

6th Equine Sports Medicine Symposium - Focus on Footing - Highlights

Friday, August 23, 2024 & Saturday, August 24, 2024

Sponsored by the Carolina Equine Sports Medicine Education Foundation

<https://equinesportsmedicinesymposium.com/foundation>

at the beautiful Chatham County Agricultural & Convention Center, Pittsboro, North Carolina

Friday morning, August 23, 2024

Moderator & President Bob Meyer, DVM Thanked our sponsors and introduced the coming 4th year NCSU/CVM student, Lexi High who was the recipient of the 2023 CESMEF \$5000 scholarship.



Heidi Zorn from Premier Equestrian

Discussed identifying footing characteristics for equine disciplines & a comprehensive look at materials and arena building techniques creating optimal footing for dressage and show jumping

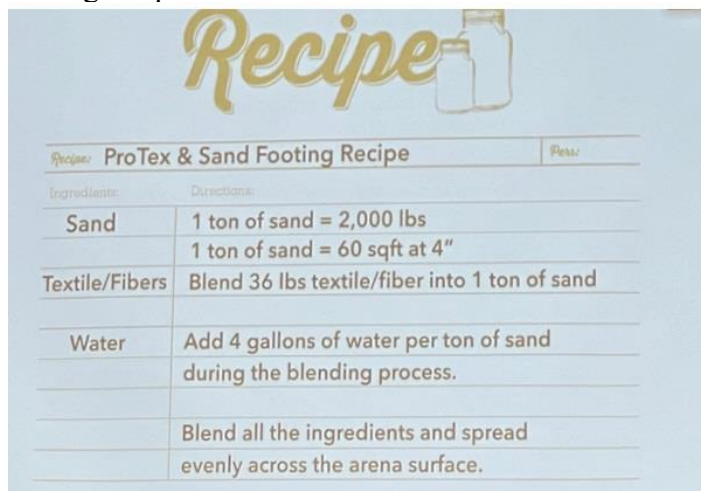
There are 10,000 different types of sand

There is no such thing as “Arena Sand”

Request a gradation report from the quarry where you get the sand

Quartz silica might be the most recommended

Footing recipe from Ms. Zorn’s talk



Recipe	
Recipe:	ProTex & Sand Footing Recipe
Ingredients:	Directions:
Sand	1 ton of sand = 2,000 lbs 1 ton of sand = 60 sqft at 4"
Textile/Fibers	Blend 36 lbs textile/fiber into 1 ton of sand
Water	Add 4 gallons of water per ton of sand during the blending process.
	Blend all the ingredients and spread evenly across the arena surface.

Surface analysis: <https://premierequestrian.com/sand-report/>
<https://racingsurfaces.org/lab-testing/>

Caitlyn Horne, DVM, DACVSMR from NC State College of Veterinary Medicine discussed the variety of imaging modalities available for diagnosing equine limb injuries. What each one can and can't determine and how each might help in guiding treatment plans.



Dr. Caitlyn Horne



Jim Kiser

Friday afternoon **Jim Kiser from Kiser Arena Specialists**

Mr. Kiser discussed the basics of arena building along with arena concerns for QH training and competition.

Start with property selection – 1% slope is about as much as can be manageable.

Consider access to the barn and water

Drainage and firm compacted base are critical

If you are looking for a horse arena contractor short of picking a professional horse arena builder for your discipline, pick a sports field builder

Firm compacted base is important

Equipment operator for dragging is very important

Barrel racing footing is the most difficult

Both footing speakers mentioned the FEI Equine Surfaces White Paper reference

<https://inside.fei.org/fei/about-fei/fei-library/equine-surfaces-white-paper>

Next speaker was **Britt Conklin, DVM** who is the Associate Dean for Clinical Studies at the new Texas Tech University School of Veterinary Medicine.



