

Stay competitive with VikingGenetics' reliable solutions for your herd

Page 16

VIKING IN GERMANY

Page 24

REVIEW OF NTM

Page 10

Viking WORLD

Page 30





Web: vikinggenetics.com

VikingGenetics, Head office
Ebeltoftvej 16
DK-8960 Randers SØ
T: +45 8795 9400
info@vikinggenetics.com

VikingGenetics, Sweden
Box 64
SE-532 21 Skara
T: +46 511-267 00
export@vikinggenetics.com

VikingGenetics, Finland
Korpikyläntie 77
PL 95
FI-15871 Hollola
T: +358 40 311 5000

Publishing and Editorial Director
Camilla Rosman
T: +46-(0)511-267 22
M: +46-(0)70-201 22 39
caros@vikinggenetics.com

Editor of VikingNews
Verónica Löfgren
T: +46-(0)511-267 24
M: +46-(0)70-7620779
velof@vikinggenetics.com

Follow us on:



Layout and production
vahlé+nikolaisen.

Photos
Alex Arkink, Elly Geverink,
Elisabeth Theodorsson,
Tiina Tahvonen and
employees by VG.

Cover photo
Thomas Moberg from
the Rabbalshede farm in
Sweden uses all possible
tools VikingGenetics
has available to increase
production and boost
efficiency in his farm.



A perfect profitable cow for a commercial farm

What does the perfect cow look like? It is a question that has been debated heavily by breeders for more than 100 years. It is also an issue that has been answered in many different ways. There is even a massive industry in cow shows, where breeders get their cows judged just by their look.

At VikingGenetics, we love cows, and we love the look of an excellent producing medium sized healthy cow and we have chosen to invest all our efforts in breeding for the most economical cow. We base our work on scientific facts and data, and that has given us high-producing, long-living, medium-sized, healthy cows. We breed cows that put money in the pockets of the owner. Here, we want to give you some more background information about our approach to breeding, and how that affects the size of cows.

In this issue of VikingNews, we have also interviewed a district veterinary from the Swedish Agricultural Board who gives us an inside take on her work where everything contributes to forming a natural defence against diseases in an animal welfare environment.

You will also get to learn more about ProCROSS and the latest study about Feed Efficiency from the University of Minnesota, new weights in the Nordic Total Merit (NTM), essential steps about genetic information and very exciting; the launch of VikingGenetics Deutschland (VGDE) and how we are operating in a world scenario to bring the best to our clients around the globe.

Happy reading!

Thank you for following us!



*David Stenkær Ravnkilde,
Head of Business Development,
VikingGenetics*

Contents

MAGAZINE NO. 02 | NOVEMBER 2018 | VOLUME 11



Investment in genetics that pays off - Medium sized cows

Medium sized cows produce more fat and protein and live longer according to an study made by SEGES.

Page 4



"We always use a narrow spectrum of antibiotics"

Sofia Muñoz is employed by the Swedish Board of Agriculture (SBA) - a government agency. She explains that they are not only responsible for border control and official tasks but are also active in both large and small animal practices.

Page 8



VikingGenetics increasing operations in Germany

In September, VikingGenetics opened a subsidiary company in Germany, VikingGenetics Deutschland. The aim is to offer increased support and a better service level to German dairymen.

Page 24

Farm visit in Denmark	6
Review of NTM	10
Farm visit in Finland	12
Keep up with the "Embryo lady"	13
Genetic disorders	14
Farm visit in Sweden	16
ProCROSS annual Conference 2018	18
ProCROSS in Portugal	20
News from VikingHolstein	21
News from VikingRed	22
News from VikingJersey	23
Meet an engaged Viking	26
High genetic level	28
Around the VikingWorld	30

Investment in genetics that pays off - Medium sized cows

Medium sized cows produce more fat and protein and live longer than taller or smaller cows according to a study made by SEGES. Our optimal size, as stated in our breeding goal for VikingHolstein, is 148 cm.

By Claus Langdahl, Breeding Manager VikingHolstein

There are definitely many opinions about the optimal size of the cow. Some would say that she should be smaller, others that she should be larger and others again that a group of animals should be uniform and medium-sized.

At VikingGenetics, our focus in the VikingHolstein breeding programme is that the cow should not become any taller – or any smaller for that matter. The optimal size as stated in the breeding goal is 148 cm and the breed average is 148.6 cm at the moment for first calvers.

TABLE 1: HEALTH TRAITS AND CORRELATION TO STATURE

Trait	Correlation to stature
Yield (Kg Milk)	+18
Female fertility	-14
Udder health	-16
Hoof health	-20
Longevity	-35

Bigger cows might have more yield but bad performance on other important traits as Fertility, Udder Health, Hoof Health and Longevity.

Source: Rasmus S. Stephansen, Ulrik Sander Nielsen and Anders Fogh, SEGES – published in the magazine "Dansk Holstein" #3 – 2017.

VikingHolstein cow on average today, is close to the economic optimum – what we indicate as a medium-sized cow.

The medium-sized cow is the most economical

There are good arguments for breeding for a medium-sized cow, and the main one is the most economical cow. She has a longer productive lifetime, less disease cases, such as hoof problems and needs less feed to maintain. Table 1 shows the genetic correlations that confirm this.

Some people prefer a large cow that can convert much roughage into milk and with higher slaughter value. It is true that there is positive correlation between a large cow and yield, but it is also a fact that the medium-sized cow is the most profitable because of its lower costs and longer lifetime and overall a more efficient cow.

Height influences lifetime production

Cows taller than 155 cm produce significantly less solids (-193 kg) than cows of classification optimum height (148-150 cm) , see table 2. On the other hand, very small cows (135-140 cm) have lower lifetime production (-31 kg) compared to cows of classification optimum.

VikingHolstein compared to other Holstein

The size of the VikingHolstein cow compared with the Holstein cow in other countries has been evaluated. The comparison of the major Holstein populations in the world with Holstein cow sizes and development includes all daughter proven bulls in the countries and data from 80,000 bulls. The conclusion is crystal clear.



TABLE 2: EFFECT OF HEIGHT ON LIFETIME PRODUCTION MEASURED IN KG FAT+PROTEIN, EXPRESSED AS DEVIATION FROM HERD AVERAGE.

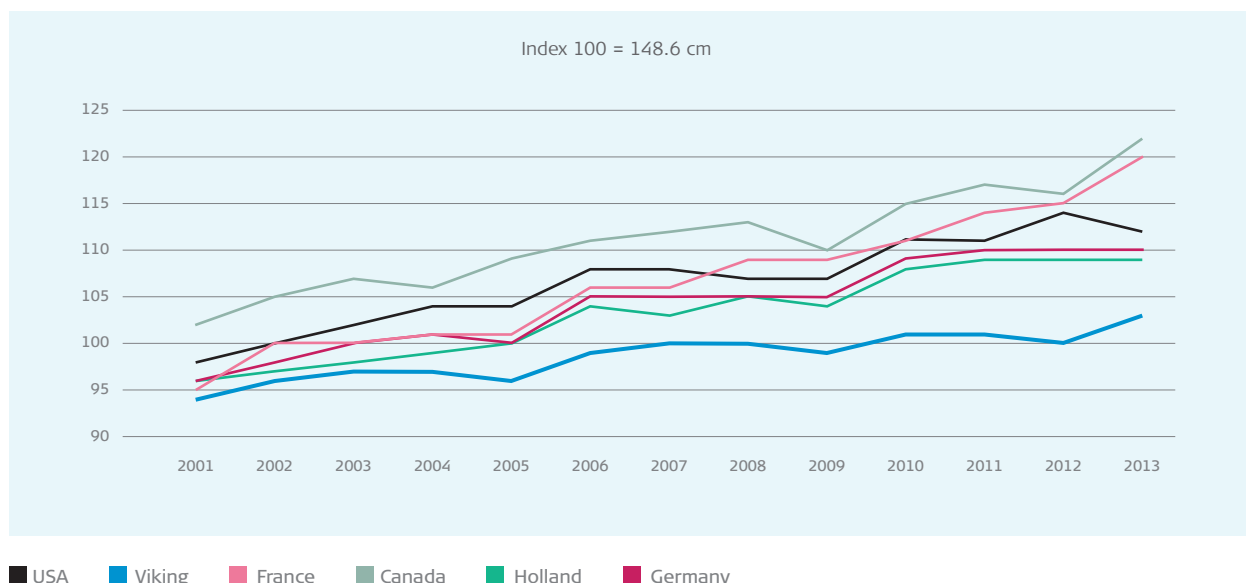
	1 (135-140 cm)	2	3 (148-150 cm)	4 (148-150 cm)	5	6	7	8 (>155 cm)	9
Share of cows	2%	7%	13%	36%	20%	16%	4%	1%	-
Kg fat+protein	-31	+2	+32	+30	-5	-43	-99	-193	-

Source: Rasmus S. Stephansen, Ulrik Sander Nielsen and Anders Fogh, SEGES – published in the magazine “Dansk Holstein” #3 – 2017.

