Joining Forces in the Nordics

An update from VikingGenetics

24.07.2018

NÖK Congress 2018, Rättvik, Sweden

CEO Rex A. Clausager, VikingGenetics





Why does VG exist?



- Because of you!
- Common Evaluation / Common breeding goal / NAV (based on NÖK discussions – common AI company incl. Norway)
- Importance of population size / Share population
- Sharing large future investments
- Need for partners / fear that partners would merge with someone else
- Cultural similarities / background: Nordic
- Nordic countries all doing health traits



Successes so far!

V

Top
Genetic
Progress

Speedy implementation of genomic selection

Successful merge of breeds across countries

Sensible price level in the market

Working across borders

Ability to return created value to farmer/owners

Development of **new traits**

R&D in common

Obtained synergies

VR has been able to reach global position

Exports
would have
been
difficult
separately

EuroStat (October 2017)



	Cows' milk production on farms (thousand tonnes)	Number of dairy cows (thousand head)	yield	Number of NUTS 2 regions (1)	NUTS 2 region with the highest level of cows' milk production (')	Regional cows' milk production on farms		Regional number of dairy cows	Regional apparent yield
						(thousand tonnes)	(% of nat. total)	(thousand head)	(kg/head)
EU-28	162 957	23 508	6 932	248	_	-	-	-	
Belgium	3 895	531	7 340	11	BE25 — Prov. West-Vlaanderen	737	19	97	7 600
Bulgaria	1 019	279	3 653	6	BG42 — Yuzhen tsentralen	259	25	83	3 117
Czech Republic	3 065	367	8 344	8	CZ06 — Jihovýchod	750	24	87	8 602
Denmark	5 436	565	9 621	5	DK04 — Midtjylland	1 611	30	169	9 533
Germany	32 672	4 218	7 746	16	DE2 — Bayern	8 256	25	1 198	6 889
Estonia	783	86	9 091	1	No regional breakdown	- i	_	_	_
Ireland	6 851	1 295	5 290	2	IE02 — Southern and Eastern	5 454	80	1 029	5 298
Greece	703	106	6 628	22	EL52 — Kentriki Makedonia	318	45	48	6 565
Spain	7 124	819	8 702	19	ES11 — Galicia	2 702	38	336	8 046
France	25 216	3 630	6 947	31	FR52 — Bretagne	5 488	22	753	7 289
Croatia	671	146	4 583	4	HR04 — Kontinentalna Hrvatska	613	91	135	4 534
Italy	11 886	2 060	5 769	23	ITC4 — Lombardia	4 743	40	480	9 870
Cyprus	186	28	6 536	1	No regional breakdown	- 1	_	_	_
Latvia	984	154	6 386	1	No regional breakdown	- i	_	_	_
Lithuania	1 624	286	5 682	1	No regional breakdown	- 1	_	_	_
Luxembourg	376	52	7 239	1	No regional breakdown	- i	_	_	_
Hungary	1 918	244	7 862	7	HU32 — Észak-Alföld	454	24	61	7 440
Malta	43	7	6 635	1	No regional breakdown	- i	_	_	_
Netherlands	14 000	1 794	7 804	12	NL12 — Friesland	2 580	18	323	7 988
Austria	3 628	540	6 719	9	AT31 — Oberösterreich	1 127	31	166	6 781
Poland	13 244	2 130	6 218	16	PL12 — Mazowieckie	2 772	21	465	5 957
Portugal	1 923	239	8 049	7	PT11 — Norte	731	38	85	8 614
Romania	3 934	1 193	3 299	8	RO21 — Nord-Est	951	24	280	3 396
Slovenia	650	108	6 024	4	SI03 — Vzhodna Slovenija	431	66	74	5 858
Slovakia	905	133	6 826	4	SK02 — Západné Slovensko	468	52	56	8 299
Finland	2 430	275	8 823	8	FI1D — Pohjois- ja Itä-Suomi	1 331	55	148	9 009
Sweden	2 862	326	8 776	8	SE21 — Småland med öarna	824	29	93	8 836
United Kingdom	14 931	1 898	7 867	12	UKK — South West	3 458	23	440	7 859
Turkey	16 786	5 407	3 105	26	TRA2 — Agri, Kars, Igdir, Ardahan	1 2 1 1	7	:	:

⁽¹⁾ Germany and the United Kingdom: NUTS 1.



