THE LATEST ON LAMENESS... 

RICHARD GARD reports from this year’s Cattle Lameness Conference, which among other topics covered the latest thinking and research into digital dermatitis.

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Brian Pocknee, Arturo Gomez and Dick Sibley at the conference.

Standards, all incidences of lameness must be recorded. These records are reviewed annually by the farm vet who also inspects the livestock, identifies key issues and makes recommendations for improvements. Every 18 months the Red Tractor assessor scores a random selection of 10 cows for mobility (using the AHDB Dairy Mobility Scoring System), body condition, hair loss, lesions/swellings and cleanliness. As well as lameness, farmer records of mastitis, culling rate, involuntary culls and calf mortality are reviewed. Assurewells carry out online assessor training for welfare outcome assessments to maintain standards of competence. The on-farm data are currently being assessed by Assurewells to provide a representative picture of the health and welfare of the national dairy herd.

The winning poster presentation, judged by the delegates, was for Antibiotic lameness treatments: a low hanging fruit by Robert Hyde and Jon Huxley (University of Nottingham). Recognising the need to reduce antibiotic use on-farm, a monthly antibiotic footbath for a dairy herd is a major contributor to the overall use of antibiotics, much more than dry cow therapy, injectables and topical treatments.

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THE CHAIRMAN OF THIS YEAR’S Cattle Lameness Conference, Brian Pocknee, welcomed everyone to the eighth annual gathering and announced that the Dartington Cattle Breeders Trust has agreed to sponsor the next three conferences.

That means the future of this important conference for the industry is secured; there were six other sponsors this year too. A quarter of the delegates were veterinary surgeons in cattle practice together with university specialists, farmers and people associated with hoof health. The programme was comprised of four technical papers, nine posters – of which three were presented to the delegates as a research update session – plus an on-farm case study.

Dick Sibley of West Ride Veterinary Practice outlined the development of the understanding of cattle lameness from a time when it was considered that lameness was inevitable and that the costs of ‘prevention may exceed the economic benefits.

The Healthy Feet Project demonstrated that lameness was measurable, manageable and preventable with changes making real differences to dairy cows. The welfare benefits became apparent to the dairy industry as a whole and the project forms the basis of the current AHDB Dairy Healthy Feet Programme.

The initiative brings farmers, vets and hoof trimmers together to deliver better healthcare for herds interested in managing lameness. The Dairy Cattle Mobility Steering Group (DCMSG) has been formed with a mission to engage with all parts of the dairy industry in achievable, affordable and effective measures to eradicate severe lameness, minimise moderate lameness and maximise mobility in the dairy herd.

The group meets twice a year and has identified tasks that include: the creation of a register of foot trimmers, with standards and regulation to ensure consistent quality standards; developing farm lameness standards based on mobility performance; encouraging new technologies to provide objective measures of lameness/mobility with the potential for automated monitoring; engaging with the Food Standards Agency to monitor lameness in abattoirs; improving the procedures for dealing with lame cows so that early culling of chronic cases improves animal welfare without penalising the farm economics; maximising engagement and effectiveness of communications with those who can influence dairy cattle lameness. A cattle lameness website has been developed and will become a prime source of best practice.

A register of mobility scorers will be in place by July 2017. Responding to questions, it was identified that the lameness mobility of a cow is set as a heifer and that the programme should be to achieve early recognition of lame cows.

Digital dermatitis

Arturo Gomez (Zinpro Corporation, The Netherlands) knows a great deal about digital dermatitis and he recognises that we need to cross knowledge boundaries to make progress with the disease.

Early on in his presentation he showed a photograph of a group of very clean and fit-looking heifers, of which 95% were afflicted with digital dermatitis. The notion that DD is a consequence of the muddy, wet conditions on UK farms is immediately challenged, although it may be a contributory factor, but there are important aspects to understand about the disease.

The point is made that “the industry has not clearly considered the chronic DD forms as a key stage of the disease and has neglected the fact that the cystic/resistance forms could drive the resilience and the endemic status of DD observed on farms today”. In summary, active and chronic stages present on farm and topical treatment at an early stage is a good and convenient starting point in the control of the disease, but a prevention programme needs to rear healthy replacement animals.

The raring period should provide a zero prevalence before the first calving and during the transition period at the start of lactation, new cases must be prevented. The genetic background of cattle can predispose them to the disease, but knowledge is not sufficiently advanced to apply this understanding.

There were many practical aspects discussed. Worldwide there is a high incidence of DD in beef and dairy herds. Foot bathing is a prevention strategy and not a treatment for clinical cases.

The disease has an economic effect even when animals are not showing lameness as they spend more time standing still or lying down. There is a lack of confidence between trimmers, vets and nutritionists of the ability of each to control the disease. A single lesion can have as many as 25 genetically identifiable treponemes. Visual awareness, detection and recording of DD on-farm need application.

Sara Pederson (Farm Dynamics) described a trial for the control of digital dermatitis in a herd with 37% of the adult cows having an active, healing, dormant or recurring lesion. Of the 79 lesions recorded, 46 were active and three recurring.

These lesions were washed with clean water including the interdigital space, gently dried with sponges, thoroughly sprayed with oxytetracycline spray (Engemycin 25mg/ml), left to dry for 30 seconds, lesion sprayed again and cows returned to cubicle housing. The cows were re-examined in a crush for two consecutive days and repeat-treated as necessary.

After the three-day treatment, eight of 49 lesions had not progressed to the healing stage and were treated for a further three days. Treated cows did not go through a foot bath. Thirty-seven cows had lesions initially, three cows six weeks later and one at five months.

A four-metre foot bath with formalin replaced a shorter installation; the intention is that only clean feet go into the foot bath. The three-day blitz treatment protocol is considered to be effective.

Digital cushion data

Reuben Newsome (University of Nottingham) has further investigated the data collected on the appearance of the digital cushion during lameness.

Cows that developed lesions had a thinner digital cushion before the lesion occurred and the presence of the sole ulcer encouraged thickening of the cushion, probably linked to inflammation. It is the absolute thickness of the cushion that influenced lameness and lesions.

Lameness is linked to permanent anatomical damage within the foot. Local inflammation could cause the bone to produce more and more bone, which explains the spiky bone growths seen in lame cows investigated after slaughter.

Early treatment of lesions is essential for recovery and a therapeutic hoof trim, combined with a block applied to the non-lame claw, plus a course of non-steroidal anti-inflammatory therapy is effective.

Red Tractor recording

Jessica Sloss (Assured Food Standards) explained that within the Red Tractor system, body condition, hair loss, lesions/swellings and cleanliness. As well as lameness, farmer records of mastitis, culling rate, involuntary culls and calf mortality are reviewed. Assurewells carry out online assessor training for welfare outcome assessments to maintain standards of competence. The on-farm data are currently being assessed by Assurewells to provide a representative picture of the health and welfare of the national dairy herd.

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