

# First steps to lameness control

Lameness is a stumbling block in too many dairy herds in the UK

*White line disease, one of the main three causes of lameness in dairy herds*



**Lameness is at unacceptable levels in many of our herds and is the root cause of other problems. The situation needs addressing, according to vets and retailers at the Cattle Lameness Conference, and this starts with better monitoring and earlier diagnosis.**

Perhaps the popularity of the inaugural Cattle Lameness Conference at the University of Nottingham this spring was an indication of the size of the lameness problem in our dairy herds – and producers' eagerness to get on top of it.

The University's Jon Huxley pointed to independent studies that have recorded more than 60 cases per 100 cows a year on UK dairy farms – that's 25% of UK cows identified as being lame on any one day. And it's a situation that he and other speakers agreed needed to be addressed. "The reasons behind lameness are multi

factorial and there's a lot of work to do," he said. "Evidence-based controls are required."

## Proof needed

This was a sentiment echoed by the University of Warwick's Laura Green who was a partner in the EU-funded Lamé Cow study. Despite identifying situations where the big three – sole ulcers, white line disease and digital dermatitis – were at their highest levels, she concluded that producers needed robust intervention studies to prove that changes in management

do lead to changes in lameness levels. "We know, in terms of lost performance and therefore income, just how serious lameness is," said Professor Green. "But how can we ask producers to make changes when we have no hard evidence that it makes a significant difference." The study monitored 50 dairy herds that were visited by researcher Zoe Barker

*Laura Green: "Producers are reluctant to make changes"*



and colleagues four times in a year and records were made of management and housing factors like cow comfort, floor quality, foot bathing, stocking rate, cow tracks and social behaviour. Producers were trained to recognise and record lameness and distinguish between sole ulcers, white line disease and digital dermatitis.

## Reluctant producers

The project highlighted the situations where incidences of the various lameness diseases were high:

*Sole ulcers:*

- Parity four or more
- Roads or concrete tracks from parlour to grazing
- Use of lime on free stalls or sparse bedding for more than four months

*White line disease:*

- Increasing parity
- Increasing herd size
- Cows housed at night and pasture by day (wet feet on hard surfaces)
- Solid grooved concrete floors

*Digital dermatitis:*

- Solid grooved flooring
- Six months post calving

"Based on our observations, we made recommendations – mainly low cost and only involving small changes in management, such as increasing the amount of bedding in the cubicles, improved cow flow, better hygiene, footbathing and avoiding turning or 'pushing' cows," added Professor Green. "But we found producers were reluctant to make these changes and only a quarter were implemented." She links this reluctance with a lack of evidence to support the cost-effectiveness of making these changes.

## Zero tolerance to lameness

The implications of lameness in herds is well known. "Those with white line disease and sole ulcer showed drops in milk yield of 369g and 574kg per lactation respectively. And health, welfare and fertility are also affected. Lame cows are

reluctant to show signs of heat and fertility can decline as a result.

"However good the genetic merit of our cows, until we tackle lameness the cow can not express her full potential. And performance is further hindered by a delay in treating lame cows."

Herds employing foot trimmers may be waiting for the trimmer to visit and not treating lame cows immediately.

And another potential problem is the availability of labour in larger herds.

"But larger herds are no excuse for increased lameness," adds Professor Green. "Herds should have a zero tolerance to lameness. Mobility scoring and earlier treatment of lame cows would be a good start in most herds."

*Karen Wright*

## Three steps to controlling lameness

Gloucestershire vet Chris Watson has a three-pronged approach to investigating lameness and, as a result of advocating this on his clients' dairy units, he is treating far fewer cases.

"I used to see six or eight cases of lameness a day 10 years ago but now this has dropped to this number a week," he says. "As a vet practice, we're primarily dealing with just chronically lame cows. Thanks to routine foot trimming, better skills on farm and better on farm records, all of which we have encouraged, many cases are picked up and dealt with earlier."

Mr Watson defines the three stages in his investigations as recording the level of lameness, site investigation and cow comfort, which includes looking at cow behaviour.

"Locomotion scores and records of the types of lameness seen in the herd are a good starting point," he says. "I keep the scoring system simple and it's a good way of building up a relationship between incidence and prevalence if it's carried out regularly. Roughly, the incidence is about three times the average prevalence on farm."

"And we have educated our clients to record the type of lesion causing the problem. This means we can link the type of lameness with the limiting area affecting it."

The second stage is to carry out a site investigation. This is comprehensive and includes cow flow, floor surfaces,



*Chris Watson: "Locomotion scores and routine records of lameness are recommended"*

buildings, stocking rates, tracks and hygiene. "We need this database to work out which will give the best response to improvement," he adds.

Stage three is to look at how the cows behave in response to the way they are managed. Any sores or lesions or excessive time spent lying or on their feet, for example, will give clues as to the causes of lameness and the underlying issues controlling it.

From these investigations plans to tackle lameness in the herd can be drawn up.

"This is a logical approach that is based on an understanding of lameness. We need this to devise initiatives to reduce lameness that are achievable and will deliver results. The overall aim is to make sure we monitor lameness to evaluate whether the improvements and protocols put in place are having the desired effect."