoid of durability. Pads also prevent normal respiration and perspiration that occurs in bare frogs and soles, impairing the horse's ability to regulate his body temperature and excrete waste proteins through exfoliation.

PADS CRUSH HEELS, ENCOURAGE ROTTING OF FROG/BULBS



IMPROPER HOOF FORM IS ENHANCED BY PADS/SHOES NOT CURED

### **What amount of concussion is *just right*?**

There is an important and misunderstood role that concussion plays in providing life-giving stimulation to the foot. The natural hoof has concussion-absorbing properties appropriate for each horse on its home terrain...it's that simple. When we apply artificial materials and/or conditions to horse's hooves, such as steel shoes, pads, plastic "repairs", soft footing in riding arenas, and bedding in stalls, our interference reduces concussion to a level below what is appropriate, preventing the vital stimulation needed for the production of durable hoof tissues, healthy cartilage and ligaments and strong bones. Without concussive stimulation to the hoof, the horse's hooves and legs grow weaker and weaker. When owners attempt to "protect" their horse's hooves with artificial appliances and inappropriate conditions, **they are actually promoting weak and faulty growth and nurturing conditions for disease.**

## **"My horse just can't go barefoot..."**

Some believe their horse, or breeds of horses, are intolerant of being barefoot. These people have experiences with horses that got sore feet or feet that deteriorated when allowed to go barefoot. What is likely is that these horses' feet are weak, easily chipped, and always bruised and lame because of a history of being shod, improperly trimmed for a long time, or disallowed adequate movement on appropriate terrain from birth. **It isn't being barefoot that these horses are intolerant of--rather it is an intolerance to being shod, improperly trimmed and/or inappropriately managed.**

SHOES OFF AFTER CHRONIC FOUNDERING FOR YEARS



HEALED COMPLETELY WITH BAREFOOT AND NATURAL APPROACH

## **Shoes interfere with the hoof's natural blood-pumping mechanism.**

One of the greatest damages that occur because of the application of steel shoes is the greatly reduced circulation within the hoof, and the diminished return of blood to the heart through the veins of the lower leg. The natural hoof expands and contracts with each step, letting blood in as it spreads upon impact with the ground, and squeezing blood up and out of the hoof as it contracts when it is not bearing weight. Natural hooves perform a critical function as supplementary "hearts". This function is greatly restricted by immobilizing the hoof with steel shoes.

The reduced circulation in the foot and leg of the horse harms the horse's entire body. The damage adds up over time, taxing the body with its attempts to heal, and gradually stressing it beyond its capacity to mend. Not just the feet are taxed, but all the organs and all metabolic processes. Damaged cells and tissues are able to heal only so many times, divide so many times, and put up with insults so many times. Animals die when cells and the organs they make up are no longer able to divide and repair damage. Debilitating pain and premature death of horses is the result when we fail to trim hooves properly and/or nail on shoes.

Horses' feet have great strength and durability and perform optimally when proper, bare hoof form exists and when they are kept in the most natural lifestyle possible.

SOUND PERFORMANCE BAREFOOT HORSES



NEVER SHOD, NEVER STALLED, NEVER LAME

## **Seeking out the information and getting help...**

Straight forward instructions on proper hoof trimming techniques are available in numerous published books, on the internet and in programs for training owners, and re-training farriers. But even with the support and guidance of all available sources, turning around everyone's attitudes toward shoeing, and changing how we provide good

stewardship for our horses (lifestyles and diets), is going to be a real challenge and take some concerted effort by all of us. My original mentor, Martha Olivo, has evolved an easily understandable format with which to approach the horse's hoof and trim it successfully. She has developed United Horsemanship, a worldwide organization that lends itself as the solidarity vehicle for the barefoot movement. There are more and more opportunities becoming available for farriers, veterinarians and horse owners to learn the techniques of natural hoof trimming and the natural lifestyle so vital for its success.

When other veterinarians, equine professionals, and stewards discover the true workings of the horses' hooves they will cease to perpetrate such harm, and will not stand idly by while others do so. When they better understand how the horses' feet are constructed, function, grow, offer protection and allow proper and vital sensation for the horse to interact with their environment, these good people will have gained a very powerful new tool. They will no longer ignorantly resort to or demand the use of a nailed on appliance or a confined lifestyle for horses. They will stop unknowingly causing pain and premature deaths for the horses they care about.

I understand this now, and I can no longer keep it to myself, for I took **The Veterinarian's Oath** nine years ago "to use my scientific knowledge and skills for the benefit of society through the protection of animal health, the relief of animal suffering, the conservation of livestock resources, the promotion of public health, and the advancement of medical knowledge" to "practice my profession conscientiously, with dignity, and in keeping with the principles of veterinary medical ethics" and to "accept as a lifelong obligation the continual improvement of my professional knowledge and competence."

OWNER MADE PROGRESS ALONE BY TAKING OFF SHOES



NOTE EXPANSION OF HEELS AND SHAPE OF BULBS (Trimming alone)

### **A word about integrity and strength of conviction:**

I will never ask you to consider shoeing your horse. I have conviction in my belief about this and it is unwavering. I do not sit on the fence or beat around the bush on this issue. Steel shoes cause harm to horses, and I simply can't abide that. Some folks can advocate both shoeing and going barefoot, but I cannot.

