

More cows can mean better fertility if the right tools and skills are in place

Bucking the fertility trend

Fertility often falls as cow numbers increase. In many large herds it remains a stumbling block, attributed to an over-stretched labour force and cows showing fewer signs of heat. Heat detection is critical – a sentiment echoed by breeding company Genus and a key area of focus for one Cheshire-based producer.

text **Karen Wright**

William Blackburn from Lymm is increasing herd size but is not going to be beaten by extended calving intervals. During the past two years he has increased cow numbers from 120 to 160 cows. He has also moved away from a pure Holstein herd to Swedish Red and then Montbeliarde crosses, and now he is using a Holstein sire on the Montbeliarde cross-bred cows.



William Blackburn: "Better fertility is increasing annual milk production"

"Fertility was one reason for cross breeding the Holsteins," says William, who runs the 197-hectare arable and dairy unit with the help of a herdsman and an apprentice. "We were also keen to improve forage use and boost longevity. And while 305-day yields have dropped by 300kg to 8,300kg per lactation, the annual production per cow has increased by 100kg during the past two years and calving interval has dropped by 60 days – a lot but the herd moved from 100% Holsteins to 65% Swedish Red in two years and this has had a dramatic effect on fertility.

"There's far less wastage, which was frustrating when we had pure Holsteins and were trying to increase cow numbers," says William. "We're now on a roll with heifer replacements and by using some Holstein sexed semen on Montbeliarde cows and heifers we can produce enough heifers to grow the herd while still using beef semen on some cows to breed beef crosses to sell."

The next major step in improving fertility was the installation of Silent Herdsman 10 months ago. All cows were fitted with collars and their movement patterns monitored remotely and relayed to a touch-screen PC in the dairy. The first cows that were heat detected through the system are now calving.

So far so good and William has recorded excellent submission rates with only a handful of cows going above 90 days before serving.

"The vet has only had two cows to check," he adds. "We are so confident that the system works that we haven't bothered to PD the majority of cows, except those showing a low level of cyclical activity after insemination. The PD result confirmed that some cows continued to show activity after conception."

Fewer straws

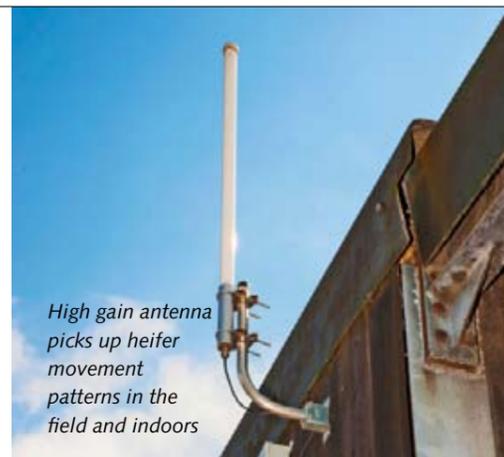
Conception rates now hover around 65% and there's been an improvement – a decrease – in the amount of semen used. "We're currently averaging 1.6 straw per calf. And everything is in line for another significant fall in calving interval," adds William. "Our target is 380 days and we're currently around 400 days."

Cows are inseminated through the Genus technician service and the company is supporting producers using Silent Herdsman. "Genus sees Silent Herdsman as a complementary product to our existing Technical Services and offers the system as part of our AI Plus service," says Matt Nightingale, business unit director for Genus ABS. "The ability to

'watch' cows 24/7 can be very beneficial on some units and it can help us, and our customers, in fertility management."

William is particularly pleased that, despite increasing cow numbers, fertility has improved without the need for more labour. "We used to spend quite a lot of time checking cows and looking for heats. With more cows we wouldn't have the time to do this now, so there's no doubt that Silent Herdsman is taking some of the strain here."

Cows are generally served at 50 days if they are showing signs of heat and they look in the right condition. "Herdsman Steve Jennings or I will check the screen before milking every morning and evening – and during the day – to see if any cows are flashing up 'red', which alerts us to possible heats."



High gain antenna picks up heifer movement patterns in the field and indoors

William is really putting Silent Herdsman through its paces on the unit with a system in the heifer shed too. This has a High Gain antenna on the corner of the heifer shed that can pick up movement in the adjoining field to at least 150 metres as well as indoors.

"We put collars on heifers at 13 months old and aim to serve them, depending on their size, at between 14 and 16 months, so they calve, on average, at just over two years old. At the moment our Sainsbury/

Heat data is critical

Genus' European technical services director John Cook referred to advances in heat detection in his recent paper at the Cattle Breeders Conference. "Heat detection in dairy herds has become critical as herds have expanded and labour often remains a challenge," he said.

"The systems used for heat detection – such as Silent Herdsman – have moved closer towards the principles of

data-based management. The time consuming and laborious task of visual heat detection can be replaced by this type of activity monitoring system or regular application and removal of tail chalk.

"The key point is that the important piece of data, which is whether or not the cow is on heat, is obtained quickly and accurately and can be acted upon without delay", he added.

Wiseman NMR records show we're averaging about 27 months."

Time off

William is also relying on Silent Herdsman to help him adjust the calving pattern from all year round – with a gap at Christmas – to three distinct 'blocks' in spring, summer and autumn. "This means we can take some time off and fit in other jobs," he says. "We still want a fairly level milk supply. We need to pick

up every heat and establish each cow's fertility cycle very accurately so we can pick the best time to AI her to fit in with our timetable. The 24/7 eyes and ears of Silent Herdsman should mean that we can do this fairly quickly."

Further expansion is on the cards and William aims to keep 200 cows to fit with the available grazing area. "We now have the type of cows and the management system that allows us to do this without compromising fertility and production." |



All cows, and heifers from 13 months, wear Silent Herdsman collars