Milk & Honey

- THE GENIMEX JOURNAL -

EDITION 10
MARCH 2015

Finland & Denemarke Toer

Johan Müller deel sy ervaringe

Seeing is believing

Britt Stanton shares her experience of the Denmark system

New Zealand

Systems and Support

Ken jou agent

Fokus op Johan Müller & Britt Stanton

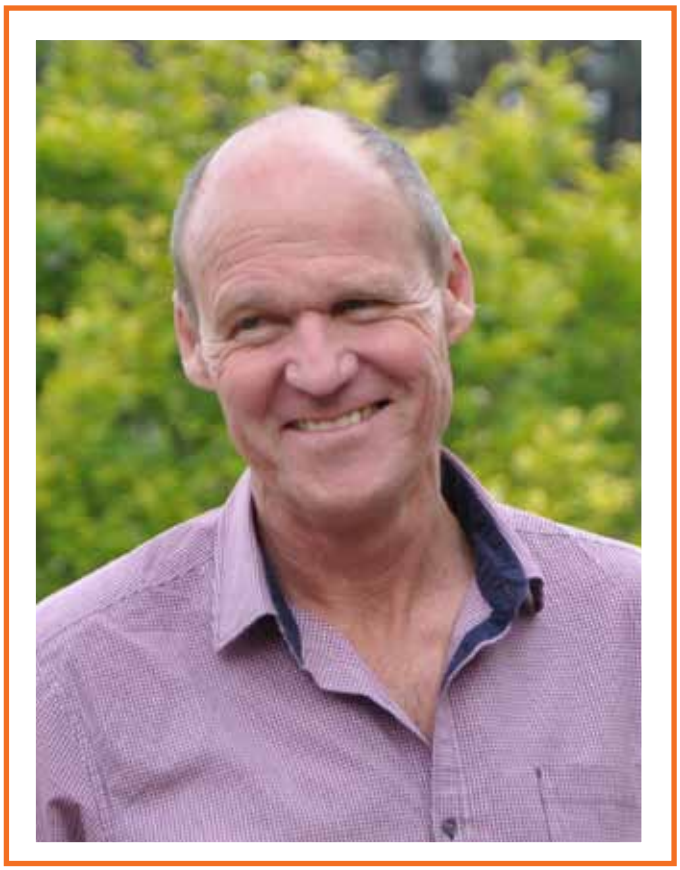
Breakthrough in breeding

Richard Spellman developing a tropical cow breed

WJCB CONGRESS
South Africa
September 2014

- Foreword -

By Chris Cloete



At the risk of irritating my fellow passenger next to me on the long haul from Johannesburg to Auckland via Sydney, I realized that it is time to write the forward to the 10th edition of the Genimex newsletter, Milk and Honey.

Once again it is time to ask some questions as to what is happening in the AI industry and it is time to drop the topic I have harped on in the last few issues and that was cheap dump semen used at the expense of the right product at a competitive and realistic prices.

Secondary traits, primary traits, when will the industry REALLY differentiate between the two? What I mean is that we all talk about the importance of the secondary traits and that we must select for them and then when it comes to the reality it all goes out of the window and the traits like Milk kg's and type take centre stage. The word "Secondary" remains the problem. It is second in our minds and until the industry changes the word it will conveniently, for most, remain second when selecting bulls to use.

The Scandinavian countries and New Zealand have over the last few decades placed a lot of emphasis on these "secondary traits"' and thus lead the world. The breeders that realize this are getting ahead and making progress.

Interestingly in 2014 the Viking sires, Jersey and Holstein dominated the Net Merit$ lists as published by the USDA and so they gained favour in the world of breeding at the expense of sires from North America. Well as we expected, the North American's changed the formula to put their bulls on top of the list again. It is all about sales of semen, is it not? See the section "What's up Down and Around" where you will see how the formula were changed. A comment on "Bull vine" summed it up perfectly. "Sires that excel in fertility, longevity and udder health will be pushed down the ranking". Where are we really if these traits are pushed aside?

I suggest we STOP calling them Secondary traits and call them VALUE traits. Value traits, as they come to you at no extra cost and can significantly contribute to profit. Start your selections there then go onto production and last of all TYPE. Are we not tired of breeding pretty but unhealthy udders? How about functional and healthy udders?

In the industry there has been this story doing the rounds about cows that give birth to heifer calves give more milk. Really? Fact or Fiction? The scientists at Viking cannot find any evidence to support this theory. See their statement on the What's up Down and Around page. Another question. Who funded the research to come up with this questionable theory? Was it not the owners of the technology that is used to produce sex sorted semen? I do not know but just ask the question.

I urge you, if you want to use sex sorted semen make sure it is from the right bull that fits your clearly defined breeding goals and that it is not this half baked 65% semen sold at discounted prices. Or for that matter, last year's bulls that are given a second lease on life when they are put into sexed semen production.

Genimex, together with Livestock Improvement NZ, will again be sponsoring the SA Large Herds Conference. This year the conference will be held in Port Elizabeth at the Boardwalk from the 1st to the 3rd of June. We will be sponsoring Kevin McDonald as a speaker. Ken Bartlett will also be out for the conference. LIC NZ and Genimex have been proud sponsors of the SALHC since its inception. I believe that this is the 10th SALHC conference.

Well let's look ahead. May your breeding decisions be based on sound financial principles and that you do not leave it over to managers and consultants who chase short term financial goals at the expense of the long term profitability of your dairy herd.

Please enjoy this, the 10th edition of Milk and Honey, in which I feature my trip to NZ bringing you some updates on the dairy industry and the ultra successful World Jersey Cattle Bureau Conference that was held in South Africa in September of last year. The cover page of this edition features two great cows in front of the spectacular Table Mountain.

Thank you to the Durr Family of Malmesbury for breeding such great cows and allowing us to have them photographed and to Johan Muller who followed his dream of having a stunning photograph taken to highlight the great Jersey cows we have in SA and also the unbelievable type of the Viking Genetics sires. I bet they have great "value traits" as well. The May:- great fertility and longevity and the Zuma:- outstanding udder health.

Enjoy.

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Cover page photo:
These two beautiful cows, a DJ May and a DJ Zuma daughter photographed at the Rockhaven Guest House on the beach at Blouburgstrand in the Western Cape. The two cows are from the Preekstoel Herd of the Durr family in Malmesbury. We thank Tienie Durr for his assistance and willingness to have this stunning photograph taken.
The Danish group at the end of their tour after attending the WJBC conference is the Cape.

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FINLAND & DENEMARKE

TWEEDUISENDVEERTIEN

Dit was ons eerste besoek aan Finland en het ons uit die staanspoor deeglik kennis gemaak met die temprature van een van die mees noordelike Skandinawiese lande. Met 'n bevolking van net oor die 5 miljoen en 338 000 vierkante km groot, is dit die sewende grootste land in Europa. Die land se oppervlakte bestaan uit 10% mere en 69% woude. Geen wonder ons het soms verlang na lig nie. Hul bure is Swede in die weste, Noorweë in die noorde en Rusland in die ooste. Die land is verdeel in 4 streke nl. Die suide met Helsinki as die belangrikste stad, die Weste met Turku as hoofstad, die ooste met Savonlinna en die noorde met Rovaniemi as die hoofstad, die streek is ook bekend as Lapland.

Kenmerkend van Finland is dat byna elke huishouding toegang het tot saunas. Na die sauna word daar gewoonlik in die yskoue mere geswem of gerol in sneeu. Sampioene en bessies is orals verkrygbaar en takbokvleis is een van die lekkernye op hul spyskaarte. Bere kom nog oral in die woude voor. Ons was in die suide met Lahti as ons basis. Die stad is ook bekend vir sy wintersport en ons hoef geen tempratuur aanpassing te gemaak het nie. Julie maand is een van die somermaande maar die temprature was rondom 15 grade, (dit was darem a.g.v 'n reën front) Somer temprature kan soms oor die 20 grade wees met die rekord laagste in die winter -51 grade! Finland is die land met die laagste korrupsie vlak ter wêreld!

Die doel van ons besoek was om meer te leer oor die Finse Ayrshire populasie. Vervolgens 'n opsomming van die produksie prestasies van die ras:

160 000 Ayrshires koeie op melkaantekening

Melk	**8616 kg**
BV	**372 kg**
BV	**4.32 %**
Proteien	**302 kg**
Proteien	**3.5%**

Meer as 120 bulle word jaarliks getoets en eerste ontledings met meer as 120 dogters per bul verseker uiters hoë betroubaarhede. Dit is by verre die grootste populasie ter wêreld. Finland is waarskynlik die enigste land wat hul genetiese potensiaal en seleksie nog versterk deur middel van 'n embriosentrum. Met 'n besoek aan die eenheid het ons verskeie van die top genomies getoetste koeie besigtig. Deur middel van embrio kolleksies word die aantal bulle waaruit gekies kan word vergroot en sodoende word slegs die bestes opgeneem in die toetsprogram. Die Finse Ayrshires vorm deel van die Viking Red populasie wat verder hul genetiese basis vergroot en versterk en daarom is dit dan ook duidelik waarom hierdie genepoel die hoogste genetiese vlakke vir produksie en sekondêre eienskappe internationaal, beklee.

Ons was oor die algemeen beindruk met die koeie wat ons gesien het. Die bulle Orkko en Turandot het 'n groot invloed gehad en ons het verskeie uitstekende dogters gesien. Tosikko en Reipas is van die bulle wat tans swaar gebruik word. Die Finse Ayrshire se produksie en liggaamsgewig kan van die grootste redes wees waarom daar tans ook by suiwelboere wat 'n kruistelings program toepas, 'n groot behoefte aan die ras is. Maklike kalwing asook kleiner en ligter koeie is 'n groot voordeel op veral weidingsstelsels. Driehoeks-kruising kan dus toegepas word met Ayrshire bulle om weereens die heterose voordeel te benut. Genimex is tans besig om te onderhandel vir 'n besending van Turandot en Reipas. Internationaal ondervind die Ayrshire ras geweldige probleme wat beskikbaarheid van top bulle aan betref. Met die uiters gunstige genetiese vlakke van die Finse Ayrshire populasie sal dit baie wys wees om hierdie bron intensief te gebruik.

Tienie Durr van die Preekstoel kudde, Britt Stanton (Genimex), Nels Poulsen (Kudde eienaar), Thomas Poulsen (seun), Anders Kimer (Kudde bestuurder), Jan Hinrichsen (Viking Genetics) en Chris Cloete (Genimex). Tydens ons besoek aan die Ågården kudde.

DENEMARKE

Die doel van ons besoek aan Denemarke was uitsluitlik om dogters van die nuwe bulle te besigtig en weereens ons te verfris met die toepassing van hul uiters doeltreffende ekonomiese waardestelsel nl. die "Nordic Total Merit" Dit is die ekonomiese waarde wat aan bulle en koeie toegeken word op grond van hul prestasies wat veral die volgende eieskappe aanbetref:

- Produksie (volume sowel as persentasies)
- Vrugbaarheid
- Mastitis
- Lanklewendheid
- Tipe.

Die Nationale Jerseys Skou – Herning

Ons eerste besoek was aan die Nationale skou wat jaarliks in Herning gehou word. Holsteins, Jerseys en Viking Reds word langs mekaar in 'n groot arena onderdak beoordeel. My vorige besoek aan die skou was ongeveer agt jaar gelede en ek was veral beindruk met die ongelooflike verbetering in die gehalte van koeie wat vertoon is. Op ons vorige besoeke was dit altyd vreemd om koeie te sien wat nie aan die standaarde voldoen het nie maar doelbewus vertoon is. Dit is gedoen

om besprekings geleenthede te skep vir jongboere, kinders en adviseurs. Die werkswinkels word egter nou by ander geleenthede aangebied.

