

My Feet are Wet!

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While Florida offers temperate weather for horse owners during the winter months, it comes with a price; suffering through the "rainy season". We all bemoan the skin conditions that occur, as a result of the insects and the humidity. But another, potentially more serious problem, is that we see an increase in foot sore horses because their feet are wet. So what happens? And how do we prevent these issues?

The winter months in Florida tend to be quite dry. During this time horses' feet can become quite dry, hard, and sometimes brittle. However, the opposite is true in the summer. With the rainy season, horses' feet absorb water from the environment and become soft, break up and often develop issues in the hoof wall. This occurs particularly with horses that are barefoot, but shod horses are not immune. Like a sponge, the walls and the soles of the feet absorb the water and expand. The hard, cornified surface softens when it is waterlogged and exfoliates more frequently. You may see this as soft, flaky tissue falling off the sole, as well as peeling frog and coronary band tissue, which sometimes looking like burst blisters. With that comes relative thinning of the sole, and subsequently foot soreness develops. While this is occurring, water is also seeping into the tissues of the wall from the ground surface causing separation of the white line. This then allows dirt and environmental bacteria and funguses to encroach the tissues. Usually an accumulation of black debris is seen at the white line, which is commonly known as "seedy toe". If not addressed, bacteria and fungi within that dirt can proliferate and spread beneath the hoof wall causing a much more serious condition known as "white line disease". Serious cases of white line disease cause the connective laminae to deteriorate resulting in rotation of the coffin bone and lameness. When viewed on a radiograph (x-ray), a large, divergent

gap can be detected between the hoof wall and the coffin bone. This then requires aggressive management and should be done with the farrier and the veterinarian together. Using radiographic guidance, the affected hoof wall must be removed and a shoe with frog support must be applied as there is an increased risk of additional loss of coffin bone support and laminitis. Seedy toe, damaged soles, and broken walls can also contribute to the development of subsolar abscesses. For example, bacteria gain access to the tissues through the defect, proliferate, and cause pain as a result of the abscess development. Similarly, soft soles are more pliable and subject the bottom of the coffin bone to increased concussive trauma leading to lameness often resembling laminitis. This is also a serious condition and requires immediate evaluation by your veterinarian, radiographs, and the assistance of the farrier. It is not uncommon for veterinarians to treat horses for laminitic events during the summer months as a direct result of the moisture. With the reduced capacity of the soft/thin sole, the laminae in that region become inflamed and the horse then experiences pain and becomes very foot sore.

Waterlogged hoof walls resemble wet plywood with the layers separating. These walls no longer hold nails and shoes often fall off, or are pulled more easily if the horse steps on itself. The softer wall at the ground surface then breaks up making it very difficult for the farrier to reset the shoe.

How do we prevent wet feet and some of these issues? These issues are almost unavoidable, but due diligence with foot care and limiting turn out in the wet are paramount to your horse's feet surviving the summer. Pick the feet out daily to monitor for any changes in the appearance of the foot. Dressings such as Venice turpentine, or sole paint concoctions, can help dry soles and keep them tough. Some people advocate the use of deck sealant to 'waterproof' the foot. This should be done with caution and not over done. Avoiding the coronary band is a must as these compounds can be irritating to

the growing tissue. If sealants are used in the summer time, they must be stopped during the winter months to prevent severe dehydration of the hoof wall. Antibacterial solutions such as Betadine can also help disinfect as can bleach diluted to a 1:10 ratio. Placing shoes to raise dropped soles off the ground is very beneficial, as is the use of protective foot boots. There are several products available on the market currently, some of which have various inserts if elevation or softer pads are necessary. Avoid turn out when there is heavy dew on the ground and when there is excessive rain or standing water in the pasture. If limiting turn out is not possible, section off areas where standing water or ponds are present, and maintain the horses in the driest part of the field as much as possible.

Following some of these simple tips can help you and your horse survive the summer months problem free, and most certainly, your farrier will appreciate you paying attention to the condition of your horse's feet!

Contact Brandon Equine Medical Center at 813-643-7177 or email info@brandonequine.com with any questions regarding this topic.

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