

August 2022

Newsletter Number 8

Dear Red Breed Enthusiasts,

Climate was once a topic which was used as an ice breaker when you met someone new from far away and it was phrased into a question like: What is the climate where you live? Not any longer. It seems that the livelihood of farmers might depend on modern day science's decision about the positive or negative effect that farming has on the environment and how that will be transformed into a financial value. Followed by the eternal question: Who pays?

Our New Zealand farming friends are interested to hear from international friends about their experience dealing with dairy farm emissions and how they manage them. Initially the New Zealand government was concerned about nitrogen leaching into waterways, but have recently turned their attention to gas emissions and was proposing a tax at the rate of between four and ten cents per kilogram of milk solids, but this has increased in line with recent carbon price increases. New Zealand milk is paid for by separate values placed on the kilograms of butterfat and protein supplied to the processor. If you add the quantities of butterfat and protein together, it is called milk solids.

A quick visit to the DAIRY NZ website shows that five distinct production systems have been determined using imported feed as the criteria to group similar management systems together. The five systems describe when and how much feed is imported to the milking herd grazing area, irrespective of whether the cows are in milk or dry, but it does not include feed for young stock. In their strict seasonal calving system many farmers send their dry cows away to a grazing property for the wet winter dry period to protect valuable pastures. This is counted as imported feed.

System 1 - All grass self contained, all stock on the dairy platform: no imported feed

System 2 - Feed imported, either supplement or grazing off, fed to dry cows: 4 to 14% imported

System 3 - Feed imported to extend lactation (typically autumn feed) and for dry cows: 10 to 20% imported. Equates to 1 or 2 kg of grain fed for most of the milking season.

System 4 - Feed imported and used at both ends of lactation and for dry cows: 20 to 30% imported

System 5 - Imported feed used all year, throughout lactation & for dry cows: 25 to 55% imported

The farm of our New Zealand IRDBF Director Russell Tocker is deemed to produce about 7,500 kilograms of CO₂ equivalent per hectare per year according to a recent dairy company audit. The Tocker farm is classed as System 1 and all young stock are grazed separately from the milking area. It is a very low input business with operating costs ranging between NZD2.55 to NZD3.00 per kilogram milk solid, while personal expenses, finance costs and capital expenditure are not included in cost of production. Their's has been a very sustainable business model, but in Russell's laconic style he says "I think we are being thrown under a bus! Now we have to deal with extra stuff that we never intended to worry about." This new tax makes their present business model very unpredictable.

Since 2013 their herd has improved its output by extending the lactations by 15 days in milk and now averages 248 days. During that same time farm production has increased by 50,000kg MS, so are they improving genetically, or is the farm management improving, or both?

So what strategies are available to New Zealand farmers? One of the problems with any grazing system is that there is no precise way to compare cow intake and output. Grass growth rates, wastage and consumption are all “guesstimates” and averages. Hence the ability of farmers to lower the tax through improved feed use efficiencies is nearly impossible. In Total Mixed ration systems, the crop can be accurately measured after harvest and measured again as it is fed to the herd, but not in grazing systems.

It seems that the people who drafted the carbon audits in New Zealand have focussed on the energy required for a cow to produce her milk and mechanical milk harvesting equipment, but no regard for improvements which can be gained through the refining the efficiency of the cow's rumen. Nor have they considered the elements ingested by the pastures. Authorities have suggested that extracting the milk from cows at faster rates will lower energy consumption and higher butterfat and protein percentages in milk will help, but that does not alter the energy efficiency of the cow.

Maintaining tight calving patterns will reduce the number of late calving cows who are only able to contribute short lactations. And unfortunately there appears to be a declining fertility trend among the Red Breed bulls available in New Zealand. It may become necessary for dairyfarmers to introduce higher grain feeding during the mating period to improve conception rates, but the problem in New Zealand is that very little grain is grown nationally and imported grain is considered expensive.

The whole issue causes dairy farmers in the Land of the Long White Cloud increasing grief. On one hand they are told how efficiently they produce animal based food commodities, while on the other hand government is planning to tax an already efficient system and the most recent estimations place severe doubt about the viability of their national dairy industry. Perhaps in your country you get the same feeling? Is this just a tax grab designed to justify a flawed ideology?

In our last newsletter I explored the idea that emissions taxes should not be based on a per cow unit, rather it should be based on per unit of output. The rationale behind this is that the maintenance cost (that is wasted energy) per cow is rather fixed for her body weight and if the same sized cow could produce more than her contemporaries, then there is a cow maintenance saving on a unit of production basis. Any proposed tax must recognise this gain.

