



April 2023

Newsletter Number 10

Dear Red Breed Enthusiasts,

All of you will have noticed the increasing number of helpful evaluations appearing in bull proofs with titles like: mastitis resistance, hoof health, general health, heat tolerance, fertility (or daughter pregnancy rate), feed conversion efficiency, herd life (or survival), young stock growth and more. The contribution of these composite assessments in the national ranking systems is increasing, while the effect of more traditional production and type traits is diminishing.

The Lifetime Net Merit system from the USA uses 17 component parts to calculate its final score, with just 39% of that score derived from milk production. Net Merit is further refined into Cheese Merit, Fluid Merit and Grazing Merit. The alternate TPI system has just three component parts (Production 46%, Health 28% and Type 26%). TPI is operated by the Holstein Association of USA, which explains its vision for the system in the statement:

“TPI is the gold standard in ranking world-wide Holstein genetics, serving as a rudder for the genetic direction of the breed. TPI represents HAUSA’s vision for feeding the world through the improvement of the domestic and international Holstein population, encompassing animals identified in the Herd book as well as commercial Holsteins. TPI is not necessarily aimed at breeding individual cows, but rather to advance the entire genetic pool. HAUSA recognizes and encourages diversity in breeding philosophies to ensure the continual improvement of the Holstein breed globally.”

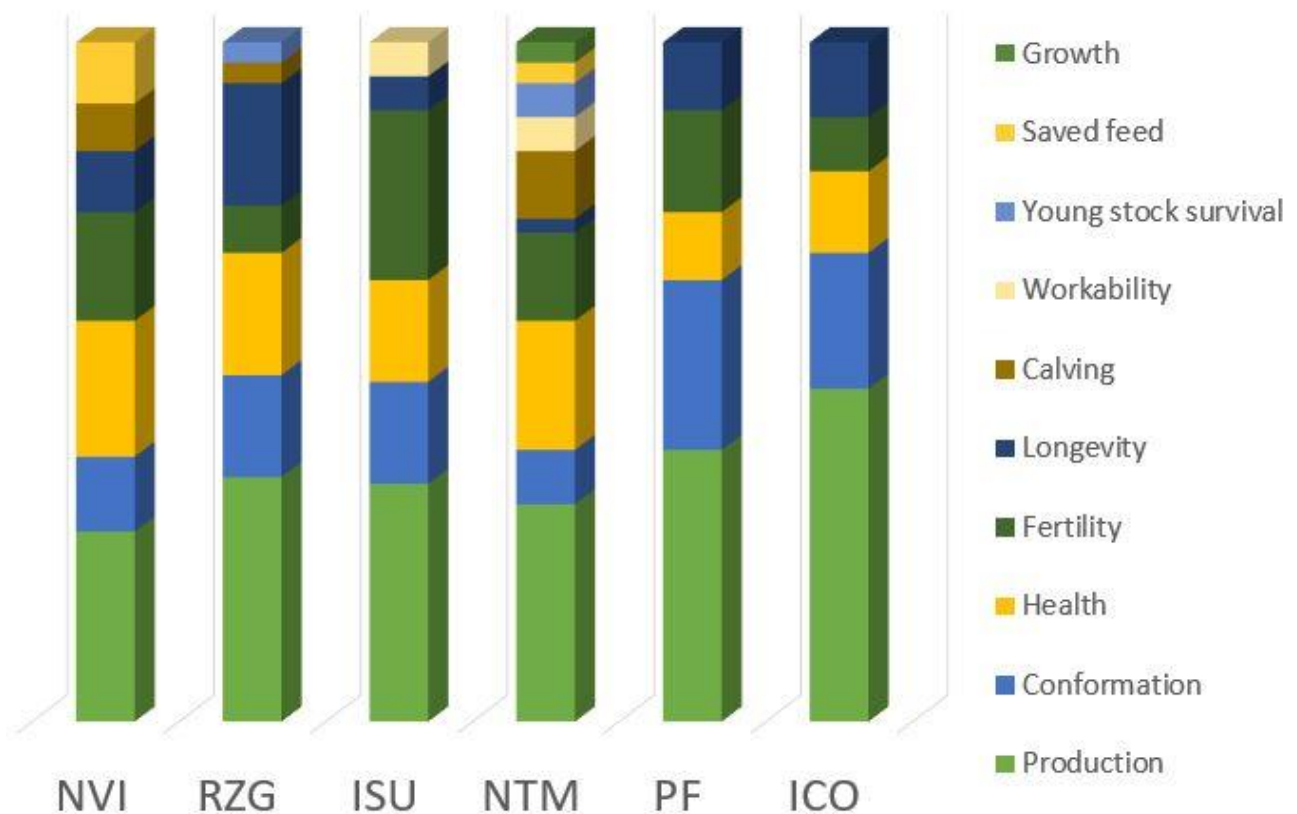
Many Red cow breeders will be familiar with the Nordic Total Merit (NTM) system with its goal of breeding the “Green Cow”. However, in Europe there are more than five other ranking systems: NVI (Netherlands and Flanders), RZG (Germany), ISU (France), PF (Poland), ICO (Spain). There are significant differences between these systems and because of the various weightings applied to each trait, the systems cannot be compared directly. When these differences are considered thoughtfully, it behoves breeders to consider which breeding philosophy best fits their situation.

Holstein USA raises a very interesting point in its statement:

“TPI is not necessarily aimed at breeding individual cows, but rather to advance the entire genetic pool. HA USA recognizes and encourages diversity in breeding philosophies to ensure the continual improvement of the Holstein breed globally.” Does this resonate with you?

