

CRV indexes point the way to an efficient and trouble-free herd

Breed for financial ease

The priority for father-and-son partnership Harrie and Hans Janssen, from Groesbeek in the Netherlands, is to increase herd and business efficiency. And CRV's breeding indicators – Better Life Efficiency and Better Life Health – will help them to build a herd that supports this strategy.

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Asked about their favourite cow in the herd, Harrie Janssen and his son Hans point to Waldgraaf Gerda 183, but she's a cow who doesn't immediately stand out. She is not excessively large but is correctly built. She scored 85 points for type as a heifer, thanks to faultless linear traits. She calved easily for the first time before her second birthday and always had a calving interval of a year in subsequent lactations. Her 305-day lactation yields show an increase from



Harrie Janssen (left) and CRV's René van der Linde identify the 'trouble-free' cows in the Janssen's herd

8,000kg of milk as a heifer to 10,000kg as a second-calver, and nearly 11,000kg in her third lactation, with a protein content averaging 3.72%. Her somatic cell count has never been more than 100,000 cells/ml and she has had no udder infections or hoof problems.

She is, in essence, 'trouble free' and easy to manage and cows like Gerda 183 are the type of animal the Janssens will need to breed from now on.

Based at Waldgraaf Farm, in Groesbeek, the Janssens's 110-cow herd is milked through two robots and produces more than a million litres of milk each year. The pair built a new cow house six years ago and installed a second robot. "Two years later we were already producing an extra 250,000 litres of milk and in 2013 we bought another nine hectares of land. So our current priority is to reduce our financing costs," explains Hans. Key to this is breeding – and milking – trouble-free cows.

Invaluable indexes

And key to breeding these cows is the use of CRV's two indexes: Better Life Efficiency and Better Life Health. The first index can be used to breed for a herd that processes the available feed on a farm more efficiently. This means that throughout the life of a cow – including the rearing period – a higher percentage of the energy in the feed she eats is converted into kilogrammes of fat, protein and lactose. Better Life Efficiency incorporates the following breeding values: milk yield, persistency, late maturity, longevity, calving interval and body weight. Selecting for efficiency will result in a herd with higher yields and longevity at a lower weight. The index is expressed as a percentage, with the top animals scoring more than 10%, and CRV expects breeding for efficiency to produce a 10% increase in feed efficiency over a few generations.

The second breeding indicator, Better Life Health, was developed to make it easier for producers to breed for a trouble-free herd. Many different breeding values are calculated for health traits and Better Life Health sums them up in a single figure. This index is based on the breeding values of udder health, hoof health, calving ease, maternal calving ease, calf vitality and daughter fertility. No weighting is applied to the different breeding values. A cow with an udder infection is just as irritating and costly for the producer as a difficult calving, so the reasoning goes. Here too, the top animals score



Efficient milkers: indexes aid selection for good production, health and fertility

around 10%. A bull that scores +10 for this indicator will pass on 10% fewer health problems to its progeny. This means that, if the bull is mated with an average cow, 5% fewer problems can be expected in his daughters.

Using these indexes is allowing the Janssens to optimise their breeding strategy to maximise herd efficiency and allow them to consolidate their business. Hans, who finds it interesting to collect figures, says one of the key aims is for the herd to convert as much of the unit's home-grown forage into milk as possible. Hans already carries out feed efficiency calculations regularly during the winter, when the animals are housed, and he now has a good idea of how to control its using management.

A short calving interval, an even calving pattern and a high average age help to improve feed utilisation. In addition, Hans is convinced that there are differences between individual cows. His instinct tells him that small, high-yielding cows will be more efficient than large, low-yielding animals.

Producer support

"We developed the breeding indicator Better Life Efficiency to support producers like the Janssens, whose aims and objectives mirror producers across the world," says CRV's René van der Linde. "Every producer feels that body weight and yield, in terms of kilogrammes of fat and protein, say something about the cow's efficiency. However, longevity is important as well.

"During the heifer rearing period, the animal does nothing but eat and the longer she keeps producing milk the more litres there are to offset this 'loss' or cost. And calving interval also has an influence. The shorter the lactation, the fewer fluctuations there are in body condition, the higher the average daily yield and the more efficient the conversion of feed into milk."

Hans is happy that he's using the indexes as a breeding tool. The good figures for bulls such as Kian (+6) and Paramount (+7) confirm his assumptions about the efficiency of their daughters in his herd. So he always takes Better Life Efficiency into account when selecting sires.

Cow fertility

Harrie and Hans agree that improving herd and business efficiency also includes improving cow health and fertility. But things do not always run smoothly in this respect, as the Janssens know. They had to contend with poor udder health for a few years and were not happy with their cows' fertility either. The calving interval was respectable, at 400 days, but it took an average of 2.2 inseminations to get cows back in calf.

On top of this, some animals were culled due to failure to conceive. The pair say that a lot can be improved with better management, but breeding can also make a significant contribution, particularly if they are able to rule out bulls with extreme negative scores.

"A problem-free herd is what every producer wants to milk," adds René. "With the new breeding indicator Better Life Health, it is easy for producers to make progress in this trait. The index incorporates the breeding values of udder health, hoof health, calving ease, maternal calving process, viability and daughter fertility. Over time, breeding for health results in a herd with fewer problems," he says.

Although the heritability of many of the traits is low, Harrie and Hans Janssen do see a picture emerging. For example, they point out the poor fertility of their Kian and Fidelity daughters – both score -2 for Better Life Health – while daughters of Linfield, with a score of +7, stand out as they have few fertility issues. And with Delta Onedin (+4) as a sire, the quality of herd favourite Gerda 183 is no fluke either. |