### **Some additional thoughts and feelings:**

I'm keenly aware of how I seem to be an "it's my way or no way" sort of guy, but that's not true. I do disdain shoeing horses, and that is a practice near and dear to a lot of people. I call into question the things they've spent their entire lives working on. Naturally, they're likely to have an initial, negative reaction, but often, when I get the opportunity to go beyond the initial reaction and enter into an in-depth exchange with these same men and women, I encourage them, sometimes rather forcefully, to examine their beliefs and their practices. It can be a painful process. I've had friends and other people who have put shoes on horses for decades who break down and sob when the truth of what they have been doing hits them. This is real and it is powerful. I know: I was on the receiving end of the same process not too long ago. I am extremely grateful to have come in to this knowledge of the horse's hoof.

Gradually more farriers are realizing that we have better options. Some already encourage people to let their horses go barefoot "as much as possible", but they and the owners are still not fully convinced or educated and they go along with the conventional wisdom that horses need shoes nailed to their feet for "protection" or "support" when they are participating in activities like jumping and dressage, competitive trail rides, and other demanding sports or use. But every minute that steel contacts a horse's foot, damage is being done. In fact, ***the more extreme of a sport you participate in, the more important it is for your horse to have natural, hard-working, properly-functioning feet.***



A HORSE FOR ALL SEASONS AND PERFORMANCE UNSURPASSED

### **Reaching our destinations with our horses...our partners...**

So in spite of the resistance meet, I am dedicated to help with the "wake up call". I feel that farriers and veterinarians and trainers and horse people everywhere must learn the truth and tell their clients, friends, and colleagues that shoeing horses damages them and robs them of years of their lives. I want everyone to know that steel on a horse's hoof is not acceptable. It is the horses that especially want and need this knowledge to become mainstream.

Farriers are important professionals in the equine world and horses and stewards count on them. They need to learn what is going on inside the horse's foot and learn how to trim a foot to achieve a healthy hoof form. They need to help educate horse owners who rely on them for guidance. They need to know about and talk-up the judicious use of hoof boots so owners know they have a way to provide real hoof protection without damaging their horses' feet, on more natural means of horse care and management – getting horses out of stalls, feeding them fewer rich foods and more grass in their diet, and letting horses be together in herds where they naturally belong.

Farriers, if you let people know that you are dedicated to the welfare of the horse, the monetary rewards will still be there, and with less strenuous work, and if you become knowledgeable and practiced enough, you *will* be able to save the lives of many laminitic horses others ailing from hoof problems that would not be able to heal if they were treated only with conventional methods, such as so-called "therapeutic" shoeing. Money aside, the personal rewards are terrific.

"Barefoot-friendly" veterinarians are rare and very badly needed. In a huge percentage of equine veterinary schools and clinics the world over, the highly effective therapy of natural lifestyle and the natural barefoot trim are not even mentioned as treatment options for lame and foundered horses. This is unacceptable.

As time goes by, veterinarians and other equine professionals will be unable to ignore the mountain of clinical and scientific data related to the harm done by the use of the horse shoe, and the astounding benefits of natural lifestyle and natural hoof form.

### **A professional plea.**

As recently as 2001, I was prescribing egg-bar shoes, pads, impression material and other bizarre procedures--I can't do that anymore. I deeply regret that many horses died at my hands because I didn't know what to do to save them. Now when I see horses with similar conditions, I can treat them without prescribing shoes, indeed often without anything more complicated than proper trimming of their hooves, movement, and diet. Most of these horses are better in a short time. Better yet, by keeping clients' horses out of shoes all together as they mature, the typical, super-prevalent hoof problems will largely be a thing of the past. I encourage all veterinarians to become students of the hoof and experience the huge degree of personal satisfaction that is attained by saving that "hopeless" case, and see the relief in the eyes of owners when they realize they'll never have to shoe their horses again--the gratitude and admiration I continue to receive from these folks begins a journey from ownership to stewardship.

I implore all veterinarians to learn about the much better ways we have of truly protecting horses' feet with alternatives to steel shoes--the natural trim based upon the rediscovered and continually-improving understanding of the workings of the equine foot, and a myriad of different hoof boot designs with more coming all the time. Boots allow a horse's feet to have vital mechanism with every step, and can completely protect the feet. It's really hard for me to even fathom using a steel shoe at all because these devices are simply not offering anything beneficial to a horse...only harm. We can't continue to apply them and feel good about it.

This is a plea to equine professionals everywhere. People around the world will need your help in implementing what they want for their horses. It is up to you to look at the available data, evaluate it critically, relate it to the anatomy and physiology of the horse and apply it to the horses in your care. By doing so you will become an integral part of improving the health and welfare of horses everywhere.

### **The power of truth.**

"All truth passes through three stages. First, it is ridiculed. Second, it is violently opposed. Third, it is accepted as being self-evident." ~ *Arthur Schopenhauer*

I encourage those who have acquired this truth. Speak with conviction, but maintain an open ear to the concerns of others. Listen as they express their insecurities and ignorance concerning the use of steel shoes; remember, that is all they have ever known. Be honest about the time and effort it will take to undo the harm shoes have caused. Learning how to enlighten and influence those that have a difficult time seeing and/or admitting what it is best for the horse is our goal.

I am continuing to learn every day as I listen to people and their concerns. I'm learning what is best to say and how best to say it. Sometimes, I don't know the whole answer, and it's actually helpful when that happens, because it forces me to learn more, dig deeper, and consult with others who know more than I do. It has never caused an erosion of the base of truth concerning the horse's hoof; rather, it allows me to further strengthen that base for my convictions.

For more information, refer to [www.unitedhorsemanship.org](http://www.unitedhorsemanship.org), [www.equinextion.com](http://www.equinextion.com) or run an internet search for "barefoot horse", or email me directly, at [tomasteskey@yahoo.com](mailto:tomasteskey@yahoo.com)