



BEYOND THE HORSESHOE

Trainer Shannon Peters explores the benefits of going barefoot with high-performance horses.

By Kelly Sanchez

Shannon Peters isn't one to sit around waiting for something to happen. So when Ravel, her husband Steffen's celebrated two-time Olympic mount, turned up with a quarter crack two and a half months before the London Games, she knew there was no time to waste. After extensive consultation with Ravel's team and weighing all the options, the decision was made to try working him without shoes.

Pulling the shoes of a horse headed to a major international event isn't typically part of anyone's training strategy, but Shannon believed it could be successful. Just a few months earlier she'd begun working with barefoot trimmer Sossity Gargiulo, who had undertaken a dramatic transformation of Shannon's own Grand Prix horse, Flor de Selva. The Westfalen gelding had suffered from soundness problems for two years.

Steffen was more skeptical. He wondered how he would keep Ravel in the condition needed to compete against the world's top equine athletes in London. "I had no personal experience with this," he says, "but seeing that Shannon had success gave me the confidence to try it."

Fortunately, a new generation of hoof boots enables newly barefoot horses to maintain their training routines, says Gargiulo. "The shoes can come off and the horse can be ridden the same day." For Ravel, that meant a pair of Easyboot Gloves for his front feet (he remained shod behind) that were put on prior to training sessions and removed afterward. The gloves have a tough rubber tread and a neoprene gaiter that fastens around the pastern, protecting the hoof while allowing it to expand and contract and adjust to the ground below. Using heat, Gargiulo and

OPPOSITE: Shannon Peters keeps Disco Inferno, her young Dutch Warmblood, barefoot. Peters is a U.S. Dressage Federation bronze, silver and gold medalist and a three-time competitor at the U.S. national dressage championships. She and her husband, Olympian Steffen Peters, operate a 65-horse training business near San Diego, California, that caters to competition horses and riders.



Courtesy, Akiko Yamazaki

Barefoot trimmers Sossity (right) and Mario Gargiulo with Ravel.

her husband, Mario, are able to fit the boots to each horse's hoof.

A Surprising Last Resort

At Arroyo Del Mar, Shannon and Steffen's training barn in San Diego, Shannon has now taken 15 horses barefoot, from Training Level to Grand Prix. "The legs tighten up, they're freer in their shoulders, they're better in their move-



Photos courtesy of Shannon Peters and Sossity Gargiulo

This series of photos shows the transformation of Shannon Peter's horse Flor de Selva (Squishy) 1. beginning November 2011 through 2. April 2012, 3. May 2012 and finally 4. July 2012. Photos 5 (before) and 6 (after) show the progress of Squishy's heel area during that time.

ments and they're straighter," she says.

Leading a natural hoof-care revolution wasn't on her radar; it was more of a last resort. She'd tried everything for

Flor de Selva, with whom she competed at the 2009 U.S. Equestrian Federation (USEF) National Intermediaire Championships. Squishy, as he's affection-

ately known, was never obviously lame. "He had thin walls, thin, flat soles and chronic thrush," says Shannon. "Nothing was diagnosable on X-rays or MRI, but he was flatter and a little against the bridle and just not comfortable."

She consulted her veterinarian, Dr. Mark Silverman, who specializes in the equine foot, and Ernest Woodward, a high-performance dressage farrier (together they run the Southern California Equine Podiatry Center). "Ernest can make any shoe known to man or horse," says Shannon, "but we could not find a shoe, a pad or anything else that Squishy was comfortable in. And every single time we pulled off the shoes, he'd be 100-percent perfect."

Woodward adds, "It's not even that Squishy has terrible feet. He just reacts terribly to shoes and the pressure." So he and Dr. Silverman were astonished when Shannon announced last spring that Squishy was sound.

Shannon's search for someone who could help transition Squishy out of shoes led her to Gargiulo in Ventura, California, a founding member of the Pacific Hoof Care Practitioners and a board member of the American Hoof Association. Gargiulo began with regular barefoot trims and hoof boots. She was encouraged by new growth at the top of the hoof as well as increased mass in the heel bulb area. "Four months in, it appeared thicker and more robust," she says, "and you could feel the difference in firmness to the digital cushion area." The horse moved more freely as well, and he was consistently landing correctly heel first. He has since transitioned out of hoof boots and is back in training with Shannon.

The Barefoot Debate

No matter what the discipline, there's little in the horse world that generates more heated debate than taking a horse barefoot. "A lot of farriers believe this is just junk science," admits Gargiulo.

It's a perspective that Pete Ramey knows well. The Georgia-based author of *Care and Rehabilitation of the Equine Foot* and creator of a DVD series began as a farrier and is now a leading natural hoof-care practitioner in the United States, specializing in laminitis and caudal foot pain. "There was a time when I thought all riding horses should be shod. There was also a time when I thought all horses should be bare. As with most arguments, the truth lies somewhere in between. Generally speaking, metal shoes are very good at masking problems and can be somewhat effective for healing some problems. In contrast, barefoot trimming is not so good at masking problems, but vastly superior for healing them."