Die hoogtepunt van die Jerseyskou was beslis die vertoning van die Zuma dogters. Hulle was absoluut uitstekend met besonderse uiers en suiwelvorm. So was die grootkampioen koei dan ook 'n Zuma dogter geteel uit Jas Tabic. Ander bulle wat baie goed vertoon het was Impuls, Izzy en May.

Nageslag Toer

Ons het 24 plase besoek met die uitsluitlike doel om dogters van die volgende bulle te sien: ***VJ LURE VJ HILARIO, VJ HUSKY, VJ HERODOT, DJ BROILER, DJ HOLMER en VJ LIX***.

Op elke plaas is ons voorsien van al die koeie in die kudde se volledige produksie en reproduksie rekords. (Nogal 'n dik pak wat ons uiteraard op die einde moes saam dra want van die kuddes was meer as 500 koeie.) Dit beklemtoon egter die presiesheid ,omvang en akkuraatheid van die wêreld se effektiefste datastelsel.

Die ***VJ Lure*** dogters het my veral beindruk met die suiweleienskappe wat ooreenstem met sy wêreldklas produksie ontleding. Dit is tans die bul met die hoogste kg proteien en bottervet produksie. Ons het verskeie dogters gesien en was aangenaam verras met funksionele koei en goeie uiers.

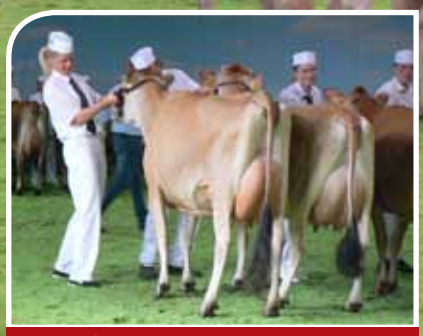
Die ***Hilario*** koeie was indrukwekkend. Groot suiwel koeie met uitstekende produksies en baie goeie uiers. Hilario is 'n Q Hirse uit 'n Q Impuls en is veral ook gewild vanweë 'n baie goeie vrugbaarheids ontleding.

VJ Husky is soos Lure en Hilario een van die top bulle op die NTM lys. Die kombinasie van Hulk en May het hier uitstekende gewerk. Hoë melk met positiewe persentasie vastestowwe sal altyd gewild wees en dit het Husky beslis. Die Husky's het veral beindruk met uitstekende suiwelsterkte.

VJ Herodot is 'n Q Hirse uit 'n Jas Bregne wat hom 'n baie goeie uitkruis opsie maak. Die bul was waarskynlik die verrassing van die toer. Hy is tans die bul met een van die hoogste indekse vir liggaamskapasiteit nl. 118. Verder spog hy met 'n indeks vir lanklewendheid van 118 en vrugbaarheid van 125. Hierdie kombinasie verseker dat, ten spyte van gemiddelde produksies, hy nog steeds 'n NTM van 17 het. Ons het verskeie dogters gesien en hulle was beslis indrukwekkend. Groot sterk koeie met baie goeie uiers verseker dat hierdie bul wyd en intensief gebruik gaan word as 'n plaasvervanger vir die legendariese DJ May.

Verder het ons verskeie dogters van ***Broiler Holmer. Izzy, Jante, Lix*** en natuurlik ***Zuma*** gesien en het hulle net weer onderstreep dat daar geen plaasvervanger vir 'n betroubare, groot toetsprogram is nie. Die eenvoud, presiesheid en doeltreffendheid van hierdie stelsel het ons maar net weer sprakeloos gelaat. Ons het op hierdie besoek verskeie nuwe plase besoek en net weer besef dat die Dene vêr voor is en ek twyfel of iemand hulle gaan inhaal. Dit was weereens 'n voorreg om die land te besoek en baie dankie aan Chris van Genimex, die Viking Genetics personeel en boere wat dit vir ons moontlik gemaak het. M&H

Groot kampioen koei. 'n Zuma dogter.



'n Zuma dogter met 'n MTM van 31.

High producing dairy farming in the semi desert

Japie Nel and his family successfully run a high producing herd with 400 Jersey cows in the semi desert country of Schweizer-Reneke in the Northwest province of South Africa. Summers there are hot and winters cold, but the Jersey cows seem to acclimate very well.

Japie Nel was originally a teacher specialized in science and mathematics. His granddad was a passionate farmer and Japie spent most of his spare time on the farm. 20 years ago Japie and his wife, Anelia, took over the farm and started with 15 cows of various breeds - Holstein, Ayrshire and Jersey.

"We farm in a place with very extreme temperatures. It can go up to 45 degrees C in summer and down to -11 in winter. The jersey cows seem to adapt very well in this climate", Japie tells. "From the start I used Danish Jersey sires due to their high solids. We sell our milk to a local cheese factory, and they pay a premium for the high solids in Jersey milk. With an average production of almost 8,000 kg milk it is a must to have good udders. We find that Danish / Viking Jerseys are outstanding for this important trait. Also, fertility is of high priority with the heat stress we have during summer months" Japie points out. Some of the sires that have been doing really well in the herd are DJ Zuma, DJ May, DJ Broiler, DJ Holmer, Q Impuls and DJ Lix. The DJ Lix cows are the favourites when it comes to udders.

"Good health and fertility is essential in our extreme weather, if you want many lactations from the cows".

Daughters of DJ Zuma.

Excellent cooperation with Genimex

Over many years Japie has had an excellent cooperation with Genimex, who represent Viking Genetics in South Africa. Chris Cloete is the manager of Genimex and his advisors give good service to the farmers through out the country.

Japie has also visited Denmark to see the Viking Jerseys with his own eyes. "I was very impressed with the quality of the Jersey cows and high level of the herds. In the future I will definitely continue using Viking Jersey sires because you know what you get. The Scandinavian data and registration system is so complete and refined that the breeding values on the sires never disappoint. The secondary traits like udder health and fertility are outstanding - and we need that with the production system that we are in. Good health and fertility is essential in our extreme weather, if you want many lactations from the cows." Japie stresses.

Dry country farming

The annual rainfall is around 450mm, which only allows growing natural African grass without irrigation. 26 ha are irrigated and here Japie grows maize for silage. In the winter it is possible to grow oats for hay. Lucerne hay is one of the other feed components in the TMR ration bought in from other farmers. This year the crop of maize silage in the pit is below average which only allows 3.1 kg in the ratio versus normally 10-15 kg.

Finally higher milk price

Up until April 2014 dairy farmers in South Africa suffered with low milk prices and high feed costs. "During a period we lost 20.000 ZAR per month, and it was the worst time in my years as a dairy farmer" Japie tells. "But luckily there is now a better balance between supply and demand and the milk price has increased to 4.85 ZAR / liter at 4.70% fat and 3,72% protein.

"On top of the period of low milk prices we lost 68 cows in November 2013, due to a compromised immune system (mastitis, pneumonia etc.) in many of our cows. The reason was a toxin, which we unfortunately never located, as it was already degraded in the feed. The vets suspected that bought in maize or lucerne had been sprayed with a pesticide against worms with too short a period until harvesting. But unfortunately we could never prove it, so therefore we did not get any compensation", Japie explains.

Bottom line economy

A high milk price is of course essential, but just as important are the costs of producing milk, and Japie has very accurate figures for his business. The costs in relation to producing one liter of milk are:

- Feed costs: 48% (incl. own feed)
- Capital: 8% (farm, machinery, stock etc.)
- Labor: 4,2%
- Vet / drugs: 4%
- Genetics: 1,5%
- Milk recording: 0,5%

The rest is net income to the family, depreciations and investments. Two years ago Japie bought 258 ha land for the price of 10,000 ZAR per ha. This might seem reasonable, but you have to consider this is dry land, and the yield is limited. As an example you can only count on one beef cow per 7 ha. of non irrigated dryland!

Challenges for farming in SA

Japie points out a number of challenges for dairy farming in South Africa:

- Lack of skilled labour
- Continuous expansions
- Lack of water
- Climate changes
- Politics
- Crime

The first point with skilled labour is a major challenge in farming in South Africa in general. Many workers have minimal school education and todays farming is getting more advanced than earlier. Therefore, it can be difficult to achieve the full benefits of modern technology. On the other hand labour is (still) relatively cheap.

The second point are the continuous expansions that are necessary to keep compatible in both the local and world market. This requires capital and the possibility to buy more land. We see that water is becoming a major issue after some very dry years. Normally we get about 450 mm of rainfall annually, but the last three years we have only had a total of 700 mm.

The climate changes are also visible here in Africa. "When I was a boy we had persistant rain for seven days, but now we get rain storms of 70-80 mm in a few hours", Japie says.

The political situation in South Africa is a major concern for many farmers and other businesses. "We have to live with it and try to adjust to the political system," Japie underlines. "We might have to form a trust with the locals, if we want to expand our herd. Of course it gives several challenges but many farmers overcome this too. Often it seems like the government plans only a short time ahead which is another challenging factor. As an example there is a lack of power in SA with daily limitations.

The last thing is the high crime rate in a country with major social diversities. We try to maintain good relationships with our local community, but in many places in SA crime and protection of your property can be a daily concern." M&H

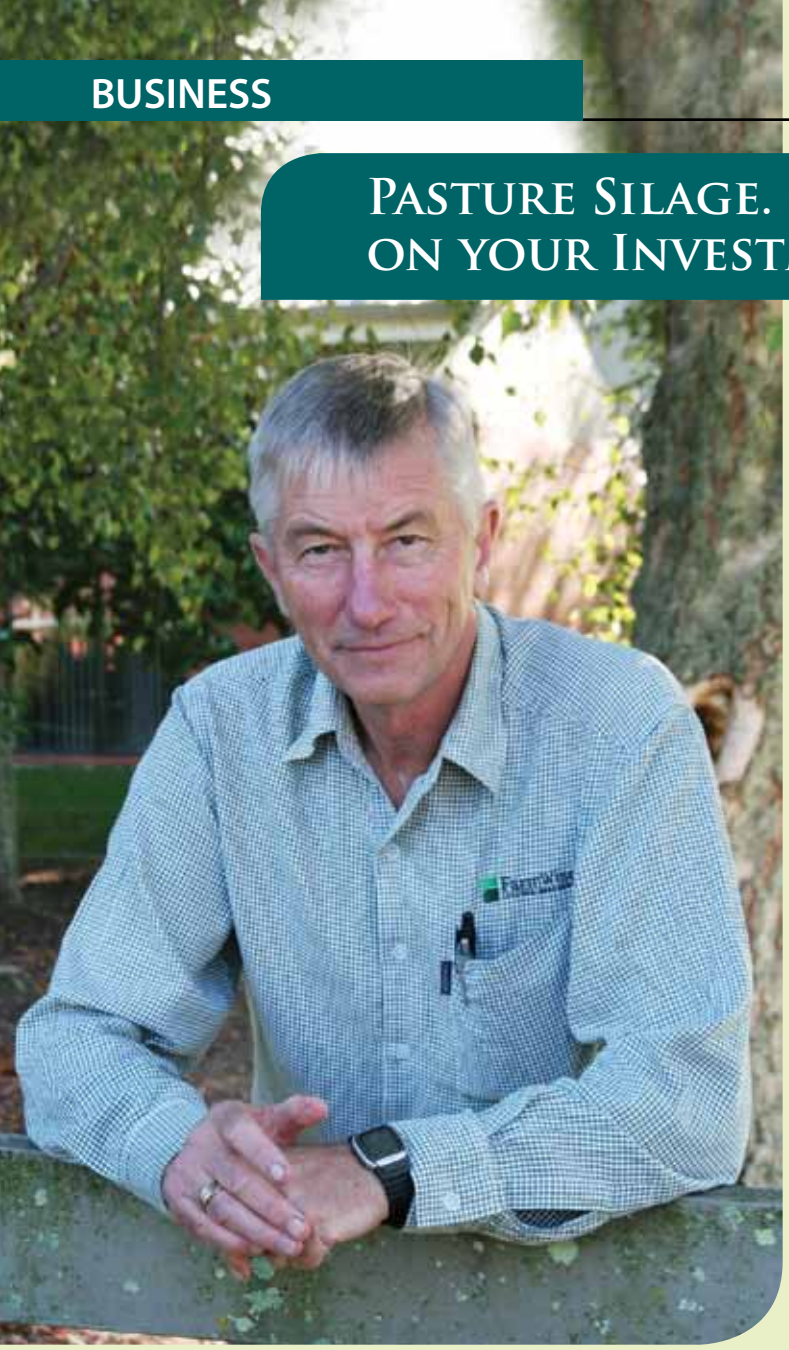
Japie Nel with family Hernus, Anja, Ferdinand and wife Anelia.

