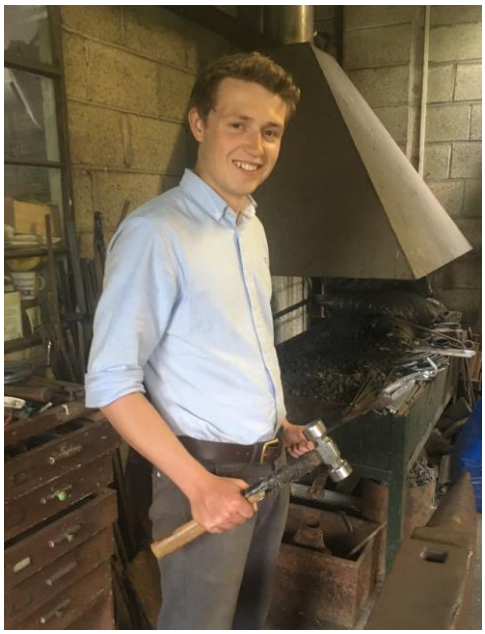
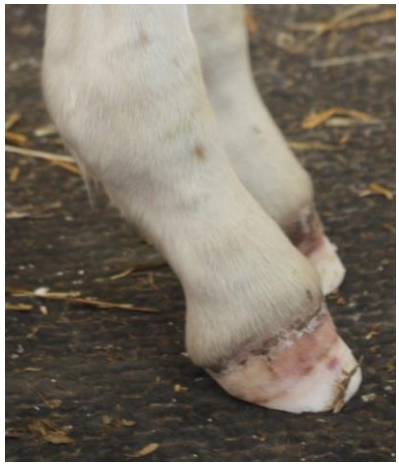
Worshipful Company of Farriers Equine Veterinary Studies Award 2020

William Phillips, University of Bristol



As the recipient from University of Bristol of the Worshipful Company of Farriers Equine Studies Award 2020 I spent a week with John Chilman who is based near Pershore, Worcestershire. During my week with John I saw a wide variety of different cases including foal limb deformity correction, treatment of laminitic ponies and remedial farriery of particularly challenging cases; alongside more routine shoeing and trimming. A particular highlight of the week was making a hoof pick from a shoe in his forge, this really made me appreciate the skill and craftsmanship that goes into working with metal to create shoes. I feel privileged to have been awarded this unique opportunity to gain an insight into farriery with someone who is as knowledgeable and passionate as John. During my stay with John and Jill, I was made to feel welcome and was very well looked after (Jill's cooking was excellent!). I really enjoyed the week and it was great to have a good laugh with John – I even managed to have a ride out in his Morgan car one evening!



Foal with a club foot

The first appointment of the week involved corrective trimming and placing of medial/lateral glue extensions on several thoroughbred foals to correct angular limb deformity. Here John explained how the growth plates of more distal bones close sooner than proximal bones, therefore it is more important to address the most distal ALD first before these growth plates close. During the week we visited several other foals with other limb deformities such as club foot. Club foot occurs due to hyperflexion of the coffin joint by contracted tendons (the foal appears to have a 'ballerina' stance), caused by the bones growing faster than the tendons. This disparity in growth is largely caused by excess nutrition, and commonly occurs following a recent flush of lush grass. I saw John treat these foals by placing a dorsal glue extension to lever the foot down and extend the tendons; he also noted that reducing nutrition (e.g. sometimes early weaning is performed), encouraging walking and performing physio are just as important as corrective farriery.

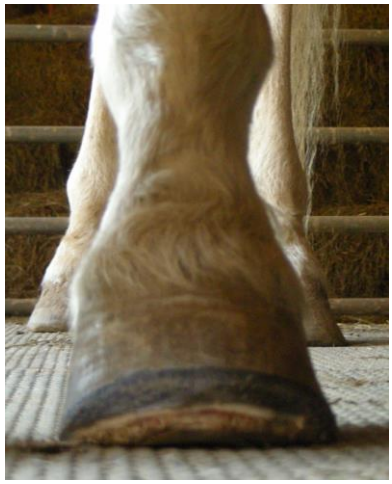
Over the course of the week we trimmed/reshod several ponies who had chronic damage caused by previous episodes of laminitis. John gave me a comprehensive guide to the initial treatment of laminitis as a vet (beyond just giving some bute!), which I'm sure will benefit any horse with laminitis that I treat during my career.

