



Every producer sets goals for his farm. These goals may differ, but the herd is always at the heart of the business. In this six-part series we set out to help you to improve your herd. Our fourth article focuses on breeding to improve fertility.

Part 1: **Introduction**

Part 2: **Production**

Part 3: **Efficiency**

Part 4: **Fertility**

Part 5: **Longevity**

Part 6: **Health**



Balanced approach results in trouble-free cows with plenty of milk

Focus on fertility

Breeding has a key role to play in improving herd fertility and it is possible to select for fertile, efficient and 'milky' cows, as one Scotland-based producer is proving.

text **Rachael Porter**

Fertility is something that all producers keep a close eye on, be they maintaining herd performance or looking to improve by reducing the calving interval or increasing the number of cows in calf 100 days post calving.

But how do producers know that they're choosing the correct sires to help them focus on this breeding goal, when bull proofs offer so much information?

CRV's Result Navigator tool has a role to play here. It allows producers to define a breeding goal and then if, for example, its efficiency they're looking for it focuses on selecting the best bulls for fertility and all the traits that also help to achieve that – health has a key role to play here, as does calving ease.

CRV Avoncroft's David Matthews reiterates that 'targeted' breeding is all about keeping it simple. "You really do

get what you breed for, it's as straight forward as that. And this tool, or approach, allows producers to keep whatever that may be in their sights but not at the expense of all the other vital type and production traits that are key to a cows' long and productive life in the dairy herd

Without good fertility, the road to building an efficient and profitable road is extremely long. So says Martin Wilson, who runs a 250-cow herd Broadlea Farm, Eaglesfield, near Lockerbie. He knows, first hand, just how important it is to breed for fertility and how it's integral to longevity, efficiency and, ultimately, herd productivity and profitability.

He manages the commercial herd with help from two full-time staff, including herdsman Charlie Hannah, which is currently averaging 9,000 litres at 4.00%

butterfat and 3.20% protein. "When I select sires for use on my herd, I want to maintain yields at around that level. Milk is important but it's not at the top of my list of sire selection criteria. Fertility is definitely one of my key parameters," he says.

Recent years have seen replacement heifers bred from Dutch sires including Poos Stadel Classic Red and a few of his sons.

Longevity has been an issue in the past, particularly when, after his previous Cumbria-based herd was culled during the 2001 foot-and-mouth disease crisis, he bought in cows from other units to relocate and rebuild his herd in Lockerbie.

Restocked herd

"I had better longevity with my previous herd and, after buying in stock and setting up my new herd, I struggled with longevity for quite a few years. And, again, that's very much tied up with fertility – If you can't get a cow back in calf and she's not producing milk then she has to go.

"I think it took about 10 years to change the course of the herd and get it back on the track that I wanted it to be. That

sires	fertility
current CRV Avoncroft Holstein bulls with high fertility	
Apina Norman	+13.5
Apina Health	+12.8
Ralma Oman CF Cricket	+11.8
Peak Tango Paisley	+10.0
Texel Beauty Debutant-Red	+9.1
current NZ Holstein Friesians with high fertility	
Deluca	+15.7
Deville	+14.2
Megabuck	+13.2
Delux	+11.0

Table 1: Top fertility sires (UK figures, August 2015)



Martin Wilson: "Breeding for fertility is very important"

just shows how important it is to make informed breeding decisions and to be sure about what direction you want to take – and that you're selecting the best possible sires to take you in that direction. "I really upped my game with breeding after restructuring and it was a good eight or nine years before what I'd been doing really started to make an impact.

His breeding focus is on the type of the cow, rather than production. "I have totally capped cow size. Big cows are nice to look at but they don't last. I'm looking for smaller cows with more 'heart' – plenty of chest width with dairy strength coupled with improved legs and feet. That's something we have always focused on," says Martin, who now breeds all his own replacements.

"So tall and angular cows are a no no. I want trouble-free cows – the kind of cows that just get on with it without too much intervention in terms of fertility and, indeed, health."

Sexed semen

With all this in mind, more red-and-white Holstein bloodlines are being used. Heifers are served with sexed semen, followed by a Limousin sweeper bull. And Belgian Blue semen is used on proportion of the herd to produce beef calves. "Fertility has been an issue in the herd – as it has in many herds throughout the UK and the rest of the world. What's key is to get cows and heifers in calf as soon as possible," adds Martin.

"There are the two extremes – the tall, sharp and angular show cow who need special treatment to survive every lactation and then I also looked at cross breeding. But the milk yields are not as high as I'd like them to be. I like to think that by selecting for fertility and other type traits, and also avoiding sires with negative scores for milk yield, that I'm somewhere in the middle and breeding a 'balanced' cow."

He adds that, during early lactation, when the cow is freshly calved, is when milk is produced most efficiently. "Longer lactations, which are the result of poor fertility and not being able to get cows and heifers back in calf, mean that you're often forcing them to milk – usually with expensive feed. So fertile cows, with tight calving intervals, are definitely more efficient, in my opinion."

Continuous work

The herd's calving interval stands at 385 days and has been as low as 379 – impressive compared to the UK average of more than 400 days. "I don't want to reduce it any further – I'm happy with that figure. And I'm also satisfied with my strong, fertile cows that are fertile, last well in the herd and also produce plenty of milk. What more could I ask for, other than more of the same?"

He admits that there's always going to be room for improvement, but he's happy

with his current trajectory and wants to maintain what he's got. "It's vital not to take your eye off the ball when selecting sires – one or two poor choices and all your hard work can begin to unravel."

Ultimately his goal is to continue calving cows down cleanly and, in the case of heifers, at 24 months old. "We don't want any difficulties, because that can cause fertility issues and we aim to serve cows 40 days post calving."

Martin gets a cow back in calf for every 2.2 services. The percentage of cows back in calf 100 days after calving is 56% and by 200 days just 8% of cows are no in calf.

Management does play a role – just as it does in anything – but so does breeding. "Work is on going. Resting on your laurels is not an option. It's vital that we keep on top of things and that's what we'll do.

"It took almost a decade to get to this point, so I appreciate how important it is not to let things slip back," he adds. |

