



# HAPPY Hooves, HAPPY Horses

There's a lot riding on your hunter's or jumper's hooves. Here are four common hoof issues you should know about.

By Lisa Munniksma

**O**h, my aching feet," you moan after a long day of working, riding and attending family activities. Your two feet support your 100-, 200- or 300-pound frame and experience the true wear-and-tear of your day. By the evening, you're feeling that they're worn out.

Just imagine how your horse's feet feel. Instead of holding up their share of a few hundred pounds, they're the base for 1,000-plus pounds. With these four tiny pedestals of support, you ask your horse to run, jump and turn on a dime. It's no wonder, then, that performance horses' feet experience a range of issues.

*USHJA In Stride* asked two of the industry's most experienced farriers to discuss some common hoof issues found in hunter and jumper horses, how to recognize the problems and what to do about them.

## Shelly Feet

Structurally weak feet are common among performance horses in this country, largely due to environmental and management conditions. Frequent bathing, long periods of wet or dry weather, unbalanced nutrition and a lack of turnout contribute to crumbling, shelly feet. These feet are prone to cracking and are difficult to keep shoes on.

Moisture balance in feet is a key component to hoof strength and health. Horses that are exposed to water regularly, such as during bathing, and then returned to their absorbent wood-shavings-bedded stall face a constant fluctuation in hoof moisture.

A nutritional program that offers your horse a balance of vitamins and minerals contributes greatly to hoof quality as well. Supplements promoted for improved hoof conditioning shouldn't be necessary for horses that are receiving the nutrition they need from their regular diet.

Horses have biomechanical devices designed to regulate hoof integrity, including a vast circulatory system within the structures of the foot. "The more a horse moves around, the stronger his feet are going to be," says farrier Jack Miller, of Lantana, Florida.

But with the way horsekeeping has evolved, horses don't often get as much turnout or exercise time as they should. This challenge requires you to be vigilant about monitoring hooves' condition year-round.

Cracking and crumbling is an obvious sign of shelly feet, although you don't have to allow the condition to advance that far. Look at the bottom of your horse's hooves to check out the moisture balance. Is the frog hard and dry, or is it pliable? The sole, too, can show evidence of drying out. Similar to the way the ground cracks in the middle of a dry spell in the hot summer months, the hoof sole can exhibit shallow fissures from drying out.

Ask your farrier how your horse's hooves are looking and if you should be using moisturizer or a hoof sealant.



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*Horses can suffer sole bruises after working on a rocky or uneven surface.*



*Quarter cracks are caused by too much pressure in a weak area of the hoof.*



*Sometimes even educated horse owners have difficulty recognizing hoof imbalance.*

## Sole Bruises

Bruising is a common hoof issue among all kinds of performance horses. Often, sole bruises lead to a mystery lameness, which can range in severity from a slight limp to resistance against bearing weight on that foot.

Farrier Tony Bucci, based in Wellington, Florida, says bruises can occur deep in the hoof and while you might suspect a bruise as a cause of lameness, you might not actually see one. It can be as long as two months later that evidence of the bruise emerges on the sole.

Bruises on hooves occur in the same way that bruises on your skin occur—trauma from an impact. Horses would most commonly suffer from sole bruises after working on a rocky or uneven surface. They can also get bruised from impact with an object or frozen, uneven ground during turnout.

Horses wearing shoes are less likely to become bruised, although it can happen to shod horses with soft soles, caused by any combination of genetics, nutrition, hoof care practices and management.

Tony recommends toughening up horses' soles to improve the hoof's condition and prevent bruising. There are a number of sole paints on the market, although he says Venice turpentine works, too. One caution is that some sole paints contain DMSO, and that could show up in a test for controlled substances at a show. Allowing your horse to go barefoot and to develop a natural hardening of his sole can also be beneficial, but that's not often a realistic solution for performance horses.

If your veterinarian suspects your horse has a sole bruise, he'll probably recommend steps to reduce the inflammation in the hoof. Soaking the hoof in cold water, putting a poultice on the hoof and giving oral anti-inflammatory drugs are common options. Your horse will also require some time off from work. Horses that consistently have problems with sole bruises can be shod with a pad to protect the entire underside of the foot.

## Quarter Cracks

Quarter cracks were brought into the spotlight as a hoof issue when Thoroughbred racehorse Big Brown made his bid for this year's Triple Crown. Despite the condition's notoriety, Jack says he doesn't see too many quarter cracks; maybe just three at a show the size of the Capital Challenge and more often in jumpers than in hunters.

Horse owners who haven't had experience with quarter cracks often confuse them with toe cracks. Quarter cracks, says Jack, begin at the hairline and progress downward. Toe cracks—often caused by dry feet—begin at the ground and progress upward.

Quarter cracks are caused by too much pressure in a weak area of the hoof. On some horses' feet, you can see vertical lines that look like they can become cracks at any time. Your farrier should keep the hoof well-balanced so as not to place too much pressure on that line and cause the crack to split open.

If a quarter crack does split open, your veterinarian will first want to treat it for any infection that might be present with a topical antibacterial agent such as povidone iodine. Depending on the severity of the crack, it might heal on its own with some careful hoof balancing or it might need mechanical repair, such as with a fiberglass patch or with metal wires, to maintain the structure of the hoof and provide strength to the area around the crack.

## Imbalanced Feet

Hoof imbalance is the most common issue Jack and Tony see with horses around the country. Improper trimming and shoeing affects not only the hoof but the whole skeleton, which can impact the horse's gaits, tendons and ligaments, muscle development and growth.

A balanced foot is important for every horse, although Jack says the degree of hoof care precision necessary among hunters and jumpers varies slightly. Hunter horses, he says, can be looked at as race cars that need to be finely tuned with hooves kept in balance to achieve correct movement. Jumper horses, while they require equal care and consideration, are often less affected by minute changes in hoof balance because there's not as much emphasis on their way of going.

A big issue with imbalanced feet is that even educated horse owners have difficulty recognizing this problem.

"You have to develop an eye for it. That takes a number of years," Tony says.

There is some debate among farriers about whether you can accurately judge a hoof's balance based on the level of the hairline at the coronet band. One more accepted method to recognize a balanced hoof is to pick up your horse's leg as if you're going to pick his hoof. Hold your hand under his cannon bone, and allow his hoof to hang freely. Look down his hoof to see if it's level, symmetrical and balanced on all sides.

"That's a very good guide to good and bad shoeing," Tony says.

You can also judge hoof balance with the angle of the hoof. Each horse will have a different ideal angle based on its particular conformation. The angle of the hoof should mimic the angle of the pastern and of the shoulder.

Farriery is an evolving science. Each year, new research uncovers treatment options and new methods of trimming and shoeing. Just as white line disease used to be a big issue that's become more manageable, so will shelly feet, quarter cracks and sole bruises become less troubling.

As farriers attend more clinics and symposiums, they learn about the latest advancements in the field. More educated farriers mean fewer imbalanced hooves. As a horse owner, you, too, can do your part to educate yourself by talking with your farrier and veterinarian about your horse's hoof care.