**Stumbling: The Trip You Don’t Want to Take**

*If your horse frequently stumbles, you need to put on your detective hat because it doesn’t happen without reason.*

It’s probably happened to you: you and your horse have just finished a good workout and you’re headed back to the barn on a loose rein full of love for all mankind. Suddenly your horse catches a toe, and in a nanosecond you’re lying flat on your back looking at the sky or the quizzical expression on your horse’s face.

Was it a rare event, or is this happening more and more? When does that “bad step” become a problem?

How do we even define stumbling? Mason’s Farrier, published in 1889, states, “All horses stumble, but there is a very wide distinction between a light tip or touch, and a stumble that will bring a horse and sometimes his rider flat in the dirt.”

Whatever that distinction might be, we’re going to investigate those missteps, and we’ll call it “stumbling” if it happens to either such a degree or with enough frequency to set off alarms. The problem should not to be ignored; some of our best riders have suffered permanent disability and even death from a seemingly innocent bobble.

Have you read much about stumbling? There’s very little out there.

So we queried our team here at Horse Journal Online, asking them to weigh in on the subject. We especially wanted to know what, in their diverse and lengthy horse histories, they felt were the major causes of stumbling. We’ve included their responses; you might agree, or you may be surprised.

**FOOTING**

Let’s start with the easy one. There’s little debate rough-going is a contributing factor to stumbling. Even a change of footing from gravel to sand will take a few strides of adjustment. Any deep, rocky or irregular surface can trip up even the most agile horse if he’s had no previous experience with the.

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**A Tale of Two Horses**

One spring years ago, I started two young geldings, Maggot and Boo. If they had been human students, Maggot would have been sitting in the front row of class, raising his hand and trying to answer every question. Boo would have been in the principal’s office, probably on Ritalin.

In spite of their polar personalities, they were progressing at pretty much the same pace. One day I added ground poles to their longeing routine, with a single pole placed at 3–6–9 and 12 o’clock on a 60 meter circle. Maggot, Eagle Scout that he was, studied the poles, dropped his head, lifted his back – and then proceeded to hit or step on EVERY pole, some with his front feet, some his back, oftentimes three out of four feet. He got a little better with repetition, but not much. Even when I simplified the exercise by walking him slowly toward a single pole, there was a 50/50 chance he’d strike it with at least one hoof.

When it was his turn, Boo came out and was immediately mesmerized by my neighbor painting his mailbox. As far as I could tell, Boo took no notice of the poles or their placements. I started him in trot on the circle and he skipped through the whole exercise, never coming close to a pole and still fixated on the activity across the road. I tried to regain his attention by first doubling up the poles, then setting them at weird stride intervals, and finally putting all of them in a fan arrangement. It didn’t matter; totally inverted, he still danced cleanly through all my booby traps as if they weren’t there.

Maggot eventually learned to trot poles safely once he was under saddle, but it always required his full concentration. Boo, in the hands of a trainer, had careers in eventing and competitive trail; he remained a mountain goat in a horse suit to the end.
It’s All About Balance

Steve Krause, Contributing Farrier Editor and Cornell's in-residence head farrier, feels correcting hoof imbalances can eliminate stumbling in almost all cases where pain, neurological disease and rider error have been ruled out. In his experience, heavy-on-the-forehand con-formation exacerbates the low heel/long toe (LHLT) syndrome common in stumblers.

Once the LHLT hoof is properly balanced, Steve will decide on the need for corrective shoeing. He has had good success with either rolled or rockered shoes with good heel support and pads, if warranted.

Steve has worked on many horses with a history of stumbling that were sent to Cornell for neurological consultation; when he provides them with a balanced trim, the neurological signs and the stumbling disappear.

For a second opinion we contacted Mike Piro, John Strassburger’s farrier from Petaluma, Calif. A cutting-horse rider, Mike’s clientele is mostly dressage and event horses. He, too, feels LHLT syndrome, either from poor conformation or poor shoeing, is one of the major causes of stumbling. (He also has strong opinions about bad riding!)

Mike explains that a correctly balanced hoof will follow a naturally symmetrical arc with each stride. In contrast, LHLT hooves will demonstrate an arc with a sharp rise, and these horses tend to trip just prior to hoof impact. Conversely, horses trimmed or shod with short toes and high heels will show a very gradually-ascending arc and then set their hoof down abruptly; these horses will trip at the beginning of their stride.

