Dealing with Superficial Equine Hoof Cracks

Equine hoof cracks are common in the spring. Some are superficial, while others can be full thickness, which can be painful and become infected.

When it comes to hoof cracks, some are superficial and have no effect whatsoever, while others can be full thickness, penetrating all the way through the wall and into the sensitive tissues below, and possibly up into the coronary band as well. Full thickness cracks can cause tremendous pain and may bleed or become infected, so you are smart to keep an eye on your horse’s feet and to want to ward off serious cracks.

In the photo above, there are two different kinds of superficial cracks on the hoof. The short cracks in the lower part of the wall are grass cracks, but they may have gotten started due to poor nutrition. The cracks that run the entire height of the wall are the result of overgrown, flared walls that are now being managed, but it will take some time for the cracks to grow out.

There are many different kinds of cracks such as toe cracks, quarter cracks and horizontal cracks, and these can have a variety of causes including hoof imbalance, white line disease and abscesses. Two kinds of superficial cracks are commonly called “grass cracks” or “sand cracks,” which are not actually likely to be anything more than an aesthetic issue. Grass cracks are...
superficial fissures that typically start at the ground and head upward. Sand cracks are the same thing, but they start at the coronary and move downward.

Both types of cracks form when the molecular bonds between the outermost layers of the hoof tubules get weakened by repeated cycles of exposure to moisture followed by drying, which eventually causes the bonds to split apart. This is why we tend to see these kinds of cracks in the spring. Horses suffering from poor nutrition can have weakened hoof horn that makes their feet more vulnerable to sand and grass cracks, but they can appear on otherwise healthy feet as well.

Grass cracks get their name because the problem is often seen in horses turned out on grass that is wet and dewy in the morning but dries up later in the day. However, any environment where the feet go through alternating periods of wetness and dryness can lead to grass cracks or sand cracks, even if there is not a blade of grass or speck of sand in sight. For example, horses turned out in wet or muddy paddocks that are then locked into stalls with dry shavings at night may develop these kinds of cracks, as might horses that are bathed frequently.

One mistake people often make when dealing with grass and sand cracks is believing that the hoof is actually too dry and, therefore, needs moisturizing. It is important to realize that while the cracks may indeed make the surface of the hoof look dried out, it was too much moisture that started the problem in the first place, so applying anything that adds moisture is only likely to make the problem worse. Hoof dressings can also seal in bacteria and fungi, creating an anaerobic breeding ground that promotes infection and further damage to the hoof.

As for prevention, this is best accomplished by avoiding exposure to the conditions that cause them. This means providing “high and dry” areas where horses don’t have to stand in mud and puddles, and waiting until grass is dry if you are having a problem with your horse on pasture. Sealants designed to keep excess moisture from penetrating the hoof wall can sometimes help, but they can also make things worse if applied when the foot is already wet, or if you have not prepared the hoof to rid it of bacteria and fungi prior to application.

Ultimately, trying to prevent these harmless superficial cracks is often more of a headache than the cracks themselves, so it may just be a situation where you keep an eye on things, but don’t worry about the cracks if they remain shallow and cause no soreness. However, if something that first appeared to be a superficial crack develops into a deeper one, there is likely more than just the wet/dry changes going on, and you will want your hoof care provider to take a look.