Manager Fanus Swanepoel and assistant John Molawla.

Japie Nel with Genimex agent Ferdi Myburgh.

Ken Bartlett

Pasture Silage. getting the best return on your Investment...



Main Points
Pasture cut for silage must be of high quality as it doesn't improve in quality in the stack.

So to achieve high quality silage:
Close areas for silage early before balance date.
Close well grazed paddocks as pasture residuals should be 1500 Kg DM /ha or less.
Harvesting, compacting and covering the silage should be done quickly to reduce spoilage.
Inoculates may improve fermentation but they do not turn poor quality grass into good silage.

Silage analysis
Dry matter %: The ideal is 25%. Above this it is hard to compact and below this it is hard to ensile and may have effluent loss.
Ph: A high [>4.5]generally indicates air was not excluded properly.
Ammonia +N [NH3-N]: In well preserved silage should be less than 10%.
Lactic acid is an indicator of how successful the fermentation was and how palatable the silage will be. Ideally silage will be 5-7% total acid of which more than 50% is lactic acid.
Butyric acid: This is an indicator of secondary fermentation and soil contamination.
For good grass silage. Butyric acid should be less than 1% DM.

Silage can be made as:
Bales • Stack/pit • Pit/bunker
All these storage methods make excellent silage if the main points of silage making are followed.

Replacement Heifers: ensuring that you get the best return from these animals

Main Points
Mature Live weight
425 kg for Jersey cows.
475 kg for Jersey Friesian cross.
525 kg for NZ Holstein-Friesian cows.
550 kg for North American /Dutch Holstein –Friesian cows.

Live weight targets are
20% of mature Lwt at 3months [weaning].
50% of mature Lwt at 11-12 months [puberty].
60% of mature Lwt at 14-15 months [breeding].
90% of mature Lwt at 22 months [pre-calving].
If the live weight gain is too fast before puberty the potential milk production of the cow will be reduced.

Live weight gain before breeding should be
0.55 kg/day for Jersey cows.
0.60kg/day for Jersey Friesian cross.
0.65 kg/day for NZ Holstein-Friesian cows.
0.65kg/day for North –American /Dutch Holstein –Friesian cows.

Live weight gain after breeding should be increased to
0.60 kg/day for Jersey cows.
0.70 kg /day for Jersey Friesian cross.
0.75 kg/day for NZ Holstein –Friesian cows.
0.80 kg/day for North –American/Dutch Holstein –Friesian cows.

So what's all this monitoring worth
1. Better fertility. As you know heifers at the right weight at mating get in calf easier.
2. Production. Irrespective of breed, each kg of Lwt at 22 months up to the target Lwt for the breed is worth 0.14kg fat and 0.10 kg Protein .

In summary, heifers need to have a constant growth rate from weaning to post breeding.

Source: www.vikinggenetics.com

What is the difference between Immunity+ and health traits from VikingGenetics?

Immunity+ calculate immunity response

Immunity+ is the level for immune response of dairy cows. The idea is that sires with high immune response give daughters that are more resistant against diseases. Semex has, together with the university in Guelph, developed a genetic selection tool that aims at improving the general immunity of the cows by measuring specific antibodies.

How is the test done?

The test is done by doing a challenge test on animals, which in practice implies injecting the animal with a test antigen at day 1 and measuring the response in different antibodies at day 14. There are also physical measurements of the cell response which requires a surface injection with test antigen at day 14 and some skinfold measurements at day 14 and 15.

Indirect or direct measures

The goal of breeding for improved health is to reduce the frequency of different diseases. In relation to this goal, immune response is an indirect measure, while registered diagnoses are a direct measure, as we do in the Nordic countries. Immune response and disease frequencies are not the same trait although they might be connected.

Results are shown that heritability for immune response is around 0,25, which is much higher than what is found for the direct disease traits based on clinical records. This means that fewer cows with data are needed to give an estimate of the genetic level of a bull for immune response than for a direct disease trait. But, you have to remember that the breeding goal trait is resistance against diseases. We are familiar with this mechanism from udder health, where selection on diagnoses alone gives more knowledge about resistance to mastitis than SCC, even though SCC has a higher heritability than diagnoses of mastitis.

The effect of using Immunity+ sires

It is stated by Semex that daughters sired by Immunity+ sires have 4-8% less frequency of some diseases compared to other bulls. Be aware that they are not showing Immunity- sires... It is well documented that Nordic breeding values for health traits have a large effect on frequency of diseases, for example, a bull with 120 has 4% less mastitis compared with a bull with 100.

Conclusion

Breeding for healthier cows can be done in different ways. The immunity+selection tool is an indirect way of breeding for reduced disease frequency and for countries lacking disease recordings it is better than doing nothing. In the Nordic countries, we have the opportunity to use **direct** selection for better health and it has shown to be an effective way of breeding healthier cows!

Why is udder health index better than SCC?

The breeding value Mastitis resistance

Mastitis resistance describes the genetic ability for a cow not to get clinical mastitis. Records of clinical mastitis, SCC, fore udder attachment and udder depth are calculated. Information from SCC and type traits are used as information. Formula for the index for udder health is:
(0,25 x CM11)+(0,25 * CM12) +(0,3*CM2) +(0,2*CM3)

Trait	Lactation	
Clinical mastitis day -15 to day 50	1st lact	CM11
Clinical mastitis day 51 to day 305	1st lact	CM12
Clinical mastitis day -15 to day 150	2nd lact	CM2
Clinical mastitis day -15 to day 150	3rd lact	CM3

Udder health indicators	Lactation	
SCC	1st to 3rd lact	
Fore udder attachment (FUA)	1st lact	
Udder depth (UD)	1st lact	

Indirect or direct measures

The breeding goal for improved mastitis resistance is to reduce the frequency of clinical mastitis. In relation to this goal, the best way is to use the direct measurements which are clinical mastitis which are based on veterinary records. Many countries use SCC instead because they do not register the clinical mastitis, which is an indirect measure. It is important to understand that these are two different traits with a correlation of about 0,7. There are things other than clinical mastitis that affect SCC such as age and breed.

Facts

Results are shown that heritability for direct clinical mastitis based on records is 0,03 and for SCC 0,12. To be an official breeding value for mastitis resistance, there needs to be at least 70 effective daughters in milk production. 14% of culled cows in Sweden are culled due to clinical mastitis and 11% of the cows are treated for mastitis every year. In the NTM the weighting for udder health is 0,35 which is 14% of the total NTM.

What does the breeding value mean in reality?

In reality, 10 index units means 4% less mastitis treatments. By using a bull with a breeding value of 120 for mastitis resistance instead of one with 100 it will reduce treatments for mastitis by 8% on average, which is a reduction of 40%! In the calculations a clinical case of mastitis costs 500 EURO in vet treatments, antibiotics, extra work, loss of milk etc. If you have 500 cows and 50 cases per year instead of 70 you will save 10 000 EURO every year!

SEEING IS BELIEVING...

Like a lot of people, it took me some time to get my head around the Danish system and linear. Having come from the background where a linear should have the majority of traits as far right as possible to be of any worth, the Danish linear would at first appear to fall short … well all that I can say is "wake up people", take the time to understand the system and the breeding goals of the Danes, because their cows are THAT good!

I think what impressed me the most about the Danish jersey cattle is the uniformity we saw across the herds. Danish farmers "buy into" the national breeding goals and trust their system explicitly, which is designed to breed healthy, profitable cows. We had the pleasure of visiting 20 jersey herds and 3 Holstein herds. The herds varied from organic farms, robot milking farms to conventional farms. The Danish farmers are making use of genomics more and more. Farmers have to abide by very strict health regulations and like everywhere in the world vet costs are high so healthy trouble free cows are a must. For example a farmer must call the vet out for something as simple as mastitis treatments; he may not have cupboards full of medicines like we do in SA. The vet then treats the cow and logs this information into the national data base, so every disease/illness is logged into a national database. The same applies to hoof trimming, the hoof trimmer must log all information about every cow he trims or treats into the national data base. From this data the Hoof health index is calculated for each bull and cow. So the hoof health index on the linear is made up of actual data of diseases of the hoof. This to me is a much more powerful tool when selecting a bull than just hoof angle, leg set etc. as an indication of good feet and legs. So again I say … take the time to understand the Danish system, it is far more in touch with what farmers need than other international indexes.

To say that the Danish jersey blew my mind would be a massive understatement, my cellphone's camera worked over time at the first farmer as I thought "wow, I must take as many photos as I can as there won't be many more herds this good" ….Well almost 300 photos and 37 video clips later the cows just kept on coming. At times it felt like they were just picking up one herd and moving it around to each farm we went to, the uniformity in the Danish jersey population is something I have never seen anywhere else in the world. Nothing makes me more excited about a cow as when you see dairy strength, capacity and a good udder all rolled into one …. An awesome udder alone just doesn't get me excited any more. I can hear the sceptics out there going on about how the Danish jersey has no type and doesn't have enough milk …. Well guys that may have been true 15-20 years ago but the modern Danish jersey cow that I saw would give most farmers palpitations of the heart!

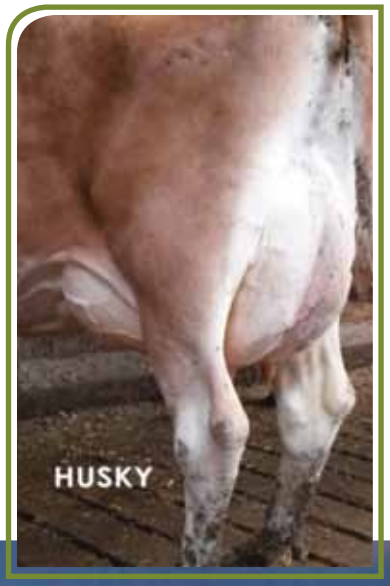
When you visit a Danish farm you are given a printout that lists every single cow in the herd, her breeding, production, classification score, lactation and other indexes. You can then look at any cow in the herd, good or bad and have all the information at your fingertips, you don't just get shown the best daughters of a bull. So at the end of the day you have a very good idea of what different bulls produce. There were 2 daughter groups that really impressed me while on this trip, those of Zuma and Herodot. The Zuma daughters were so easy to pick out in the herds, the first lactation daughters looked like gangly teenagers with super udders and the 2nd & 3rd lactation daughters had become powerful dairy cows. They are milking well above the average with great udder health. I have seen numerous Zuma daughters in milk here in SA and they look very much the same as those we saw in Denmark and the production is definitely there. We were at the Herning Show and in some classes it was 80% Zuma daughters and the Champion cow was a 2nd lactation Zuma.