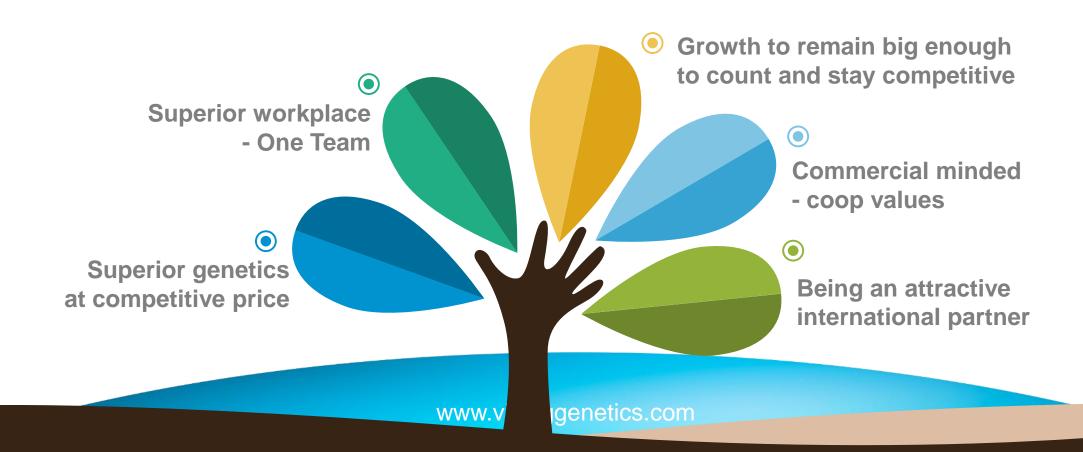
From local to global!