On the following page is a pictorial taken from the Euro Genomics website for you to assess the differences for yourselves:

<https://www.eurogenomics.com/genomic-breeding-values/6-total-merit-indexes.html>



Australia's BPI ranking for red breeds is broken down into Production 49%, Type 9%, Workability 7%, Health and Fertility 29% and Feed Saved 6%.

Red breeders do not have an evaluation system which dominates internationally like TPI which perhaps increases our diversity, but on the flip side Reds probably lack some international cohesion and individual bulls do not get the chance to spread superior traits across the world as they do in other breeds. Are we too diverse and not making sufficient genetic progress, or is this a strength we have not capitalised upon?

We farm in an era when farmers are becoming less hands-on, instead they have more business management skills and have often studied at university rather than being educated in the "School of Hard Knocks". This is a positive development if we consider the need to produce food for the world's growing population, meanwhile the farmer's once close affinity with their livestock is diminishing in most cases. This affinity often meant that breeders could easily; evaluate the cows their cows accurately, target their new genetic selections instinctively and implement very astute mating decisions. But their range of available genetics was never as broad as it is today. For the "manager-farmer" the new composite traits are becoming more valuable and they assist breeders to address the increasing number of societal and economic demands.

However there are still a significant number of skilled "Old School" breeders who successfully manage genetic improvement intuitively. These breeders steward herds with arguably the greatest potential, because they have inherited or cultivated unique skills which enable them to recognise individual cow's most limiting issues. They collate data and physical information in their minds and perceive the next steps. This skill is often found in people who also have an innate ability to feed cows correctly, but is not necessarily associated with business acumen, or forage production, or machinery skills. Aspiring breeders would do well to learn from such people, I know the benefit of this from personal experience.

In years gone by I used to hear breeders bemoan decisions at shows when an undeserving cow won a class because her presentation had covered over serious flaws which the judge had not detected. In this data era, their attention has turned to cows which are rewarded with high breeding values, but carry serious flaws which are completely obvious to their eye. The best breeders have a clear vision of their model cow, what she should look like and how she should perform.

Even the best bull in the world is not the perfect match to every cow in the herd. Every bull and every cow has a weakness somewhere and we should attempt to address that frailty at every mating opportunity- an opportunity lost can never be regained. So, how many breeders plan every mating? How many simply take the next dose of semen in the tank? The relatively smaller international population of red cows means that red breeders have a greater imperative to make every mating a winner.

How many breeders have a model cow locked firmly in their mind? The national genetic evaluation systems all have a model embedded in them, often under a title like "The National Breeding Objective". These are formulated through farmer consultation processes and are periodically modified to include concepts like "The Green Cow". Red Breeds are a little unique because of our emphasis on the "Invisible Cow". Genetic evaluation centres then put numerical values to these concepts to reward animals which best fit these concepts with high breeding values. So when we use the highest ranked genetics we follow the genetic pattern set by that breeding organisation. These values reflect the prevailing opinions of the time and by their nature are a blended compromise.

Every breeder has slightly different opinions and situations, so would it be better if each one had a model cow which best fits their own circumstances? Could this increase individual farm efficiency and could it help maintain genetic diversity? I suspect greater gains could be achieved if breeders selected animals that most resemble their model cow, rather than purchasing the ones with the highest final score. I am sure many of you are using this idea to some degree, but is there potential to extract more gains from it?

Aspiring breeders should be encouraged to seek out and learn from successful breeders whose herds can be recognised by their performance, consistency and durability. There are potential rewards for breeders who take the time to study their cows, identify the three best and the three worst aspects of each one, then use that information to make astute matings.

Blending new and old breeding technologies has merit and there are professionals who provide evaluation and mating recommendations. Many of them would also provide training if required. Classification adds more information to the picture and it allows breeders to focus on individual cows and learn, plus you receive a written report for analysis. It's a pity that most herd management programmes do not breakdown classification data into its component parts and allow comparison with performance information. Data, technology and old school intuition are all essential parts of successful breeding programmes.

How many IRDBF member breeds have written vision statements which outline their goals and ambitions? Do these statements get used in discussions with the organisations who formulate the breeding values, or to set the parameters used by classifiers to assess cow conformation? Does the vision statement match the ideal cow?

Should the IRDBF have a written statement which describes the Red breeding goals and objectives from an international view? Should this statement be generic enough to cater for both housed cows, as well as grazing cows? Or should there be a separate vision for each?

I expect everyone will have an opinion on these questions and I would like to hear yours. Maybe we could discuss it over the next few newsletters, or maybe you should attend the IRDBF conference in July this year in Estonia! It is just the place for passionate breeders to express their views and a great forum to distill the things which are most important for the Red breeds.

Details of the conference are available on the IRDBF website: www.irdbf.com or if you would like to read the newsletter back issues, they are also stored there.

Finally, some of you might remember the New Zealand Milking Shorthorn breeder Phil Garrett from Christchurch on the South Island. He was interviewed by The Farmers Weekly for an article which you can read at:

<https://www.farmersweekly.co.nz/people/canty-dairy-farmer-achieves-high-production-with-a-gentler-approach-to-the-land/?fbclid=IwAR0P-Ton6WJfmEycY5FK4s6MS-TXvOZIHDV1SaUfvNkTmQB1hJtXywo3NI>

It is an inspirational read!

Hope to see you in Estonia,

Graeme Hamilton