When it came to the Herodot daughters, I can honestly say that I have never seen 1st lactation jersey cows with so much capacity and body depth; their bodies looked more like 2nd+ lactation cows. The Herodot daughters had very good udders and the farmers were very happy with them and I think they will be the kind of cows that will be around for many lactations. Herodot will also improve your management traits so he is to me an easy choice to use if you are a TMR or pasture based herd.

The one bull whose linear does not match what his daughters look like is Broiler. The daughters are much much better looking than his linear would indicate. The broiler daughters in SA and Denmark are exactly the same, we all managed to pick out the Broiler daughters as they have a very distinct look about them… average sized, strong, super uddered cows. In almost every herd we saw Broiler daughters and after the Zuma's they were the most uniform group we saw. He will definitely make a big improvement in strength.

The daughters of Hilario are tall, dairy cows that I am sure we will see in the show ring. We had the pleasure of seeing the full sister to Hilario and other family members, what an impressive cow and this seems to be a family that produces good cattle. Hilario has high production figures and will not disappoint in the type department.

The daughters of Husky are tall cows, with strength coming from the May in his background. He is definitely a production bull and is being used heavily by the Danish farmers. The udders are well attached for such a high production bull; you see a lot of the May bodies in the Husky daughters.

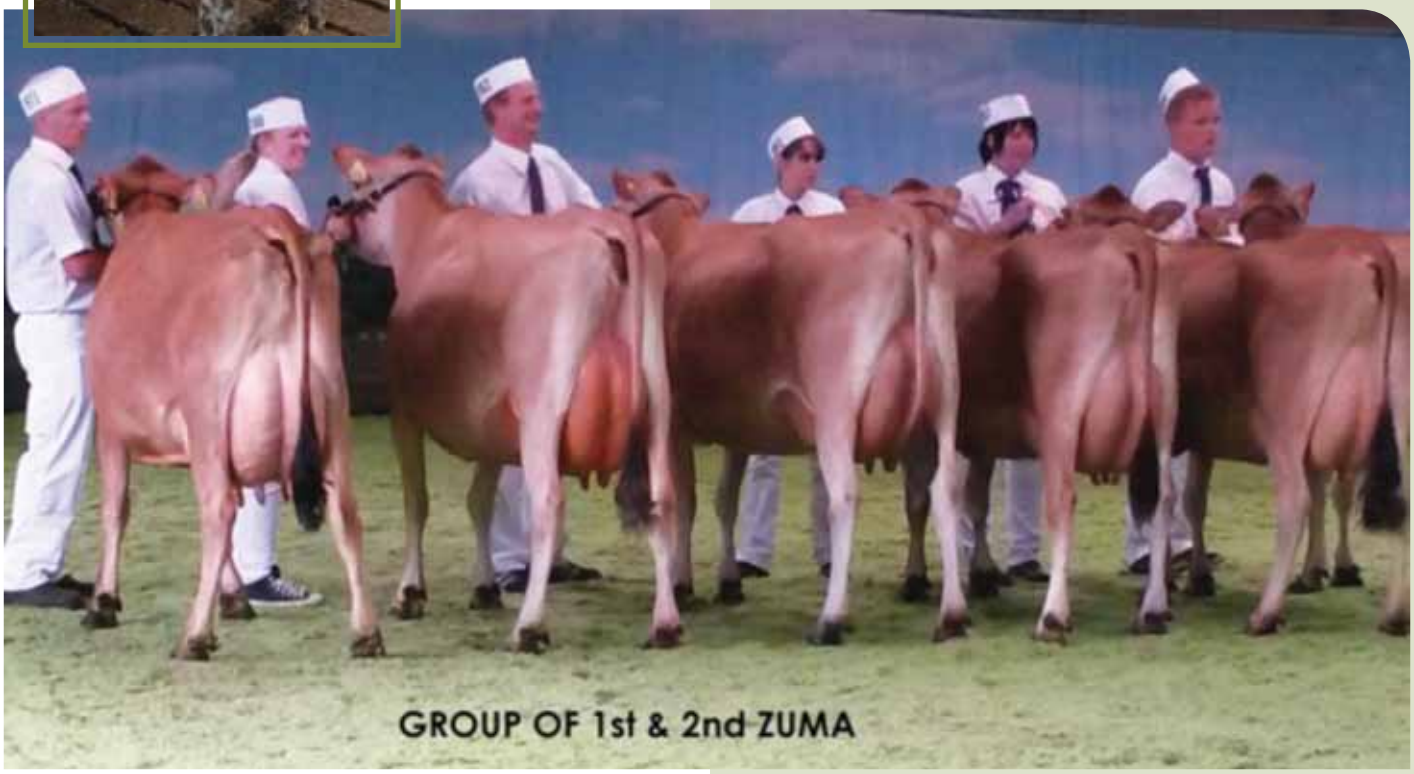


While on tour we saw a lot of Hulk and Lure daughters, they both exhibit a lot of strength and the Hulk daughters were average in size and typical of his linear. I think that the Lure daughters are going to be really good, productive cows and the daughters we saw all showed a good balance between type and high production. We also saw some early 1st lactation daughters of the bull Lix, they are smaller in stature but have phenomenal udders and will produce show winners both here and in Denmark.

The quality of cattle presented at the Herning show was of a very high standard and as I said before, the show was dominated by Zuma daughters. I always have a soft spot for a good old cow and at this show we saw great daughters of Impuls, Lirsk, Izzy and May. It was strange to attend a show where the cows are not bagged to the extreme, where top-lines and teats are not fitted and fiddled with and the cow gets to show off her "real self". We saw many daughters on farms that could have easily attended the show and maybe won but because of the stringent health rules in Denmark stayed at home. Show animals must pass various expensive health tests six months before a show in order to be able to travel, so most farmers feel that this is not a justifiable expense, so as in most countries showing is becoming less and less of an option.

The Danish jersey population is something to behold, I was very impressed with the level of information available to farmers, their dedication to achieving the national breeding goal, their pride in their national herd and the genuine honesty of their system. The modern Danish jersey cow has become the kind of cow I would not hesitate to milk. The great part of their system is that the same type of cow along with all the benefits of their management traits is replicating itself more and more here in SA. So for those who still think and believe the Danish jersey cow has no type and cannot fill the milk pail... I would just like to say … wake up you are missing out on the best kept secret in the jersey world!

P.S Seeing is believing …. Go to www.genimex.co.za to see the video clips of my trip to Denmark. (M&H)



WJCB Congress 2014

The 19 countries represented at the conference proudly display their country flags at the opening ceremony.

Mr Albert Myburgh the Master of ceremonies at the opening function just prior to the start of judging.

Grand champion cow Kluitjieskraal XF1 1031 bred and shown by AJ Schoonwinkel. Congratulations to the breeder.

September 2014 saw the South African Jersey Society host the WJCB Conference in Bredasdorp in the Souther Cape. 43 Danish breeders attended the conference and a post conference tour which took them all over the country. Viking Genetics was the name sponsor of the conference and Genimex was the name sponsor of the show that was held to coincide with the conference. Genimex was very proud to show the conference many great cows that are progeny of Viking Jersey sires. See the cover for an example.

South African National Champion and Reserve Champion hefers, Katlou Carl 3008 and Katlou BWJ 09107's 2098. Congratulations to Kobus and Madelé Burger of Katlou Boerdery.

A proud moment for all countries attending the conference. 14 in total had a chance to parade with their flags. Here Mr Joel Mamabola, the Registrar of Animal Improvement caries the SA Flag.

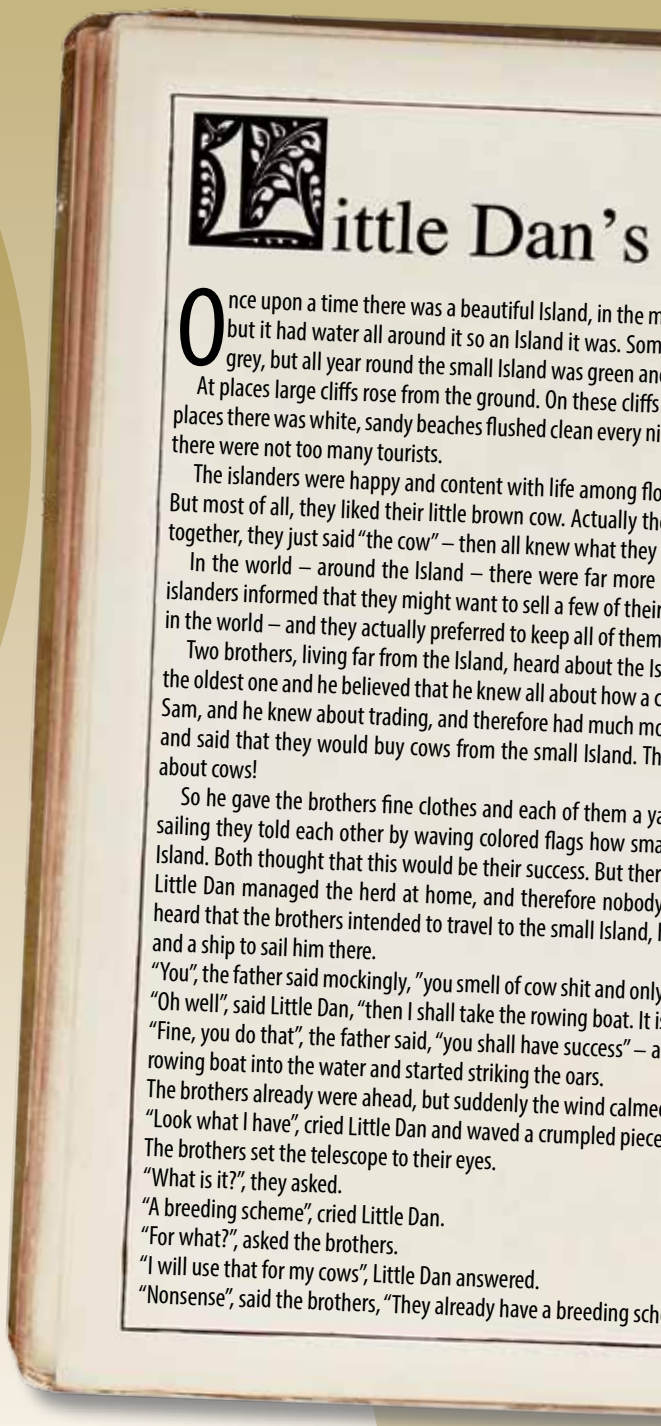
Peter Larson of Viking Genetics with the Danish flag.

A group of DJ Zuma daughters in the Preekstoel herd.

No trip to South Africa is complete without a visit to a National Park. The Danish Group paid a visit to the Madikwe Game Reserve.

Elna and Jan Rossouw with Liz and Anders Levring during the groups visit to the Maluti Herd of Jan and Elna Rosouw near Bethlehem.

Peter Larson, Executive Secretary Danish Jerseys, Johan Muller, Genimex, Dr Johan Jooste, Judge of the National Show, Albert Myburgh, organizer and Master of Ceremonies and Chris Cloete, Genimex.



Little Dan's

Once upon a time there was a beautiful Island, in the m
but it had water all around it so an Island it was. Som
grey, but all year round the small Island was green an
At places large cliffs rose from the ground. On these cliffs
places there was white, sandy beaches flushed clean every ni
there were not too many tourists.