Figure 1 shows the figures of cows from bulls born in 2001 to 2013. The figure clearly shows that the VikingHolstein cow today is smaller than Holstein cows in other countries. She has grown over the years, but not since bulls born

in 2007. That is very satisfactory and shows that VikingHolstein, despite the influence from foreign sires, has managed to keep the medium-sized cow, the opposite of cows in North America in particular. ●

FIGURE 1: DEVELOPMENT IN SIZE FOR HOLSTEIN COWS IN MAJOR HOLSTEIN POPULATIONS BASED ON BULL BORN 2001 TO 2013.





“In our barn Mastitis is 1% in average, and we are happy with this”

Erik Dolby and his wife Anne-Marie have been breeding for a medium sized cow at Fuglsøgaard farm in Denmark and as a result of this strategy, they are now increasing production while decreasing diseases in their herd.

By Uliana Langeland, Marketing Department VikingGenetics

Fuglsøgaard farm is owned by Erik Dolby and his wife Anne-Marie and located in the Central Jutland region of Denmark, around three kilometres inland. The farm produces 12,880 kg milk on average per cow and uses the milk parlour system (side by side with fast exit). For several years, Dolby has focused on breeding for medium size Holstein cows and today he can see the results of this breeding strategy. Dolby is pleased with the performance of the herd when it comes to production and the health status of his cows.

“When choosing bulls, we go for the ones that breed medium size

cows, and this is because optimal size cows are easier to manage for our employees. We have become better at feeding the cows, so they grow bigger and through breeding, we are able to compensate for this trend and achieve the cows with the size we aim for.” This focus on size has been particularly important because of their barn system, as the pens are not suitable for cows that are too big.

Dolby explains that at his farm they consider medium cows offer a lot of advantages, including excellent health and a longer productive life. “On our farm we like to see healthy cows that look well. Mastitis fre-

quency is 1% on average, and we are happy with this,” he says.

He also reports that lifetime production has increased in recent years and explains that the reason is that cows have become stronger in the body. What is more, smaller cows mean fewer problems with hooves and stronger feet and legs in general. Another important benefit of focusing on medium size in the breeding strategy is easy calving. The herd uses 100% X-Vik in heifers and this results in excellent calves with good size. For cows, calvings are also very easy.

Regarding the breeding strategy, the herd also focuses on improving health. “We are sad when we are



» It is pleasing to walk through the barn and see all the cows are doing well and none has health problems because they are too big «

Erik Dolby,
owner of Fuglsøgaard farm.



forced to cull cows because of health problems. This is now a very rare occurrence, cows stay in the herd and produce well, and we are very satisfied with these results.” Dolby also mentions that hoof health has improved a lot and farm employees perform hoof trimming on animals. There is no occurrence of disorders such as sole ulcer.

Better profitability and easy to manage herd

Dolby emphasises that focusing on medium size is beneficial in terms of better profitability and the cows are easy to manage. “Our cows are easy to take care of and it is pleasing to walk through the barn and see all the cows are doing well and none has health problems because they are too big.”

Future breeding goal at Fuglsøgaard farm

The future breeding goal will stay focused on breeding for a Holstein cow that is moderate in size and maintaining the heavy focus on improving udder health. “We are aiming to increase time in production by one more year and achieve 15,000 kg milk average production per cow per year with an average lifetime production of 50,000 kg milk”, he states.

Fuglsøgaard farm proves that giving medium size and health a high priority in the breeding strategy definitely yields excellent results. Most importantly, this investment in genetics pays off more and more with each generation of cows, and with the consistent focus on improving specific traits over time, the improvement in

herd performance is easy to see. What is more, genetic improvement is permanent and does not require any extra effort from dairymen. ●

Fuglsøgaard farm in numbers

- 550 VikingHolstein cows
- 12,880 kg milk, 3.97% fat, 3.42% protein
- Average daily production per cow: 45.8 kg
- SCC 140,000
Mastitis frequency: 1%
- Hoof disorders frequency: 3%

Sofia Muñoz, district veterinary based on the Swedish west coast:

“We always use a narrow spectrum of antibiotics”

Sofia Muñoz is employed by the Swedish Board of Agriculture (SBA) and she explains that they are not only responsible for border control and official tasks but are also active in both large and small animal practices. “To ensure that all animals have access to veterinary care even if the owner lives in a remote area and therefore we also ensure animal welfare is safeguarded,” she says while explaining about cow inspections, registration systems, low use of antibiotics and protocols for the transportation of cattle for breeding.

What are the main duties for the Swedish Agricultural authorities with regard to cow inspections?

The Swedish Board of Agriculture (SBA) collects data from different sources such as calving, purchase, trading and culling. The SBA also obtains data such as treatments reported by veterinarians and farmers on an individual basis. The data include all herds that send data to the Swedish Cattle Database, that also obtains data from other sources such as on hoof-trimming, artificial insemination, milk analysis, milk production, slaughter data and conformation classification. A livestock cooperative, Växa Sverige, maintains and manages records from the Swedish Board of Agriculture.

What is the aim of the cow register in Sweden?

The records are used to be able to trace animals in the event of outbreaks of animal diseases. And of

course the information is used in the evaluation of breeding values for health traits for bulls and cows in the Nordic countries.

What benefits do farmers get for entering data in the cow register?

It enables them to compare their herd with national benchmarks and to see trends over time. They can also view statistics and how their herd has developed over time.

What is more, all information from the herd is held in the database including information on each individual cow regarding e.g. milk production. It also provides a basis for advisory services such as calculating feeding rations and I can use it in my daily work advising farmers that I see regularly and that enables me to implement improvement schemes. It is the best management tool on herd level.

Many farmers also feel proud to contribute and view the registers as quality measures and a tool for analysis purposes.

The use of antibiotics is very restrictively controlled in Sweden; can you describe how the process to get antibiotics for a farmer works? What are the most common reasons a vet prescribes antibiotics?

In Sweden we only use antibiotics if a vet determines that the animal has a bacterial infection that its own defence system cannot overcome, or not using antibiotics would entail unnecessary suffering.

A farmer can only get antibiotics on prescription from a vet for an individual animal.

A couple of years ago, farmers that have particularly healthy animals were permitted to keep certain medications on the farm if an approved vet makes regular visits. The vet then provides preventive counselling at one to six-week intervals depending on the herd size and overall health status.

Most cases treated with antibiotics in cattle relate to mastitis in dairy cattle where the most common treatment is penicillin.

We always try to choose as narrow a spectrum of antibiotics as possible and penicillin is still effective. We make a bacteriological examination of milk from each individual cow in every case of mastitis to determine which pathogen caused the mastitis. Cows with mastitis caused by a pathogen resistant to penicillin (positive to betalactamase) are usually then culled.

Swedish animal production actually has the lowest use of antibiotics in the EU (European Union) and I am very proud to be a part of that.

How important is the welfare of the animal (cattle breeding) to Swedish authorities?

In Sweden, animal welfare is regulated by the Swedish Welfare Act that

stipulates that all animals should be treated well and must not be subjected to unnecessary suffering and disease. Animals, whether a dog or a hundred cows, must be kept in a good environment that allows them to express their natural behaviour. The concept of natural behaviour is important in Swedish legislation.

