

Tool helps producer to navigate best cross-breeding course

Fit for purpose

Want to milk trouble-free cows? Cross breeding could be the answer. All breeds have unique characteristics and, by combining several breeds, these qualities can form the bedrock of your herd. CrossFit is the latest tool from CRV Avoncroft that will help producers to make extra profit from the heterosis effect.

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Combining the qualities of different breeds allows producers to create an ideal herd that suits their breeding goals and management strategy. Little wonder that it's become so popular, both in the UK and abroad. And an added benefit of cross breeding is the effect of heterosis: cross-bred animals typically perform better than their parents.

"If your main breeding and management goal is milk – and plenty of it – then it's better to stick with Holsteins," says

CRV's international genetic specialist Theo Gieling. "Holsteins have the greatest propensity for high milk production. But cross breeding should be given seriously consideration by producer who want to avoid the risk of inbreeding and prefer a herd of cattle that can get back in calf easily and has the ability and capacity to turn forage into milk."

The latest figures for cross-bred cattle show that breed-specific traits can be



Mark Birkett: "Our replacement rate has fallen since we switched to cross breeding"

quickly embedded in a herd. "Cross breeding is one of the best examples of what you can achieve through breeding. Producers who cross breed are looking for durable cows with a longer life. And, for cross-bred herds, a replacement rate below 20% is typical."

Increased uniformity

Mr Gieling says that prospects for cross breeding – both now and in the future – look good. "Pre-conceived ideas, such

Cross-bred calves: heterosis will see them perform better than their parents



CrossFit helps to create cross-bred cows to suit individual units

To support producers when making cross-breeding decisions, CRV has developed CrossFit. CrossFit is a tool that will ensure that producers make the best cross-breeding choices for their herd and set up.

CrossFit Efficiency and Health

The tool has two 'directions': CrossFit Efficiency and CrossFit Health.

If efficient conversion of feed into fat and protein is key to your herd, it is best to combine Holstein with Jersey, possibly with a third breed. This cross type results in compact cows, with good longevity and production. These crosses will be efficient at converting feed into fat and protein. And running a high-production, durable herd will maximise profitability.

For producers wanting to place more emphasis on breeding problem-free cows, CrossFit Health is the best

direction to take. This combines Holstein with MRI, Fleckvieh and Brown Swiss. These cross-bred cattle will have good health and calve easily. They will be fertile, low-maintenance cows with good body condition and can produce plenty of milk in a wide range of management systems.

Cross breeding both adds and enhances specific breed characteristics. Each breed has its own characteristics.

Holstein

- High milk production
- High fat and protein components
- Good udders
- Long, economical life
- Wide choice of breeding goals

Jersey

- Compact and efficient
- Strong, clean legs and feet
- Durable cows

- Requires little maintenance feed
- High components

Fleckvieh

- Low maintenance
- Placid nature
- Low somatic cell count
- High fertility
- Extra turnover and growth

Brown Swiss

- Good longevity
- Powerful feet legs
- Good hoof health
- Protein-rich milk
- Robust frames

MRI

- Extremely high protein percentage
- Broad and durable
- Good legs
- High fertility
- Extra turnover and growth

as cross breeding creates too much diversity in the herd or compromises the development of breeding programmes for other breeds, are only true to a

certain extent. If you apply a concerted cross-breeding effort, uniformity in the herd will increase over time. It also depends on your choice of sires. But if you select the best bulls that fit with your breeding goals then you will definitely make progress.'

One Lancashire-based producer, who has certainly made plenty of progress after 12 years of cross breeding, is CRV Avoncroft customer Mark Birkett. He runs a 350-cow herd plus 350 followers, near Morecambe, and began using Swedish and Norwegian Red sires on his Holstein herd back in 2006.

Involuntary culls

"I was unhappy with the longevity of the cows in my herd," he says. "Involuntary culls were high due to a myriad of health issues, not least lameness.

"I was inspired to give it a go after reading about some impressive results of a three-way cross trial and decided it was well worth a shot."

Mark hasn't looked back since. "Today's my cross-bred herd is a lot healthier, my replacement rate has definitely fallen, and I'm selecting culls – they're not selecting themselves."

Prior to the switch to cross breeding – Mark now uses either Swedish or Norwegian Red, followed by Montbeliarde or Fleckvieh and then crosses back to Holstein to help maintain good milk

yields – he says that all cows were bred using dairy sires to produce enough replacements. "We struggled to keep up at times. But during the past 12 years we've increased herd size by 100 cows and we're also using beef sires across 50% of the herd. So we're not rearing as many replacements."

Milk quality

Mark has used CRV Avoncroft bulls Delta Fidelity, Topspeed Kodak, and Stellando extensively across his herd, as well as Fleckvieh sires Haribo and Wobbler. The all-year-round calving herd is currently averaging 8,500 litres, at 4.4% butterfat and 3.5% protein.

"Milk quality has certainly improved too, during the past decade, which is important because we sell to Arla and are paid for constituents," he adds.

A foot trimmer also used to visit once a month to attend to cows' feet. "But we don't need him now. We trim feet just once a year at drying off and are able to cope with the odd cow that needs attention ourselves.

"Feet are much stronger now, thanks to cross breeding.

"I'd say that, on the whole, these cows are easier to manage and trouble free, compared to the Holstein herd. We couldn't have pushed up cow numbers prior to cross breeding – we didn't have the replacements or the time." |