The islanders were happy and content with life among flo
But most of all, they liked their little brown cow. Actually th
together, they just said "the cow" – then all knew what they

In the world – around the Island – there were far more
islanders informed that they might want to sell a few of their
in the world – and they actually preferred to keep all of them

Two brothers, living far from the Island, heard about the Is
the oldest one and he believed that he knew all about how a c
Sam, and he knew about trading, and therefore had much mo
and said that they would buy cows from the small Island. Th
about cows!

So he gave the brothers fine clothes and each of them a ya
sailing they told each other by waving colored flags how sma
Island. Both thought that this would be their success. But ther
Little Dan managed the herd at home, and therefore nobody
heard that the brothers intended to travel to the small Island,
and a ship to sail him there.

"You", the father said mockingly, "you smell of cow shit and only
"Oh well", said Little Dan, "then I shall take the rowing boat. It i
"Fine, you do that", the father said, "you shall have success" – a
rowing boat into the water and started striking the oars.
The brothers already were ahead, but suddenly the wind calmed
"Look what I have", cried Little Dan and waved a crumpled piece
The brothers set the telescope to their eyes.
"What is it?", they asked.
"A breeding scheme", cried Little Dan.
"For what?", asked the brothers.
"I will use that for my cows", Little Dan answered.
"Nonsense", said the brothers, "They already have a breeding sch

The Danish delegation at the gala dinner.

After Hans Christian Andersen's fairy tail "Clumsy Hans"

Cows

iddle of the warm sunshine. It was indeed not big,
etimes the water was blue and some-times it was
d fertile.
people built large castles in the old days. At other
ght by the tide. The islanders bathed there – when

wers and early season potatoes and strawberries.
ere were pretty many cows, but when they spoke
talked about.
people and far more cows, but even though the
beloved cows – despite they were the best cows
to themselves.
land cows. One brother was named Jack. He was
ow should look. The younger brother was named
ney. The two witty brothers came to their father
at was clever – the father thought – you know

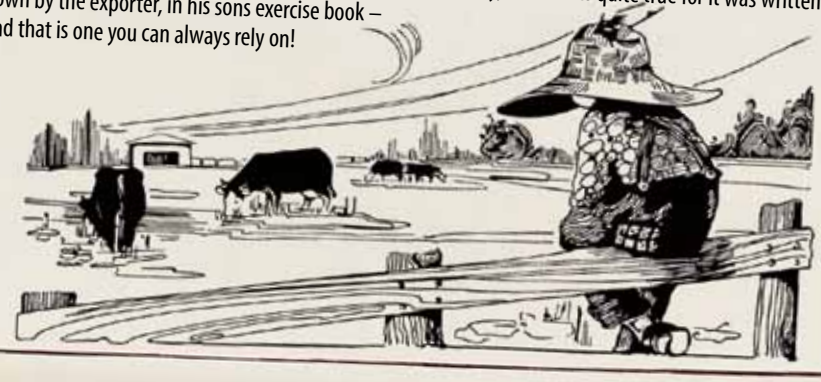
acht for the journey. The brothers left and while
rt they would be when they came to the small
e was a third brother. He was named Little Dan.
paid much attention to him. When Little Dan
he also came to the father and asked for clothes

know about farming – I shall give you no ship".
s my own and I know how to sail it".
nd then he laughed. But Little Dan shoved the

d and Little Dan gained on them.
e of paper.

eme on the Island".

Then the wind came back and the brothers and their yachts disappeared in the horizon. In the evening they set the sails, anchored in a small bay of the Island and fell asleep. But Little Dan rowed all night, and in the morning he made it to the brothers' yachts.
"Look what I have", cried Little Dan.
"What?", asked the brothers, not quite awake yet and still with sleep in their eyes.
Little Dan showed a ragged book, - it surely was poor. The cover almost dissolved by sea water, yet the pages still together.
"A feeding plan" cried Little Dan.
"Nonsense", shouted the brothers, "the cows will know how to eat without a menu".
Then they sailed into the harbor, went dry-shod ashore and was greeted by the mayor and an orchestra. Jack immediately collected all the most beautiful cows.
"Those I shall take", he said. And the exporter wrote one kilogram of bills for Jack.
Sam carefully selected the most expensive cows.
"They shall do well in shows at home", said he.
"What a witty thing", said the exporter and his quill pen almost caught fire when writing the bills.
Then came Little Dan rowing to the coast. He walked ashore the nice and pretty beach in his sea boots.
"What would you want?" asked the exporter.
"Buy cows", said Little Dan.
"They have been sold", said the exporter.
"There are some cows over there", said Little Dan, "yet they are not pretty".
"Well of course you can take some of those", said the exporter, who was a smart guy.
Then Little Dan selected the cows with the best production, for he knew about farming. The exporter had no more bills, so he wrote the amount on a page from his son's exercise book. And he shook so much from trying to avoid laughter, that he left three ink spots on the page.
"God help him an bless him!", said the islanders. But Little Dan was pleased.
When he returned home with his cows, he used his breeding scheme and his feeding plan. In this way Jack had the most beautiful cows. Sam had the most expensive cows. But Little Dan had the most economic cows – and that you can make a living out of. Little Dan established a little population of efficient brown cows and they all lived happily ever after. See this is a real story, and that is quite true for it was written down by the exporter, in his sons exercise book –
and that is one you can always rely on!



Enjoying a glass of South African Red before a spit braai with Jan and Elna Rossouw.

Anders Levring, the president of the Danish Jersey Cattle Breeders Society, and well known Jersey Breeder as guest speaker at the Gala Dinner. Instead of a very serious presentation, he recited a short fairy tail of Little Dan's Cows. Adapted from Hans Christiaan Andersen's fairy tail "Clumsy Hans".

Danish Holsteins

- COWS THAT PAY THE BILLS

On my recent trip to Denmark, I had the pleasure of visiting some Holstein herds. As I have said before one needs to get your head around the differences in how the Nordic countries present their information and in particular their linears. Where the rest of the world considers a linear to be great if the majority of traits are way over to the right, the Nordic system wants to have the optimum median for the majority of traits. As a lot of farms use robot milkers the uniformity in traits such as stature, teat placement and, to some degree, udder depth are vitally important. The farmers in Denmark buy whole heartily into the breeding goals for the national herd. They trust the system explicitly as the information available is from real data collection.

Vets and hoof trimmers must log all treatments into a national data base from which indexes are produced. So indexes, for example, udder health, other diseases and hoof health are based on real data collected on farm. We all know that one of the biggest problems facing farmers are cows with sore feet caused by diseases of the hoof. We also know that heel depth and leg set cannot predict if a cow is more prone to hoof diseases or not so the Nordic index for Hoof diseases is an extremely valuable tool that gives the farmer a much better chance of eliminating sires that transmit hoof problems. The Nordic Net Merit is a far more valuable tool in breeding than a lot of other formulas for ranking bulls, as the majority of data is based on actual on farm data. Farmers cannot afford to ignore the loss of income related to health traits and this is no different in Denmark, so the Nordic Net Merit was created and fine-tuned to produce profitable long lasting cows.

The Holstein cattle that we saw in Denmark impressed me. There is definitely a common goal to breed healthy and robust cattle. The herds we visited were large commercial herds milking 300+ cows with the use of robot milkers. There were three things that stood out for me and that was the cows are definitely smaller than the traditional North American Holstein. Their rumps are wide and level and the treat length and placement is very good. The Danish Holstein is definitely more robust, with really good udders and feet. The other big benefit of Danish Holsteins is their out cross pedigrees. The Danish farmer is using genomic sires heavily.

The bull that impressed me the most was D Sol. Sol produces medium sized cows, with good strength and great udders. His production levels and health traits make him a big favourite amongst Danish farmers. As a calving ease sire he will be an easy choice for most dairymen.

The daughters of Saloman were very good all round cows, they showed very good udders and cleft and in the 2nd lactation they became the kind of cow that shows she will last a long time.

The bull that surprised me the most was Estrup, the daughters were very functional cows that I think will fit into most dairy systems especially for pasture herds that are looking for a smaller all-around cow. We saw some 3rd lactation Estrup daughters and they mature into very productive cows.

The daughters of Grafit were definitely of a different type and showed way more dairyness than the average cows we saw. The Goldwyn influence could be clearly seen. They were quite a bit taller than the average but had good udders and produced well.

The quality of animals at the Herning show was good. The cows are not bagged to the extreme and there is very little fiddling with top lines etc. There were daughters from bulls from all around the world and a daughter of Danish bull Bismark really impressed me with her balance and super udder. She became the intermediate Champion. (Seen in photo below on far left).

After having seen the Danish Holstein first hand I believe that with their background of superior health traits, out cross pedigrees and good production they have a definite place in the South African dairy industry. If you had to place them in our scenario I would say that they are in between the New Zealand type and the North American Holstein. They are definitely smaller than the American type but quite a bit bigger than the NZ type. For the dairy farmer wanting to improve on his health traits, maintain his production and limit inbreeding then Danish Holstein is the way to go. M&H

WHAT'S UP, DOWN & AROUND...

Same production in Danish dairy cows - no matter the gender of the fetus

Contrary to the results from an American study a Danish pilot study shows that the milk production is not affected by the gender of the calf.

The American study found significantly higher production in cows giving birth to heifer calves. The difference in the total 305-day production in first and second lactation in cows with heifer calves in both first and second lactation vs. cows with bull calves in both first and second lactation was app +450 kg milk. This was due to the effect in the lactation carrying the heifer calf and the following lactation.

Same production no matter the calf's gender in Denmark
In a new, Danish study of production in second lactation based on Holstein cows born in 2010, no effect of the gender of calf in first and second lactation was found. This means that it has not been possible to find the American results with Danish data.

SA Large Herds Conference

Genimex as one of the few remaining founding sponsors, and will as usual be sponsoring a speaker for the Conference that is to be held at the Boardwalk in Port Elizabeth on the 1st to the 3rd of June 2015. Genimex and LIC will be sponsoring Dr Kevin Macdonald. Also attending the conference on behalf of LIC will be Ken Bartlett a Farm Wise consultant whom many of you know. Prior to the conference Ken will be doing his regular herd visits. If anyone is interested in a visit by Ken please contact the office.

Genimex and LIC will also have a booth at the conference and we invite you to come over and have a chat.

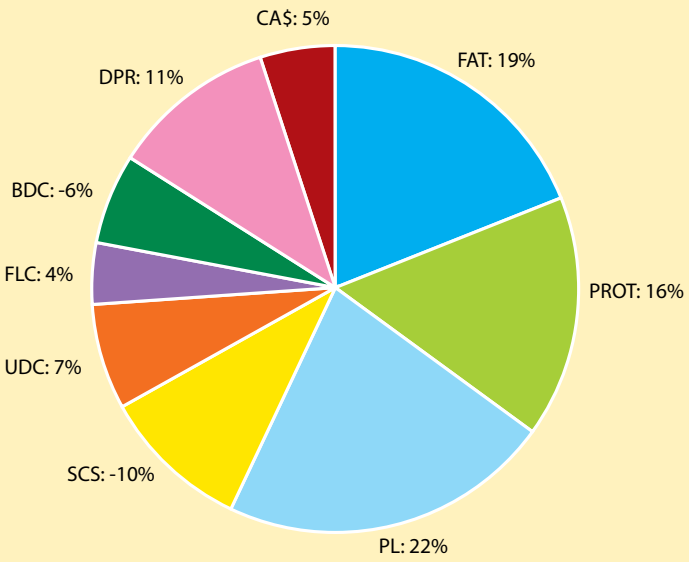
Dr Kevin Macdonald

Kevin is a senior scientist with DairyNZ and has focused on the underlying principles of efficient farm management. He is an advocate of low cost dairying and ensuring that dairy farm systems are sustainable and focuses on the underlying principles of efficient farm management. He has over 200 publications with approximately 55 being science papers. He was the senior author of 'Condition Scoring Made Easy' a booklet distributed to all NZ dairy farmers.

