

Cross-bred cows offer improved fertility, grazing ability and good yields

The best of both worlds



In the second of two articles on cross breeding, we speak to another leading dairy producer who is no longer pure Holstein and find out why he made such a radical change to his herd's breeding programme. And there's also news about the introduction of ancestry and performance certificates from NMR.

text Rachael Porter

It's not for everyone, but why do some producers decide to take the cross breeding route after decades of running a pure Holstein herd?

Geno UK's Wes Bluhm says that it's because, in part, there's more information about cross breeding out there – from geneticists and breeders alike. “And the fertility issue that many herds are facing just isn't improving, despite producers' best efforts.”

He says that others are looking for hybrid vigour: “But that's not the only, or the main, benefit. Producers should be looking beyond that and examining their nutrition, management system and unit. Then they should assess the type of cow that would be best suited to their set up and that should determine their breeding objectives and the breeds they use.”

“It's all about longevity, productivity and profitability – that's what really matters. And if you have these things, the breed or type of cow they're coming from should really be a side issue.”

Different dairy breeds offer strengths in various areas and this provides herd improvement opportunities. For example, if milk solids are a problem, he suggests Norwegian Red genetics to fertility. “The Norwegian Red breed has selected for health and fertility for close to 40 years and offers proven advantages in this key area.”

Other breeds

Open your eyes to the possibilities that other breeds can offer – look outside the boundaries of your existing breed. And see if there's a way that you can have the best of both worlds.”

One Cumbria-based producer who has done just that – and has never looked back – is Mark Shadwick. Despite some raised eyebrows along the way he's extremely happy with the route he's taken and says his only regret is not trying it sooner.

Before the 2001 foot-and-mouth disease (FMD) outbreak, Mark's family was milking the 215-strong Skyhigh pedigree

herd of Holsteins at Dalston. They were devastated when the herd had to be culled, but post FMD they bounced back and restocked with 320 Holsteins.

“But, in 2004, when we were focused on producing as much milk as possible, we were finding it a challenge to get the cows back in calf and keep culling rate low.”

“So, after doing some research, we started to dabble in cross breeding to improve fertility, using Swedish Red bulls.”

Culling rate

He says, somewhat modestly, that yields were ‘not too bad’ – they averaged about 9,000 litres. “But we needed a flat production curve because our buyer was paying an extra 1.25ppl for a level supply. Getting cows back in calf was critical. The target was to get 20 cows pregnant each month, which kept the culling rate down to 25%, but we were running about 8% short of that – that's a lot of milk and a big bonus payment loss, before you even begin to take the other costs into account. So we needed to do something pretty radical.”

It was extremely radical. The entire herd, apart from the cross-bred young stock, was sold and the unit began converting to organic status.

“We did this to try to command a premium for our milk. And I wasn't keen on the intensive system that we were running either – we were creaking at the seams,” says Mark.

Herd size slowly increased to 200-plus

cows, using the youngstock and imported Swedish cattle. Yields now average 8,600 litres, an annual total yield of around 1.8 million litres, with the herd grazing for seven months of the year from mid March until early November.

“In my view, Holsteins are not suited to any grazing system and I'm extremely happy with the cows that we're milking now,” says Mark.

And who wouldn't be happy, with a calving interval of 378 days, compared to 428 days for the previous Holstein herd. “That's a difference of two months and getting cows back in calf is the biggest profit driver on any dairy unit.”

Mark is milking more than 100 pure Swedish Reds and about 90 Swedish Red x Holsteins. The former have a calving

interval of 365 days and are yielding about 5% less milk than the pure Holsteins and crosses. There are also about 20 three-way crosses in the herd, the result of using some Montbeliarde semen.

Hybrid vigour

“I used the Monty sires to try to get some extra hybrid vigour and you lose that if you cross back to Holstein. It's early days – I've only got 15 milking so far.”

He's also used some British Friesian and Holstein Friesian bloodlines. But what he's really injected back into the herd is passion. He's enjoying looking after the cows and running the business far more than he used to.

“The Swedish Reds are the ones for me.

I calved 36 in 2008 and 2009 and I've only lost two – so 85% will reach their fourth lactation.

“Only 35% of the Holsteins would reach that milestone.

“Longevity and yield are good, so they significantly out perform the pure Holsteins for total lifetime yield.

“I was an enthusiast when it came to Holsteins, to say the least. I still appreciate a good Holstein cow.

“But our Holstein herd had reached a point where it simply didn't suit our set up or system – the cows were just under too much pressure and we needed cows that were easier to manage,” he says.

Calving is so much easier, for a start. “And fertility problems are few because the cows get off to a flying start.” |

Certificates will recognise the value of cross-bred cattle

Ancestry and performance e-certificates will soon be available for all cows of all breeds, including cross-bred animals, recorded with NMR.

Available electronically from NMR's Herd Companion website, these full-colour certificates include sire, dam and grandparent details plus all lactation records to date. And they can simply be printed off when they're needed.

“The certificates benefit all cows, but particularly cross-bred animals, which to date have not had access to an official ancestry certificate,” says NMR's Jonathan Davies. “With an increasing number of cross-bred animals now in the national dairy herd it's important to recognise the strength of breeding coming through. Endorsing information and data with a NMR certificate should also help to add value to these animals.”

Lactation Number	Calving date	Calving interval	Days in milk	Milk kg	Fat kg	Protein kg	Fat %	Protein %	SCC	
AD1	25/10/06	0	454	13,420	580	430	4.30	3.25	20	
AD2	18/01/08	280	313	11,230	510	371	5.35	3.14	87	
AD3	17/01/09	280	430	14,345	645	440	4.50	3.07	180	
AD4	22/02/10	443	350	12,306	530	382	4.36	3.10	270	
Total			417	329	51,806	2,487	5.20	4.05	3.14	145