Ramey believes horse owners should ignore extremists on both sides and consider what's needed for the individual horse. "This starts with education and always asking 'why?' If a horse needs shoes because he has long, flared toes and thin soles or is weak in the back of the foot, there are specific reasons for it. Occasionally, it's because the feet are 'genetic garbage,' but most of the time it's because of diet, environment and back-to-back shoeing without barefoot periods. Most of the time it can be fixed."

Ramey would like to see more attention paid to the early development of young horses. "Foals need space and incentive to move—constantly," he says. "It's critical for their body, mind and hooves to develop to their true potential. Hoof trimming on young horses needs to be done early and frequently, and nutritional decisions need to be scientific and adapted to the individual. If the young horse gets the right start, most hoof and body problems we see in adults can be eliminated."

Woodward, who has done extensive video analysis of Grand Prix tests, says the farrier's primary job is to protect and support the limb as well as the foot while keeping the horse's feet working well. "Horses with stifle issues, for

example, tend to have a hard time doing the lateral and collected movements, such as the half pass and most upper-level canter work. That's where shoes can really help, because there's a lot we can do with the mechanics and geometry of the hind end." But with more barefoot horses in his practice, Woodward welcomes having another tool at his disposal. "I trim horses' feet and put things on them, and hoof boots are just one more thing I put on. I see where barefoot people get fanatical, but people on the other side of the fence get so closed-minded that they won't try anything new. They're both wrong. I don't think barefoot is for every horse, but I think everyone who has a horse should take a look at it."

Ramey urges horse owners to proceed thoughtfully. "Pulling the shoes off your horse is not an easy or infallible solution to every hoof problem, and if it's done without the necessary boots, pads and terrain considerations, it can be dangerous. The decision to try it on an individual horse is the polar opposite of turning out a horse with no hoof care."

Barefoot Benefits

The adage "no hoof, no horse" (from an 18th-century farriery book of the same name) underscores the importance of the foot to overall equine health. Whether it's protected by metal shoes—which were commonplace in Europe by about the sixth century—or trimmed to mimic the form found on wild horses, the hoof performs vital circulatory functions. Natural hoof-



Cealy Tetley

Steffen Peters says the barefoot program kept Ravel "moving with confidence," which allowed his training to stay on track for the 2012 London Olympic Games.

care practitioners say that back-to-back cycles with metal shoes limit the ability of the hoof capsule to expand during weight-bearing, which decreases blood flow, nerve function and natural shock absorption in the hoof, while increasing concussion to the leg and joints.

Debra Taylor, DVM, of Auburn University's College of Veterinary Medicine in Alabama, believes veterinarians and farriers underestimate the equine foot's ability to adapt and change in size, shape and structure. "We have a tendency with valuable horses to bubble-wrap them to the point that their own tissues are never really challenged. We take a weak foot and continue to protect it rather than saying, 'Let's try to put a great foot under this horse.'"

Through their clinical work on laminitic horses, Pete Ramey and Dr. Taylor hypothesize that the hoof can undergo structural change and become more able

AKIKO YAMAZAKI TRIES BAREFOOT

When faced with the decision to pull Ravel's shoes, owner Akiko Yamazaki didn't need convincing. "I had no hesitation that Ravel should go barefoot to promote healthy and faster growth of his feet," she says. "He has a deformity in one of his hooves, which was probably caused by an injury



Sheryl Ross

Akiko Yamazaki rides Ravel during his retirement.

when he was young. When I bought him, he had a quarter crack and had a little metal plate that held the hoof together. It's something we've had to battle with from time to time."

Yamazaki now has other barefoot horses. "When Shannon told me she'd taken one of her horses barefoot, I thought it was interesting, but I didn't immediately follow suit." Then one of Yamazaki's own horses started tossing his head whenever she picked up the canter. She went through a process of elimination and with nothing left to try, she pulled his shoes. He stopped tossing his head the next day. "I was incredulous. Not only that, he also stopped grabbing the right rein." The problem, she believes, was that one hoof had started to deform. "It was starting to cave in, probably causing great pain."

Yamazaki has since pulled off the shoes of her Grand Prix mare De La Noche and shown her barefoot to their highest scores ever. The mare had some inconsistencies but nothing obvious. "It was one of those things you cannot quite explain to your vet," she says. "When I took the shoes off, these things went away. It made me realize that a horse doesn't have to be tossing its head or be head-bobbing lame to be in discomfort."

tends that when the rear of the foot improves, other benefits follow: greater sole depth and concavity and a decrease in broken and flared hoof walls.

Gargiulo, who's had particular success with founder and navicular cases, says that in her practice she consistently sees hoof walls thicken with less separation, along with improved breakover and wider frogs with a larger heel surface area.

in response to the stimulation created by a heel-first landing, something first explored by Robert Bowker, VMD. Much of what is believed to change in response to natural hoof care is found in the heel's soft tissues—the digital cushion and collateral cartilage. While she acknowledges that some experts ignore or minimize the significance of these structures in maintaining soundness, Dr. Taylor con-

Internally, the feet also realign. "The heel area is being brought back into the equation with the pressure and release of each stride, so the digital cushion has better development." [Breakover is the place on the bottom of the hoof that is on the ground at the moment the heel leaves the ground.]