Other causes of missteps which Mike has seen include:

“Pipe-panel” babies – horses raised in small dirt lots with no exposure to different footing;

Over-shod horses – carrying unnecessary weight on their hooves causing fatigue. He believes “1 ounce on the hoof = 3 pounds at the withers multiplied by thousands of strides.”

Neglect – trying to eek out an extra week or two between trims or shoeing; he’s adamant horses be kept on a schedule.

Mike’s approach to eliminating stumbling differs from Steve’s. He feels rolling the toes and attempting to speed up break over with rockered or set-back shoes “just makes it easier for the horse to be lazy.” He, like Steve, insists on a balanced trim and then feels it’s up to the rider to make the horse move correctly.
but because the neck is used to regain balance, horses with these faults are less likely to be able to recover from even a mild misstep.

Assuming an equal level of alertness, short-gaited horses are less likely to stumble than those with long, reachy strides. (Think how you alter your own walk when you encounter an icy patch.) Ground-covering “daisy cutters” are especially vulnerable. You’d expect warmbloods to be more susceptible due to their extravagant trots, but they normally show a marked period of suspension at that gait, which allows those feet to lift and swing through easily.

**TYPE A’S VS TYPE L’S**

We probably all associate hot, uber-alert horses with agility. They seem catlike in their movement and have an uncanny sense of the location of every part of their body, including their hooves. Contributing Writer Beth Hyman runs the Squirrelwood Equine Sanctuary, a rescue facility in New York. However, she has mileage in many disciplines from hunters to polo, feels there are just some horses with enhanced proprioception. “They are naturally handy and surefooted,” as well as being “engaged” with their environment, she said. (See sidebar: A Tale of Two Horses.)

How can we help our less-reactive horses develop more body awareness? Ground poles and cavaletti are the classical answers. Linda Tellington-Jones and her TTEAM method describe many exercises that she feels activate unused neural pathways, teaching the horse to listen to signals from previously ignored areas of his body. Several approaches involving the lower leg and hind end could be very relevant. You can give the techniques a try without becoming a disciple.

Don’t disparage the Type “L” – Lazies, though. From a survival aspect, the horse who spent his day conserving energy was not the one at the back of the pack when pursued by a predator over a long distance; the horse whose tank emptied first was lunch. (Contributing Writer Linda Layne claims to have owned a horse so lazy it

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**The Big Elephant**

With all this talk of stumbling, one of Horse Journal’s Veterinary Editors, Dr. Grant Miller, could not help but weigh in on lameness as a principle cause of stumbling.

Did you know that statistically, about 90% of lameness in horses comes from below the fetlocks in the front feet? Of course, a great number of horses will have what Dr. Miller calls “house of cards” lameness in which they have little aches and pains contributing to lameness from different locations. But - for the stumbling horse, lameness originating in the front feet should be at the top of the list of potential causes.

If the horse stumbles continuously, having the vet place a lidocaine nerve block in one or both of the front feet should yield an instant result (at least for a long enough period to convince you that the stumbling is due to foot pain). For those horses with more infrequent stumbling, having the vet prescribe anti-inflammatories for a week while the horse is ridden can help to determine if the stumbling is due to pain.

**All the Usual Suspects**

Since horse after horse has taught us that stumbling is a symptom of lameness, and that lameness comes from the front feet most of the time, the next logical step in the investigation involves determining what structure(s) within the feet are causing the pain. This subject could be a whole article in itself, so we will cut to the chase. Most commonly, horses that stumble due to front foot lameness have one or several of the following problems:

1. Navicular syndrome/ caudal heel pain
2. Ringbone
3. Thin soles/ sole bruising
4. Deep digital flexor tendon insertion tears
5. Torn collateral ligaments of the coffin joint
6. Coffin joint arthritis (independent of ring bone)

Simple radiographs can rule out some of these problems, while others may require magnetic resonance imaging or “MRI.” Of course, there are several other potential causes of lameness that can come from the front feet, but they are less prevalent relative to the list above.

**Bass Ackwards**

For those horses that stumble behind, especially when going down hills, make sure to check those hock joints since they are the most frequent cause of stumbling behind. Horses with arthritic hocks tend to not want to bend them, which causes them to drag or stub their toes, which leads to tripping in some instances.