We also discussed A2 milk and Kappa Casein variants as ways to increase the value of the milk we produce. The reality is that unless a processor somewhere is prepared to pay a premium for this improved milk, our work in producing it is for nought!

So Red thinkers, how do we get a premium for milk from Red Cows? Have got other suggestions for Russell and our friends in New Zealand?

Tonu Polluar of Estonia has left his position in dairy herd management and moved to a new career. For those who have the pleasure of knowing Tonu, his happy disposition and ready wit will be missed at our international gatherings.

In May the IRDBF Board met for a video meeting and I have included below edited comments from our conversation for your information

Welcome at 6.15 pm (ACST) from Christina Paulsen-Schluter

Attendance

Christina Paulsen-Schluter, Claus-Peter Tordsen (Treasurer), Graeme Hamilton, Russell Tocker, Tanel Bulitko, Morten Hansen and Kylie Boston (Minute Secretary)

Country Update

New Zealand:

- Production is good
- Concerning government environmental policies
- Sales have been very good this autumn along with good milk price
- Rebuild of database to store our cow data – still some issues with the other breeds agreeing on who is paying for the data and who has access.
- BW (Breeding Worth index) now includes udder data. Classifiers are now using liveweight data rather than visual assessment.
- Red genomics a difficult topic, considering international alliances.
- UK Shorthorn conference is coming up

Germany:

- All agricultural commodity prices are high
- Cost for energy, feed and inputs are also high
- Can sell heifers and cows to other farms.
- Angler breed average production figures are average: 10,000litres, 4.5% fat, 3.65% protein
- Two new bulls from the 1st May
- Five new bulls in the next month
- The rise in beef semen sales for lower ranked dairy cows is depressing Angler semen sales
- Next breeding value data release in September will see changes
- Shows in January were cancelled due to Covid. Euro Tier on 29th Oct 2022 is next big show.
- Angler Show, Sudarbrarup, 18/04/2023

Estonia:

- Red cows number 11,000 and growing.
- Production 9,100 litres, 4.3% fat, 3.5 % protein
- Not possible to export
- Milk factories targeting high milk solids content, which is better for red cows
- Young bulls are now 98% genomic tested
- Increasing sexed female semen use.
- Milk price 45-euro cents and meat prices also very high
- But inputs have also increased
- Dairy sector is stable
- High cropping incomes have become a major competitor for land, so some farms stopped dairying to grow crops

Denmark:

- Milk prices are high next month EUR 0.55 cents per litre. Had many rises this year.
- But input costs of feed, energy etc are also high
- Dairy farmers margins are still good, farms merging.
- The Holstein breed is increasing populace at the expense of red cattle
- Sexed semen use is more popular.
- Not many surplus heifer sales
- No live exports to Russia at present
- Danish Red promotion strategy focusing on more grazing, positive health traits, high milk components and cross breeding opportunities.
- Seeking international dairy marketing opportunities.
- Viking Genetics proposal to merge into an international genetic company did not succeed, so are now focussed on domestic structure.
- 29th June 2022, Herning national show after a 2 year lapse due to Covid.
- Danish breed administrators have made an observation that “What we think is normal, is not normal everywhere” on the international scene.

Australia

- Milk price is high but inputs are also high. Farmer margins are reduced from last year.
- East coast of Australia has been very wet with floods and in the southern regions it's been very mild and dry and therefore winter crops are very slow.
- Semen exports South Africa, Pakistan, New Zealand, Europe, China and other SE Asia countries.
- 16,000 daughters of red bulls in national herd.
- 92,000 doses of red semen sold in 2021. About 4.5% of national sales, up from 4% in 2020.
- Genomic sampling is gaining momentum, but breeding value calculations being batched monthly. Combined with other variables, animals are 6 months old before data is returned.
- ST Genetics provides the most comprehensive genomic report and includes complete genetic recessive profiles. Fishy milk taste is a common positive among reds.
- Genomic samples are processed by Pfizer, Neogen or Sexing Technologies. The first two have laboratories in Australia, but ST sends samples to USA. All laboratories send genome sequences to Datagene in Australia to compare against our red data set, which includes some all breeds traits. Only four traits (milk volume, fat %, protein % and Somatic Cell) are genomically analysed, the rest are derived from these four, or are parent average.

