17/08/2020 – 21/08/2020 Laura Ingram

Worshipful Company of Farriers Equine Veterinary Studies Award 2020

As the recipient of the 2020 Worshipful Company of Farriers Equine Studies Award for Liverpool University I spent a week with Steve Hewitt, who is an associate of the WCF and an approved training farrier. After spending time with many equine vets, I had a basic appreciation of the importance of good farriery but when I received the award I was very eager to increase my understanding and gain some practical skills to build on what I had seen during EMS. I was made to feel very welcome by Steve and his wife Jill (as well as being met by Hugo the looney Vizsla and Hattie the lovely cocker spaniel)! Steve is in the process of completing his Graduate Diploma in Applied Equine Locomotor Research with the RVC and throughout the week I was able to draw on the wealth of knowledge Steve has. My goals for the week were to refresh how to assess foot balance, better understand how remedial farriery aids the treatment of common foot conditions and learn basic practical skills to aid my career.

Throughout the week I gained knowledge of the different shoe types and their uses. Steve mainly works with racehorses, which are cold shod using aluminium race plates. These plates are lightweight and can be fitted quickly in the stable but are less malleable and too brittle to be heated in the forge. Thoroughbreds have small, delicate, flat feet with little heel which alongside an intense training regime, are subjected to increase wear meaning the shoes become worn 3-4 weeks after shoeing. Consequently, racehorses are shod every month at least. If a horse is entered to run, Steve will aim to shoe them as close to race day as possible as fresh shoes have the most grip. Most thoroughbreds would benefit from proactive preventative farriery before their heels are completely flattened. However, extra heel support means an increased weight of shoe and hence potentially poorer racing performance. Shoeing a horse for the race track is a compromise between keeping costs down for the trainer and owner and improving poor conformation by proactive remedial shoeing whilst maintaining racing performance. We discussed that the main aim of shoeing thoroughbreds is to preserve feet, as by the time they are at their peak, their feet have already undergone significant wear. Racehorses are shod about 16 times per year, compared to 8 times for a pleasure horse!

Figure 1: Aluminium race plates

A recurring conversation Steve and I had was the importance of farrier-vet communication. Horses should be viewed holistically using static and dynamic assessment to analyse foot balance, conformation and gait analysis. Part of Steve's research project, encompasses new gait analysis technology to assess the effectiveness of pads, which I look forward to reading about when the final report is written. Steve expressed that he would recommend that all horses are turned out to grass for 6-9 weeks barefoot (i.e. without shoes) once a year. The theory behind this is to 'reset' the foot balance to the natural 'wild' position, with the frog in contact with the ground and the varied terrain wears excess hoof growth. Increasing pressure on the frog, decreases pressure on the hoof wall and hence it undergoes less stress. Being barefoot means the toe wears out quicker than the heel bulbs; opposite to shod thoroughbreds! Unfortunately, this rest period is rarely possible in racing.

During my week, Minnie was an interesting case I saw. Minnie is a dressage pony and presented with intermittent hindlimb lameness and had blocked to the right hindfoot, after which the vet took a series of radiographs. Nothing was highlighted except a degree of medio-lateral imbalance.

Medio-lateral balance is crucial for horses to maintain normal function of the limb and soundness. Steve was asked to take a look at Minnie and when we arrived we both noticed her poor conformation with a bowed leg stance. The medial-lateral imbalance and very low heels were obvious from static assessment and when assessed at walk she occasionally rolled her weight laterally when placing both hindfeet. The hoof wall was longer medially so the lateral portion needed extra support.

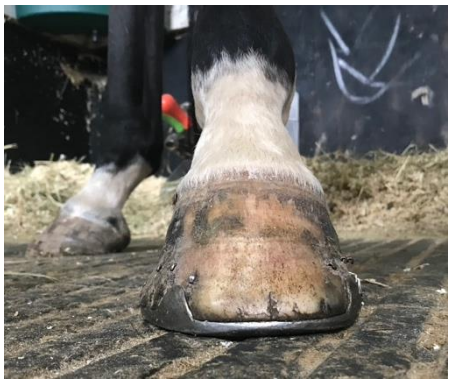


Figure 2: Obvious latero-medial imbalance and shoe not centred.

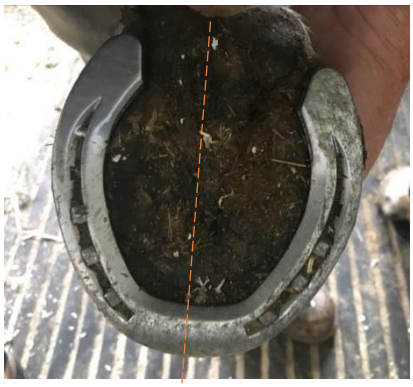


Figure 3: This image highlights the shoe placement has been twisted. The centre of the heel bulbs is not centred between the heels of the shoe.