Animals should be kept so that they are motivated to express their natural behaviour.

Animals should be allowed free range and tie stalls are therefore being phased out.

Can you give us examples of some of the protocols regarding cattle breeding welfare?

One practice that makes Sweden unique is that all cattle must spend at least 2-4 months a year outside.

The length of time depends on where in Sweden the herd is located. In the further north, farmers are only required to let out their animals for two months a year but in the south, four months is a minimum.

What are the main rules regarding transport of cattle?

In Sweden, you are allowed to transport cattle for a maximum of eight hours. You are permitted to extend cattle transport up to 11 hours if you comply with special requirements such as providing water and feed in transit. You are never allowed to transport gestating animals within four weeks of calving and three weeks after calving. If the journey is to a slaughter house, the maximum is eight hours but occasionally up to 11 hours is permitted if the slaughter house is a long distance away. ●

Sofia Muñoz is a district veterinarian based on the Swedish west coast with the fine task of ensuring that animal welfare is secured.



New weight in NTM to fulfill the future needs of dairy cows

By Lars Nielsen, Head of Breeding VikingGenetics

The Nordic Total Merit (NTM) index is an excellent tool to detect the most profitable bulls and cows for dairy business with respect for the balance between production, cost reducing traits and health.

The NTM platform is very stable, and smaller updates are done on regular basis to guarantee optimal work of the index. Nowadays, more updates are taking place where all conditions including financial models are reviewed with support from scientists, genetic experts, farmers and other stake-holders to ensure the best possible index for selection of genetics to the future needs. The last two years we have been in a process to define the optimal NTM based on facts - and now we are ready to explain more about it.

What has changed?

As the NTM is very stable the changes are quite minimal even though all conditions have been reevaluated.

The main changes are:

- More focus on concentrated milk
- More focus on health and production in later lactations
- Still very big progress in all health and reproduction traits

Concentrated milk

The production is the main income for dairy producers and there is still a focus on increased production in the future. To ensure that growth is done as efficiently as pos-

sible we have risen the weight on content in milk for all breeds and, therefore, punish bulls with low components. As there is an expected high demand on fat in the future we have increased the relative weight on fat more than on protein – but there will be a vast increase on both fat % and protein % and still genetic progress in kg milk.

Longer lasting cows

As a combination of better genetic longevity potential and better management, the cows are staying longer in the herds and replacement rates are in general decreasing. For that reason, we have increased the relative weight on 3rd and later lactation, so now counts for 45 % compared to 20 % in the past.

Big response on health and fertility

After the revision of the NTM, we know there is still huge genetic progress on all health and fertility traits ensuring an excellent balance between production and health. Even though we go for a higher response on kg fat and protein, we are sure that we are not damaging the progress in cost reducing and animal welfare traits.

NTM is with the updated economical weight an even stronger tool to predict the most economical bulls and cows for you. The value of NTM per unit/per year is now 8 Euro for VikingJersey, 9 Euro for VikingRed and 10 Euro for VikingHolstein. ●

TABLE 1: CORRELATION BETWEEN PRODUCTION INDEX AND INDEX FOR % FAT AND % PROTEIN WITH OLD AND NEW INDEX.

	Fat %		Protein %	
	Old	New	Old	New
VikingHolstein	0.20	0.39	0.22	0.33
VikingRed	0.09	0.24	0.11	0.19
VikingJersey	-0.05	0.06	0.04	0.12

Table 1 shows that the correlation between fat % and protein % to Production Index increase very much. So, a clear positive trend in components can be expected in the coming years. This fit into our strategy as it is easier and healthier for cows to produce less water and more solids.



VIK RANK
Tailor-made for your breeding goal

New categories in VikRank

For a long time, we have used VikRank, a tool that helps categorise bulls that suit your breeding goal and to make it easier for you to select the right bulls. We have now updated the categories to include all our new information and have added Hoof Health and VikingDefence as two new categories. However, you can still create your own goal in VikingCustomized. The best bulls in each group will be labelled with the icon for that group, so the VikRank tool is now more integrated in the web page.

All the bulls on the lists are top-ranked in NTM (Nordic Total Merit), meaning that all of them are profitable and ensure balance between health and production. Different weights are put on the traits and therefore the ranking differs from the NTM list. Check out our webpage at www.vikinggenetics.com or contact your distributor to learn more.



VikingDefence

Ranked on the sum of three indices: Udder Health, Hoof Health and General Health. In addition, high score on production



VikingFertility

Ranked on a single trait: Daughter Fertility index



VikingHoofHealth

Ranked on a single trait: Hoof Health index



VikingGrazing

Ranked on the calculated index: % Fat + % Protein + Daughter Fertility + Hoof health – Stature



VikingSolids

Ranked on the sum of two sub-traits: % Fat & % Protein



VikingCalvingEase

Ranked on a single trait: Calving direct index



VikingMilk

Ranked on a single trait: Milk kg



VikingRobot

Ranked on Milkability only, but good scores for rear teat placement and udder balance



VikingCustomized

Customize the breeding goal based on the traits that matter the most to you.

www.vikinggenetics.com/about-us/tools-solutions/vikrank

Fast progress with an embryo herd strategy at Kotirinne farm in Finland



The Rinnes have a very clear picture of the genetic capabilities of their cows and using embryo flushing for their best females makes perfect sense on their farm. In 2004, they bought five embryos and got five heifer calves from them. To date, they have made over 70 embryo transfers and produced over 40 calves from them.

By Johanna Vouri – Marketing Department

Pasi Rinne and his wife Miina Kuusimo-Rinne are dairy farmers in Finland, who use embryos as a development strategy for their 120-head herd. When there is no room to physically expand a farm, the genetic improvement of the herd with well-considered breeding strategies becomes very important. The couple has been part of VikingGenetics' GenVik project, where Viking supports the genomic testing of females, since 2014. The herd consists of 60% VikingRed and 40% VikingHolstein, and they use embryo flushing for both breeds.

They have also bought five Danish Holstein embryos and all the pregnancies from those embryo transfers have been successful, producing three heifers and two bull calves. From those embryos they have two amazing heifers – gNTM +30 and gNTM +26. The heifers have had embryo flushing done on the farm and in a single day, 33 high-quality embryos were collected. "We were a

bit surprised with the number when we heard the results," Pasi Rinne says.

Most of the collected embryos were used in their own herd but some were sold. One bull calf born from Maahanmuuttaja's embryos was bought by VikingGenetics, VH Oonsun (VH Optimal) gNTM +32.

The dam of these heifers is from the herd of Lykke Andersen I/S, Denmark. She is on her fourth lactation and has been flushed four times and produced 53 embryos. VikingGenetics has also bought bull calves of this dam for the VikingHolstein breeding programme.

Production of solids in focus

They also have one Jersey heifer on the farm, which comes from a VikingJersey embryo and resulted in a beautiful heifer calf, Oregano (VJ Rodme x DJ Logo). "She is so beautiful," says Minna with a broad smile and continues, "we want to increase the production of solids and are therefore very interested in adding more VikingJersey cows to the herd".

The breeding strategy on their farm has heavily focused on longevity and production. They have clearly achieved that goal as over 30 cows in the herd have reached the 50,000 kg limit of which 17 are still part of the herd. Now that longevity has been achieved, Pasi and Minna are turning their focus to solids.

Pasi has a long history of working with Ayrshire cows as his family farm always had them, but he doesn't favour one breed over the other: "I like to see the cows' performance and nature as individuals without being biased based



Pasi Rinne and his wife Miina Kuusimo-Rinne, dairy farmers in Finland use embryos as a development strategy for their 120-head herd.

on the breed. A good cow is a good cow no matter what the colour".

Minna is of a different opinion. Her answer is unequivocal when asked her favourite breed. "I have always been a Holstein girl", she says. Miina and Pasi have seven children. "Let's see if one of them wants to take over the reins here one day," Minna says.

