Running a tight ship relies on smart monitoring tools

Caught by the collar

Cow collars are about more than simply monitoring activity. Now the same tool can monitor eating and rumination and flag up health issues. One Cheshire-based herd is taking advantage of this and moving management moving up a gear.

text **Karen Wright**

Silent Herdsman has been a significant investment for Richard Blackburn but he is adamant that it's easily paying for itself. During the past seven years he has doubled cow numbers to 400 Holstein Friesians. He's also built new cubicle housing and taken on a management system that records cow movement, eating and rumination data through collars and a wireless aerial linked to his PC and mobile phone.

More cows called for accurate monitoring and recording. Working closely with his vet, Den Leonard of Lambert Leonard and May, he identified health and fertility as the key target areas to concentrate on.

Starting with fertility, and recognising there was progress to be made, Richard swapped his old fertility monitoring system for Silent Herdsman. "We were increasing cow numbers and needed more collars so it was an obvious time to go for a more up-to-date and reliable system," says Richard.

He also joined the vet practice's Vet-Synch fertility management programme, which involves the vet monitoring and synchronising the non-pregnant cows every week from 45 days post calving.

Two years on and Richard is reaping the rewards, not least from Silent Herdsman. The frequent data updates, thanks to an aerial strategically placed in the yard, means that he and his team are now working with more accurate and reliable information than they were in the past. "It's improved our heifer management too," he adds. "We have an aerial in the heifer yard and collars are put on when they are 13 months old so we can pick up heats from movement data as well as observation. We don't intervene and induce heats, but we still want to calve them at 24 months old. Heifers are served with sexed semen and the timing of insemination is highly important. The collars have been a huge help."

The NMR data provides tangible evidence too, with most of the herd's results now within the top 25% of NMR herds.

With a fall in calving interval from 430 days to 380 days as shown in Figure 1, the latest data shows that 81% of cows are served within 80 days of calving and 51% of the cows are in calf 100 days post calving. Average calving to conception is 115 days and conception rates have increased from 23% to 42% during the past two years, since Silent Herdsman has been in operation.

Work 'by the screen'

Some of the credit, though, goes to Richard and his assistant Graham

Graham Routledge (left) and Richard Blackburn (right) pick up fertility and health information on their phones or the office PC

Latest Health Alert

The new mySilent Herdsman Health Alert software service provides early identification of animal illness through 24/7 eating and rumination monitoring. It has been proven to accurately and reliably alert producers to the signs of illness – most typically the early onset of acidosis, ketosis, mastitis and lameness.

Early indications of health problems mean that preventative action can be taken. All Silent Herdsman collars can provide eating and rumination data and alerts can be accessed through an annual licence fee, which costs £1200 for a for a 200-cow herd.

Cost:benefit

Catching a potential case of clinical mastitis early by using mySilent Herdsman Health Alert can result in significant savings.

"A 'typical' case of mastitis, based on the frequency and severity of the different types of mastitis, costs between £200 to £250," says dairy vet Den Leonard. "A 10% reduction in mastitis rate in a 100-cow herd is, therefore, worth between £2,000 and £2,500. For a herd of 400 cows, this is between £8,000 and £10,000."

Early notification of 'vulnerable' cows gives producers the opportunity to intervene with a holistic treatment at a fraction of the cost of treating a mastitis case.

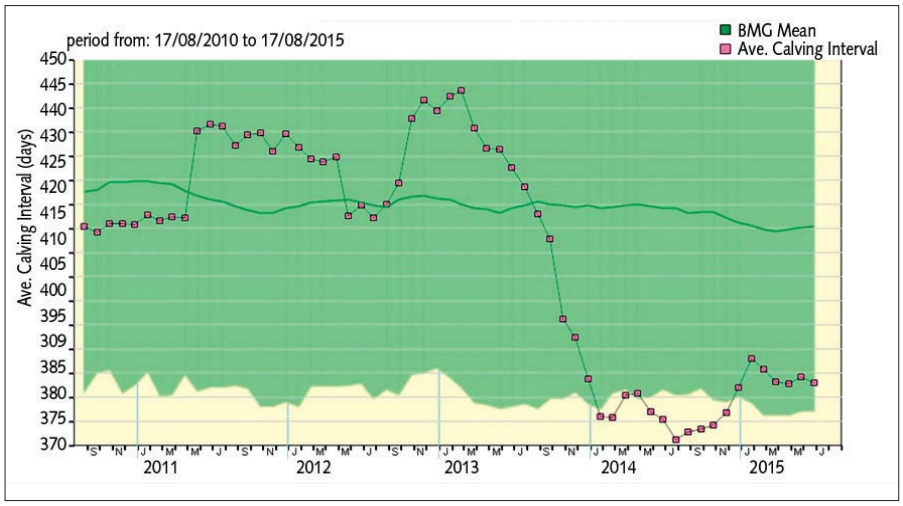

Figure 1: Trend in average calving interval 2010/2015

Routledge. They do all the AI work 'by the screen', picking up heats off the PC or their mobile phones and then inseminating cows at the optimum time. In addition, the whole farm team plays a part in heat detection and herd health by being vigilant and observing cows at every opportunity.

And more benefits are achieved through the latest Silent Herdsman development. In January 2015 Richard upgraded to mySilent Herdsman Health Alert, so he now monitors eating and rumination patterns and receives alerts on his farm PC and phone.

The combination of rumination and eating is an indicator of a cow's well-being – a change from the normal pattern can signify the onset of illness. "We can see her eating and rumination patterns and often there's no need to panic if one or the other dip a bit, but when they're both down then that's the time to pay very close attention," says Richard.

"Cows are highlighted on the screen with a 'health alert' flag and we might then mark her and keep an eye on her for 24 hours," adds Richard. "But so far we've found that it's a pretty sure sign that she's going down with an udder infection that, without early intervention, could develop into a case of mastitis. Often the health alert confirms our suspicions."

Richard and his team have also noticed a strong correlation between decreased rumination time and bulling activity. "If she's meant to be bulling and I see her rumination has fallen I can be pretty sure she's ready for serving."

Early warning system

While he knows that good stockmanship is important and Silent Herdsman won't manage herd fertility and health single-handedly, he is finding the Health Alert features to be a reliable early warning system.

"As the herd has grown, our pool of skilled labour is stretched more thinly," adds Richard. "I'm aiming for 9,000 litres of milk on twice-a-day milking and I want to make sure I have a herd of healthy, fertile and long-lasting cows," he says, adding that he's already taking control of some key diseases.

All calves are tagged using XLVets' CheckTag BVD tags and the farm is now BVD free, and NMR's Herdwise Johne's testing is used. "There's always scope to be better and more efficient. So if Health Alerts picks up subtle behavioural changes that might be easily missed in our larger herd and we can take preventative action then our efficiency will improve." |