Managing the Barefoot Horse

Shannon says she'd never have believed that barefoot was an option for a competition dressage horse until she saw it firsthand. "Everyone's on a 12-month schedule with these horse shows, and they're scared to death because they think they can't work them without shoes. But of our horses that are barefoot, none have gotten bruised and none have gone lame."

While some barefoot adherents insist that horses live and train on surfaces that will condition their feet, Shannon does what makes sense for her horses. They live in stalls with shavings, and they go in arenas with good footing. "They're living like normal competition horses, and it's absolutely doable." She makes sure they get a low-sugar, low-starch diet and regular exercise in addition to barefoot trims every five weeks. And they're exposed to varied terrain so their feet can adapt to the stimuli. "They're hand-walked on pea gravel, turned out on sand and they graze on grass." The horses that aren't yet comfortable fully barefoot are warmed up in hoof boots, which can be removed before they enter the show ring.

But going barefoot isn't just about removing a horse's shoes. A good hoof-care professional also reviews the horse's health, diet and exercise routine, as well as the owner's goals. "It's a holistic, rehabilitative approach," says Gargiulo. When she and her husband first see a horse, they assess the digital-cushion area, take "before" photos and watch the horse move. Only then do they pull the shoes. "We do a very con-

servative trim, fit them for boots and, ideally, come back in a couple of weeks to re-roll the hoof walls. At that point, the nail holes are reaching the ground and chipping.”

Unlike other approaches, the barefoot trim takes pressure off the hoof walls to allow the sole, frog and bars to bear more weight. Since most domestic horses don't wear down their hooves naturally, barefoot trimmers typically “roll” or bevel the hoof wall, which also helps resist chipping. Gargiulo favors a short breakover and believes it helps facilitate a heel-first landing. “Long toes draw the entire hoof capsule forward, which can contribute to underrun heels, flaring and contraction,” she explains. “Plus, the leverage they create can damage the wall connection and put excess strain on the tendons and ligaments.” She takes care that there's no thrush and that the heel height allows sufficient pressure to the frog so that it can engage and develop, but not too much that it's overstimulated.

Garrett Ford, the president of EasyCare Inc., maker of Easyboot Gloves, won the 100-Mile Western States Trail Ride (the famous Tevis Cup) in 2012 on a horse wearing hoof boots. He agrees that barefoot isn't for everyone. “I think that the people who are willing to invest the time end up with a horse that's going to last longer and recover quicker.” He believes he and other manufacturers are just scratching the surface, and he's now working on prototypes specific to dressage, including a design that could allow horses to compete in boots, something currently prohibited. “I think rules are going to change,” he says. “We've already seen changes in endurance and competitive trail. More and more people will want to compete using these products.”

Boots are not a crutch or transitional tool, but rather “the 21st-century horseshoe,” says Ramey. “They offer

better feel and flexibility, while offering more complete protection from injury. Different tread patterns can be employed as the footing changes; insoles can be changed for support and they can be removed at the end of the day to allow the foot to breathe, develop and callus.”

Looking Ahead

Dr. Taylor and her colleagues at Auburn are seeking funding for a study that will use MRI and Computed Tomography (CT) technology to identify and track changes within the hoof. “We know that you can increase bone density and change the shape of bone through physical therapy and exercise—we believe the foot can also do that,” she explains. She says she and other experts are still learning. “Maybe there's a way to change the foot *in* shoes.” But until a complete set of physical exam parameters is developed, the success that she's seen in her clinic is largely subjective. “I can feel the changes in the hoof, and I can see them, but I haven't come up with a way to objectively measure them.” She'd like tools that would enable someone to pick up a horse's hoof and determine its level of fitness to make decisions regarding work readiness. “Can't we find a way to assure that a hoof is ready, rather than just assuming it's adequate because the whole horse looks good?”

At the end of six weeks of training in the boots, Ravel's hoof was healed. “And he was working the whole time,” says Shannon. But before the horse left for London, Ford flew to San Diego from his home in Colorado to fit a custom glue-on shoe. He had no idea



Steffen Peters

Also going barefoot is Peters' student Emma Weinert on Velvet, her Intermediaire II mare.

that he was about to meet one of the top dressage horses in the world. “I'm pretty ignorant about dressage, and I didn't realize the magnitude of it, which is probably good,” he laughs. Just before the Games, Ravel was shod with aluminum shoes, which were pulled at the close of competition.

Now happily retired to owner Akiko Yamazaki's property in Northern California, Ravel enjoys regular turnouts and trail rides. Several days a week she works him in the arena, sometimes under Steffen's watchful eye.

Shannon Peters says she's glad to offer her horses a chance to optimize the feet they were born with. “Not every horse can go barefoot, but we've found a great system that works for us.” 📖

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natural hoof care, go to the websites pacifichoofcare.org and americanhoofassociation.org.

