

Worshipful Company of Farriers Equine Veterinary Studies Award 2022

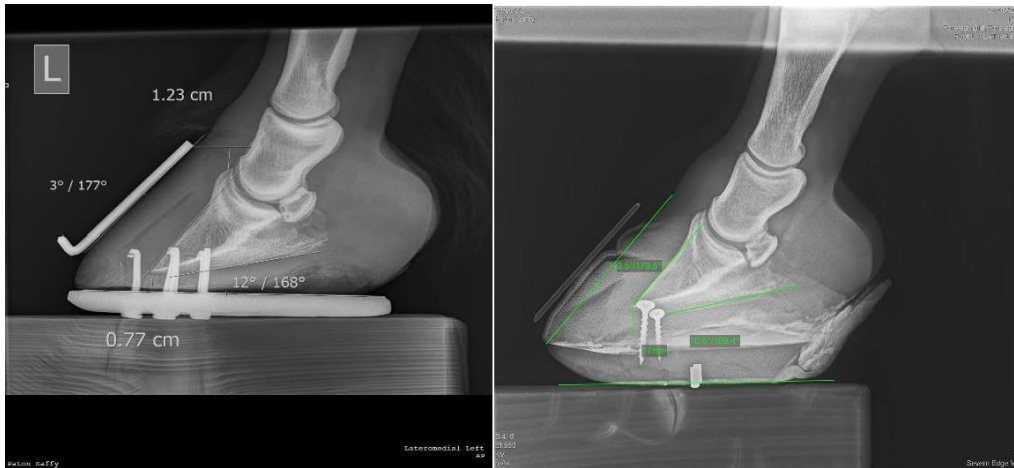
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I have always been particularly interested in the sports horse aspect of veterinary medicine so to have had the opportunity to learn all about the links between remedial farriery and veterinary practitioners has been an invaluable experience. I was very excited to start my placement with Marc Jerram (WCF), but could not have imagined how much I was about to learn! I was starting the placement with a basic knowledge of the biomechanics and anatomy of the foot, alongside experience with my own horses, but could not have fathomed how much more there was to it. The importance of remedial farriery has become much more pertinent to me now as I have seen to what extent it can improve a horse's health, performance and welfare. I was lucky enough to see numerous different veterinary related cases with Marc throughout the week as well as get very practically involved too.

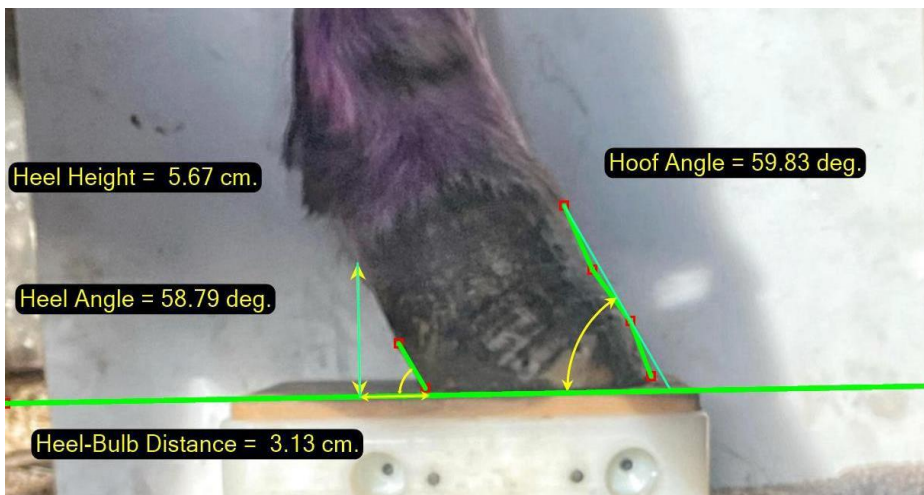
Having a basic knowledge of anatomy was definitely a good place to start from but Marc taught me how to look for more subtle differences in the feet and also looking at the feet as a pair rather than individually. He showed me how to assess the hoof pastern axis (HPA) and the best way to trim and shoe horses considering this. In horses with a broken back HPA – commonly seen in thoroughbreds – there is often minimal heel growth which means there can be less cushioning from the heel bulbs and more strain put on soft tissue structures. It is important in these cases to prevent the toe from growing too long as this encourages more weight to be put on the heel and dropping of the fetlock. These cases are ideally shod with frog supports in, such as a leather pad, as these can significantly encourage heel growth at the same time as giving the horse the extra support and comfort they may need. I was able to see photos from before and after using frog supports so it was clear to see what a difference they can make to horses with this HPA. Side clips on the front feet can also make a big difference in these horses as they allow for trimming of the toe and preventing over growth, to encourage the foot over time to have a more normal HPA. I learnt that the palmar/plantar angle (base of the pedal bone to the floor) should be around 4-6 degrees in a normal HPA, but in horses that are broken back the angle tends towards zero. This can put pressure on structures such as the navicular, resulting in navicular bursitis or true navicular where the bone itself is involved. This shows the importance of correctly shoeing horses with this HPA to reduce the chances of further problems occurring, as well as the vital team work needed between farriers and vets when faced with these problems.

