

Digital dermatitis – prevention, not cure

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In the UK lameness continues to be a serious problem on many dairy farms with digital dermatitis, the main cause, being present in 70% of all dairy herds and accounting for up to 25% of all cases.

Annual herd lameness cost estimates vary widely, from around £30 per cow to over £100, but the cost of dealing with a single case can be well above £250. This takes into account the direct costs of treatment and labour as well as the indirect costs of lost milk, reduced fertility, early culling, etc.

Results from the recent EU Lameness Cow study showed that digital dermatitis results in an average loss of one litre/cow day, while another study by Green et al in the Journal of Dairy Science (2002) concluded that 160-550 litres are lost per lactation due to lameness, depending on the cause. It is obvious, therefore, that this is an area of equal importance to mastitis and fertility in terms of impact on dairy profitability.

Prevention, not cure

By far the best approach to tackling lameness is to prevent it occurring in the first place. Part of this involves identifying potential causes; in particular look at housing comfort, the

condition of walking surfaces, slurry removal, and general hygiene as infectious diseases like digital dermatitis usually result from poor hygiene. Poor nutrition, resulting in conditions like acidosis, should also be considered.

Locomotion scoring

Regular locomotion scoring of your herd (Table 1) is an excellent way to identify potential problems early as well as assessing the effectiveness of preventative measures or treatment. Scoring is a fairly simple procedure and becomes even easier with experience. Set a benchmark then aim for regular improvements.

Cows scoring 2 or 3 are considered to have sub-clinical lameness with those scoring 4 or 5 being clinically lame. Aim for a minimum 65% scoring 1 and less than 3% scoring 4 or 5. Treat any scoring 3 or more; if left they are almost certain to get worse.

Cows scoring 3 or less will benefit from a regular footbathing programme as a means of prevention.

Footbathing

Footbathing is the only way to routinely clean and disinfect the feet of the whole herd, including dry cows and young stock.

Footbaths need to be long enough and deep enough – at least 3m long with a solution depth of around 10cm – to ensure the hooves are immersed completely and for long enough.

The solution must be changed regularly if it is to be fully active and a good rule of thumb is to allow one cow pass per litre before changing. This will of course depend on how much dirt gets carried into it on the cows' hooves, especially in winter when the risk is much higher.

To minimise contamination, clean the hooves before they enter the bath. Volume washing in the parlour does this very well but the cows are not usually very keen on it and it will be painful for those with lesions. There is also the risk of splashing



dirt up onto the udder. A much better option is to have a second pre-wash bath containing water or, better still, a solution containing surfactants to help loosen the dirt quickly. It will also stimulate the dunging reflex before they enter the active bath.

Formalin and copper sulphate are still in common use for the active bath as they are cheaper but it is

likely they will be banned eventually due to health and safety and environmental concerns. Effective alternatives are available.

Rosebeck's Digit Gold twin bath system comprises an initial bath containing surfactants to clean and loosen organic matter, followed by a second bath containing the active biocides and has been shown to be very effective. ■

Fig. 2. Locomotion scores before and after using Rosebeck's Digit Gold regularly (119 dairy cows footbathed twice daily three times a week for a month).

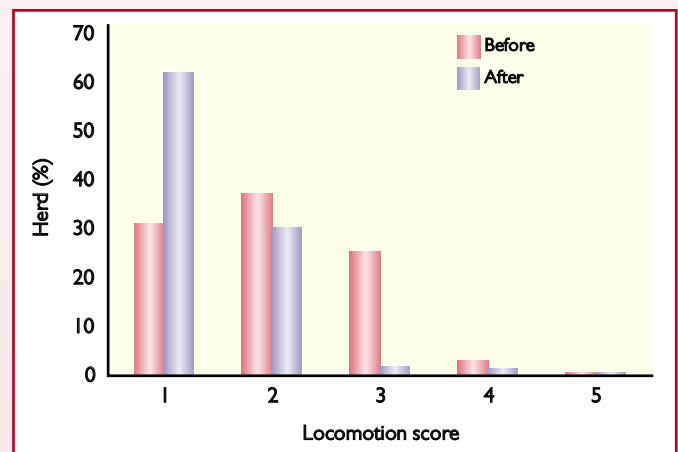


Table 1. Locomotion scoring.

1 – Normal. Back is flat when standing or walking and the feet are placed purposefully.

2 – Slightly lame. Stands with flat back but arches when walking. Gait may be slightly abnormal.

3 – Moderately lame. Stands and walks with an arched back. Short strided gait.

4 – Lame. Walks and stands with arched back and favours one or more legs. Head nodding evident.

5 – Severely lame. Extremely reluctant to bear weight on one or more legs. Very poor gait.