

The Horse's Hoof™



The Horse's Hoof 20 Year Anniversary Issue!

Featuring retrospective articles from:

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Thorsten Kaiser
Dave Fitton
Gwenyth Santagate
Carola Adolf
Dr. Robert Cook
James Welz
and so much more!

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*Evelyn Santer and
her Haflinger, Wöln*

In the Beginning

by Steve Hebrock

Well, maybe it wasn't *the* beginning, exactly. But it was certainly *my* beginning into so-called "natural" hoof care. Unlike many horse owners, I hadn't grown up with horses; rather, I discovered my love for these amazing animals as a thirty-something adult. Up until then, my primary focus in life had been my career as an engineer, designing various electronic and electroacoustic products and one-of-a-kind solutions to specific test & measurement problems for large and small companies across the country.

And so in 1993, after purchasing my first horse and reading the breed registry's dire warnings about how easily the wrong kind of hoof care could screw up my Peruvian Paso gelding's feet, I made the decision to care for his hooves myself. After all, I was quite adept at working with hand tools and very used to having to learn new engineering skills to do my work, so I was confident I could learn to trim horse hooves. I contacted Tom Wolfe, the now-former head of the Montana State Horseshoeing School, whom I'd befriended several years earlier while on vacation at the Lazy K Bar Ranch near Big Timber, Montana, and asked him if he thought I could learn how to trim. His answer: "It's not rocket science, and you *are* an engineer!" So Tom proved to be a great help with me getting started, lending me how-to videos, recommending books on trimming, and helping me with tool selection and sources.

In those early days of learning to trim, I had no particular opinion about horseshoes – I figured some horses probably needed them and some didn't. I hung around every vet and farrier appointment I could, watching, listening, and asking questions, read what I could find on hoof care and shoeing philosophy, and talked to countless owners about their horse's feet and foot problems. It began to dawn on me that a very large percentage of the common beliefs about what could and couldn't be accomplished via trimming and shoeing not only conflicted with what I'd learned in various physics, biology, and engineering classes in school, but ran completely contrary to basic common sense and logical thinking, as well.

And so, I more or less stumbled my way through teaching myself how to trim without the benefit of any sort of underlying philosophy or clear objectives. Sure, the farriers I occasionally had look at my handiwork would sometimes have something to offer, like, "Make certain the toe angles are the same as the pastern angles," or, "Front feet should always be trimmed to 54 degrees," or, "The hooves need to be trimmed to be matched pairs, or the horse won't move right." But try as I might to get them to answer what for me was the most important question of all – *Why?* – they would instead attempt to placate me with answers I either recognized as complete scientific nonsense, or simply say, "Because that's the way it's supposed to be." And the responses to questions put to veterinarians about why they were recommending a particular course of action for a hoof or foot problem weren't any more enlightening than the horseshoers – often, they were just stated with more authority and even less room for possible discussion.

Keep in mind that at the time, I was also suffering from some preconceived notions about farriers and veterinarians – namely, that they were all more or less properly-educated professionals in the areas of science necessary for the task at hand. According to noted equine anatomist, clinician, and author Dr. Deb Bennett, that list includes training in physical assessment, knowledge of the physiology of body tissues, a concept of what is normal in stance, able to relate the principles of physics or biomechanics to the work, and the ability to develop a long-term treatment plan. Little did I realize that only about 70% of full-time farriers have *any* formal training at all (their number, not mine), and of those that do, they only spend about 3 hours learning any of the things on Dr. Bennett's list. And examining the veterinary programs of even the leading vet schools shows the same deficits in their education, in spite of veterinarians' eagerness in offering hoof care advice.

Fast-forward to 2000, when, after nearly 7 years of searching for what I could refer to as the "unifying theory of hoof care," I discovered Jaime Jackson's book *The Natural Horse*. Unlike anything else I'd ever read or heard about, this book presented a completely logical approach to hoof care based on real, defensible data, not seemingly arbitrary numbers or rules. At last, here for the first time was someone who recognized hoof form as the consequence of conformation, environment, and movement, and *not* as a means of *creating* proper movement as most veterinarians and farriers continue to be taught and to preach.

Let me expound on that a bit, in case you missed it: If a horse is trimmed strictly in accordance with the principles of nature, changing hoof form *away* from that natural form can *never* improve movement – it can only make movement *worse*. This concept is what so many hoof care providers, veterinarians, and horse owners fail to understand; hoof care can never *cause* proper movement, but **proper hoof care will allow every horse to move its best by removing obstacles to proper movement.**

Years later, through many hours of consideration of hypotheses put forth by Dr. James Rooney coupled with some of Gene Ovnicek's observations, I came to understand the serendipity of Jaime's studies of feral mustangs in their aboriginal environment as a model for



Steve searched in vain for a "unifying theory of hoof care," and then discovered genuine natural hoof care, based on the principles of nature.