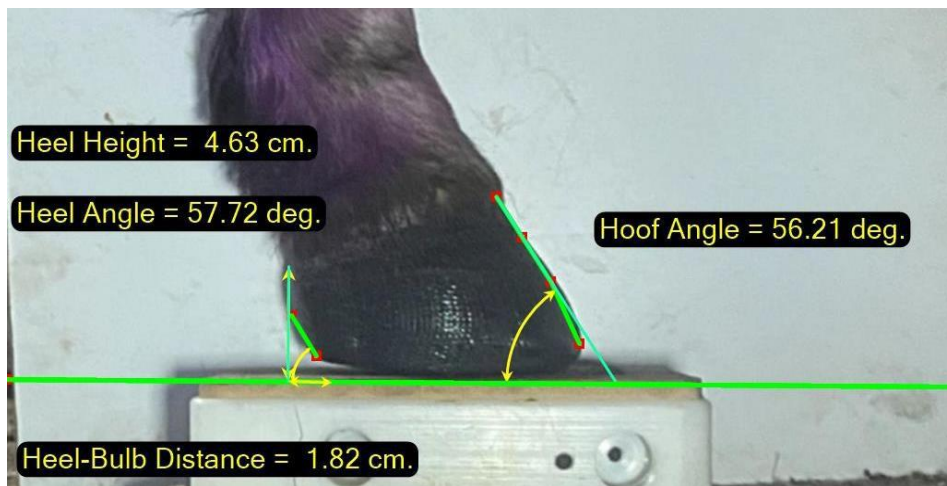


In contrast to this, I saw a few ponies with very upright feet where their HPA would be described as broken forward. These ponies have excessive heel growth, which is commonly seen with pedal bone rotation with laminitis – a palmar/plantar angle greater than the normal of 4-6 degrees. It is paramount in cases like these to trim back the heel to try to prevent any further rotation and establish a more normal HPA. The toe can be encouraged to grow longer here to balance out the foot. It was great to see the improvement in welfare for some of these laminitic ponies who were in a great deal of pain before, to now being able to comfortably walk around. This highlighted how important it is to continually work closely with farriers on cases like these in order to reach the optimum outcome.



Another interesting case I saw was an older pony who had had very serious laminitis this summer. The laminitis had been managed with clogs and casts applied to the front feet with the pony being kept in on soaked hay. I was shown photos of the feet before the management of the laminitis and could clearly see the excessive heel growth. I learnt that it is important to take some of this heel back to help prevent pedal bone rotation and foundering. Looking at the before and images of the pony in clogs and casts it is clear to see the better shape and length of heel. I have been able to see from the numerous laminitis case radiographs how important it is to take a good quality radiograph in order to assess pedal bone rotation and degree of foundering. This will be particularly important when I start my job as an intern at an equine hospital as I can ensure the radiographs I take are always of diagnostic quality.