IRDBF 2023 Conference – Estonia

General Discussion

- Planning to hold in July 2023, coordinating dates for event to follow Herning Show in Denmark.
- Tanel is the main contact
- Estonia to seek sponsorship
- Estonia seeking recommendation of speakers to use for Conference Day.
 - Jennie Pryce, Australia (Graeme to ask Jennie's availability)
 - George Thaller, From Kiel University (Christina to seek information from George)
- Options to Stream international Speakers

Next Steps:

- Confirm dates
- Structure concepts (10 Days in total):
 - Pre-Conference program to start in Germany/Denmark (4 days), involving Herning
 - Formal conference is one day with member country reports and a focus on Maximising the opportunities from red breed genomics. Other days will include farm visits in Estonia (4 days)
 - Post Conference program to include farm visits in Latvia and Lithuania (2 Days)

Other Conference Topics

The “ReDiverse Project”

Initial project is complete, but they are now working on some additional projects. New funding for more work on the Anglers. Georg Thaller, Kiel University to be invited to present findings and recommendations.

Financial update:

Cash report

Opening balance 15.11.2021 = 8.449,11 €

Income: 0.00EUR

Expenses:

Visa card 42,00€

Bank charges 6.00€

Closing balance 15.05.2021 = 8.397.61 €

Membership Fees:

Send out Membership fee notices with the save the Estonia conference dates and preliminary program. Also include a list of current IRDBF members and an invitation to join.

Full membership (yearly)

- ✓ EUR 500 per year (*large breed - more than 20,00 cows per year on milk recording*)
- ✓ EUR 300 per year (*small breed - less than 20,00 cows per year on milk recording*)

One vote per member organisation

Associate Membership (yearly)

- ✓ EUR 50 (any breed size)

With no voting rights

Note that we haven't collected memberships for 2 years and to highlight the need to support the planning and preparation for the next conference. At the last conference it was agreed to offer conference attendance scholarships for one nominated youth from each member country. It was agreed that scholarship recipients would be responsible for their own travel arrangements to the venues. Member countries could fund additional scholarships to other youth from their associations. This vital work for the IRDBF succession plan.

All board members agreed to maintain current membership fees rates and that they need to be sent out this year.

Other Business:

- Russell: Highlighted the need to continue the theme from the 2019 IRDBF conference "Bringing Red breeds Together". Also to continue international communication through the Red breeds newsletter and social media. Board members need to promote communication wherever possible, with their interactions. (Supported by Christina in closing remarks). More red performance statistics would be welcome.
- Short save the conference date email to be sent in Aug/Sept (as above)

Christina closing remarks thanking to Tanel for his efforts to plan the 2023 conference. South Africa has participated strongly in previous conferences and has fallen away. Board members to look for opportunities to re-engage with them and any other red dairy breeders around the globe.

Next Informal Catch up: Wednesday 30th November 2022, 6.00pm (ADST)

Meeting Closed: 7.30pm (ACST)

In this issue we read the views of a young and passionate Red Cow breeder from the Angeln region of Germany by the name of Agnes Greggersen. This young lady conducts her family's milking herd, a farm stay operation which can accommodate several families simultaneously and contributes a great deal to dairy and red cow promotion through activities on her Facebook page entitled "Ich liebe mein Kuhe". She was asked two questions:

1. What in your view affects a cow's profitability?
2. What are the challenges of increasing the profitability of the Red Dairy Cow?



Agnes Greggersen, pictured in 2016 during her international travelling. Read her thoughts below in German, or an English translation.

Original Deutsch

Heutzutage wird es immer wichtiger profitabel zu wirtschaften. Der Konkurrenzdruck ist hoch. Dabei gibt es viele Faktoren, die diese Profitabilität beeinflussen.

Auf der einen Seite ist die Rasse und das genetische Potenzial der Kuh entscheidend, auf der anderen Seite ist mein Management sehr wichtig und darf nicht unterschätzt werden. Als Landwirt muss ich mich entscheiden, welche Faktoren mir wichtig sind. Außerdem muss ich mein Management regelmäßig selbstkritisch überprüfen und entsprechende Maßnahmen treffen und anpassen. Zudem gibt es noch weitere Faktoren, die die Profitabilität meiner Kuh beeinflussen. Als Landwirt ist es meine Aufgabe den Kühen beste Bedingungen zu bieten, damit sie ihr genetisches Potenzial entfalten und ausschöpfen können.

Zur Verbesserung meines Managements muss ich analysieren, was meine Kühe benötigen. Wie ist die Futterqualität? Die Klauen- und Eutergesundheit? Wo sehe ich Verbesserungspotenzial? Dafür müssen nicht immer große Stellschrauben gedreht werden, sondern teilweise viele kleine.

Auf meinem Betrieb haben wir in den vergangenen Jahren viele kleine Dinge im Management verändert. Bessere Pflege der Liegeboxen, regelmäßige Klauenpflege, Zwischendesinfektion im Melkroboter und vieles weitere. Dabei müssen es nicht immer große Veränderungen sein. Auch viele kleine Dinge haben eine positive Auswirkungen auf die Tiergesundheit, die Futterqualität und zuletzt auf die Milchleistung. So habe ich einen direkten Einfluss auf die Profitabilität der Milchkuh. Auf diesem Erfolg darf ich mich nicht ausruhen, denn es ist wichtig, dieses Niveau zu halten, selbstkritisch zu überprüfen und weiter verbessern.