<u>Laminitis Initial Treatment</u>

1. Remove shoe to improve weight bearing on the frog
2. Trim/rasp heels + roll toe to create breakover
3. Provide support for frog + caudal part of foot using dental impression material (could also use vetwrap tube, Styrofoam)
4. Provide a deep bed for them to stand on
5. Advise trimming + Imprint shoes fitted by farrier if radiographic changes are present

I also saw John's approach to treating laminitis as a farrier: he trims and re-balances the hoof according to radiographs, and then applies 'Imprint' plastic shoes which provide frog support and avoid the need for nails. For on-going care of chronic laminitic cases he commonly uses leather pads packed with cotton wool and Stockholm tar. Leather pads provide protection and shock absorption without causing sole pressure (unlike silicone gel pads) and can be used for as long as 12 months, with the cotton wool packing providing frog support.

It was interesting to learn more about the changes to the conformation and appearance of the hoof that is caused by laminitis. We discussed how pedal bone rotation causes heel to toe foot placement due to pain at the toe, this results in excessive growth of heel which requires trimming. I observed the dramatic improvements in foot placement that trimming the heels provide. It was great that John showed me the radiographic changes of the pedal bone before we visited some of the ponies, this really allowed me to visualise what he was trying the achieve by trimming the heels and rolling the toe to correct the pedal bone angle back to 4-5 degrees from the sole. Other changes caused by laminitis include the presence of a 'laminar wedge' which is a clear indicator of a pony which has previously suffered from laminitis, the frog may extend forwards and require trimming back, and laminitic ponies often have narrow heels and are wide at the toe.



Laminar wedge indicating chronic laminitis

In addition to remedial farriery, John also provided me with a brief introduction to more rotuine shoeing. Watching John carefully modify and fit each shoe uniquely to each foot made me appreciate the art and craftsmanship behind farriery. He explained the reasons behind why he decided to make each adjustment which allowed me to gain a deeper understanding of foot balance and conformation, and the corrections which can be made.

It was interesting to learn the basics of farriery such as that front clips should never be used on hind shoes due to the risk of causing damage if they overreach, and hoof nails being angled at the tip to cause them to bend away from the sensitive laminae. John discussed that the outsides of the hind feet are usually worn more than inside (and often offside more than nearside due to road camber). Therefore, when shoeing the hind feet he usually trims more on the inside, and fits the shoe slightly wide on outside on hind feet. However, he also noted that it is important not to fit shoes too wide as the shoe may be pulled off if they are stood on by another horse. While in his forge I gained an understanding of the wide variety of different shoe types and the reasons behind why each may be used (or why they stopped being used!); from shoes that taper towards the heels with a wedge which were previously used before studs, to wide shoes with no fullering typically used in welsh cobs.

Over the course of the week, we saw several horses being fitted with studs. John mentioned that it is essential to only use studs where absolutely necessary as they may increase the forces exerted on joints. We considered the advantages of using 1 stud vs 2 studs and he

suggested that either may be appropriate depending on the horse's individual circumstances. However, he often prefers to use 1 stud on the hinds as it allows the hind feet to twist when turning tight corners and 2 studs on the front shoes to provide a more balanced traction either side of the foot. I also saw tungsten nails being applied which are used to increase grip on roads.

It was great to see the close relationship between John and some of the vets that he worked alongside – I hope to be able to achieve a similar relationship with farriers in the future! When treating a particularly challenging hoof, the farrier can provide comprehensive knowledge of hoof balance and the practical skills of shoeing; while the vet can evaluate the bone anatomy within the hoof capsule using radiographs and provide a holistic view of other anatomical systems.

I would like to thank John Chilman for sharing his lifetime of knowledge and expertise with me, and his wife Jill for looking after me for the week! Also, Dr Lydia Brown for organising this placement, and the Worshipful Company of Farriers for providing me with the amazing opportunity to gain an insight into farriery with John.

William Phillips
Final Year Veterinary Student
University of Bristol