Throughout the week Marc was brilliant at making everything so relevant to my life in the future as an equine vet. Although we didn't come across any actual foot abscesses, he showed me how to properly assess a horse with a potential abscess and work out its location using hoof testers, and how to release the pus using the loop knife. This was such a useful thing to learn how to do as it's definitely not a rare thing to get called out to as a vet! An important skill to accompany this is how to properly remove a shoe. Although I had experience of pulling my own horses' shoes off when they'd come in from the field with one half hanging off, I was desperate learn the best method to use as a vet in practice. Marc showed me multiple methods, starting off by using a hammer and buffer to knock up the clenches. Having not used a hammer much in my life at all, I found this tricky at first, but I did start to get the hang of it after a couple of tries! The other methods involved rasping off the clenches, and pulling out the nails individually first. All three methods will come into use I expect at some point in my career, so it's been brilliant to be able to practice all of these on multiple horses during the week. Marc carefully selected some very well behaved horses for me to learn the skills on, so I am hoping when I come across a more fractious horse in the future, I will at least have the basic skill set required to remove the shoe.

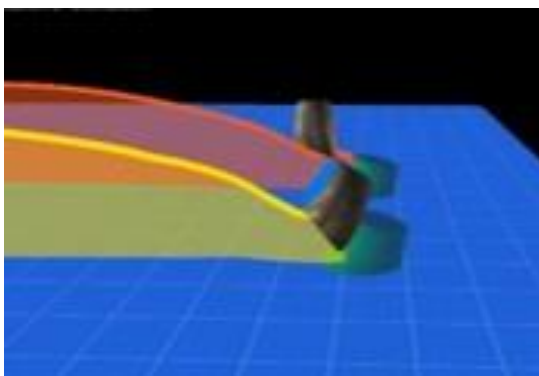


A particularly interesting concept I was introduced to during the week was a club foot. I had only really heard of these in humans before so I wasn't quite sure what to expect. I looked into the different grades and appearances of club feet before going to a case with Marc the next day. This horse had a grade 3 club foot – as shown below with a dished anterior wall - with the contralateral foot being slightly broken back. I learnt that if club feet are identified and managed appropriately as

a foal, the feet can become a matching pair later in life, however it was clear this foot had possibly not been identified early. The aim when trimming this foot was to reduce the height of the heel due to the excess growth in comparison to the broken back opposing foot in order to match the feet as closely as possible. The nails needed to be low in the hoof wall due to the horses previously having been nail bound. I found this case particularly useful as the horse – who was a valuable 4yr old dressage horse expected to compete at a decent level in the future – had recently been vetted and the club foot hadn't been mentioned to the owner at all. Before seeing this case I don't think I would have paid as much attention to viewing feet as pairs, but it has highlighted the importance of looking for even more subtle differences than this in the future. The mismatched feet could predispose the horse to injury which is the sort of thing an owner would like to know at a vetting.



I was lucky enough to experience the use of the gait analysis tool that Marc uses alongside other diagnostics and collaboration with vets. This involved putting markers on the four hooves (dorsal aspects) and videoing the horse walking and trotting in a straight line. The device is able to assess any impact or push-off asymmetry. This is a useful tool for a farrier to use alongside a vet particularly to see improvements post shoeing. The image below shows the asymmetry in the breakover of the horse above with a grade 3 club foot. Although this horse wasn't lame, it is useful to be able to see the push-off imbalance in the two front feet. This allows the farrier to be able to see any improvements that occur over a period of time of corrective shoeing. I think this is also a very useful tool to be able to show owners how effective remedial shoeing in cases like these can be, as often it can be hard for them to see differences as it is a gradual process.



I am so grateful to everyone involved with the EVSA process as it has been such an important part of my preparation to be an equine vet, and I couldn't recommend it enough to other students. I

couldn't have asked for more from the week from a theoretical and practical learning aspect as well as it being thoroughly enjoyable! Marc was absolutely brilliant at teaching and answering my never ending questions, as well as ensuring I got everything I possibly could have out of the placement. I have a whole new appreciation of remedial farriery, as well as so much more confidence when it comes to veterinary involvement in foot related problems that I am undoubtedly going to come across in my career. Thank you to everyone involved!