

Activity monitoring system flags up cows in heat

# Caught by the collar

An automatic heat-detection system is lightening the labour load, when it comes to spotting bulling cows and keeping herd fertility on track, on an organic unit based near Oswestry. We spoke to a progressive producer to find out more.

text **Rachael Porter**

**P**ressure on labour led one Shropshire-based dairy business to turn to technology to keep on top of herd fertility. And not only has switching to a computerised heat-detection system saved time, but it's also improved herd performance and – most importantly – offers peace of mind.

Wes Hickson runs a 250-cow organic predominantly Brown Swiss herd in

partnership with his father Paul, at Dudleston near Oswestry. The herd, which averages around 5,000 litres at 4.70% butterfat and 3.75% protein on once-a-day milking, calves all year round but with a large spring block. The aim is a level milk supply for buyer Arla. “Our herdsman moved on about five years ago and, to be honest, we struggled to replace him. He was completely on



*Wes Hickson: “The heat-detection system saves time and has improved performance”*

top of herd management – from health and fertility, through to feeding and calf rearing. We've always done all our own silage making, as well as other work that many other producers contract out. And we quickly realised that we didn't have enough time – or labour – to do it all,” explains Wes.

They decided to switch to once-a-day







Monitoring movement: the Ovalert collars capture data for individual cows in the herd



Data hub: the system produces an action list

milking in 2014, which served to relieve some of the pressure. “And we were also surprised at how well the cows still milked on this system. We started out expecting that we’d probably switch back milking twice a day. But it suits our predominantly Brown Swiss herd, so we’ve stuck with it and are happy with how it’s working.”

Milking does take longer – about four hours compared to three. “But we’re still saving two hours a day and once the morning milking, which starts at around 4.30am, is done then that’s it for the day. We’re free to tackle other jobs.”

What was also taking a lot of time and,

by Wes’ own admission wasn’t always being done, was heat detection. “We’d always been out to observe the cows for signs of heat at least three times each day. But staff shortages meant that this wasn’t always the case, particularly during busy times such as silaging.

“And even when we were making sure that we checked the herd at regular intervals, we’d still miss silent heats and cows that came bulling late at night.”

### Brown Swiss

CRV Avoncroft’s Richard Williams has a solution. He’s been selling semen to the Hicksons for more than 10 years. The herd is 75% pure Brown Swiss and they have cross bred with New Zealand Friesians and Jerseys. They’re currently using Norwegian Red sires, such as on some cows. Wes is looking to improve fertility. Brown Swiss sires, including Assay, are still predominantly used on the herd’s best performing cows.

Richard noticed that Wes and Paul were struggling with heat detection. “And they said that conception rates and calving interval were also starting to slip. Just a little, but then that’s how it can begin to unravel. And with so much

Table 1: Fertility performance before and after Ovalert installation

	before Ovalert	after Ovalert
calving interval	441 days	401 days
number of services per conception	2.08	1.82
conception rate	39	48
60-day rate	35/180	63/189

else to do on farm – and so little time and labour available – a system that would take care of heat detection seemed to be the perfect solution.”

Richard is familiar with the company’s Ovalert system, having seen it in use on many other units both in the UK and Europe during the past 10 years. “So I knew it would work well for the Hicksons and their herd,” he adds.

Wes was also keen on the system. “My uncle uses a system that has a pedometer to monitor activity. So I had an idea of how it could work. I thought that a system with collars would work better – I know he had a few issues with the leg transponders.”

### Simple system

Since Ovalert was installed, in February 2017, heat detection is now as simple as checking the computer for alerts and keeping back the cows listed after milking for checking and, where required, insemination.

“Back then we had some cows with calving intervals that were more than 400 days, but they’re all below that now. We want the herd average to be as close to 365 days as possible,” says Wes.

The herd’s calving interval stands at 401 days today – down from an average of 441 days. “And until we’ve had the system in place for at least two years, we won’t really see what it’s capable of. But we’re certainly on track for some impressive results come February 2019.”

The system comprises neck collars with transponders, which monitor cow activity. This information is sent, via an antenna, to software on the farm computer and any spikes in activity – bulling cows – are flagged up.

### Early intervention

“And the system inadvertently also shows other unusual behaviour. We’ve picked up a few cows where normal activity has dipped – they haven’t been eating. And this has also proved really useful,” adds Wes.

Reduced intake is often the first sign of a problem and early intervention has paid dividends both in terms of maintaining cow health and welfare, but also milk yield and fertility.

Wes says that, after an initial investment of £20,000, the system should easily pay for itself in between four and five years. “We’re saving on time and labour, as well as semen costs. And there’s peace of mind too – it’s hard to put a price on that. We’re not stressing all the time because we can’t be in two places at once.” |