THE PLAN OF...

Paul Dean

Running two herds on slightly different systems could make breeding complicated, but this family-run unit takes a simple, but effective, approach.

Herd size:	**400 cows (in two herds)**
Average yield:	**3,500 litres & 5,800 litres**
Conception rate:	**Between 65% and 70%**
OAD milk solids:	**5.1% fat & 4.1% protein**

Ideal mix: Ambreed sires produce daughters that suit both management systems

Grazing ability and high constituents are vital for block-calving system

Cross-breeding for fertility, health and milk solids

It has the potential to be complicated, but a simple approach to cross breeding is allowing one Cheshire-based producer to rear replacements for two herds managed on slightly different systems.

text **Rachael Porter**

A change in breeding policy and management system have not only resulted in a robust and productive herd of cattle, but have also helped producer Paul Dean to adapt to the current milk-price crisis slightly better than his business would have done 15 years ago.

Paul runs the family business – spread across two units that are just one mile apart and on the edge of the Peak District – in partnership with his brother Alister. The original family-owned herd has expanded from 80 cows during the past 15 years to 400 milkers, which are split into two herds. The herd that is based at the original 'home' farm, is milked once a day and, due to the steep contours of the unit's land and the farm layout, this herd is all spring calving.

The second herd is split 65:35 into spring and autumn calving. This second recently acquired contract-farmed unit is less exposed and more suited to that calving and management system.

"The two herds have different milk contracts. The spring calving herd has a milk solids contract with Arla. If you're going to milk once a day, in a bid to cut costs, then you have to have a solids contract. It's the only way to make it pay," says Paul.

"We saw milk volume drop by between 20% and 25% when we moved to once a day. But as milk production per cow drops, fat and protein yield increases, so the figures add up.

The second herd has a liquid milk contract with Wisemans and is milked twice a day. This herd has a greater

proportion of black-and-white Holstein/Friesian cows, compared to the once-a-day herd with more Jersey genetics.

Insight: genetic foundations

Cow numbers expanded steadily with a mixture of home-bred and bought-in heifers. "But we only bought in cattle once – we're now closed again and use all our own replacements," stresses Paul.

The two herds share the same breeding policy – cross breeding with Jerseys began 15 years ago and crossing has continued, with CRV Avoncroft's Ambreed sires, for the past three years.

Both herds are now on track to comprise the same type of cows – a mix of two thirds New Zealand Friesian and one third New Zealand Jersey. "Another generation or two and all out cattle will be cross-bred to produce this mix of genetics," adds Paul.

Plan: milk solids

He began cross breeding with Jersey semen 15 years ago, when the then 80-cow herd calved all year round. "We started down the cross-breeding road because we wanted to extend our grazing season and that meant breeding heifers that were more suited to grazing, particularly with the conditions we have at the home farm.

"A switch of system, to block calving with more emphasis on milk from forage, demanded a different cow. Jerseys offered the type and milk solids production that we were looking for. We needed a more robust cow and we also felt that the black-and-white cows that we were milking were too 'fine and frail' for a more extensive set up."

Some of the 'robustness' he is currently enjoying in his herd has since been added to with the introduction of Friesian genetics. "The breed also adds some milk protein. Jerseys offer plenty of butterfat, but we needed to balance that."

So the Ambreed crosses offer the best of both worlds, as far as milk solids go. And milk solids are certainly high. The once-a-day herd is yielding 3,500 litres at 5.1% butterfat and 4.1% protein. The twice-a-day herd is averaging 5,800 litres at an equally impressive 4.8% butterfat and 3.7% protein. "So the breeding for milk solids is certainly there and these cows perform well on our systems," adds Paul.

Sires in the flask this year include Selwyn and Overdrive. Bulls used in recent years include Megabuck, Pater and David. "And we're really pleased with all of them," says Paul.

"The daughters are performing just as we expected they would and their type suits our systems perfectly."

Improve: future plans

Fertility is important in block-calving systems. "It's the number-one trait we look at when selecting sires. No calf means no milk, fat or protein. It all starts there. So we would be unwise to select a sire with fantastic components but poor fertility. We definitely look for a plus score here, as well as calving ease."

The spring-calving herd calves during a nine-week period and to keep this pattern tight Paul says that they really have to get as many cows in calf to first service as possible. Between 65% and 70% of the herd hold to first service and he says that just 7% will be empty after the nine-week service interval. "And we're working on improving that, with help from genetics."

As well as good fertility, cow size is spot on too. "We don't want cows that are too large – we're looking for an average of 450kg. Compact is the key word here – a cow that's small and 'tidy', but with good body capacity for forage. And she's got to be able to walk a fair distance too."

Friesian genetics add robustness to the Jersey elements. "They're just a little stronger than a straightforward Jersey cross."

That said, the Jersey genetics are important, particularly in terms of their tough feet and good temperament. "The mix of the two is ideal, the resulting heifers and cows move around well and they're not stubborn. We feel they offer the best of both breeds.

Paul Dean: "Our breeding policy is relatively simple, but it works well"

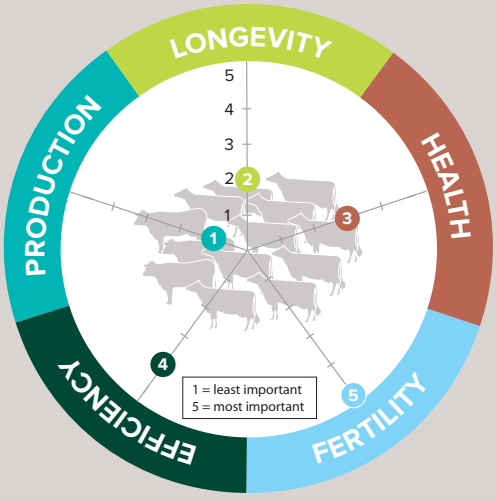
With expansion complete, the Deans now only need to rear heifers from the spring calving herd. And currently Paul's using sires that are around 60% Friesian.

"That's the way we're 'tweaking' things at the moment. We may opt for a higher percentage of Jersey in the future. It's something that's continually evolving and our milk solids, as well as cow health and fertility, will signal the direction we need to take.

"For now, we're pleased with the cows and heifers that we're milking – and the breeding direction that we've taken.

"It was a different route to many other more Holstein based herds, but it's paid off for us. And it's certainly allowed us to adapt and thrive in the current economic climate." |

THE PLAN IN ACTION



What traits are key to suit the management of the Dean family's herd?

5 Fertility
This is vital to the success of a block-calving system.

4 Efficiency
Compact cows with good body capacity and not too heavy, to help avoid sward damage.

3 Health
A healthier and trouble-free herd makes for easier cow management.