Flushing contract with VikingGenetics

VikingGenetics has sought to purchase some of the heifers for the Viking-Embryo – programme, but Miina prefers to have a flushing contract with VG. "I have nursed and cared for them since they were babies. They are my pride and my joy, so I don't want to sell them", she says. ●

Kotirinne (Homehill), Sysmä, Finland

- 120 cows - 60% VikingRed, 40% VikingHolstein (plus 1 VikingJersey)
- Production: 9,506 kg
- Fat: 3.9%
- Protein: 3.3%
- Farm size: 100 hectares
- No hired help on the farm

ET programme coordinator, Johanna Aro:

“With embryos you need a clear plan of how to work”

VikingEmbryo is the embryo breeding programme from VikingGenetics and Johanna Aro as programme coordinator has in-depth knowledge of all our three main breeds.

When talking with Johanna Aro, you cannot skip embryos. This is what she does, and is her passion. Johanna is the person in charge of the Embryo Programme of VikingGenetics and was born in Ostrobothnia, on the west coast of Finland where VikingGenetics’ specialized lab for Embryo is located.

Her parents had a herd of 20 cows, both Ayrshire and Holstein or Friesian at that time. “I worked on my parents’ farm during my summer holidays, so I never had a problem finding a summer job,” Johanna laughs. “My dad also worked as an AI technician in the area and he used the best bulls in our herd from Finland and abroad,” she continues. Interest in cows must be in her genes.

She studied agriculture at Helsinki University and immediately knew she wanted to study breeding. Not just any breeding, but cattle breeding. As a student, she also followed in her father’s footsteps and worked as an AI technician.

Johanna was particularly interested in gene technology and biotechnology. The subject of her Master’s thesis was gene mapping, bovine chromosome 19, that she did at MTT. Around that time Faba published the first articles on nucleus herds in its Nauta magazine. “That sounded interesting and I decided that this is what I would like to work with,” Aro says. Faba also started an EU-funded project with embryo marketing in Ostrobothnia and Aro was offered a job there. She was involved in producing the very first information package on embryo transfers that was then distributed around Finland. She subsequently gained her dream job in the nucleus herd as an embryo coordinator. The year was 1999 and the success story of Finnish embryo transfers had begun, as did Aro’s career as an “embryo lady”.

From Asmo to VikingEmbryo

Johanna’s days are spent in cooperation with researchers considering what would be the best possible embryo programme. She oversees the number of heifers we have in Hollola and product development of embryos. “We also need recipient herds where we implant the embryos and we also need herds that can accommodate heifers after their embryo production career is over. I’m working on finding those herds too,” she says.

Together with other embryo and breeding experts, she works on product development. “This way we can choose the best male embryos and avoid implanting only average ones. It is really streamlining the breeding programme,” she says. “When we talk about embryos, we often talk about how many embryos we get or how good the donor is. We often forget the recipient. But recipients are also part of the efficiency equation,” she adds.

Her big dream is a recipient herd that can receive many embryos and implant those soon after a flush. That is the way to get a better next generation.

“With embryos you need to have a clear plan of how to work – try more than two. If you just buy two embryos, it is possible that you will end up with nothing. To get a real picture of how to take your herd to the next level with embryos, you need to use enough,” she recommends.

“It is fascinating to work with embryos. People working with embryos are really into the subject and like to talk about this subject at all times, even outside work,” Johanna laughs. ●

Johanna Aro is synonymous with embryos in VikingGenetics. She is a key person in the VikingEmbryo team.



Identify genetic disorders at an early stage with genomic testing

Genetic data will soon be published in the Nordic national cattle databases in Finland, Denmark and Sweden, and be available on all bull profiles on the web.

By Lars Nielsen, Head of Breeding VikingGenetics

The genomic information gives us an excellent tool to detect recessives, and knowing the status means we can continue to use the top bulls in our breeding programme and retain genetic variation.

Our plan is to eliminate the recessives that cause dead calves as quickly as possible. The carriers causing early abortions will also be eliminated over time, as we will always select a recessive free bull calf if two calves have an equal breeding value.

In January, genetic data including genetic disorders will be published for individual bulls on:

- National cattle databases in Denmark, Sweden and Finland.
- NAV (Nordic Cattle Genetic Evaluation)
- VikingGenetics, website, bull profiles

This is a part of a strategy to handle genetic disorders at herd level

What is genetic information?

Genetic traits are a group of traits where the phenotype is related to a single gene, for example milk protein type, polledness and recessive disorders. Genomic selection enables easy access to this information, and a lot

of new information is emerging, which we see as a big advantage.

Recessives are a well-known phenomenon in breeding. A recessive gene is a gene that is masked by a dominant gene. In the past we were unable to detect recessive disorders until defective calves were born and we found the causal mutation. BLAD, CVM and BY are examples of this.

» It is important to control the role of inbreeding to ensure sustainable development «

LARS NIELSEN, HEAD OF BREEDING, VIKINGGENETICS.

Genomic test of females allows you to identify genetic disorders at an early stage and plan matings to avoid unsuitable matings and minimise the number of offspring with genetic disorders.

New inheritable disorders are being discovered all the time and this new information will be available for both bulls and females, and will be shown on bull profiles on the web. VG will regularly publish informa-

tion on new disorders we test for and which disorders we have zero tolerance for in the VG breeding programme, as well as the frequency of disorders in the population. At VikingGenetics, we are open and transparent and take responsibility for sustainable breeding.

VikingGenetics manages all known recessives in its breeding programme

Mating plan programmes will manage all known disorders in the future and be able to avoid carrier x carrier matings if both parents have been genomically tested.

In the long term, it is important to control the role of inbreeding to ensure sustainable development. As such, it is important to highlight the fact that genomic selection has given us an excellent tool to detect and eliminate defective genes from the population. Together with our modern mating programmes, we can ensure that carrier x carrier matings are avoided.

By eliminating recessives step by step in a controlled way, we can continue to make superior genetic progress on important financial and ethical traits at the same time. ●



VIKMATE

Online mating to enhance your herd

Enhance your herd with VikMate



VikMate is an online tool to make optimal matings to create future generations, selecting the best bull for each female as easily as possible. VikMate controls inbreeding and gives you information on genetic improvement in your herd.

Please contact your distributor

to learn more and get a login: www.vikinggenetics.com/contact-us/find-distributor



VIKINGGENETICS[®]

Breeding for what truly matters



High quality offspring by using cutting-edge tools in Rabbalshede farm in Sweden

Tomas Moberg and his brother Björn are the fourth generation with a passion for cattle breeding on Rabbalshede farm. They use all possible tools that VikingGenetics offers to increase health and production in their farm.

By Verónica Löfgren, Communicator at VikingGenetics

Rabbalshede farm is situated in the south of Sweden and is surrounded by forest and open landscape suitable for milk production. Moberg explains that they grow everything the cows eat on 330 hectares of land.

When the Moberg brothers succeeded their father in running the farm, they took over a herd with 120 cows with the ambition to improve the genetic level of the next generation of animals. Their father was already using some embryos at that time and was very interested in breeding.

Tomas Moberg inherited his father's interest in cutting-edge solutions to improve milk production. He has

intensified the use of genetics in the herd. "Breeding is so interesting because you feel you can always do something new and further develop the herd," he says.

He uses every possible advantage and tools for the breeding plan VikingGenetics has available for progressive farmers on the VG home markets.

GenVik (Genomic test of females) and ET (Embryo Transfer) combined with well-planned selection for robust cows are a perfect fit for Moberg's high-producing herd. "Faster breeding progress with genomic testing is music to my ears," he says proudly.

Facts of the farm

- Two milking robots / 130 cows (70% VikingRed and 30% VikingHolstein)
- He started to flush embryos in 2015
- Production: 12,201 kg ECM
- Fat: 4.2%
- Protein: 3.6%



1403 (VR Faradi x VR Tuomi) is dam to a bull calf by VR Amaretto, a result from the VikingEmbryo programme.



Tomas Moberg (in the picture) and his brother Björn from the Rabbalshede farm in Sweden are using all possible tools VikingGenetics has available to increase production and boost efficiency on their farm.

A smart combination of traits

Depending on how he selects and combines traits, he knows he will get the desired offspring. He uses innovative management solutions to make his life easier. “I am constantly aiming to get the best females. I use beef semen for cows low in NTM (Nordic Total Merit). I optimise the information from the genomic tests, which is one of the good things about using these management tools.”