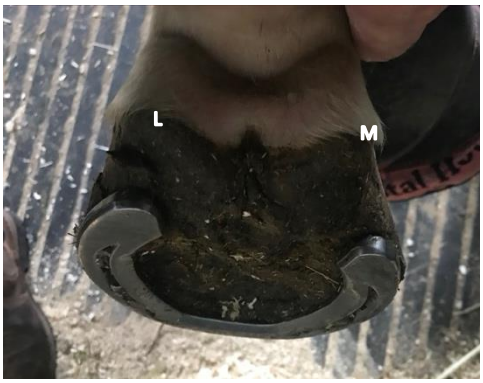
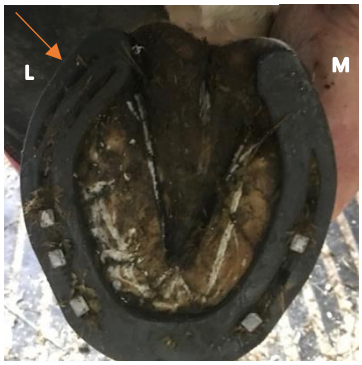
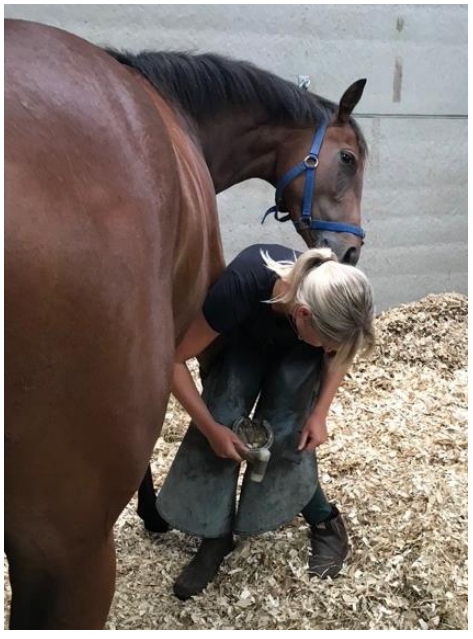


Figure 4: Medial wall is longer than the lateral.



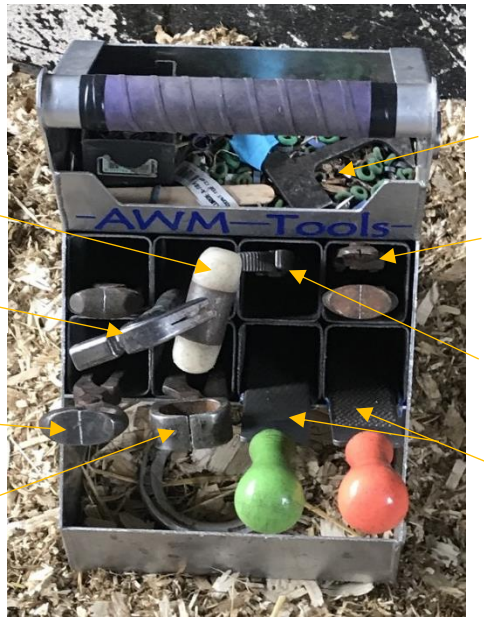
Using a factory steel shoe and the furnace, Steve created lateral support and fitted the right hind so the toe was set back from the shoe, to aid symmetry and balance. We discussed the pros and cons of the shoes used in Minnie's case, on one hand the lateral support will help spread the load and reduce the pressure and 'lateral buckling' but if these were fitted during the height of winter or could not be box rested, the extra shoe would create suction in deep mud and would quickly be pulled off! This case highlighted to me the importance of a tailor-made plan for each horse and with skilled farriery, modifications can be made to factory shoes to aid horses with various conditions. It also reinforced that correcting foot balance is not a quick fix and what might work for one horse on one surface will not work with another.