As with the front feet, other potential causes exist, but the hocks should be at the top of the list when investigating hind end tripping. Flexion tests +/- radiographs by the vet are in order to help determine if pain is emanating from the hocks.
would even stumble and fall to its knees in slow motion.)

**FITNESS**

Fatigue and injury go hand and hand. We can add stumbling to that duo. A tired horse is a careless horse. It’s the rider’s responsibility to assess when to call it a day. A wise horseman knows at what point an optimum amount of work has been done without unduly depleting the horse's reserve. Stumbling occurs when “just one more flying change” or “one more shot at that oxer” drowns out the voice that says “enough is enough.”

Several widely-published injuries from stumbles have occurred in recent years to seasoned professionals who failed to consider the inexperience and/or lack of fitness in their young mounts. A horseman who retires on course or scratches a class earns our respect.

**REFERRED PAIN**

Nearly all our experts listed “saddle pain” as a cause of stumbling. Once you’ve made sure your saddle fits your horse, make sure you fit your saddle. Attempting to squeeze a large behind into a tiny saddle is not only unsightly, but it intensifies the pounds of pressure the bars place on a too-small area of the horse’s back. If you can’t fit the width of your hand between your buttocks and your cantle or your thighs are obscuring your saddle flaps, you need a bigger saddle.

Clearly the back is a long way from the hoof, but pain in one area that presents in another is more common than you might suspect. In humans who have suffered blunt trauma to the abdomen, complaints of pain in the left shoulder signal a ruptured spleen almost 100% of the time. After over 40 years in an ER, I can tell you almost every patient with an isolated UPPER extremity injury will present to triage limping.

Our farrier editors – Steve Kraus and Lee Foley - were united in linking stifle pain to stumbling. And, it’s not infrequent to find stories of frequent missteps finally diagnosed as equine dental pain.

Contributor Susan Quinn rode a “stumbling mare” for 15 years with some memorable over-the-head catapults and a spectacular down the centerline near-crash. Only when the mare became lame did radiographs reveal probably longstanding pedal osteitis.

What this all means is that you, the horse’s owner, have to become both a detective and an advocate. You need to marshal every resource to determine why your horse is stumbling: your vet, the farrier, and your instructor. If they are all stymied, you have to keep searching beyond the obvious.

**THE RIDER**

We’ve already given you some assignments: balanced shoeing, a comprehensive vet work-up, all-terrain schooling, cavaletti, TTEAM and a correctly-fitted saddle. Now it’s time to look in the mirror.

Get an honest evaluation of your riding skills from an experienced instructor, not necessarily your own. Are you allowing your horse to fall on his forehand? Are you actually teaching him that? Some hunter and western divisions now require horses to show with as little animation as possible, heads positioned at the level of their knees and feet dragging. Are you rebel enough to ignore the trend and ask your horse to engage his backend and lighten his front?

We’ve all been to clinics where a demo rider is trotting around the ring on a sleeping horse with little puffs of scuffed dust following. The clinician gets on, shifts the horse’s weight off his forehand and transforms the horse into an Olympic prospect. That’s your goal. Change those Type L’s into Type A’s, at least for the duration of your work session.

Even during walk breaks, your
horse should be alert and working. Sing “Seventy-Six Trombones” or something by Sousa, and keep that horse marching. (I whistle the piccolo part to “The Stars and Stripes,” which all my horses find entertaining, since I can’t whistle.) An FEI rider friend confessed that every fall she’s ever had occurred on a loose rein at the walk when her horse caught a toe.

**BOTTOM LINE**

Don’t overlook the legal ramifications when buying or selling a horse with a significant history of stumbling. “Does he stumble?” or “Has he ever fallen to his knees?” should be a mandatory conversation. Our own editor Cindy Foley once tried a horse at an upscale barn. The mare was fine on the flat, but fell on landing after the second jump, tossing Cindy into the dirt. The owners “forgot” to tell her “the horse had been nerved and would sometimes stumble on uneven ground.”

It should be obvious by now that stumbling is a complex issue. Horses don’t want to stumble. (Except for those crafty guys who figure out stumbling makes you jump off and lead them back to the barn.) When they trip repeatedly, they’re trying to tell you the only way they know how that something is very wrong.

Hopefully we’ve given you much to think about and lots of ideas and approaches for your stumbling horse. Now you understand why one of the greatest epitaphs a horseman can give a beloved mount is: He never put a foot wrong.

*Article by Contributing Writer Beth Benard.*