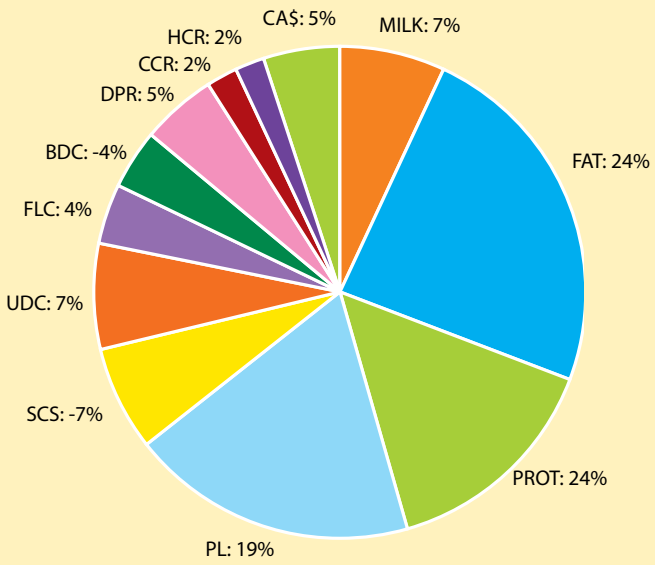
His work has involved understanding farm systems and this has been around the development of grazing systems, management and rearing of young stock. Recently he oversaw the management of the New Zealand part of a Holstein-Friesian Strain trial which was a collaborative effort between DairyNZ, Massey University and LIC Moorepark in Ireland. Currently he is the project leader for the New Zealand part of the Feed Conversion Efficiency project, which is a collaborative effort involving LIC and (Victorian researchers, Australia). This project is near completion but from it has come the identification of genetic markers for residual feed intake.

Lifetime Net Merit weight changes 2010 vs 2014

Lifetime Net Merit 2010 WEIGHTING



Lifetime Net Merit 2014 WEIGHTING



Thoughts on the changes by www.bullvine.com:

- The emphasis on production will increase by 31%, to where production traits account for almost half the weighting. That is a considerable change.
- Milk and fat yields get all the increase for production.
- Some breeders have been commenting that milk yield needs to be given more attention given that, in many herds, diets contain a high percent of forage.
- It is somewhat surprising that protein is dropped slightly, especially when you recognize that cheese holds a big future for marketing milk.
- To compensate for the increased emphasis on production other traits were reduced. PL (86%), SCS (70%), Type (88%) and Reproduction (88%).
- More reduction in SCS that other traits is likely justified given the progress made in SCS to the point where sires over 3.00 do not get used.
- Reduced emphasis on Body Composite, -4 from -6, follows our thinking here at The Bullvine that size does not matter as much as we have thought necessary for high production.
- Reduced emphasis on DPR, 5 from 11, also follows the Bullvine research which showed the accuracy of prediction for DPR genomic indexes is only 50%
- As getting conceptions is crucial, the addition of CCR and HCR is desirable
- The reduction for PL from 22 to 19 may be questioned by some however, in proportion, it is no greater than reductions for other non-production traits.

New agent in the Western Cape

Genimex is proud to announce that we have appointed a new and energetic agent in the Western Cape. Hanno Pretorious will be joining our team as of the 1st of April 2015.
Hanno can be contacted on 083 630 6051.

Ek het groot geword in Kroonstad en in 2002 gematrikuleer te hoërskool Kroonstad. Ek het groot geword in ń plaasgemeentskap, sodoende altyd 'n liefde gehad vir landbou! Nooit gedink ek sou in die suiwel bedryf opeindig nie, maar geniet dit verskriklik!

In 2003 het ek n jaar prakties gewerk by n gemengde boerdery waarna ek in 2004 Amerika toe is deur Wêreld Landbou Visie van Bloemfontein waar ek op die melkplaas Schotler Dairy Farm gewerk het. In 2005 het ek by Delaval begin in die Vrystaat en kort daarna Kaap toe verhuis en sederdien nogsteeds teenwoordig by hulle. Toe word ek mens en trou in 2012 met Ophia, my steunpilaar en ons het ń seuntjie Pieter Willem wat nou 10 maande oud is. My belandstellings is enige iets wat met water te doen het,waterski graag en spearfish. Dis regtig n passie om te doen wat ons doen met al sy uitdagings solank die boer net kan bly groei en winsgewend wees! Dankie vir die geleentheid om deel van die Genimex span te wees, hoop ek kan ons kliente se verwagtinge oortref!

Ken Bartlett visit to SA 2015

For those that make use of Ken Bartlett's services and those that would like to use Ken. He will be out for the SALHC in June this year and will be doing his rounds the two weeks prior to the conference.
Please diarise 18 to 29 May 2015. Chat to me or the agent in your area so that we can ensure you are allocated a slot.

Dr Richard Spelman

Hot, hairy bull enables major scientific discoveries

An artificial breeding bull which caused some of its offspring to be excessively hairy and prone to overheating has led to two world-first scientific discoveries.

The bull called Matrix had inherited a previously unidentified genetic mutation from its sire and passed it on to offspring born in 2011 and 2012.

As part of an investigation into the bull, LIC scientists isolated the 'hairy' genetic mutation, and also discovered a variation in a Caribbean breed of cattle that allows them to tolerate high temperatures.

The discoveries – published this week by the prestigious international science journal Nature Communications – pave the way for the farmer-owned co-operative to breed cattle that will maintain high milk production in tropical conditions, and could protect New Zealand's cows from future impacts of climate change.

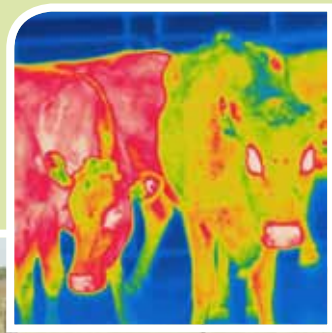
Dr Richard Spelman, LIC's chief scientist, described the finding as marvellously serendipitous.

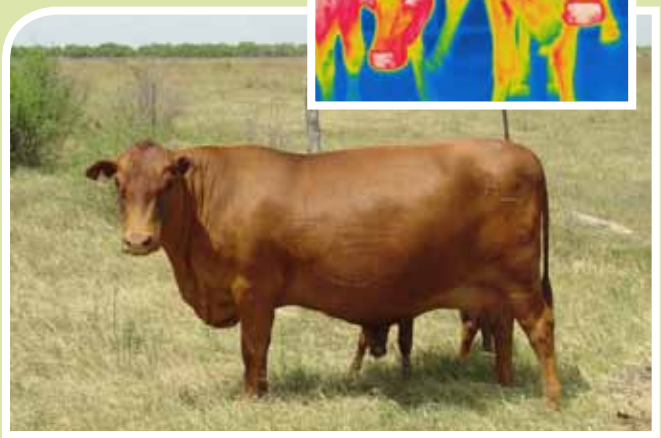
"Many farmers will recall the Matrix offspring - they were hairy, heat intolerant and failed to lactate, and when this came to LIC's attention we set out to find an explanation.

"As a result of the investigation, we were able to isolate the gene involved, but this has also led to another discovery that provides an opportunity to develop a new breed of cattle which will continue to graze and produce large quantities of milk at temperatures that would make most dairy cows struggle."

Spelman said the discoveries revolve around the prolactin hormone, a molecule which is best known to initiate lactation in mammals.

"In the Matrix offspring we found that a mutation in the prolactin hormone was impacting milk production and coat length, but we also found it was impacting the animal's ability to sweat, and therefore couldn't cope with heat."





Dubbed the 'hairy' mutation, the effects were identified as being opposite of those seen in the Caribbean beef breed called Senepol, renowned for its short, slick coat and ability to thrive in hot temperatures.

"This got the team thinking about whether prolactin could be involved in Senepol, and after sequencing the DNA of some Senepol bulls, we found a major genetic variation in the prolactin receptor gene. The Senepol variant improves the animal's ability to regulate body temperature, probably due to enhanced sweating, like the hairy animals, but in reverse.

Dr Richard Spelman, LIC Chief Scientist

"This discovery provides a genetic and physiological explanation as to how some cattle are able to tolerate high temperatures, providing an understanding of genes and gene pathways whose activity is required for the heat tolerance trait."

As a result of the discoveries, LIC bulls are now screened for the hairy mutation and a breeding programme is underway to cross Senepol animals with New Zealand Holstein-Friesian dairy cattle, to create offspring with the prolactin receptor variation.

Dr Spelman expects these animals will start being milked in 2017 and if successful, enable these new LIC genetics to be used in tropical countries to produce milking cows.

In addition to the breeding programme, the co-op is also working with Dairy SolutioNZ Ltd, a Waikato-based company breeding Senepol cross-bred dairy animals, to further develop a tropical cow breed.

These discoveries were made in collaboration with scientists at the University of Auckland and several other US and European Universities, and as part of the co-op's DNA sequencing programme of work. This broader programme aims to map genetic variation impacting cow production and health, and use these to improve the accuracy of genomic selection for future sires. The work will continue in 2015.

The DNA sequencing programme utilises a large dataset developed by LIC scientists and is co-funded by the Ministry for Primary Industries through the Transforming the Dairy Value Chain Primary Growth Partnership programme, led by Fonterra and DairyNZ.

Chris Cloete

- New Zealand -

Some truths about the dairy industry, the cattle and associated industries in New Zealand

Dairymen, people in associated industries and suppliers to the dairy industry in South Africa have their opinions about New Zealand. There are those that think that the New Zealand dairy cattle population consist of large numbers of unrecorded, low producing ugly cows that live on a starvation diet. Then there are those that have been there that realise that the huge dairy population is made up of highly fertile productive cows that produce off high quality pastures with limited supplements. Then there are those of us that realise that the success of the industry lies in the incredible systems that have been put in place to support the industry, support in the form of technology, advice, systems and programs.

What is the reality? Having been to NZ many times over the last 18 years but having only been to the South Island once before in the 90's I felt that it was important to get down onto the South Island to see some of the large herds that are run on the so called "conversions".

It is not my intention to run off a whole lot of numbers, facts and figures as the outcome would be weighted heavily in the favour of the NZ population but to indicate a few facts that make the NZ population unique and very, very successful.

In a population of in excess of 4.8 million dairy cows producing 20 Billion liters of milk the support structures that are in place are incredible but then they have to be. I do not think that the average dairyman in NZ realizes what it means to him. Livestock improvement NZ is placed squarely behind these support structures. Just to mention a few they would include milk recording (MR) herd testing, Minda, Pro track, DNA identification, AI or as they say in NZ AB services (using fresh and frozen semen), Easy heat etc.

These services are paid for by the dairymen as there are no such things as subsidies but the majority of dairymen realise that they need the industry and the support that they get from it, as does the industry need them.

When it comes to animal improvement in NZ the most important factor that is in the favour of the New Zealand dairy industry is that there is one common breeding goal that reflects the cooperation between the milk buyer and the livestock improvement industry. The Breeding Worth is a financial figure that assists dairymen to base their selection of AI bulls and cows for replacement and sale/purchase.

