The second Cattle Lameness Academy Seminar involved veterinary surgeons, foot trimmers, farmers, researchers and anyone working within the agricultural industry with an interest in lameness. Developed by RAFT Solutions, the gathering was hosted by Synergy Farm Health and supported by Zinpro, CowAlert, Boehringer Ingelheim and Bayer.

Jon Reader (Synergy) highlighted the changes that have taken place since the first seminar in 2016, including a growing evidence base for day-to-day activities together with new techniques and protocols. A presentation was made to Professor Jon Huxley, whose energy and enthusiasm has driven the cooperation and developments that have brought the lameness industry together and improved the mobility of dairy cows. He will shortly be moving from the University of Nottingham to New Zealand.

The incidence of lameness in UK herds

Dick Sibley (Westridge Vet Practice) chairs the Dairy Cattle Mobility Group and, with reference to understanding also developed from the Healthy Feet Project, the speaker emphasised that the current state of lameness in UK dairy herds is too high. Lameness management has to move on to a “predict and prevent” strategy and leave behind the idea of “test and treat”. Veterinary surgeons are a part of the solution and they need to benefit from successful lamelessness and not derive income from lameness failures. Twenty-five years ago, it was clarified that there was a 7:1 payback to the farmer from fertility management, but it is not so clear with lameness.

The speaker calculated that with the current situation in the UK, 25 percent of milk purchased has come from a cow in pain. Some 18,000 adult cows are culled each year for bTB and over 70,000 for lameness, but there is a big difference between farmer awareness and the actual lameness incidence in many herds. A tribute was paid to the work financed by the Tubney Trust and their support for improved animal welfare.

The clinical situation has changed from white line disease and sole ulcers 20 years ago to digital dermatitis and sole ulcers now. But lameness is not inevitable and some of the most successful and intensive dairy herds have little lameness. The future lies in becoming more efficient at what we do, with farm systems to suit the cows rather than the farmer and the farm buildings. The regulation of foot trimmers is also an important development for lameness management.

Treating cows early

Reuben Newsome (Synergy) has contributed to the understanding of the pathogenesis of claw horn lesions. He emphasises that the challenge is to treat cows early and stop them becoming chronically lame. It takes approximately two months from the initial interruption of keratogenesis to the formation of a sole ulcer. Lameness prevention relies on managing the forces applied to the foot, where factors such as standing times, walking surfaces and social competition become important, and the transfer of forces through the foot, which relies on foot shape and cow factors that influence the structure and function of the foot.

The speaker highlighted that current research is ongoing to understand the role of insulin and the indication that high levels lead to weaker suspensory ligaments, combined with the changes around calving occurring with the laminae and a greater risk of sole damage. Susceptibility to trauma is influenced by metabolic issues and disruption to horn development. Behind the current recommendations for changes in cow lameness management lies a considerable depth of science.

Laura Randall (University of Nottingham) highlighted that the risk factors for claw horn lesions are not simple. As well as increased tissue laxity, a low body condition score and a history of lameness are key indicators. Repeat cases of lameness are a major issue and understanding why these cases occur is essential.

The management of young stock to prevent the initial case will stop the incidence of broken cows that cannot be fixed. Sara Pedersen (Farm Dynamics) is investigating current foot trimming practices. Although the majority of farmers undertake routine trimming at or around drying off, the commonly asked questions concern the optimal time and method for foot trimming. There is great variation in the targeted measurements for trimming, including foot angle, weight balance between claws, claw modelling and the techniques used. It is advised to get the method right and then move on to when might be the best time to trim.

Jonathan Huxtable (Zinpro) reported on the feeding of trace minerals and a reduction in new cases of digital dermatitis. It is established that the addition of trace minerals,