Worshipful Company of Farriers Equine Veterinary Studies Award 2023 Anna McGorum Begara - University of Edinburgh

I was very grateful to receive the Equine Veterinary Studies Award provided by the Worshipful Company of Farriers. This allowed me the valuable opportunity to gain experience of the craft of farriery by spending a week shadowing a farrier. After a long journey south to Haverhill I was excited to meet my hosts; farrier Robert Rush AWCF and his apprentices Callum Stock, Tom Yates and James Colaco.

I started the week off by learning about the process of dressing a foot, where a foot is prepared for shoeing. This process involves pulling the old shoe and trimming or rasping excess horn until uniform sole thickness is achieved. The time taken to dress a foot also allows the farriers to assess the horn for any pathology. Before long I had the opportunity to remove my first shoe. We used a buffer and hammer to raise the clenches before levering the shoe off with shoe pullers. Callum showed me the importance of having good posture and technique to reduce the risk of injuring your back.

I saw both hot and cold shoeing performed and learnt about the pros and cons for each. When shoeing a horse, many farriers now use copper-coated steel nails due to copper's antimicrobial properties and rust resistance. I was taught where nails should be placed; from the widest part of the hoof and towards the toe. Nails should exit the hoof wall 1/3rd of the way up the hoof.

It was interesting to see how each horses' athletic activities were considered when shoeing. The dressage horses that we saw were primarily fitted with concave shoes and had a short shoeing cycle of 4-5 weeks. The hunters required more regular shoeing due to the heavy wear incurred from road work. The type of work a horse was doing also determined whether they needed a pair or a full set of shoes.

Through Robert's work at Redwings Horse Sanctuary, I was able to observe plenty of remedial farriery, particularly the process of managing ponies with laminitis. Most were shod with aluminium heart bar shoes, which increases bone column support and reduces weight through the toe. We used glue-on imprint shoes for more acute or sensitive cases of laminitis. These were atraumatic to place and greatly increased the comfort of laminitic ponies. Robert taught me a trick which involves resecting the dorsal edge of an imprint shoe to further remove pressure from the toe.



An imprint shoe for laminitic cases

One of the horses that we visited was found to have growth rings. These rings are thought to be caused by dietary or environmental changes, as well as conditions such as laminitis. Whilst this case had a previous history of laminitis, it was currently sound. The dorsal location of these rings suggests that there is an ongoing insult to hoof wall growth.

I learnt about how shoeing can help with the recovery of horses with ligament injuries. For a horse with a chronic



Hoof growth rings located distal to the coronary band

SDFT injury we fitted a sloped shoe that lifted the heel and lowered the toe. When shoeing an injured horse, it is important to take extra care when lifting the other legs so as not to risk worsening its injury. Likewise, this consideration should also be made for geriatric horse who may be stiff and painful upon manipulation of their limbs.

I learnt that farriers assess medio-lateral imbalances by observing the horse when standing square, as well as by raising the leg in a neutral position whilst held just proximal to the fetlock. Whilst medio-lateral imbalances cannot be corrected in an adult horse, remedial farriery can be implemented to manage them and support the foot to reduce the risk of further pathology occurring. Robert showed me how he can tailor a standard shoe to support a horse with medio-lateral imbalance. This case had a toe-in conformation and was striking the ground with the lateral aspect of its hoof, creating vertical hoof wall cracks. A shoe was tailored with extra lateral support. Even a subtle change like this can make a big difference to a horse's conformation.

Robert and his apprentices saw to



RF medio-lateral imbalance corrected with a lateral shoe extension



The oval shape of a donkey's foot

several donkeys throughout the week. I had never picked up a donkey's foot before and it was interesting to see the difference in hoof conformation compared to a horse, with donkeys having more oval hooves and longer heels. Donkeys evolved to live in hot arid climates, and therefore many develop foot problems in the UK as a result of the wet and muddy conditions they are exposed to. Robert explained that he has noted donkeys to be more prone to white line disease (seedy toe) than horses. This occurs when water and dirt track up the white line. Many often require intervention, and we saw a case that was recovering following a dorsal hoof wall resection for this condition.

We saw many cases of solar abscesses and thrush throughout the week, again often perpetuated by the winter conditions. Patients with solar abscesses often presented acutely lame. The vet and farrier discussed the case and worked together to locate the abscess and release the pressure. Cases with thrush, a bacterial or fungal infection of the frog, were treated by debriding the necrotic horn tissue before packing it with hoof clay mixed with copper sulphate.

I was lucky enough to visit the forge and have a go at making my first horseshoe. A steel bar was measured and marked in the middle then placed in the forge to heat up. The bar was then bent around the horn of the anvil to make the horseshoe shape and the heel ends were flattened, ideally whilst avoid the creation of a 'fish lips' appearance. The nail holes were then marked and punched out. Whilst my shoe took many heat cycles to complete (farriers normally take 3 cycles) and had several imperfections, I was very proud of the finished product!

Throughout the week, I picked up many tips which will help me in my veterinary career. These include carrying a set of hoof knives and nail pullers in the car, so that I can put my shoepulling skills to good use. I will also make sure to dig solar



Shaping a shoe on the anvil

abscesses out layer-by layer instead of hacking at the sole (which I was told many vets are guilty of!)



I would like to round off my report by thanking Robert, Callum, Tom and James for sharing their wealth of knowledge and giving me a valuable insight into their profession. Many thanks to Linda Quinn from the Worshipful Company of Farriers for organising this placement. I also wish to thank Dr Oliver James from the R(D)SVS for awarding me this opportunity. This experience has deepened my respect for farriers and made me aware of the importance of a strong farrier-vet relationship. I would thoroughly recommend this experience to any veterinary students with an interest in equine practice.