Having reliable data to feed into this system is the corner stone of animal improvement. In New Zealand 68,7% of the dairy cows are on Milk Recording which equals to 3 293 541 cows gives them an incredible advantage over not only SA but many other populations when it comes to selection intensity.

cont. >>>

A view in the Northern part of Southlands where there is still a fair amount of dryland cropping and sheep farming especially in the hills. In the area there are still many dairy farms on dry lands but conversions to irrigation is happening wherever possible.

In a hillier part of the Wiakatto a crossbred herd, which most are taking the last bit of grass off the allocated pasture. At the end of January things can get a little dry at times and this year it was particularly dry with the move towards part if not all the herd being put onto once a day. Silage may be fed and soon cows will be dried off. Not due to the lack of ability to milk but due to feed restrictions. They will then be moved to their over wintering pastures.

The conversions are dependant of the herds being large and have to be particularly well managed. Identification and recording are non negotiable and the large herds make full use of automation in order to make matters easy for the few staff members. Herd managers take full responsibility for heat spotting and picking cows for AI. Heat detection aids like Beacons are widely used together with tail paint. Herds like this aim for their cows to be F12 J4 in genetic make up, this is only possible if they are on Milk recording and on the national data base. An accurate clear numbering system is in place on farms that are on Milk Recording.

All is focused on the BW. Be sure to understand that the BW is an economic figure that is based on the payment system and the requirements of the dairy farmer in New Zealand. We can in SA use it as an indicator but should still base our selection process based on our requirements, however diverse they may be. Herd owners need to clearly identify those traits that are of economic value to them and set their goals accordingly.

The value of herd testing or Milk recording in the population must not be underestimated. Not only does it supply data for use on farm, it supplies data for Dairy NZ to calculate the breeding values for bulls and cows. What is often not realised is that Milk Recording over a long period of time builds pedigrees resulting in large numbers of cows, stud and commercial, having complete pedigrees.

The value of all these animals that have pedigrees was realized and LIC started testing cross bred bulls and registered the so called Kiwi Cross bulls. The purists will look down on this program but why should the genetics of 43% of the population be lost in the name of so called breed purity. With the pedigrees that have been built up and the use of Kiwi Cross sires, herds can select sires and arrange matings in order to breed towards the ideal genotype. Which is currently considered to be 12F 4J.

Do not, for one moment think that NZ is different to SA when it comes to droughts and low milk prices. They have them too. What may be different is how dairymen and consultants react to these problems. Each operator is different but the trend according to Ken Bartlett is to start feeding out silage if you have, put progressively more cows onto Once a Day milking and lastly dry off cows early. Don't stop herd testing, maybe just reduce it to three recordings not four and don't cut your AI account as you still need to get cows in calf and to the right product to continue your herd improvement plan and have the right replacements. One year of bad genetics significantly reduces the BW and PW of your cows making your herd less valuable.

An overview of a recent conversion with the conserved fodder in the fore ground. The irrigation for the farm is out of the Mataura river. The driver in this herd is Kg Dry matter per kg Milk Solids produced. They use high BW bulls in order to breed cows that efficiently convert feed into Milk Solids. They would use AI for 6 weeks, use 10 days short gestation Hereford bulls and then 10 days short gestation dairy bulls. Calving the whole herd in 8 weeks.

So what do all these systems in place in NZ mean to us in SA? We can tap into their system getting access to reliably proven genetics out of the Livestock Improvement NZ genomic and progeny testing program. We can access data and info about getting cows into calf in a limited season using the support from Farm Wise consultants like Ken Bartlett.

The type of cow which every pasture based dairy farmer would like to milk. This cow 159 in Gene Marsh's herd will due to the systems in place have a pedigree and full production data.

Through the Kiwi Cross trial, we will when completed, be able to offer Kiwi Cross Sires to our clients. But we will, due to the lack of data on the cows in South Africa not be able to breed towards the Genotype that we would like but we will be closer than using a criss cross breeding program.

I am sure that some of the other programs and systems will in due course become available to the SA dairymen. Take for example the Easy Heat system where a camera scans the Bulling beacon and if activated automatically drafts the cow for AI.

A very functional and no doubt profitable cow in the herd of Craig and Gaewyn Hodsell. Craig and Gaewyn farm originally from Northland, who moved down to Southland and dairy farm on "Retreat" which is only about 1.5km's from the sea. The rainfall is 1100mm per year with an even spread through the year. Concentrating on efficient management of pasture production, cow management and breeding for BW has put them into the top 1% of the country for BW. An incredible herd of cows from which many a dairymen purchase surplus heifers at a premium price. The 2014 born heifers have an average BW of 200 and PW of 217. In 2013/2104 this herd of 480 cows produced 258 837 kg's of milk solids (539kgs m/s per cow).

What saddens me is that the SA dairymen are offered these MR services but the uptake is incredibly low and participation is dwindling even further. I have to ask WHY and allow myself to answer the question as I see it. The MR systems in SA have not kept up with the requirements and challenges of the large commercial operator. The operators see little or no benefit to

Gene Marsh, a full time Farm Wise consultant and dairy farmer (spending two hours a week on farm with his staff for planning) Gene is seen here on a newly built irrigation storage dam with the milking parlour in the distance and herd managers home on the left. In the distance are the Eyre Mountains. He draws water out of the gravel from the Irthing stream Originating from a family sheep farm he bought and developed the dairy farm and running it, in all aspect, according to sound financial and scientific principles. Gene is in partnership with his wife Angela and they milk 480 cows with two full time staff and a relief milker. Next year they will increase to 530 cows with three full time staff.

doing MR because the data is considered inaccurate and of no or little value and above all is not worth the expense. The operator is continually told to cut costs and MR is considered a cost and of no value.

MR is the start of building a population of dairy cows that will have pedigrees and will have data that can be used to add value to cows if each cow that gets an index puts her apart from the others. It not only makes it possible to select within herd but give her a value when it comes to the trading of cattle. In NZ they sell heifers and cows on their Breeding Worth and Production Worth.

Nick Hamilton and Gene Marsh at the sight of the where Nick will be drawing water out of the Cromel Stream. Nick, a graduate from Lincoln University is part of a very large family owned operation with beef, deer, sheep and dairy. They built their first dairy in 2007 milking 800 cows off dryland pastures utilizing the heavier soils on the farm. The conversion will be utilizing about 600 ha's of gravel soils that will be under irrigation with 120 ha's of run off. The total investment for the conversion will be in the region of NZ$5 000 000.00.

In NZ it has for some time been acknowledged that accurate identification is an issue and so LIC has developed a program where dairymen can take tissue samples of the cows in the herd and of the calves born and thus eliminate the doubt. So the data base gets more and more accurate. This also adds accuracy to the identification of all test daughters of Sires that are sold via LIC. All test daughters of LIC sires have DNA samples taken in order to confirm parentage before being entered into the system. Adding reliability to the progeny tested program.

There are some incredible dairymen in SA that have highly productive herds, just imagine where they would have been if they had these types of support structures in place. A milk recorder that comes out 4 times in a cows lactation, cows that have accurate data to enable the dairymen to make informed decisions as to what to sell, cull or keep.

I urge the authorities, people in control of Milk Recording and institutions to, for a change, listen to the requirements of the large commercial dairy farmer that needs support and systems to make her or him more successful in the interest of food security in our country of which I am a very proud citizen. As in New Zealand these services must be paid for in order for them to be sustainable and to ensure that they are run properly with the necessary accountability. In South Africa, and more specifically, in the pasture based dairy production herds we need a simple system where we can build pedigrees and add value to cows and heifers when it comes to selection and sales.

Gaewyn with a group of mated yearlings that are due to calve in July 2015. Clearly a herd that is well managed and bred for efficient cows. Nowhere in our discussion was the word type used. Interestingly the herd, in terms of type as we in SA like to fall back on was incredibly good. My take home message from this incredible herd was "Manage and breed for efficiency and you will get "type" as well".

So you should ask. What is Genimex doing to rectify the situation in SA? Through the Kiwi Cross trial and working with the powers that be we will be entering a significant number of commercial cross bred cows into the national data base. Milk recording of these animals will be supported and done by recorders. This is just a small effort to get commercial animals onto a database. However, there needs to be a change in mind set and dairymen must want to subscribe to a National data base not only in their own interest but also in the interest of the industry. Then the powers that be in the Milk Recording industry need to make the system adaptable and user friendly to the large commercial dairy producer.

I returned from NZ with a certain amount of jealousy when it comes to the extent and size of their industry and most of all the support and systems in place. Compliments do go out to the SA operator that is just as efficient and doing a great job without the support and systems. But could be better off with the systems and support.

I thank Livestock Improvement NZ for being my hosts and particular Ken Bartlett and Gene Marsh of Farm Wise for arranging the herd visits and openly sharing their incredible wealth of knowledge. M&H

The Wairima Dairy operation milking 1650 cows under the watchful eye of Will Bolter. The operation is due to be expanded with another conversion in the "pipeline" to milk 1200 cows. With this kind of operation the manager Will makes use of all the systems and support he can get. They make use of Pro Trac and Minda. They plan to take tissue samples of the whole herd for DNA analysis to assist with calf identification. A must in order to add reliability to the data originating from the herd.

VikingGenetics

will have the largest Holstein breeding program worldwide!

From 1 September VikingGenetics and German NOG enter a cooperation and form the largest Holstein breeding program worldwide.

At present VikingGenetics and NOG sample 180 Holstein bulls each per year. With this new cooperation they will in total sample 360 bulls per year and thus form the largest Holstein breeding program worldwide.

The advantage of VikingGenetics' cattle breeders is even higher genetic progress when it comes to NTM and then higher profit for all Nordic dairy producers with Holstein cows. Genomic selection already meant a quantum leap for breeding, and this new cooperation will speed up the progress even more.

The additional genetic progress goes straight to the bottom line since the new cooperation is based on existing DNA information – no further expenses. The increased progress is based on improved efficiency in the top bull selection when VikingGenetics and NOG in future exchange all genotypes of the 7,400 bull calves in genomic selection every year.

All 7,400 bull calves will be evaluated in both the Nordic NTM scale, and VikingGenetics will gain access to selecting the very best for the breeding program.

Likewise all bulls will also be evaluated on the German RZG scale, and NOG can select the best bulls for German conditions.

The new cooperation also acknowledges the Nordic breeding material that internationally is very attractive due to our reliable registration of health, fertility, hoof health, milking speed etc. On this basis Nordic cattle breeders and VikingGenetics are requested partners for other AI organisations worldwide.

VikingGenetics' partner in the new cooperation NOG is a breeding cooperation consisting of the four German AI companies Rinderzucht Schleswig-Holstein eG (RSH), Rinderproduktion Berlin Brandenburg GmbH (RBB), RinderAllianz GmbH (RA) and Masterrind GmbH (MAR).

VikingGenetics and NOG will continue to have own breeding programs and separate ownership of the selected bulls.

For further information please contact:
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VIKINGGENETICS

World Jersey Cheese Awards

Hosted by Agri Expo during the WJCB Conference 2014

Genimex would like to recognize the achievements of the following two cheesemakers:

Thise Mejeri

Thise was awarded the "Best use of the Jersey Brand"

Peter Larson of Viking Genetics receives the award on behalf of the Thise Dairy Company from Johan Ehlers of Agri Expo.

Thise is well know in Denmark for the production of dairy products from only Organically produced Jersey Milk.