Wie sieht meine perfekte Kuh aus? Auf meinem Social Media Kanal erzählen mir viele Holstein-Züchter, dass meine rote Kuh schlecht sei. Diese Annahme vertrete ich nicht. Wie heißt es so schön „Eine gute Kuh hat keine Farbe“. Mit der roten Kuh habe ich bereits das züchterische Fundament einer robusten, langlebigen Kuh. Wie jedoch die perfekte Kuh aussieht, kann sich nur jeder selbst beantworten. Jeder Landwirt hat andere Ansprüche und Anforderungen. Hier in Deutschland habe ich zum Teil andere Gegebenheiten, wie in anderen Ländern der Welt. Somit muss ich als Landwirt mir überlegen, wie sieht meine Kuh aussehen soll.

Was macht meine rote Kuh aus? Wie bereits erwähnt hat jeder Landwirt andere Ansprüche und eine gute Kuh keine besondere Farbe. Meine rote Kuh ist robust und widerstandsfähig. Die Milchleistung und Inhaltsstoffe kann ich als Landwirt direkt monetär einschätzen. Für die indirekten Faktoren, wie Gesundheit, Nutzungsdauer oder Fruchtbarkeit, muss ich selbst eine Kalkulation aufstellen. Bei mir selbst muss ich feststellen, dass ich diese indirekten Faktoren ebenfalls gerne übersehe und nicht bedenke. Dabei sind sie für die Profitabilität ebenfalls sehr entscheidend.

Fazit: Viele unterschiedliche Faktoren beeinflussen die Profitabilität der Milchkuh. Dabei können neuste Technik und Sensoren helfen. Jedoch ist auch diese Technik nur so gut, wie der Mensch, der dahintersteht. Somit kann die Kuh ihr gesamtes Potenzial nur ausschöpfen, wenn ich als Landwirt die besten Voraussetzungen dafür schaffe. Dabei ist auf der einen Seite das genetische Potenzial der Kuh und auf der anderen Seite die äußeren Faktoren entscheidend

English Translation

It is becoming increasingly important to manage our herds profitably and cost pressures have never been higher, but there are many factors influencing this profitability.

While the breeding and the genetic potential of our cows is critical, herd management is extremely important and should not be underestimated. As a farmer, I have to decide which factors are important to me and offer the cows the best environment so that they can develop and express that potential. I must also regularly and critically analyze my management, then implement the most appropriate improvements.

To be able to continually increase the profitability of my cows, I must look for the next opportunity for improvement while also being mindful of routine aspects like forage quality, hoof and udder health. It is not always necessary to make big adjustments, sometimes a series of small ones can make surprising improvements.

On my farm we have changed many small practices in recent years, ranging from better care of the cubicles, regular hoof care, intermediate disinfection in the milking robot and much more. These many small things have had a positive impact on animal health, feed quality and last but not least, milk yield has improved. It is rewarding to see that my management decisions have had a direct influence on the profitability of our cows, but I cannot rest on my laurels because it's important to maintain and improve on this level of performance.

What does my perfect dairy cow look like? On my social media channel, many Holstein breeders tell me that my red cow is bad. I do not support their view. As the saying goes, "A good cow has no color". With the red cow I have the breeding foundation of a robust, long-lived cow. However, what the perfect cow looks like is something every farmer must answer for themselves, as each one of us has different needs and requirements. Here in Germany I have partly different conditions than in other countries of the world, so my ideal cow will have some traits unique to my farming and economic conditions.

What makes my red dairy cow unique? As already mentioned, every farmer has different requirements and a good cow does not have a special colour. My greatest requirement is that red cows should be robust and resilient. Assessing the margin between milk yield and forage inputs can be done in a number of ways, but the indirect factors such as health, fertility and herd life are less defined because each of us places different values on these aspects. I have to say I often overlook these indirect factors, but they do have a significant effect on herd profitability.

Conclusion: Many different factors influence the profitability of the dairy cow and new technologies are helping farmers make more informed decisions. But technology is a machine and can only be as good as the person operating it. Thus, the cow can only express its full genetic potential if I offer it the best possible conditions, while at the same time minimising the influence of other factors which might threaten that performance.

Thankyou to Agnes for this contribution and to you readers for taking the time to learn how fellow Red Dairy Cow herds are faring in other parts of the world. As always, your feed back and insights are invited, as I am always looking for material for the next issue due in December.