All photos courtesy Steve Hebrock

Today, the “barefoot” world looks very different from those early days. For one thing, people are generally much more open to the notion that horses can be successfully barefoot.

trimming. Because those mustangs already exhibited a hoof form suited to *every* environment, his trimming process was successful in addressing *all* of the factors that determine proper hoof function and their effects on hoof form. Had he based his trim on horses in non-aboriginal environments e.g. Assateague horses, he might have reached very different and incorrect conclusions about cause and effect.

And so I contacted Jaime to evaluate my work and offer advice on how to improve my trimming, which also involved him sending me to several clinics with Mike Lagrone, one of Jaime’s very early students. But after getting my trimming squarely on track thanks to Jaime and Mike – at least with respect to so-called “normal” hooves – I needed to step away from further formal trimming education to concentrate on finishing up my M.S. in Engineering, while also teaching a more-than-full-time course load in engineering technology and computer applications at The Ohio State University Agricultural Technical Institute. And I used what little spare time I had to strengthen my trimming skills by taking care of friends’ horses’ feet, as well.

After finishing up my Master’s degree in 2005, I decided I wanted to expand my hoof trimming practice, but recognized I was lacking in experience with the various hoof and hoof-related pathologies so commonplace in the horse world. And so I once again turned to Jaime for help by traveling to his home in Arkansas to get a good look at some pathological hooves. He convinced me to join his then-new organization called the American Association of Natural Hoof Care Practitioners (AANHCP), which gave me the opportunity to travel to various parts of the country in an effort to learn from some of the organization’s field instructors. I progressed rapidly through the program (after all, I’d been trimming horses longer than many of the people I studied with), and ended up becoming a field instructor, workshop leader, and one of a handful of people authorized to do final assessments for certification in Jaime’s organization. The university also added their Horse Management degree program class called “Farriering” to my list of classes, although I always taught the class from the perspective that horseshoes were, at absolute theoretical best, neutral, and in practice were far more likely to be harmful.

In those relatively early days of natural hoof care, a typical discussion while trimming was usually with a skeptical onlooker who’d argue that horses couldn’t be successfully barefoot. No matter what anecdotal or scientific evidence to the contrary I presented, they’d already made up their minds. And I had the same struggles with my Farriering class at the university; out of the 25 or so students in the class, only 2 or 3 thought maybe some horses could be barefoot. At the height of my frustration, I remember asking Jaime how I could convince some close friends of mine that their horse could be barefoot. His answer: “You can’t!”

In 2008, Dr. Bruce Nock, founder of Liberated Horsemanship and former board member of the AANHCP asked me to join the faculty of his newly-formed LH Barefoot Initiative to teach advanced topic workshops on trimming pathological hooves as part of his Gateway



All photos courtesy Steve Hebrock

Discussing hoof form in a United States hoof care workshop.

Clinics, along with other former AANHCP instructors. I jumped at the chance to work more closely with Bruce and with Ann Corso (former AANHCP Director of Training), both of whom I’d met several years earlier as part of my AANHCP training. Twelve years later, we’re still together, offering both domestic and international Gateway Clinics annually; thus far, we’ve taught science-based natural hoof care to dozens of people from over 20 countries, and have Certified Hoof Care Professionals in 29 states and 11 countries. And even though I’ve retired from the university, I still teach the hoof care part of the Horse Management program along with Liberated Horsemanship Field Instructor, Straightness Training Instructor, and wife, Dora Hebrock. Dora joined my already-thriving hoof care practice in Ohio after our marriage in 2016, where together we successfully care for horses of all types and disciplines, with and without hoof pathologies.

Today, the “barefoot” world looks very different from those early days. For one thing, people are generally much more open to the notion that horses can be successfully barefoot. For example, by the time I left the university in 2016, that 2 or 3 out of 25 students who thought maybe some horses could be barefoot had become 2 or 3 students who thought maybe some horses *couldn’t* be barefoot. And the skeptical onlookers have diminished in numbers as well. In my mind that’s progress, but with it have come some problems I never would’ve anticipated back in 2000. Allow me to elaborate...

Nowadays, there are a great many people billing themselves as “barefoot trimmers” or “natural trimmers.” Unfortunately, much of what they believe and practice is not, in reality, science-based and therefore consistent with the laws of nature, but is instead some “method” or “style” that revolves around mistaking a very limited set of experiences for actual science: someone trims a few horses a particular way, the horses seem to improve (at least in the short term), the “new method” is proclaimed a success, and yet another bunch of people are off and running promoting yet another “barefoot trim style.” Sorry, folks, but that’s not natural trimming. Let me point out a couple of things:



Lecturing at a Liberated Horsemanship Gateway Clinic in Spain.