He has found that his efforts pay off, much due to the robust-productive cow he is designing. “A cow that you don’t see, is the best cow, the one that never gives you any trouble”.

Picking up the fruits

The work they have put in transforming the farm has given excellent results. The Moberg brothers have two of the best cows in 1402 (VikingHolstein) and 1403 (VikingRed). They were born on the same day and have been flushed at VikingGenetics in Skara at the same time.

“VR and Holstein are similar when it comes to economics even if Holstein produces a bit more. But the red cows will become a little bit older with better udder health in my herd, which I think is also the case in all countries,” he emphasises.

His farm has also given extraordinary bulls to VikingGenetics breeding plan; VR Tophat – a VR Tornado son and VH Omega, a son by D Onside. ●



Rora 1402, (VH Sparky x VH Miracle) has been flushed in the VikingEmbryo programme.

ProCROSS cows

superior in converting feed into milk

Les Hansen, Ph.D., Dairy Cattle Genetics Specialist from The University of Minnesota, who has headed several research projects on the crossbreeding system ProCROSS, presented the results of a study about feed efficiency and stated that ProCROSS cows are inherently able to convert feed more efficiently into milk solids compared to Holstein cows.

“Improved feed efficiency can be added to the list of advantages of ProCROSS cows over Holstein cows,” Professor Hansen explained in Lisbon, Portugal, last summer. The study was the research project of Ph.D. graduate student Dr. Brittany Shonka-Martin at the University of Minnesota, he said. She compared 123 first-lactation cows (63 ProCROSS and 60 Holstein) and 80 second-lactation and third-lactation cows (43 ProCROSS and 37 Holstein) for dry matter intake, body weight, height, body condition score, milk volume, and fat plus protein production over a three-year period.

All cows were fed the same TMR (Total Mixed Ration) twice daily in tie-stalls. Feed samples were collected twice weekly to determine dry matter content. Feed intakes were recorded from days four to 150 of lactation. “Fat and protein production (kg) was no different for the two groups during the first lactation or during the second and later lactations. However, the ProCROSS cows had higher percentages of fat and protein in their milk than the Hol-

stein. For most milk markets, milk price is based mainly on the solids in milk,” Hansen said.

The trial also demonstrated that ProCROSS cows carried significantly more body condition but were no different to Holstein cows in terms of body weight; “The smaller frame sizes of the ProCROSS cows combined with increased body condition enhances fertility and health which are among the advantage of ProCROSS cows over Holstein,” he added.

“In an uncertain dairy economy where every penny counts, even the smallest increase in revenue or reduction in expenses can have a positive impact on farm profitability,” Stéphane Fitamant, managing director of ProCROSS, said.

Independent research into feed efficiency is vital and of high importance for the dairy industry. Feed Efficiency cows are sustainable cows that reduce methane gas thanks to a more efficient body, ProCROSS cows are environment-friendly animals. ●



The ProCROSS conference “Lower feed costs – increase your profits” in Portugal attracted farmers and journalists from Spain, Italy, France, the United Kingdom, The Netherlands, Germany and Sweden.

PROCROSS



Lower
feed
intake



Smaller
cows



Higher fat
and protein
production

+50%
MORE
LIFETIME
PROFIT!



#PROVEN
#PROGRESSIVE
#PROFITABLE



VIKINGGENETICS[®]

breeding for what truly matters



ProCROSS cows improving the bottom line

at Casal de Quintanelas farm in Portugal

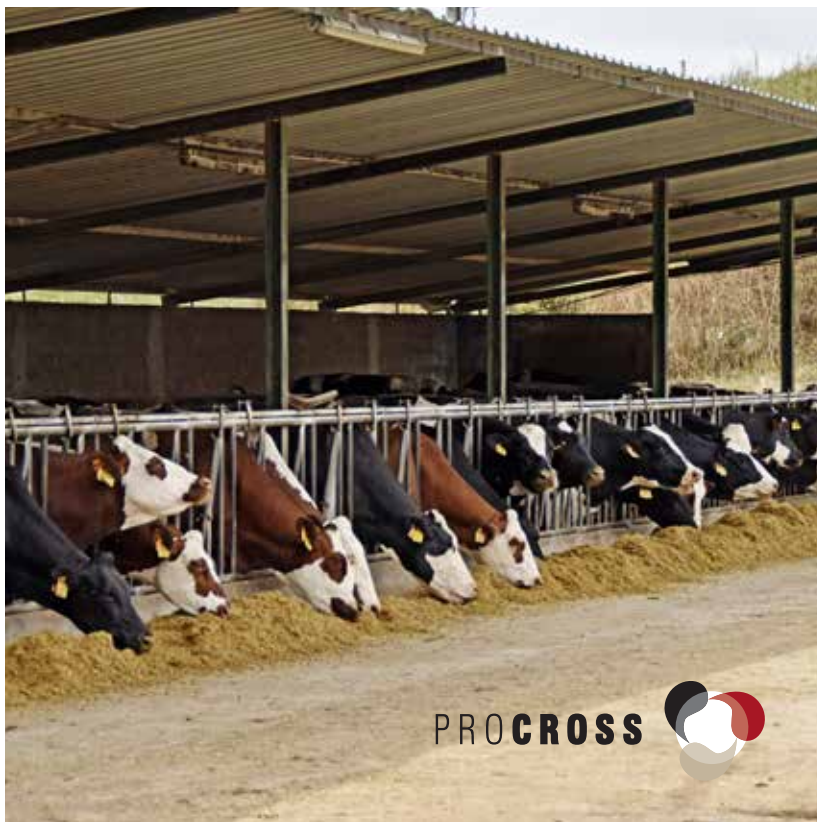
The Casal de Quintanelas farm is located in Sintra, Portugal and has been using the ProCROSS system since 2007. The farm has 370 ProCROSS cows and owner, Antonio Castanheria, took over the farm after managing it for several years.

Having used the three-way cross-breeding system for 10 years, Casal de Quintanelas has become an important reference for farmers in Portugal, and more recently, also for dairymen from Europe. The yearly ProCROSS seminar took place in Portugal this summer.

Les Hansen, Ph.D., a Dairy Cattle Genetics Specialist from the University of Minnesota, presented the results of the latest study about feed efficiency in Portugal and confirmed that ProCROSS cows are more efficient than pure Holstein cows in converting feed into milk.

This advantage is now added to the list of scientifically proven benefits of ProCROSS cows, and has been demonstrated in practice by farmers such as Castanheira who says that the study of feed efficiency also confirms that they made the best decision 10 years ago when they switched from pure Holstein to ProCROSS cows.

Castanheria proudly presented the control data they have been collecting for more than 10 years. Feed



The Casal de Quintanelas farm has 370 ProCROSS cows.

conversion, production and reproduction data confirm their outstanding performance.

“We have made a lot of improvements in lifetime production and can see higher profits,” he said. The production numbers of his herd back up his enthusiasm. They have

achieved 11,566 kg milk production with 4.21% fat and 3.44% protein as of 20 July 2018.

He has paid very close attention to the numbers in his dairy business.

“ProCROSS works in practice, and a lot of benefits can be achieved”, he said. ●

Remarkable genetic progress for VikingHolstein: 50 NTM units in 15 years

By Claus Langdahl, Breeding Manager VikingHolstein

From 2001 to 2016, the average Nordic Total Merit (NTM) of VikingHolstein bulls has increased by +50 NTM units in total, which is an amazing genetic progress. Table 1 shows this improvement in detail and where it is coming from.

Important traits such as production, udder, female fertility and udder health have improved the most.

