

Sexed semen can boost income a

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A growing number of producers are using sexed semen. And some are taking a strategic approach to produce beef from the dairy herd or a glut of heifers to meet increasing demand – both here and on the continent.

text **Rachael Porter**

It's been 15 years since Cogent first introduced sexed semen in the UK and in that time the success rates achieved by producers using the product have improved significantly. With this success has come increased confidence in the product and with that comes increased and strategic use.

Avoncroft's David Matthews says that his company has certainly seen the use of sexed semen increased during the past few years. "We're selling a lot now and I think that's partly driven by TB – more producers want to run a closed herd and rear their own replacements."

He adds that there's also a shortage of replacement heifers in the UK – sale ring prices show that demand for quality stock is outstripping supply. And this shortage is also being seen in Europe.

Heifer numbers

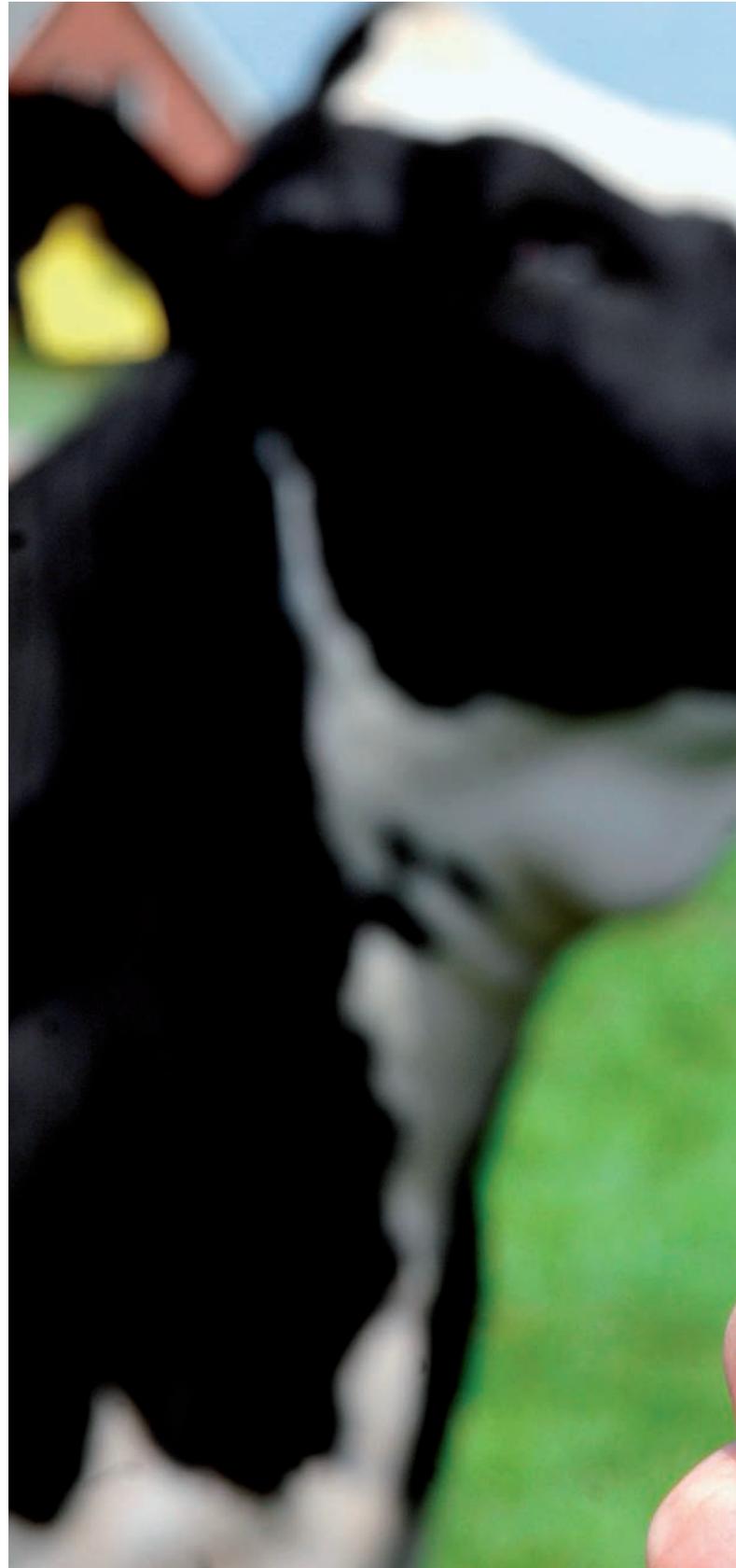
Some producers use sexed semen simply to boost heifer numbers on their units, but a growing number are breeding a surplus with an eye on the stock sales market or to produce heifers from the top 50% of their herd and put the remainder to beef bulls, looking to tap into the equally burgeoning beef calf market.

"The price – and shortage – of replacement heifers is driving the former," says Genus ABS' Stephanie Whittaker. "The use of sexed semen is growing all the time – we've seen yet another upsurge in usage during the past 12 months. Sexed semen currently accounts for 12% of dairy semen sales and this is increasing every year."

Breeding a 'glut' of heifers and selling them at calving age or freshly calved is proving popular with producers, looking to generate additional income.

Some are also breeding more heifers as the end of milk quotas approaches in 2015 as that will further open up the market for stock and increase demand.