- 1) The sensitivity of a given horse to a particular trimming method follows the same normal distribution i.e. “Bell” curve that every other natural phenomenon follows. That is to say, for a given trimming style, some number of horses will be comfortable, some will be slightly “off,” and some number will be very lame. The further away from correct trimming i.e. from following the tenets of nature and the laws of physics a “method” is, the fewer the number of sound horses. And keep in mind that many of the ill effects of incorrect trimming will not be immediately evident; for example, insufficient trimming of the bars will probably not cause lameness right away, but will eventually cause distortions of the hoof capsule and soft tissues, and subsequent foot pain.
- 2) “Better” and “optimal” are definitely not the same thing. Nearly every horse will show some degree of improvement with a less-incorrect trim than their previous one, which can make it very difficult for hoof care providers and horse owners alike to understand and appreciate the difference between “the horse is moving better” and “the horse is moving at his best.” As I like to point out, no one would argue that it’s impossible to run a foot race wearing cowboy boots, but neither would anyone argue that it can be better run wearing sneakers. Likewise, there are certain criteria that must be met when trimming to ensure *optimal* movement.

I’ve also noticed that many of these self-appointed “trimming gurus” tend to have several things in common:

- 1) They often have no formal education in hoof care or in any of the requirements listed by Dr. Deb Bennett as being necessary for successful hoof care. When questioned about their lack of qualifications and whatever science is alleged to be the foundation for their trimming “style,” they become defensive and default to the W. C. Fields approach (“If you can’t dazzle them with brilliance, baffle them with bullshit.”).
- 2) They’re in a hurry to get the hoof into what they perceive as the “right” form. It’s not at all uncommon for it to take a year or two for a foot to attain a stable, “proper” form, and trying to rush the process – either through trimming and/or through dietary supplementation – will usually lead to problems. As I pointed out early on, hoof form is the result, not the cause, so if you always trim for proper function, proper form will eventually follow. The good

news is that in spite of a less-than-ideal form at the onset of the correct trimming process, most horses will be sound – or at least, more sound – relatively quickly (within a trim or two).

- 3) They don’t adhere to the principles of natural trimming, yet often promote themselves as “natural trimmers.” Simply removing shoes, doing a bit of rasping on the wall, and/or applying a “mustang roll” does *not* constitute natural hoof care; likewise, drawing lines on the hoof or using templates or numbers to determine how/where to trim is the antithesis of natural hoof care. And finally, selectively trimming only parts of the foot in the mistaken belief that certain features should never be trimmed is completely contrary to the laws of nature and, therefore, to the principles of natural hoof care.

Performing *true* natural hoof care – science-based hoof care – requires an intimate understanding of *why* a particular hoof looks and functions as it does at a particular point in time, coupled with the ability to trim in a manner consistent with the lessons of nature – in short, the capacity to understand and apply *all* of the requirements on Dr. Bennett’s list to every horse you encounter. The successful hoof care provider must recognize and understand that the foot of the feral horse in its aboriginal environment has several distinctive characteristics:

- The foot is short
- The foot is uniformly worn
- The various parts of the foot make ground contact in a very specific order
- The foot lands with minimal acceleration of the coffin joint i.e. a “flat” landing

Please note that I’ve deliberately not elaborated on any of these here. Why? Because it’s my firm belief that proper trimming cannot be favorably taught remotely e.g. via book, DVD, internet, etc. – it must be taught “hands-on,” and must be built upon a foundation of theory emphasizing the “why” of hoof care. The “how” part – handling the horse and using the various tools – is relatively easy; it’s an understanding of the “why” that’s much more difficult to source and learn, and I think it can only be successfully taught under the direct guidance of a well-educated, skilled practitioner who also has experience as an educator (knowing something and teaching that knowledge to someone else are very different skills). For those reasons, I’ve steadfastly refused to produce any sort of trimming “how-to.” But I *will* mention just a few things I believe will be helpful:

- Don’t simply accept anyone’s word for it (including mine) that what they have to offer is truly well-reasoned, logical, and correct. Challenge their education, their credentials, and their perspective on trimming. If it doesn’t make sense in your head and in your gut, beware!
- The two greatest technical errors I see when observing others’ trimming are:
 - 1) Not all foot material that needs to be removed is removed. Understand that nature doesn’t discriminate when wearing the foot; it doesn’t say, “Those are bars, so I’m not going to wear them,” or “I’m going to wear the sole, but I’m not supposed to wear the frog,” or (worse) “I’ll wear away all of the wall’s bearing surface, but leave the sole untouched.” When you understand the proper order



Giving hoof care advice to horse owners in Slovakia.

of ground contact, and grasp that friction affects the *entire* bottom of the foot to some extent, you'll be on the path to knowing what and how much to trim.