The trait that has made the greatest progress is longevity with 33.7 units. This genetic progress has made it possible to now have a high-producing, healthy VikingHolstein cow with the potential for high lifetime production. ●

** Hoof health has less improvement than other traits since it was not introduced to NTM until 2011.*

TABLE 1: AVERAGE GENETIC LEVEL OF VIKINGHOLSTEIN BULLS BORN IN 2016 AND THE GENETIC PROGRESS COMPARED TO BULLS BORN IN 2001

Trait	VikingHolstein 2016	Genetic improvement from 2001-2016
Production	114.1	+22.0
Female fertility	107.4	+18.7
Calving ease	107.8	+15.0
Longevity	114.5	+33.7
Hoof health*	105.9	+11.8
Udder health	108.7	+19.9
General health	105.6	+16.6
Udders	114.3	+28.2

Higher number of cows reaching 100,000 kg milk

There is an impressive development in the number of cows reaching 100,000 kg milk of lifetime production per year. In 2000, fewer than 50 cows managed this per year and today over 350 cows now do so in Denmark. The sires having most daughters surpassing this milestone are T Funkis and V Bojer with more than 225 daughters each. ●

T Funkis and V Bojer are the two Holstein bulls that have most daughters reaching 100 000 kg milk.



This fantastic cow has reached the production of 100.000 kg milk, and being priced for that reason. She is bred by V Haslund x VAR Elvis and is owned by Poul Jacobsen in Thisted in Denmark.

VikingRed and Holstein are similar when it comes to the bottom line

By Auli Himanen, Breeding Manager VikingRed

Morten Kargo has done research in Denmark from SEGES to compare red and Holstein cows with field data used for EBV (Estimated Breeding Values) calculations. The results show that these breeds are comparable in terms of economics. The yield income is lower for red cows but on the other hand, fe-

male fertility, udder health and general health costs are lower. The strength of red cows is specially clear in organic production. The results tell the same story as Swedish research from a few years ago. In this study, the importance of focusing on the total economics rather than simply on yield data, is clearly demonstrated. ●

Profitable decision with GenVik

For you as a farmer, genomic selection means greater reliability in your selection of best females to keep in your herd.

It is a must today to have genomic values for females as well, not just in breeding programmes but also for management purposes at herd level. Having females with reliable data in the reference population gives us greater accuracy for the genomic values, meaning success for selection. The ambitious goal for Red Breeds in the Viking area is to have 95% of females genomically tested! ●

Focus on polledness

The line-up of VR sires shows two polled sires are among the very best in the breed: VR Fanof P with gNTM+30 and VR Fitbit P with gNTM +28. They are both heterozygous, Pp, meaning that 50% of their progeny will be polled. ●



By Peter Larsson, Breeding manager VikingJersey



With gNTM +31, **no one is higher than VJ Higher**
(VJ Hjørri x VJ Huzar) on the VikingJersey bull line up!

VikingJersey bulls are pure bred and JH1 free

Breed definition and the influence of genes other than Jersey were discussed at the World Jersey Conference in the United States (USA), last summer. Delegates from Europe expressed their concern, as crossed (JX) bulls will be more difficult to use in Europe with the planned new herd booking rules. The risk of introducing genetic defects from breeds other than Jersey with the use of bulls that are not pure bred, was also a topic that was much discussed.

In the light of these concerns, we are pleased to say that all VikingJersey bulls are a minimum of 99.5% pure Jersey. What is more, from November 2018, all bulls marketed will be JH1 free! ●

First ET calves in USA

In June, the first nine ET calves from VikingJersey embryos were born in USA and more pregnancies in USA recipients have been made. The aim is to establish a small VikingJersey bull stud on our most important Jersey market, the USA. This will make it easier to supply the US market and to ensure supply in the event of biosecurity problems in Europe. ●



First VikingJersey ET bull calf born in the USA



Udo Carstensen
will head the
VikingGenetics
Deutschland team.

“Cattle breeding is in my blood”

Udo Carstensen will head the VikingGenetics Deutschland team. He was born on a dairy farm in the north of Germany and has plenty of experience in sales in the dairy cattle breeding industry. “I am looking forward to putting my knowledge into practice with a company that strives to help dairy farmers succeed in their dairy business,” Carstensen says. “I prefer cows with lower costs and higher revenue. At VikingGenetics, we have the best solutions to offer farmers,” he adds.

Carstensen not only brings knowledge but also passion in breeding for healthy and high producing cows. Carstensen is extremely familiar with genetics from Viking, having been striving to achieve profitable cows since his younger years in charge of his parents’ dairy farm.

“Before I went into sales, I was a dairy farmer and used a lot of VikingRed semen; Peterslund was one of my favourite bulls. I inseminated the cows myself. I preferred being in the barn with my cattle than driving a tractor in the fields. Cattle breeding is in my blood,” he says.

His journey as a salesperson for an Artificial Insemination (AI) company in Germany took him to California, France and The Netherlands where he learned more about the ProCROSS system - the only scientifically proven crossbreeding concept in the world. “I love listening to what farmers need,” he says. ●

VikingGenetics increasing operations in Germany

In September, VikingGenetics opened a subsidiary in Germany, VikingGenetics Deutschland. The aim is to offer increased support and a better service level to German dairymen as part of planned growth to further develop dairy cattle breeding in Germany.

The new subsidiary is an important piece in VikingGenetics’ global growth strategy. “We truly believe in the potential of the German market. German dairymen are recognised worldwide for their dedication in the dairy industry,” says David Stenkær Ravnkilde, Head of Business Development at VikingGenetics.

VikingGenetics Deutschland is the third subsidiary founded by VikingGenetics following Australia (VGAU) in 2010, and the United Kingdom (VGUK) in 2017. As has been the case with VGUK and VGAU, the new subsidiary in Germany is a high-priority business for VikingGenetics, and can count on an excellent team to meet demand in the field.

Udo Carstensen will head the VikingGenetics Deutschland team. He was born on a dairy farm and has plenty of experience in sales in the dairy cattle breeding industry. The aim, according to Stenkær Ravnkilde, is to rapidly strengthen the team to provide better coverage service of the German market. “We welcome Udo Carstensen as a key member of the VikingGenetics family. He shares our passion for breeding for healthy and productive cows and will head the team that we are in the process of assembling to grow and develop our presence in Germany.”

VikingGenetics’ three dairy breeds are already well known in Germany thanks to their numerous different advantages for commercial dairies. “Dairy farmers in Germany have already seen the benefits of VikingGenetics’ breeding solutions with their presence in Germany through our distributors. The addition of a VikingGenetics office in the country makes for an upgraded approach,” Stenkær Ravnkilde says.

VikingGenetics Deutschland will be the distributor for VikingHolstein and VikingRed, while ST genetics will continue to provide VikingJersey. VGDE will also play an important role in the distribution of ProCROSS, the only scientifically proven crossbreeding system in the world, where VikingHolstein and VikingRed are part of the cross breeding system. ●

“We build our business on long-term relationships and happy customers”

Our CEO Rex A. Clausager explains more about VikingGenetics Deutschland (VGDE).

Why is VikingGenetics interested in Germany?

Germany has the largest dairy cow population in Europe with over four million dairy cows. Germany has a strong tradition for supporting local breeding cooperatives like those we experience in our three home markets: Sweden, Denmark and Finland. However, in every market, some farmers are looking at other ways to improve their dairy herd. We see that our solid combination of strong health and high production is a good fit for this group of German dairy farmers.

What does a farmer in Germany gain from choosing VGDE?

A German farmer can expect to find a breeding company that focuses on

helping them make the right decision concerning choice of genetics. If they choose us, they will have a company that looks to build long-term business relationships with satisfied customers.

How is this new subsidiary going to operate? How many people will work at VGDE?

The team has been established starting with our Sales Manager in Deutschland, Udo Carstensen. In close cooperation with and the support of our Export Manager Jan Andresen, Carstensen is tasked with managing the company and building a team of highly motivated salespeople. Right now, we expect to have about eight people in three

years' time, but this can change depending on the opportunities we find in Germany.

How can we guarantee that subsidiary companies will live up to the VG philosophy from the Nordic countries?

The VG philosophy is a global philosophy. From a very early stage, Nordic farmers have been brave enough to sufficiently respect health traits and have built up an impressive number of phenotypic registrations to support both genomic and traditional reliable breeding values. This courage is paying off today, where it is clear, that a healthy and strong dairy cow is a high producing cow with low maintenance costs. ●



Rex A. Clausager, CEO, VikingGenetics

“The combination of a passion for cows with a curiosity about people is what I enjoy the most.”

Sara Wiklert Peterson, Head of Sales at VikingGenetics is in charge of three priority export markets: the United States, the United Kingdom and Australia.