He discussed shoeing considerations, limitations and horse injuries for various western horse disciplines. He used the term “countered mechanic demands”; “counterproductive foot needs”; “counter axial loading” meaning what might be needed shoeing wise in front might be different than the needs of the hind feet. He likened each discipline to a human athletic event.

Cutters were likened to gymnasts. More prone to suspensories, stifles, hock issues. Front feet pivot so need to consider amount of traction vs slide. Might consider barefoot behind. Footing might be moist & deep for recoil

Reiners were likened to figure skaters. More prone to hocks, suspensories, stifle issues. He is concerned about excessive toe protection that can create negative sole plane angles thus creating muscle fatigue. Footing might be shallow & moist.

Cow horses were likened to be a cross between a figure skater and rugby player. More prone to hocks, navicular, stifles, suspensories, plus various issues. Consider training the horse into the reduced traction behind.

Barrel racers were likened to slalom or mogul skiers. More prone to hocks, backs, fetlocks, suspensories, navicular issues. Shoeing considerations might include rim shoes in front, clipping and creating a strong anchor to the hoof. Again “counter axial loading” and maybe consider barefoot behind?

Ranch horses were likened to MMA fighters. More prone to navicular, hocks, ring bone and backs. Shoeing considerations might include heavier shoes with 8 nails

Team roping horses were likened to intense pickle ball players that might be prone to navicular, hock and back injuries.

Saturday morning began with **Rick Mitchell, DVM, MRCVS, DACVSMR** from the Fairfield Equine Hospital of Connecticut discussing two major problems with dressage and jumping horses that being diagnosing and managing suspensory branch injuries and distal limb lameness associated with focal bone marrow edema-like lesions in the second phalanx. Dr. Mitchell made a few observations related to suspensory ligaments:

Dr. Denoix suggests high heel increases tension on the suspensory ligament whereas Dr. Stover suggests the long toe/low heel increases tension on the suspensory ligament.

Tendons and ligaments stiffen with age.

He recognizes chronic changes in suspensory ligaments and the horse is still sound.

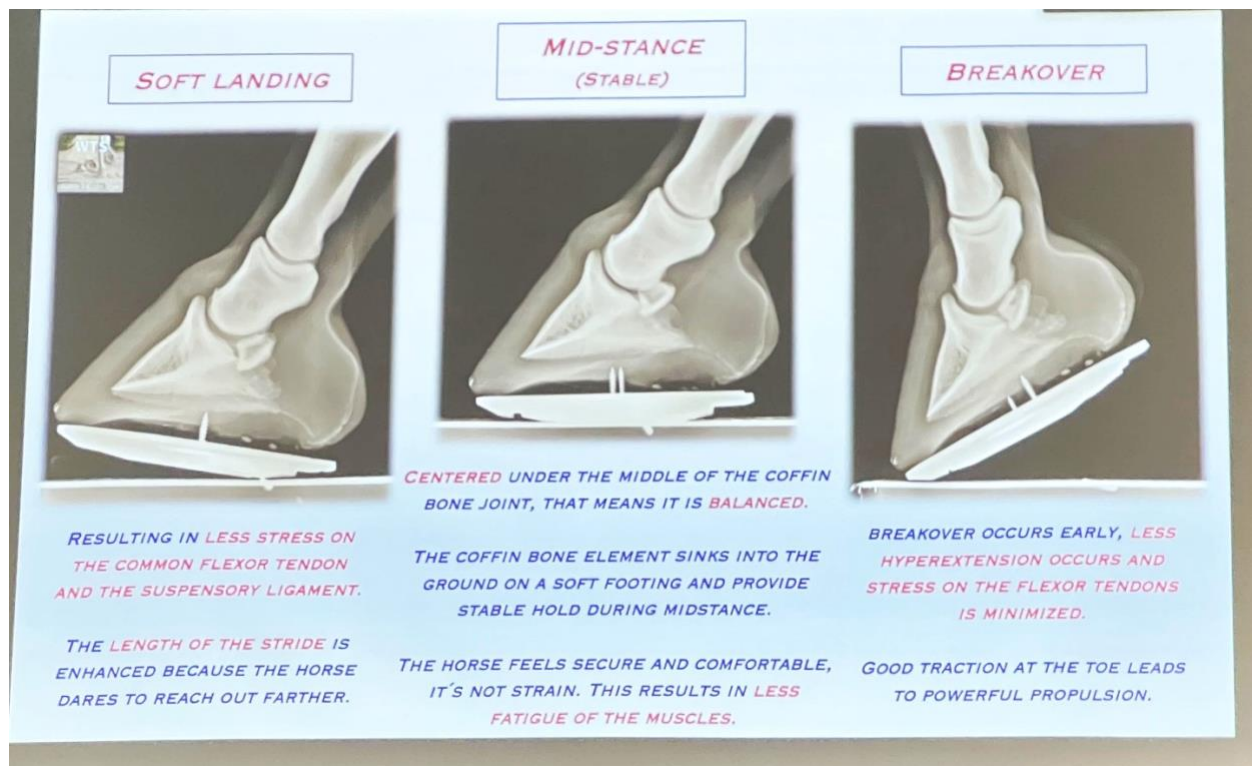
Hind suspensory problems in Dressage horses are difficult to treat/manage.