2) The foot isn't trimmed to land flat on a flat, unyielding surface. As Dr. Rooney pointed out, the horse's coffin joint is, by design, not intended to undergo any rotation at the instant of ground contact. Any rotation it *does* experience directly contributes to long-term damage of the coffin joint and the deep flexor tendon/navicular bone interface, i.e. navicular disease. Make absolutely certain the hoof is properly balanced, so there's negligible foot rotation at landing.

- The very real effects of diet, environment, and various stressors on hoof health, function, and form are not recognized, are trivialized, or are altogether ignored. The best trim job in the world cannot make up for too many calories in the diet, being stuck in a urine-laden stall, or not having a stable social group. Since the hoof care provider sees any given horse only a very small percentage of the horse's time, it's imperative that he or she understands the significance of these factors and properly educates the horse owner.

And so, given all of the incorrect trimming "philosophies" and inadequately-trained hoof care providers that now exist, today's discussion with an onlooker, a university student, or a Liberated Horsemanship attendee is often far more complicated, because it's more likely to be centered on explaining why a particular barefoot "style" is inconsistent with science-based hoof care and therefore ultimately problematic. And because the physical differences can be fairly subtle and the questioner has been lulled into a false sense of confidence in a "method" without scientific basis (some of which, by the way, come from actual scientists), today's conversation can be every bit as challenging – and sometimes as unsuccessful – as the one 20 years ago with the ardent horseshoe enthusiast.

A year or so ago, I remember reading the post of someone in a Facebook "barefoot" group (which, for the record, I generally avoid reading!) asking for advice on where she could learn how to trim hooves. She emphasized how important it was for her to learn from someone, or from something created by someone, with considerable education, expertise, and experience in proper hoof care. And she

closed by saying it had to be free, or at most, very inexpensive.

This, quite frankly, is a classic example of what's wrong with "barefoot" hoof care today. This person expects access to someone's education, expertise, and experience so she can learn how to properly care for horse feet – things that cost some of us, and continue to cost some of us, very dearly. Yet, she effectively places zero value on them, so she's much more likely to go out and buy a DVD, or attend a \$400 weekend workshop, offered by someone who has *not* invested heavily in learning the science of proper hoof care. And she may end up with some of the "how to" skills, but is highly unlikely to gain the absolutely crucial "why to" knowledge. She'll then trim a few horses, who will be somewhat better off than they were with their traditional farrier-applied "pasture trim," and tout her successes as a "barefoot," or even "natural," trimmer. By that time she'll be yet another "expert," perhaps marking up photos online for people to trim their own horses, or offering clinics featuring her own "style."

Education and training cost money. *Quality* education and *quality* training cost more money. Very few of us who've spent a great deal of time and money on our education and training can afford to be completely altruistic when it comes to giving away our hard-earned knowledge, and it's unreasonable to expect otherwise. Please keep that in mind as you consider hoof care and its practitioners: Do you want, or want for your horse, someone with a mediocre education? Seriously – would you settle for a physician who learned his or her profession from a mail-order correspondence course?

To wind up, I'd like to leave you with this thought: Proper trimming is all about allowing proper hoof form to emerge by removing obstacles to movement, i.e. maximizing hoof function. As board-certified veterinary surgeon and certified hoof care provider Dr. Neal Valk once told me, "Vets don't heal anything. We set up the conditions to allow the horse to heal itself." In the same way, correct hoof care is not about creating good feet; correct hoof care is about allowing the horse to (re) create his own healthy, well-functioning feet through an intimate understanding of, and strict adherence to, the unvarying principles of hoof care demonstrated to us by nature. Please don't settle for less in your choice of hoof care. 🐾

About the author: Retired professor and award-winning product designer, musician, and recording engineer Steve Hebrock taught, among a number of other technical subjects, hoof care at The Ohio State University ATI for many years. He now concentrates his efforts on his and his wife's hoof care practice,



on developing technical products for horse and hoof care, and on writing for *Enlightened Equine*, his blog dedicated to applying science to horse management. An AANHCP-Certified Hoof Care Provider and Liberated Horsemanship Master Hoof Care Professional and instructor, he is a frequent speaker at the *Equine Affaire* and other horse events, and most recently presented at the American Veterinary Chiropractic Association's national conference. www.enlightenedequine.com