She is a member of the Management team and senior manager at VG Skara, Sweden.

Sara was also head of the Export Manager group for global markets and one of the architects in the implementation and development of the ProCROSS crossbreed system.

By Veronica Löfgren, Marketing department, VikingGenetics

Her laugh is contagious and her leadership evident. Sara first came to Svensk Avel (before VG was formed in 2008) as a curious, young redhead keen to start her summer internship in 1996. She did another summer job in 1998 before she started a formal work in 2000. Her first work was in Breeding Department.

Sara was born and raised on a red cattle dairy farm. Her parents still run a Charolaise and Angus stud business. It was natural for Sara to seek a career that revolved around animals and people.

“I try to see and evaluate all the possible angles of any given situation, something I inherited from my father,” she says. Hard work and a passion for what she likes doing can best describe her. “It is important to do what you enjoy doing. I enjoy the contact with colleagues, friends and customers around the world. I also enjoy sales because it is so measurable, competitive and you can see the results,” she adds.

She spends about a third of the year travelling and is a proud VikingGenetics ambassador. “It’s easy to sell a product that delivers results; when you go to Italy and see cows that are daughters of one of our bulls, and you know this is something good, and the customers are happy. It is very rare to find someone who is not happy with the results, and if that does happen, they tend to say, “well I

should have started earlier or gone for it 100%, why didn’t I? So those are the kinds of complaints that are good to hear.”

Long-term relationships

In 2002, Wiklert Peterson started to travel to California more to meet the modern pioneers of ProCROSS. “I like the kind of sales we do here because you build very long-term relationships with your customers, it’s not a quick fix,” she says.

Having seen how the different markets have developed, she feels that global sales are “extremely competitive” but that VikingGenetics has an advantage when it comes to quality. “We are still breeding for health, which is even more the right thing to do today than before. It has not always been like that,” she laughs.

“Even if competitors were to focus more on health, it’s still not enough turn things round. However, we are modest and can see that our competitors are doing lot of good things and that they are so much bigger in scale than we are. We need to continue to be creative in finding the next thing and the next, and the next,” she acknowledges.

Another advantage VikingGenetics has when competing in Export markets has a lot to do with the lower use of antibiotics and high quality animal welfare, two of the biggest challenges farming in general faces all around the globe.



Sara has a Master of Science in Agriculture from the Agricultural University of Sweden (SLU) and started to work in Svensk Avel in 1998, while she was still studying.

“I think this is where our profile can support dairymen because we have promoted sustainable farming, in our case, in dairy cattle, I don’t think consumers of tomorrow will accept the level of antibiotics usage in livestock production and unnecessary suffering of animals either,” Sara says.

She believes VikingGenetics can make a difference in the milk production industry and the challenge of a better environment around the world with Viking bulls that will soon be able to be bred for feed efficiency and lower methane gas emissions. ●



GENVIK[®]

Genomic test for females

Make profitable management decisions with GenVik!



GenVik testing gives you all the information about the genetic potential of your heifers and helps you make correct decisions at an affordable price. GenVik delivers a reliable and comprehensive genetic mapping on the health, fertility and production potential of your animals.

GenVik is a genomic test for females on the NTM scale.
To order GenVik test, please contact your distributor.

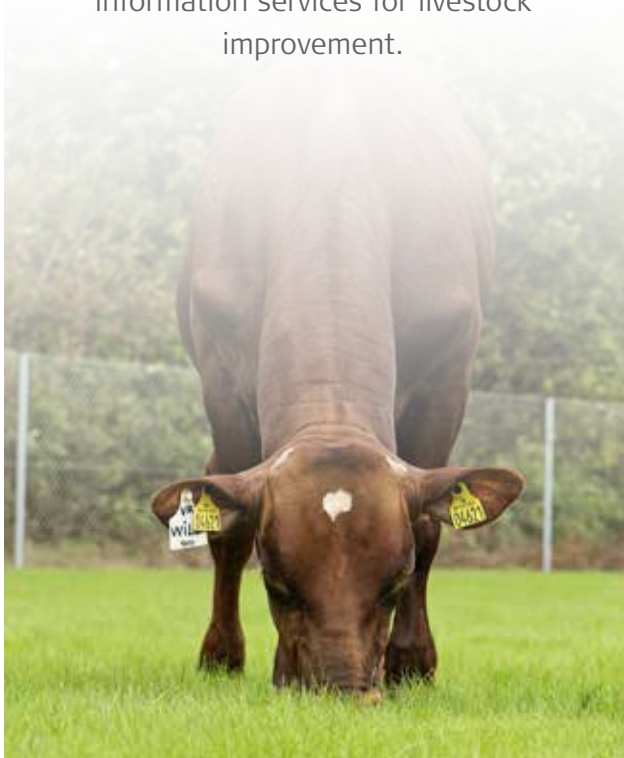
Read more about GenVik on our website: www.vikinggenetics.com/dairy/genvik-test



Outstanding genetic level

Interbull confirms the outstanding genetic level for our three dairy breeds.

The International Bull Evaluation Service (Interbull) is a permanent subcommittee of the International Committee for Animal Recording (ICAR). Interbull is a worldwide network providing genetic information services for livestock improvement.



VikingHolstein

The International Bull Evaluation Service delivers excellent performance for Holstein bulls from Denmark, Sweden and Finland in comparison with bulls from the rest of the world. VikingGenetics bulls are the top performers in Udder Health, Fertility & Yield. On top of that, VikingHolstein cows are smaller in size compared to other Holstein populations which means greater efficiency, less feed and high production.



(305 days)

10,273 kg milk

4.0% fat

3.4% protein

VikingRed

Interbull ratifies the Nordic countries as world leaders in Yield, Udder health and Longevity for RDC bulls.

The Interbull list, based on national information about bull performance, ranks the Nordic countries at the top of the list when it comes to production yield, udder health and longevity. Data reveal that VikingRed bulls are the most profitable choice among Red Dairy Cattle (RDC) in the world, not only thanks to their superior health but also their excellent production numbers which are the top rated.



(305 days)

9,091 kg milk

4.40% fat

3.51% protein

VikingJersey

VikingJersey tops the Interbull list for Udder health, Longevity and Daughter fertility. The data compiled by Interbull show the excellent genetic level for Jersey bulls from Denmark. Udder Health, Fertility, Longevity and Yield for daughter-proven bulls born in 2011 or later, were compared with other Jersey populations. The results show that VikingJersey is the best option to breed healthy and productive Jersey cows.



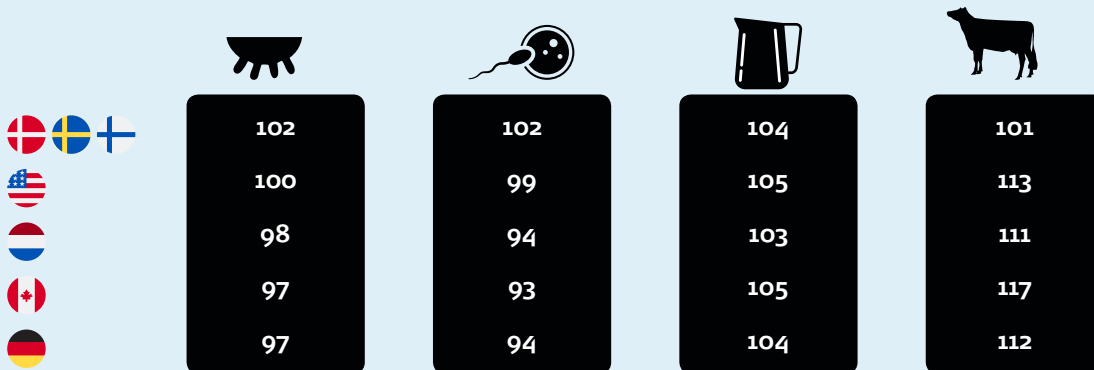
(305 days)