Both Drs. Mitchell and Conklin suggested metabolic issues may play a role in performance horse lameness. This needs to be further evaluated but base line insulin, leptin and ACTH might be helpful earlier in the age of the horse than currently routinely recommended.

Bone edema-like lesions might be suspected in that distal limb lameness that responds positively to routine treatment and shoeing for a short time and then the lameness returns. This lesion is only diagnosed with an MRI, but that MRI diagnosis might end up being more economical than repeated treatment and lay off times without the actual diagnosis.

The rest of Saturday talks were related to the foot of the horse with **Dr. Raul Bras, DVM** from Rood & Riddle and NC State CVM started with injury to the pastern and foot from various footings. He raised several ideas related to prevention vs therapeutic and lame vs. asymmetrical moving. One slide related to landing, mid stance and breakover suggested softening of the heels could result in less stress on the flexor tendon and the suspensory ligament & possibly allowing the horse to dare to lengthen their stride. At mid stance possibly with center loading allows the

“coffin bone element” to sink into the footing providing stability resulting in less muscle fatigue. Softening the breakover gives less hyperextension thus less stress on the flexor tendons.



Then came **Curtis Burns** experienced farrier from Florida. He discussed hoof problems and their management associated with footing such as quarter cracks, bar cracks, seedy toe issues and severe corns. In some quarter cracks he places drains to be flushed daily and uses CuSO₄ crystals in his glue patch. He has used DE hoof taps in some wall separations. With White Line Disease he places a wire up the separation and then makes a horizontal opening at that wall area and treats leaving the more distal wall in place.

The ideal farrier/DVM record system would be to record the shoeing, radiographs, etc when the horse is at its best health and peak performance

He philosophized on the current TB racing situation observing 2 major problems

- 1) That a very small group of trainers have a huge number of horses – possible solution - limit number of horses a trainer can have or stalls for trainers.
- 2) Have a handicap racing system vs the current American claiming racing system

In his discussion related to Veterinarian/Farrier relations he gave a few examples of Responding vs Reacting. Our minds are wired to react but pause and respond. He encouraged all of us to investigate Chris Voss <https://www.youtube.com/watch?v=MjhDkNmtjy0>

He is a hostage negotiator and talks about using tactical/weapons grade empathy using your limbic system when we are in a less than positive discussion.

Great take away at the end of our 6th Equine Sports Medicine Symposium!

Several good questions from the audience were discussed in the Panel Discussion moderated by Dr. Bob Meyer with Drs. Conklin, Mitchell, Bras & Curtis Burns

