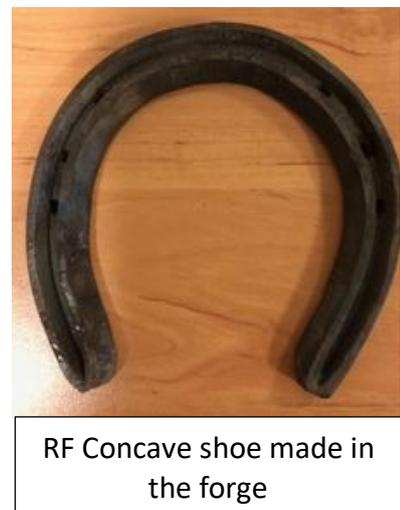


Worshipful Company of Farriers Equine Veterinary Studies Award 2020

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Having received the award, I spent a week with the Army School of Farriery at the Defence Animal Training Regiment, Melton Mowbray. I was placed with Master Farrier Chris McCabe, including his team of farriers and apprentices. Working with horses of the Household Cavalry Mounted Regiment, I learned a great deal about routine and remedial farriery and was able to practise basic farriery skills such as shoe removal, burning on shoes and forging my own. I had no prior experience of working closely with a farrier for an extended period of time or working with the army in any capacity so was extremely excited for the opportunity.

On my first day Chris tutored me on the basics of shoeing; why we do it, what shoes we have to choose from and the principles behind shoeing to conformation. We discussed how concave and flat shoes differed in purpose and how the placement of clips can influence breakover. Additionally, we discussed the importance of breakover and how it affects foot flight. For example, we explored the consequences of having an upright HPA due to a short foot which would in turn lead to a slow ascent in flight with a brisk and forceful descent. Hence, we discussed how this horse's conformation may predispose them to certain conditions such as pedal osteitis and bone spavin due to the persistent concussive effects of its gait. After this, Chris gave me a tutorial on imbalances and the necessity to split the foot into four symmetrical quarters when shoeing. Ultimately, the farrier shoes to restore the symmetry in the foot – whether this is through lateral extensions or adding length for example. In the afternoon, I was taught how to make a concave shoe in the forge and we talked about the utilisation of fullering to add length or width. This was a great experience and contextualised the day's theory.



The next day, I was tutored on hoof trimming to restore balance to the limb and strength to the hoof wall and practised assessing imbalance and conformation in conjunction with removing shoes and trimming the feet. We discussed how the type of work affects the trim and thus gave the horse a grass bevel as it was going to pasture. In removing the flaring and bullnosing of the hoof we strengthened the integrity of the wall and decreased the chance of crack formations. In the afternoon, Chris gave me a talk on angular and flexural limb deformities in foals which proved relevant when the apprentices shod for a carpal valgus and fetlock varus conformation later in the week.

One thing that I learned very quickly was the working relationship the farriers had with the Veterinary team onsite and the collaborative approach used for remedial cases to give a holistically considered therapeutic regime. For example, a horse 4/10 lame RH had x-rays taken at the hospital which were later assessed by the farriery team. Everyone concluded the gelding had obvious hock osteoarthritis but it was fascinating to analyse the radiographs with a farrier's mindset in assessing angles and considering their effect on the biomechanics of a limb. Chris speculated the horse had proximal suspensory issues due to the sunken

fetlock with a broken back and subluxated P2, whilst P1 and P3 were broken forward – altering the HPA significantly. The collective team concluded that frog support for P2 was essential, with plantar and lateral support for the sunken fetlock, this would bring breakover back and correct the HPA. Bruising was evident on the medial hoof wall due to secondary loading from an medio-lateral imbalance which should resolve with the remedial shoeing.



Radiographs, laterally extended heart bar shoe with added length

Working with the apprentices was really beneficial. We would observe a static horse and they would then talk through its entire conformation in order to decide what shoe to fit with or without moderations. I found this an invaluable exercise and discovered that so much can be learned about the animal from inspection alone. For example, from one horse, I noted rain scald, lack of top line in the neck with little lateral muscling in the hindquarters and coronary growth rings indicating the horse had been out to pasture and not in work recently. The gelding had a narrow base stance with fetlock varus and carpal valgus, resulting in medial flares with upright lateral hoof walls. They decided to shoe the fronts with a lateral extension and bar. The hindlimbs were post-legged and we discussed how this could predispose to suspensory problems. They were shod in a similar fashion to the fronts.

I had a great talk from Chris about alternative types of shoe such as the thermoregulated moulds for laminitic horses, hospitalisation shoes for keratomas and the use of glue and casting tape in cases where there is no hoof wall to nail. I learned earlier in the week how dangerous it is to nail without sufficient depth of wall and how it can lead to nail bind where the nail impinges sensitive structures of the foot. Chris then gave me a tutorial on fixing quarter cracks with glue, screws, a metal plate and a Vaseline coated straw and how glue can be used for toe extensions in foals with contracted flexor tendons as mentioned in his talk earlier in the week.

At the end of the week, a fractious mare needed sedating for shoeing. This presented an opportunity to remove shoes under a time constraint. The team fullered the lateral sides of the hinds as the heels were under-run, the fullering allowed the foot to regain its symmetry as it was extended to under the coronary band where the heel



Example of different types of shoe including: Acrylic with cast tape, plywood with dental impression material and cast tape, thermoregulated mould, hospitalisation shoe and aluminium shoe

should have been. We added dental impression material to the heels underneath the bars for extra frog support.

Overall, I had an amazing week and learned so much. In addition to gaining theoretical knowledge I was able to observe and practise many farriery crafts. Working in the forge was physically challenging but extremely rewarding and the instructors created a quality teaching and working environment in which I felt comfortable and enjoyed being a part of.

I would like to thank everyone at the Army School of Farriery, in particular; Chris McCabe, Mark Neal and Alan Bould for sharing their knowledge. Also, to Dr Lydia Brown and the Worshipful Company of Farriers for providing me and other vet students with the opportunity.



Removal of RF shoe