

Calving alert systems can offer peace of mind, as well as the promise of a good night's sleep

Call the midwife!

Dairy technology is often about larger herds and managing more cows per person, but devices that warn of imminent calvings are equally – and sometimes more – useful for part-timers and one-man-band set ups.

text **Rachael Porter**

A cow that's about to calve is always a source of anxiety – particularly when there are important tasks to do away from the unit. Technology that functions as an extra pair of eyes was the solution that one Ireland-based producer came up with.

Losing a cow and her calf spurred Niall Austin, from Tullamore in Co Offaly, into action. "Working part time on his unit, he was off site when the cow began to calve. Welfare issues aside, he calculated that the net loss to his business was around £2,300," says Moocall's sales director Peter

Vallely. "And he decided that, with today's technological advances, there had to be a way to alert producers to calving cows remotely."

After four years of R&D, Moocall was launched to market in December 2014 and so far it's been exported to 35 countries. The device, which is attached to the cow's or heifer's tail close to calving, works by monitoring tail movements and recognising patterns that are associated with the beginning of calving. "Tail movements change when an animal is close to calving, the tail 'vibrates' more and more over a set

period. The device picks this up and will send an alert – via text message – to the producer, saying that an hour of 'high activity' has been detected," explains Mr Vallely.

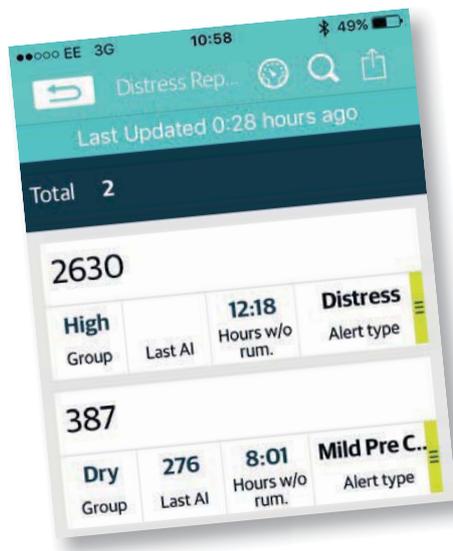
If the tail movements continue, the device will send another alert after another hour has passed to say that two hours of activity, signally that calving is about to begin, has been detected. "It's at this point that the producer can stop what they're doing and make sure they're on site for calving, just in case the animal requires some assistance."

The technology used is similar to that used in mobile phones to indicate which way up the phone screen is being held. "This 'equilibrium' technology is key to the product's success – as is its robustness. It has to be tough in its construction to work – and avoid breaking – out in the field."

One-man band

One producer who's pleased with the two devices he bought in 2015 is Rob Perry.





Moocall device (left) and a text alert from ProCalve (right), which detects changes in rumination

He runs an 85-cow British Friesian herd in Cheshire and says that this is very much technology for the smaller-scale herds and one-man-band set ups. “I don’t have any full-time staff and I’m often off site when cows are close to calving.”

He first saw the device at UK Dairy Day and was so impressed that he bought one – quickly buying another just a few weeks later. “Calving all year round means that there’s a constant need to check on dry cows in the close up period. I still have to do that, but not in the middle of the night! I can check my stock last thing and then go to bed. I know I’ll get a message that will wake me up if I’m needed. Prior

to using the system, I’d have to set my alarm and go check on any cows or heifers that I thought may be close to calving.

“The devices cost around £200 each, plus £90 each per year for software upgrades and the messaging service, but you really can’t put a price on a good night’s sleep – or peace of mind. If I’m fencing at the other end of the unit, or even away from the farm, I know that the system will alert me if a cow begins to calve.”

He says that, during the past 12 months, the technology has been spot on every time and he’s not missed a calving. “I’d definitely recommend it to other producers as a guide – another pair of watchful eyes. It’s not a substitute for good husbandry and regularly checking on your stock, but it’s invaluable when you’re struggling to be in two places at once. It’s taken a lot of worry out of the job for me.”

Added assurance

Lambert Leonard & May’s Shropshire-based dairy vet Hannah Batty agrees that it’s a useful tool to assist producers at calving time, particularly for those who work off site. “And for high-value calves, such as those from ET work, producers have an added tool to help with decision making and to highlight when they may need to pay closer attention. It’s added assurance that means that producers don’t have to watch close-up cows around the clock. Combined with regular visual checks, producers can build a good picture as to when the calving is likely to start.

She stresses that the system was not designed, nor is it sold, as a substitute for good stockmanship: “It’s an assistant, if you like, and forms part of the a much

bigger picture when it comes to best practice at and around calving.”

Producers, including Rob, like the non-invasive nature of the device. There is another system on the market – a French product called Medria Vel – which is available through Semex as part of its ai24 suite. “This works in a different way,” explains Semex’s Fearghal Gallagher. “A thermometer device is inserted into the cow’s vagina, close to expected calving date. This will send a signal to text message the producer twice a day. Around 48 hours prior to calving, there should be a temperature drop, which the producer will be alerted to. And this will drop again 24 hours prior to calving.

“The device will be pushed out of the cow, when the water bag containing the calf is expelled. It cools rapidly at this point, so the producer knows the bag is out and calving is imminent.”

Mr Gallagher says that producers looking for a calving alert system – and nothing else – purchase this technology. Uptake is good, and those who have it are pleased with it. It’s popular with producers who like to use technology to give them peace of mind. But it only flags up calving and some are not so keen on its invasive nature.

Rumination monitor

“Semex offers another system – ProCalve – that can alert producers to the start of calving, as well as a myriad of other cow health and fertility events. It monitors rumination, flagging up irregularities in rumination in the run up to calving. And it also watches the cow closely for post-calving disease.

“Producers seem to prefer the ‘multi-tasking’ that this system offers. It’s part of ai24 Heatime, which monitors heat, health and nutrition,” he adds.

Rumination data from individual animals is monitored, via a collar, and any drops in activity will trigger an alert. “It tells you that something is happening – that there’s something amiss. And, for dry cows in the close-up period, that can include calving.”

Mr Gallagher says that the health monitoring system is so good that Lely include it as standard in all its robotic systems.

“It takes so little to knock a high-yielding dairy cow off her stride and producers can’t be watching their cows 24-hours a day. Producers have so much to do every day and this extra pair of eyes gives them peace of mind.” |



Helping hand; remote alert systems can ensure that someone is present at calving