

A new early warning device paves

Health Alert fla

Pre-empting health problems and staving off disease and illness is an advantage for any dairy business. And this is exactly what mySilent Herdsman Health Alert will do. Alongside Silent Herdsman's activity monitoring, the enhanced system can now log eating and rumination patterns. These can be linked to early signs of illness.

text **Karen Wright**



Andrew McKay



Drew Sloan

MySilent Herdsman Health Alert helps producers and their advisers detect early signs of disease. The software builds on research carried out during a three-year programme supported by Innovate UK that measured behaviour patterns – a combination of activity, eating and rumination – that could be linked to the early identification of conditions such as acidosis, ketosis, lameness and mastitis.

“The software continually monitors eating and rumination via a single collar-based sensor that also monitors movement patterns linked to heat detection,” says Silent Herdsman chief executive Drew Sloan. “It is calibrated to the cow’s norm and deviations from this norm draw attention to the cow.”

If a cow’s eating or rumination starts to drop she may well be at the early stages of a health problem. “Our trial data shows that if both drop by 30% then illness is imminent in the majority of cases,” adds Mr Sloan.

Early investigation

Although the most immediate link to a problem is seen if both rumination and eating drop, a fall in either still calls for further investigation. “A cow might stop ruminating if she is on heat – we know there’s a link here and it provides improved confidence in the heat detection accuracy. Or she could have a mild stomach upset. And although she may recover naturally, the producer or herdsman can keep an eye on her. She’s on the radar and won’t get missed if it turns out to be more serious.

“So being able to pick up this information and take action could avert problems before they affect production and incur labour and treatment costs. It’s a huge step forward in herd management.”

The Health Alert software sensor is set at a 30% default – at which point drops in eating and rumination will be reported through a wireless system to the farm PC, or to a mobile phone

or tablet. As with movement monitoring, this sensitivity can be altered.

Dumfries-based producer Andrew McKay installed the Silent Herdsman system three months ago and bought 300 collars for his pedigree Lowmalzie Holstein herd. “Our main motive was to improve heat detection,” says Mr McKay, who farms the 223-hectare unit at Broughton Mains near Sorbie. He also runs a 50-hectare farm nearby with his parents and wife. “I normally do the morning milkings and the rest are shared between our team of workers. They’re very good, but it’s easy to miss heats or forget to record them.”

Eating records

Comparing the alternatives, Mr McKay’s decision came down in favour of Silent Herdsman because of the latest health alert option. “I am keen to manage as much of the herd in house as possible and the option of using Silent Herdsman for fertility, as well as health management, was attractive.

“Being able to monitor eating and rumination is a big thing for me. I don’t see the cows individually more than once a day. Even after just a few months I am really appreciating seeing what’s going on with each cow from the farm PC – or on my phone if I’m away from the farm. It’s proving really beneficial. If I’m away and spot a problem I can phone the herdsman and ask him to check out a cow.”

Having reverted back from organic milk production to a more intensive system five years ago – which Mr McKay admits better suits his type of cow and his mind-set – he is looking for increased production without jeopardising health and fertility.

The current yield average for the 380 milkers is 10,600kg at 3.99% fat and 3.25% protein on three-times-a-day milking. Herd somatic cell count averages 135,000cells/ml and the current calving interval is 404 days.

the way to averting health problems

gs up sick cows



Lowmalzie cows with Silent Herdsman collars that monitor activity, eating and rumination

“I’d like to see our heat detection improve and I am sure this will be possible. We’re bringing all the fertility management in house and we will serve any cows showing signs of heat at 12-hour intervals. It gives us far more flexibility and it means cows are served closer to their time of ovulation, which should improve conception rates.”

On top of the game

When it comes to monitoring eating and rumination, Mr McKay admits that it’s a case of building up confidence in the system. “We’ve picked up two or three cows where eating and rumination has dipped more than the 30% benchmark. At first we were reluctant to do anything as these cows looked perfectly fit and healthy. Then within a day or so their milk yield has dropped and we’ve needed to take some action.

“Now we know that we need to get the vet in or at least take action immediately. Also we keep a close eye on any cow that shows a significant dip in either rumination or eating. This is proving really worthwhile – we’re far more on top of the game.”

With more producers reaping the benefits of the Health Alert software alongside the heat detection function Drew Sloan is confident that the cost of the system can be easily justified. He quotes industry data that costs a mild case of mastitis at £60 a cow, increasing to £300 a cow for a severe case. And there are more savings to be had from the early detection of other illnesses and improved fertility.

“It’s a fantastic tool for large and small units. It’s an extra pair of eyes 24/7 that can help manage both fertility and cow health.”

Software service

Marketed by NMR as part of the Silent Herdsman service, mySilent Herdsman Health Alert is available as a software service and costs from £900+VAT for the 12-month license, depending on herd size band.

Silent Herdsman collars can be purchased or rented from NMR. Producers in England can apply for grants from the Rural Payments Agency. The RPA currently has an option for collar based rumination monitors with a deadline for submission of June 30, 2015.

The Silent Herdsman system infrastructure costs from £2,700 including installation, training and support. Full details are available from NMR. |