"There are many large dairies being built in the Netherlands and herds here are also expanding. Demand for heifers to stock these units could mean



and improve dairy business viability

ilk cheque?



that the supply to the UK from Europe could tighten even further. So there's an opportunity there for UK producers. There could even be the potential for some UK-bred heifers to be exported to Europe."

Miss Whittaker says that beef semen sales have also increased. "Some are using sexed semen on their best cows and heifers and using beef semen – predominantly Belgian Blue and Aberdeen Angus – on their lower end cows.

"They're getting the best of both worlds – they're still breeding enough of their own replacements and they're realising top prices for their calves at market. It's a valuable additional source of income for many businesses and a welcome one too after such a tough year," she adds.

Semen quality

These choices are possible due to continuing progress in sexed semen quality, achieved through the on-going development of production methods and quality control procedures.

"Attention to detail is essential at every stage in the process, from maintaining happy and healthy bulls through to minimising potential losses at the main stress points of freezing and thawing," explains Cogent Group's Andy Smith. "We are now consistently seeing 93% female calves from sexed semen, and – when the correct protocols are adhered to such as at our own Grange Farm heifer unit – first service conception rates from 65% up to more than 80% are achievable.



Andy Smith: "We are seeing 93% female calves from sexed semen"

"Improvements in sexed semen production methods have also seen significant reductions in sample rejection. There are now seven steps in our quality control procedures to ensure the best possible sexed semen viability."

Providing a viable product is, however, only part of the challenge. The procedures required in producing sexed semen inevitably reduce the product's lifespan when compared with conventional semen, and so there is a need for extra care in the thawing and handling, not to mention a greater imperative on accurate heat detection and service timings.

"There is nothing fundamentally different about using sexed semen," adds Mr Smith, "but there is less margin for error, so preparation, equipment and all procedures need to be to a 'best practice' standard. "Basic equipment including electric semen thawing,

'Beefing up' dairy income

One producer following correct procedures and seeing tangible rewards from sexed semen is Cheshire-based Ed Seaton, who farms at Kynsal Farm in Audlem. He now uses significant quantities of Cogent sexed semen on his 240-head pedigree Holstein dairy herd and benefits also from the additional income derived from quality beef calves produced from cows not required for breeding replacements.

He began using sexed semen with a degree of caution, using it on limited numbers initially and monitoring results closely. Conception rates to first service of 65% for heifers and 55% for cows gave the necessary reassurance to use sexed semen more widely.

"We're now using it across the majority of our maiden heifers and selecting from cows up to fifth calving to breed replacements, choosing those with a good record for fertility and no history of milk fever, metritis or difficult calvings.

"This makes record keeping very important, but if you know the cow is straight, you are not only far more likely

to get good conception rates, but you're also breeding the type of fertile and disease-free cows you want for your herd."

Overall, sexed semen use equates to 1.72 straws per heifer pregnancy and 2.2 straws for cows, indicating that it is certainly not compromising conception rates in the herd.

Carrying out DIY AI helps with timing, as service can take place precisely 12 hours after the first signs of heat. Activity monitors for the cows are also said to have transformed heat detection and are now being considered for maiden heifers too.

The condition of cattle is also regarded as paramount, and both heifers and cows are indoors and settled on a stable diet before insemination.

Today, around 45% of the herd is inseminated to sexed dairy semen and 55% to beef, with between 120 and 130 quality beef calves produced each year and generating a useful additional revenue stream.

"We have been selling British Blue crosses



Ed Seaton: "Income is up every week"

through Market Drayton market, but we are also looking at a contract to supply Beef Shorthorn crosses to a specified outlet," he says. "This would secure a reliable market for all our beef calves whether or not we are under movement restriction.

"It's having a big impact on income every week because we are selling calves at a premium. Instead of coming back from market with a cheque for £30 for two or three Holstein bull calves, we may have £800 or £900 for the beef crosses, which over the course of a year will make a huge difference."



thermometer, gun warmers and a timer are not expensive items, but investing in dedicated kit and maintaining it accordingly does make a difference."

"Also give some thought to practicalities, such as easy identification of straws in your flask, to avoid unnecessary removal and delays, and the distance to your service pens.

"Then there are the handling facilities, which must be capable of restraining the animal properly. Conception rates fall by

as much as 9% if a heifer is moving about when served – an easy situation to avoid in most cases," adds Mr Smith.

Detailed guidelines

Detailed guidelines on correct semen handling and insemination procedures are freely available, and with the growth of sexed semen use and the successes increasingly reported there is no doubt that these messages are being taken on board. |

Sexed semen – the lowdown

The sexed semen business model is totally different from the conventional semen business.

Basically all the sexing technology and machines are owned by Sexing Technologies Texas, who leases the machines to international companies like Genus ABS, Cogent and CRV.

Companies sexing semen have contracts and have to pay Sexing Technologies a 'royalty' for every straw produced. So it's an expensive product where supply and demand play a key part. Only large companies are financially able to enter into these contracts.

Understandably these companies only produce sexed semen from bulls that they can sell quickly to aid cash flow. Also they can make more money from selling conventional semen from popular bulls than selling sexed semen because the sexing process is 'rough' and destroys a lot of sperm.

Some bulls' semen does not reach certain standards after the sexing process. The AI system in the Netherlands soon 'flags up' any bulls with below average conception rates. This is the reason why CRV's Apina Curtis' semen is no longer sexed.