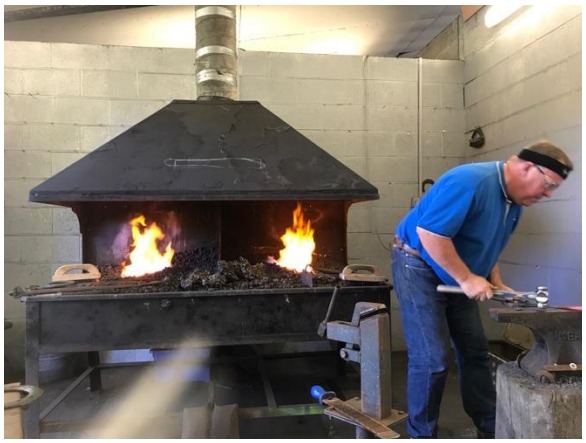
Practically I gained huge confidence in taking front and hind shoes off. I started on 2-year-old fillies, which were twitchy with flies making my job tricky but by the end of the week I was much quicker and more efficient. It wasn't until I tried removing shoes myself, that I truly appreciated the physicality of being a farrier. It also took a few attempts to understand the posture I needed to be in to make the horse as relaxed as possible. In order to effectively take the shoes off, the horse must be comfortable in the position you hold the leg in.

Steve described various methods of removing shoes depending on the wear of the shoe and urgency of removal. For example, if the horse has trodden on the toe clip, the shoe needs to come off immediately! In which case, knocking up the clenches is of less importance. Where knocking up the clenches is important is when the hoof wall is lacking in strength and hence the risk of damage is higher, for example in a racehorse.

I took some time to understand and learn the different tools farriers use, and I paid particular attention to the ones Steve recommended I had as a vet in practice. The buffer, mallet and hoof pincers are essential for removing shoes, and an apron is a farrier's best friend! The rasps are needed to shape the hoof wall and level the solar surface so the shoe sits flat and flush.



For hot shoeing the tools needed are totally different and I hadn't appreciated the extensive variety of shoes that farriers make during their training or through competitions. Steve showed me many shoes he had made including; ¾ fullered, heartbars and graduated heartbars for heel support and elevation, fishtail shoe which is good as a rest shoe for flexor tendon injuries, and an egg bar for horses with collapsed heels and broken back hoof pastern axis to unload excessive forces in the heel area.



I was very grateful to visit Grant Moon and spend a day at his forge with Steve and three other farriers. Whilst at Grant's forge, Steve made a small draft shoe with heel caulks and welded toe bar for extra grip, a shoe with lateral extension and an elliptical bar shoe to manipulate loading forces and aid recovery of limb injuries.

I believe that continued professional development is very important in all professions including farriery, so I was thrilled to be able to learn from the best in the business! I had never witnessed shoes being made but through Grant's demonstrations and observing Steve at work, I was able to gain a useful insight into how custom shoes are forged. Grant also performed a foot dissection for my benefit which was extremely kind and very interesting to see the hoof wall structures in detail. It was great to see the care the farriers took over their craft and their passion to keep improving their skills. I also gained an appreciation of the training routes and extra certificates/exams farriers can take, starting with a diploma awarded after a successful apprenticeship, progressing to an Associate and then Fellowship of the Worshipful Company of Farriers. Steve introduced me to the 'find a farrier' tool on the Farriers Registration Council, which will be very helpful when I am working in practice if I require advice on a case I am dealing with or to point a client in the direction of a qualified farrier.

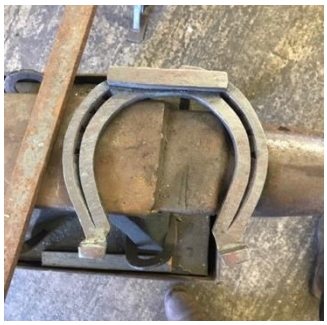


Figure 5: Small draught shoe

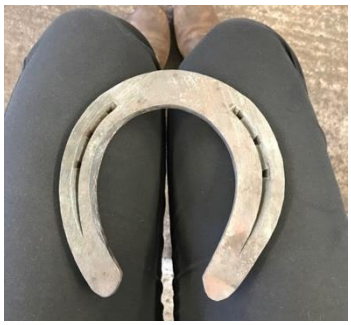


Figure 6: Shoe with extra lateral support

Throughout the week, Steve gave me many useful tips and tricks, including communication and understanding client expectations/views, which I am very grateful for. The week was extremely enjoyable, informative and really helped me develop practical and ‘day 1’ professional skills. I would like to thank Dr Lydia Brown for coordinating the placement and the Worshipful Company of Farriers for the opportunity to work alongside highly skilled farriers. Thank you to the equine clinicians at Leahurst for awarding me the placement and finally, thank you Steve and Jill for the invaluable experience and welcoming me into your family for the week. Moreover, I recognise that I have been extremely fortunate to have been able to get back working with horses during the current global pandemic and I am very thankful to all the trainers, grooms and clients I met for being so supportive from a social distance!

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