



Progressive business uses evidence-based data

# Seeing sense on data collection

Pressure on labour and the need to meet performance criteria and make a living, has encouraged one Herefordshire-based producer to grab technology by the horns. So he has upgraded to the latest activity monitoring system and invested in robotic milking.

text **Karen Wright**

A major overhaul is probably the best way to describe changes made at Nicholson Farm, Leominster. During the past few years, fourth generation producer Phil Brooke has replaced the 75-hectare unit's dairy sheds and parlour with new housing and cubicles for the

140-cow Holstein herd. As part of the new set-up, he added three robotic milkers in 2015 and in July 2017 he replaced his eight-year-old Heatime collars with the next generation of SenseTime collars. "The move from Heatime to SenseTime has been a massive leap," says Phil, who

runs the farm with help from a self-employed relief milker, two students who each work two days a week and a consultant.

And since setting up the new unit, he's also converted to organic milk production. "We applied for planning in November 2014 and when we started the building work, milk price fell, each month, by 1ppl," he explains.

"It was a fairly stressful time and under our milk contract, at the time, we were experiencing the worst of the volatility."

## Move to organic

With the commitment to a high-tech system, Phil decided that producing high quality milk that met the organic criteria – and secured him a better price – was the way to go. The first load of milk was collected by OMSCo in October 2017. "So far, the robots have been brilliant and have helped to overcome our labour problem," he says, adding that he also appreciates the lifestyle change now he has a young family.

The upgrade to SenseTime has also been a positive move. "Heatime worked well, but the results were only available from a



## Track it and manage it with new SenseTime

SCR SenseTime is much more than just a heat-detection system, according to NMR product manager Emma Eastham. "It's been developed as an all-round heat, health and wellness system," she says.

"It allows a lot more activity to be monitored, compared to older systems, such as eating, rumination and activity. Monitoring these three daily activities gives us a real insight into the cow's health and wellbeing."

Dairy cows ruminate, on average, for 450 to 500 minutes per day. Monitoring eating patterns and rumination activity, and acting on any deviations from a cow's pre-established norm, will minimise detrimental effects on production, reproduction and overall wellbeing.

"There's also a strong link between rumination and the onset of heat. Rumination will fall, on average, by 35% when a cow is on heat. Rumination monitoring is also a tool in predicting post calving disease and disorders."

Research by SCR – which developed the system – found that cows should

be back up to normal rumination time between five and six days post calving. If not, she may be suffering from metritis, ketosis or a displaced abomasum.

"And monitoring eating as well as rumination provides us with a much clearer insight into the cow's health, as a fall in both is a clear sign that she is unwell," adds Ms Eastham.

SenseTime is the first cow monitoring system that offers a choice of neck tags or intelligent ear tags. It is simple to install and easy to upgrade. It has a control box that acts as its own data server and antenna, which can communicate with up to 1000 tags. An extra control box is added for larger herds.

"The control box links to the cloud and this means that users can view data via different devices such as tablets, PC's and mobile phones," says Ms Eastham. "It also links with herd management software. And we've also made sure its flexibility is extended to payment plans so there's a scheme to suit all herd management systems."



Phil Brooke: "Upgrading to SenseTime has been a positive move"

small LCD control box in the parlour – and only for activity that related to heat detection.

"Now I get movement information and eating and rumination patterns, again against the cow's norm, on my mobile phone or tablet. So I don't even need to be on the farm. I can call my relief milker and tell her which cow needs inseminating or any cow to keep an eye on, perhaps because her intake or ruminating pattern has changed."

Phil is already reaping the benefits of the new system in his high-production herd, which is currently yielding 9,200kg of

milk at 3.8% fat and 3.2% protein. "The rumination data is extremely useful. Information comes through quickly – it's updated every 20 minutes – and the algorithms in the program automatically pick out 'poorly' cows and highlight these under 'cows to inspect' or 'cow distress' headings."

Although it's still early days, he's pleased to report that 12 out of 14 cows and heifers, from the first batch served on the date identified through SenseTime, have PDed positive. And there have also been a couple of 'blips' in the rumination data that have pre-empted possible mastitis issues that they have been able to deal with.

He adds that the combination of SenseTime and the robotic milkers is contributing to improved health and welfare of the herd and that somatic cell counts are certainly improving. "We were plagued with housing problems in the old cubicle building and we're now managing our way out of it."

The herd's vet Matt Pugh, from Belmont Farm and Equine, is also a supporter of the new technology as a means of improving cow health and welfare.

"We're able to work together and take full advantage of this new tool," he says. "We'll also use the whole herd rumination data to flag up changes in feed quality of the ration, so we can tweak the diet before it impacts on production."

### Technology trend

Phil admits that he spends longer in front of the screen now. "You can't be a technophobe," he adds. "But then much of farming is going that way, so it cannot be ignored." He gets NMR records and data from the parlour software Crystal and SenseTime, but soon he hopes that data from each will be integrated into one package – possibly UNIFORM – to produce one set of cow reports and action lists.

"NMR supports all these systems, so there's always help at hand if you do get into difficulties. The company is superb at sorting small issues on the phone and providing on-site training.

"We're expanding the herd with home-bred replacements – we're a strictly closed herd – and we've capacity for 240 cows," he adds. "We've got the system and technology in place to manage a herd of this size proactively." |