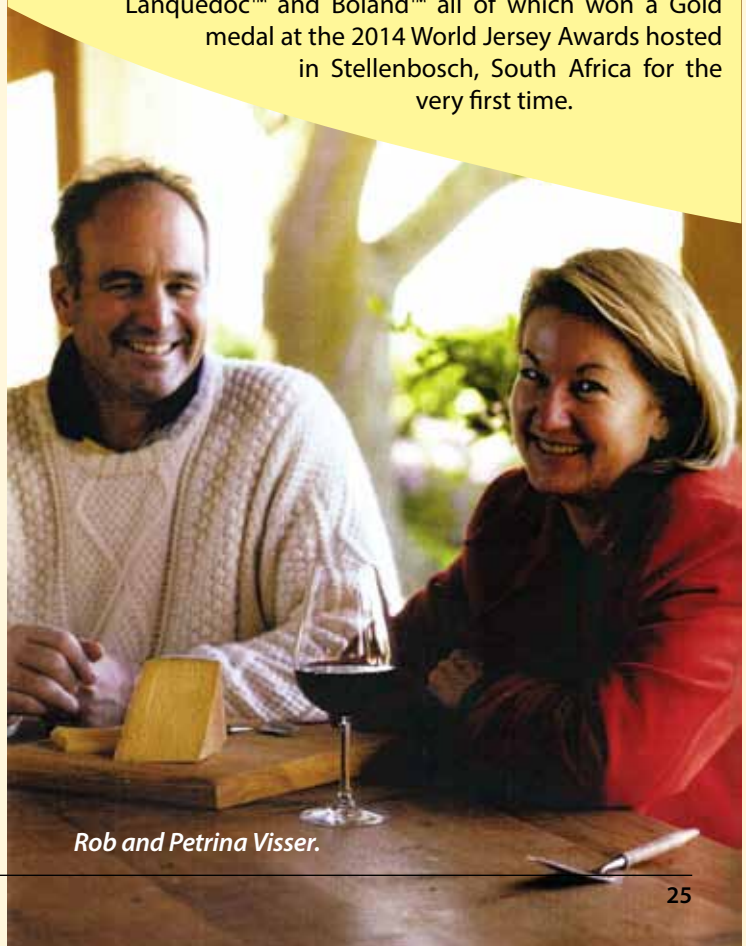
On behalf of Genimex we would like to congratulate these two Cheese makers and the contribution they make to the Jersey Breed by producing such high quality products .

Dalewood Fromage

ESTATE CHEESE

Dalewood Fromage is a small farm cheesery in the Cape Winelands making artisanal Estate cheese from milk produced from its own award winning Jersey herd.

Dalewood has an eco-friendly approach to farming. The rotationally grazed herd spends each day on green pastures, which are precisely managed, beginning with the gentle nurturing of the biological life in the soil. No artificial fertilizers, insecticides or weed killers are used. Dalewood produces limited signature cheeses including the Huguenot®, Lanquedoc™ and Boland™ all of which won a Gold medal at the 2014 World Jersey Awards hosted in Stellenbosch, South Africa for the very first time.



Rob and Petrina Visser.

KEN JOU AGENT...

JOHAN *Müller*

Johan Müller het groot geword op 'n suiwelplaas in die Alexandria distrik wat toe reeds een van die belangrike suiwelgebiede in die land was.

Na sy diensplig voltooi Johan die Diploma in Akkerbou en Veeteelt op Elsenburg.

Sy beroepskeuse in die kommersiële landbou val op Taurus wat alreeds sy passie vir veeteelt in sy loopbaan uitbeeld en hy aanvaar diens in Oktober 1982 in Durbanville. Gedurende sy eerste drie maande by Taurus ondergaan hy opleiding in die tap, verdunning en bevriesing van semen.

"Genomiese ontleding die grootste ontwikkeling in die toekoms van genetika"

Johan is onderlê in die aanbied van KI kursusse, wat hy onder Dr Awie Schutte se leiding bemeester het, en tot vandag toe nog sy slag daarin behou.

Gedurende sy 15 jaar by Taurus behels sy werksaamhede opleiding asook die werwing van melkaantekening kuddes met die klem om beproefde semengebruik te bevorder. Vanaf 1990 verskuif hy na die bestuur van die nageslagtoetsproram in die Wes Kaap. Sy laaste vier jaar by Taurus onderneem hy die verantwoordelikheid vir promosies nasionaal wat die voorbereiding van bulgidse en nuusbriewe behels. Hierdie verantwoordelikhede verplig hom om 'n fotograaf van formaat te word.

In 1995 doen hy 'n Besigheidbestuurkursus by die bestuurskool van die Universiteit van Stellenbosch, wat die beginsel van entrepreneurskap en die uitdaging van verandering by hom stimuleer. Tydens 1994/95 en 1996 het Johan 'n noue werksverhouding met Chris Cloete ontwikkel en tydens Nampo 1996 was daar besluit om met die oorsese verskaffers aan Taurus te gesels oor die moontlikheid om weg te breek en onafhanklik semen names hulle in SA te bemark. Die hoofrede dat die verskaffers wou wegbreek van Taurus was dat hulle produkte nie hulle regverdige mark aandeel kon geniet nie. Dit was toe dat die maatskapy Genetic Actions International op die been gebring is.

Johan aanvaar diens in 1997 as Genimex® (GAI) verteenwoordiger in die Wes Kaap. Kort daarna onderneem hy 'n ses weke reis na Europa om stelsels en nageslag van uitsoek bulle te bestudeer. Meer as 'n honderd plase word in Denemarke, Duitsland, Frankryk en Italië besoek. Reeds hier word die grondslag vir kennis en belangstelling van wêreldwye genetika gelê.

Johan koester die geleenthede wat Genimex® hom bied om jaar na jaar Genimex® toere mee te maak. Sy besoeke aan jarelange kliënte in sy bedieningstreek wat tans die Boland, Suid Kaap en 'n paar kuddes in die Oos Kaap insluit lê hom na aan die hart. Dit gee die geleentheid om die jongste ontwikkelings in suiwel genetika aan sy kliënte oor tedra. Johan beskou genomiese ontledings as die grootste gebeurtenis en omwenteling in die afgelope 32 jaar in die wêreld van genetika.

As senior verkoopsman van Genimex is Johan betrokke by die bul seleksie, opleiding en ondersteuning van die agente in die Kaap streek. "Ek heg baie waarde aan Johan se ondersteuning en insette tot die besigheid" sê Chris Cloete.

Johan is in 1986 met Elda getroud. Hulle twee seuns, Regardt, 23 jaar oud, is werksaam in die Kaap as ingenieur en Dewald, 20 jaar oud, is in sy derde studiejaar in aktuariële wetenskappe by die Universiteit van Stellenbosch.

Johan speel graag golf maar verraai nie sy voorgee nie.

Johan Müller met sy seuns Regardt, Dewald en vrou Elda.

BRITT Stanton

Milking by hand and leaving milk cans at the top of the hill takes Britt back to her days of growing up on her grandparents farm in Bathhurst. A pineapple enterprise with a small dairy which balanced the cash flow on the farm. Britt attended Kingswood College and went on to obtain a diploma in Animal Husbandry.

She started work at Taurus Baynesfield, and realised that she should broaden her experience. For the next five years she worked on American dairy farms learning everything from driving tractors to raising calves also showing animals at agricultural shows. This experience was invaluable as the American Dairy Industry at the time was technologically at the forefront of dairy production systems.

On returning to South Africa she managed Nietbegin, the Heidelberg Billy Hall Holstein Dairies herd for the next ten years. This herd excelled at the Africa Dairy Expo and twice won the Transvaal Dairymen's Top Dairy Farmer award. Here she learned the value of breeding good functional cows.

Britt's experience as dairyman and in the world of commerce served as good grounding to fulfil the fundamental values of Genimex.

After a spell in the world of commerce she realised her passion lies in the animal world and went on to raise calves for Synag in the Meyerton area. Here she gained great respect for the crossbred cow. The client base she serves comprises predominantly pasture fed grade animals. Britt has successfully completed the junior Holstein and Jersey cattle breed judging courses however concentrates mainly on the genetic aspects of her sales advice.

Her training of detection dogs for overseas contracts gave her a valuable insight in animal behaviour after which she joined Genimex® as sales representative responsible for the Standerton and Kwazulu-Natal areas.

IPO (Internationale Prüfungs-Ordnung) encompasses the sport of tracking, obedience and protection in the canine world. Britt not only competes in this sport as a pastime but also has five German Shepherd bitches in her breeding team. She has her sights set on representing RSA at the world championships.

Britt's experience as dairyman and in the world of commerce served as good grounding to fulfil the fundamental values of Genimex® being that of supplying the best genetic solution for the different production systems in her area.

Livestock Improvement NZ Sire Line Up 2015

with comments from Hendrik Bezuidenhout & Britt Stanton

Hendrik Bezuidenhout

Die geselekteerde groep bulle vanaf LIC in Nieu Seeland vir 2015 is van die beste in jare.

My Fries keuse is die volgende:

Grandeur - Die Frostman seun is 'n ware "all-rounder". Uitstaande totale langslewendheid van 475 dae, hoe vastestof persentasies, lae somatiese tellings en uitstekende uiers. Definitiewe kalwingsgemak op die koop toe.

Jubilant - Met Super Hero as vaar verwag ons baie goeie vrugbaarheid en langslewend. Goeie konformasie en uiers, gekombineer met goeie melkvolume en vastestowwe gaan JUBILANT'n gewilde keuse maak. Hy kan ook met gemak op verse gebruik word.

Tommo - Vir die wat nie kruisteel nie bied Tommo 'n uitkruis stamboom. Goeie melkvolume en vaste stowwe asook vrugbaarheid en langslewendheid met lae somatiese seltellings word voorspel. Tommo behoort verder koeie met uitstaande kapasiteit te teel.

My Jersey keuse is die volgende:

Finesse - Met 'n teelwaarde van 1.66 vir eier is hy 'n uitskieter. Goeie melkvolume en vastestowwe tesame met vrugbaarheid en langslewendheid maak van Finesse 'n maklike keuse.

Headstart - Uitkruis stamboom vir Jersey kuddes met uitstaande vrugbaarheid en langslewendheid. Hoe vastestowwe met uitstekende uiers en goeie kapasiteit sal Headstart ook gewild maak om te gebruik vir kruisteling.

Terrific 5-Star - 'n Terrific seun met hoe melk volume. 5-STAR het hoe persentasies bottervet en proteien tesame met goeie vrugbaarheid en langslewendheid asook lae somatiese seltellings. 5-STAR beloof verder om goeie uiers te teel en kan veral agteruier hoogte verbeter. Hy is in die top 15 BW bulle in Nieu Seeland.

Britt Stanton

With the great line up of LIC bulls for the 2015 mating season, the options are many and farmers should have no problems selecting a team of bulls to achieve their breeding goals.

My Fresian team of choice would be as follow:

Grandeur - a bull that offers good udders & type, longevity, all round management traits and can be used on heifers.

Majestic- a bull with high production and positive fertility, along with good udders makes this son of the Mint Edition a good all round option for any breeding program.

Supersonic - the fertility and longevity specialist with above average milk makes this bull unique. His all round type makes him an easy choice for any team of bulls.

My Jersey team of choice would be as follow:

Headstart - a bull with good udders and capacity as well as above average fertility. His pedigree is something different with a high combined solids percentage.

United- a pedigree without Manhatten, this bull offers exceptional combined solids along with good fertility and management traits. He has above average capacity with good udders and will meet most farmers breeding goals.

Jericho- with high fertility, longevity and good SCC, this bull will also add capacity to your breeding plan and in many ways a true all rounder.

With all the choices on offer from Genimex this season .... there is a team of bulls that will tick all your breeding goal boxes!

PLEASE NOTE THAT ALL FIGURES PUBLISHED ARE

ACROSS BREED

For a copy of the complete catalogue please contact your Genimex agent.

LIC

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