6,977 kg milk

5.91% fat

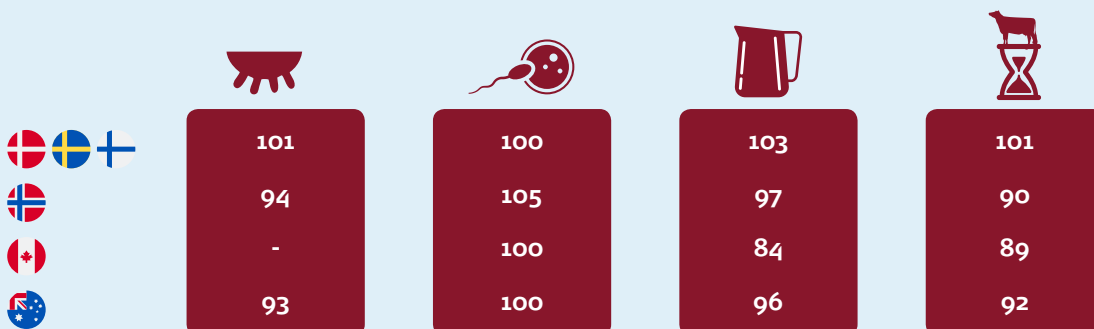
4.16% protein

Interbull International Comparisons Holstein



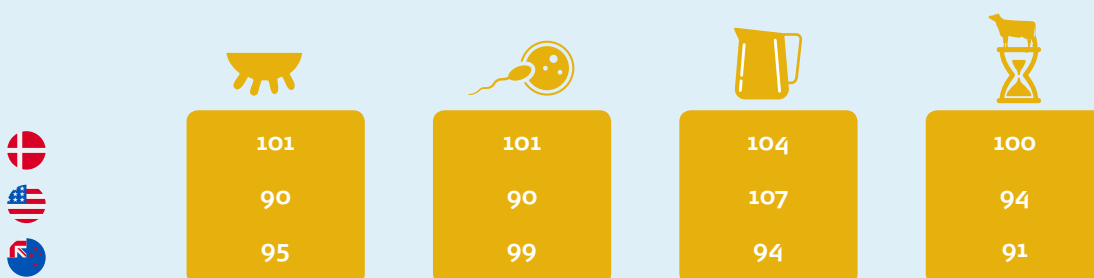
Daughter-proven bulls (born in 2011 or later).

Interbull International Comparisons Red



Daughter-proven bulls (born in 2011 or later).

Interbull International Comparisons Jersey



Daughter-proven bulls (born in 2011 or later).



Evolution in France joins the VikingJersey breeding programme

In September, VikingGenetics and Evolution, a French Artificial Insemination company, signed a strategic partnership agreement to increase their cooperation in Jersey cattle breeding.

Following the agreement Evolution is now a member of the VikingJersey breeding programme. The companies, that have a longstanding commercial relationship, have now upgraded their partnership to the advantage of Jersey dairy farmers in France and on VikingGenetics' home markets of Denmark, Sweden and Finland.

The French Jersey farmers will be joining the world's best Jersey genetic programme, while Nordic Jersey dairy farmers will have new opportunities to breed even better animals with a larger breeding population from now on.

This is the first step in VikingGenetics' determination to strengthen the VikingJersey breeding programme. Access to the French Jersey population will enable enhanced selection opportunities to assure higher genetic progress in the dairy plan with excellent animals.

Common breeding goal

As VikingGenetics and Evolution have the same breeding goal for the Jersey, reaching this strategic agreement was very easy. French dairy farmers also look for healthy cows with good fertility, functional conformation and high production of solids.

The VikingJersey breeding programme will now be managed in the same way on both the Nordic and French markets. French Jersey cattle breeding will be included in animals available for selection as donors or as recipients for the VikingEmbryo programme.

What's more, dairy farmers can now count on opportunities to sell bulls to VikingJersey for the dairy programme and can use sexed semen from VikingJersey top bulls to bring the next generation of high quality females closer to reality for French dairy farmers. ●

Meet Ahmet Yilmaz

– our new Export Manager ready to strengthen VikingGenetics' sales team

In November, Ahmet Yilmaz joined our VikingGenetics sales team as Export Manager and will be in charge of our sales to Turkey and developing other markets.

From the start of his professional career, Yilmaz has been involved in international sales and marketing. This has taken him to all corners of the world where he has played an active role in increasing sales and ensuring success for the company.

"One of my primary responsibilities has been searching and selecting new markets globally and entering them in the most efficient way possible," Yilmaz says.

Some of the markets he is most familiar with are in Europe, Africa, North America and the Middle East where he has done business extensively.

Yilmaz is motivated to strengthen relationships with our distributors.

"I have participated in exhibitions and customer meetings around the globe. It could be a farmer in the Algerian desert, a high-end department store in London or anything in between," Yilmaz says.



The key factors for Yilmaz are hard work, persistence and team spirit.

Yilmaz has an M.Sc. in Marketing and Business innovation from Aarhus University in Denmark.

We welcome Yilmaz to our Viking family. ●



UK farmers convinced of benefits of VikingGenetics solutions

To coincide with the UK Dairy Day, which the VikingGenetics UK Team attended, The Dairy Farmer magazine published an article about our genetics. In their Dairy Show edition, they featured the award-winning Jersey herd at Manor Farm, owned by Tom Dickinson.

Dickinson has had great success with his VikingJersey herd and has won the Lily Hill Cup for best Jersey herd in the Gold Cup competition in 2017 and the Yorkshire Taste Award for best beverage and best liquid milk at the Yorkshire Show.

Dickinson started off with a Holstein herd in 2001, sold 80 cows and

restocked with Jerseys from Denmark. After realising that the Jerseys had better fertility and feet & legs, he decided to switch the whole herd to VikingJerseys. His goal has been to raise protein production and the VikingJerseys have helped him achieve this.

Dickinson is happy with the breeding information from VikingGenetics, in particular the genetic indices such as hoof health and udder health. "To us it's all about breeding functional, long-life, productive cattle that meet the requirements of our milk contract," Dickinson says.



Antibiotic usage has been monitored and found to be far under the target.

The VikingJersey cows deliver the milk, health and fertility that Dickinson wants from his cows. ●

VikingJersey and ProCROSS cows increase in USA



In June, our Head of Sales, Sara Wiklert Petersson, visited two of our large Jersey customers in the USA; the Veldhuis family in Washington state with 15,000 cows in total and Jeff Bosma, Oregon, with 3,000 cows. She was also in two ProCROSS herds in Idaho.

On the Veldhuis farm, they have used plenty of VikingJersey in the last 12 months following a visit to Denmark last summer, and quite a lot of sexed semen since last year. The hutchers are starting to be full of Viking offspring. They are looking for the fat and protein and daughter fertility at the VikingJerseys.

This story is also very positive in Oregon where Jeff Bosma has used VikingJersey for many years. There are numerous daughters of VikingJersey bulls in the herd, from VJ Husky, VJ Lappe, DJ Zuma, VJ Luvoka, DJ Lix, VJ Lurik, VJ Hihl, VJ Hilario, and VJ Hama to VJ Livius.

"He loves the VikingJersey, as they are efficient, high yielding cows with good reproduction. He is now planning to build another dairy with

the same number of cows, but that one will have robots, so teat placement, milking speed and udder depth are important," Wiklert Petersson says.

She also explained that as they have been using VikingJersey for many years, they were very interested using a mating system that works for the NTM (Nordic Total Merit) traits, and primarily also to avoid inbreeding.

Sara introduced the VikingGenetics mating tool, VikMate, to Bosma.

Sara also visited ProCROSS herds in Idaho. First the Sewy family with 1,300 cows. This herd has been using ProCROSS for about 13 years. The second visit was to Andersen Dairy that has been doing it as long, combining 2500 ProCROSS with 500 top Holstein. This herd has bred the world famous sires, Supersire and Silver.

Both herds are high yielding with production of 41kg / cow / day average. All the farmers are happy with VikingGenetics solutions she says. ●



VikingJersey is a more and more appreciated dairy cow in USA

The Real Cost Cutting Cows

Nordic countries have the lowest use of antibiotics in the world and are in top position for milk yield. Exceptional health and high production is in the genetics. An everyday solution that works.



VIKINGGENETICS^R

breeding for what truly matters

www.vikinggenetics.com