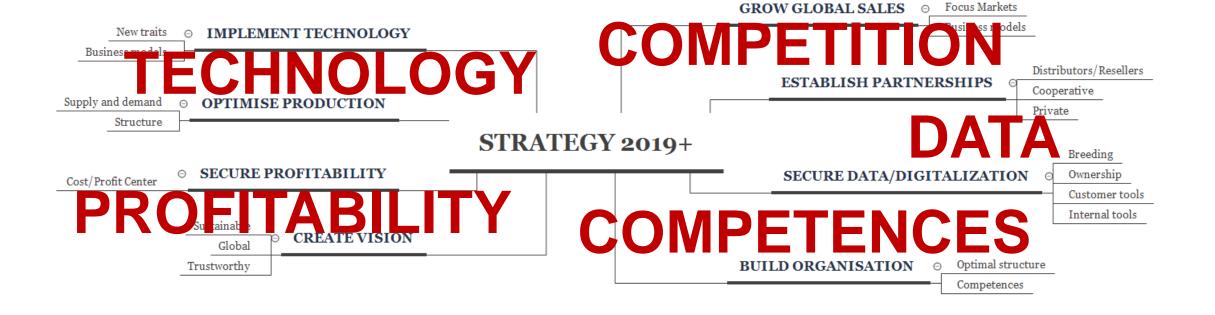
Guiding Stars



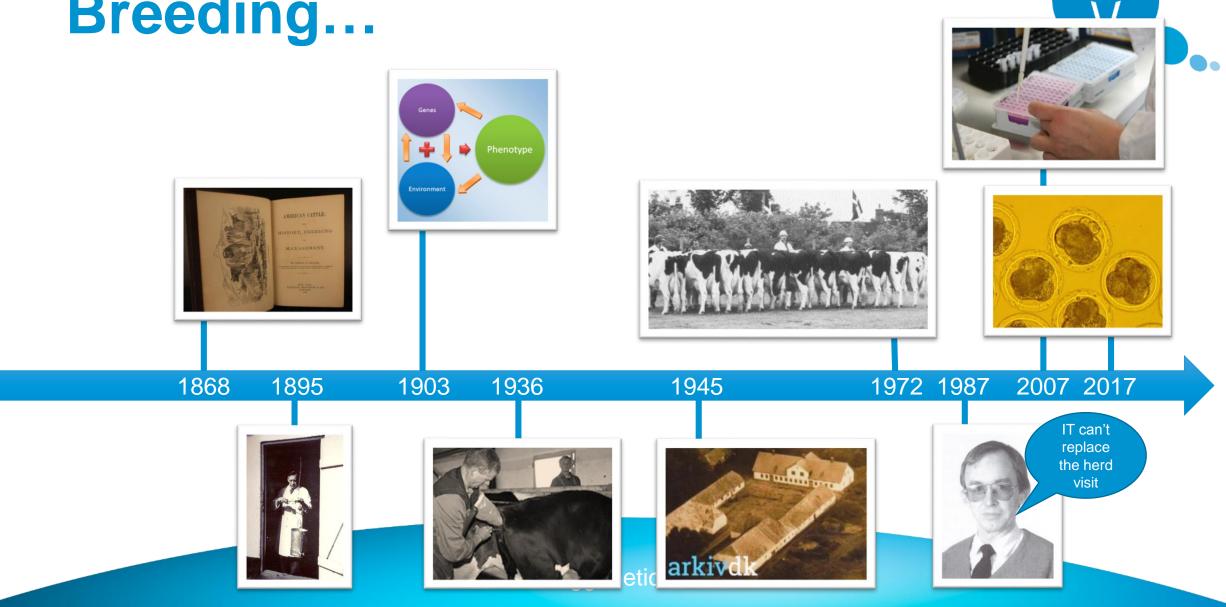


Mindmapping our challenges





Breeding...



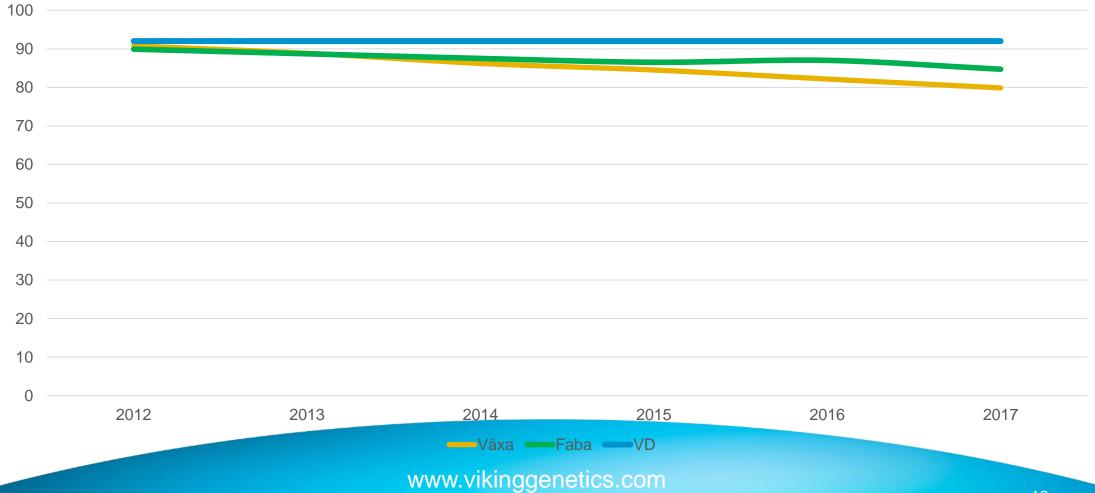
Total Homemarket (#doses)





Calculated Market Share





Changes in the competetive landscape





US based ST genetics in Cogent deal Mark Roach Published: 07:12 Friday 13 October 2017 Worldwide livestock reproduction and bovine technology business ST genetics of Texas has become the majority shareholder in the UK's largest bull stud Cogent Breeding Ltd. Cogent will provide ST with a strong platform in the UK and Europe providing new routes to market and a creating a powerhouse of industry knowledge, technology and In turn, ST genetics will provide significant benefits to Cogent, in particular: world class bull power including the number one PLI bull in the UK; new generation sexed semen

machines and processes; genomic testing and mating programmes and access to new and

innovative bovine reproduction technology.

Changes in the competetive landscape





Strategy and/or necessity?

Are you buying or being sold?



Impressions from the outside world!





Sustainability framework with management approach to create impact on 11 sustainability themes



Global layer

- · Overarching sustainability vision for the global dairy sector
- A series of 11 sustainability issues, each incorporating a number of sub-issues

Regional layer

 Prioritisation of the issues relevant to a particular region including continuous improvement spectrum



Sustainability themes

- · Focus on 11 globally applicable sustainability criteria
- Outline the high-level objectives (Strategic Intents), which the dairy sector has committed itself to work on for each of these criteria

Jaap Petraeus (FrieslandCampina)

The farmers' arena – Böndernas eget mejeri

A communication platform for Arla Sweden



Supporting key trends and drivers:

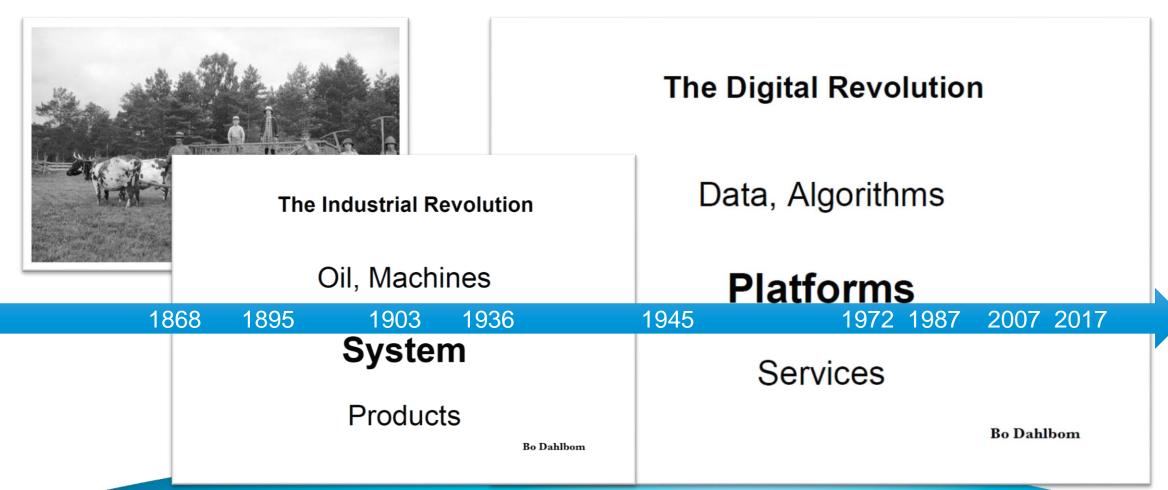


Aria

Anna-Karin Modin Edman (Sustainability Manager, Arla Foods)

Oh yes, the world is changing!







An elite athlete knows the amount, weight and content of nutrient in each meal to be elite



We expect our **cows** to be **elite**BUT we **don't know** what a
cow is eating



Background

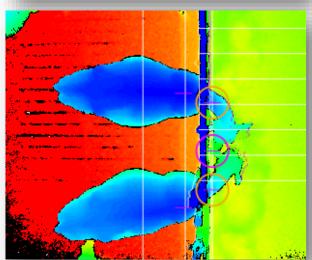












Aim and purpose

V

- To develop a **3D camera system** that can measure **feed intake** at **individual cow** level at **each visit**
- May not:
 - Disturb daily routines on farm
 - Disturb cow behavior
- Should be same system as for identification
- Cattle Feed Intake (CFIT)





System setup

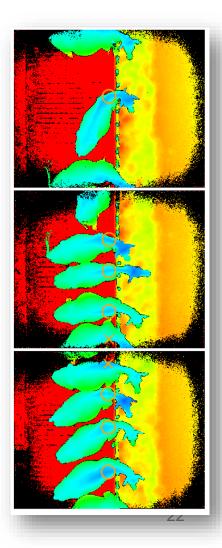


System setup





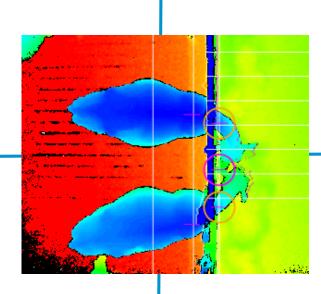




Perspectives



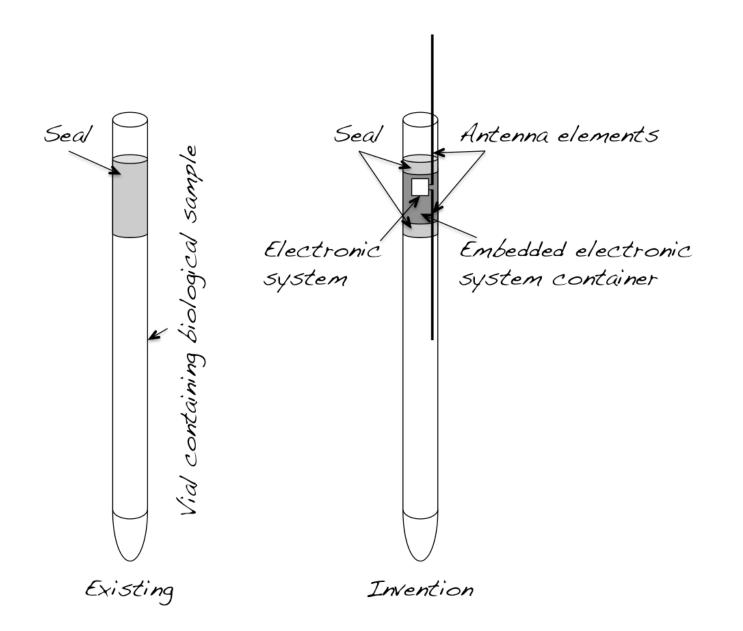
Efficiency



Health

Behaviour

Grouping







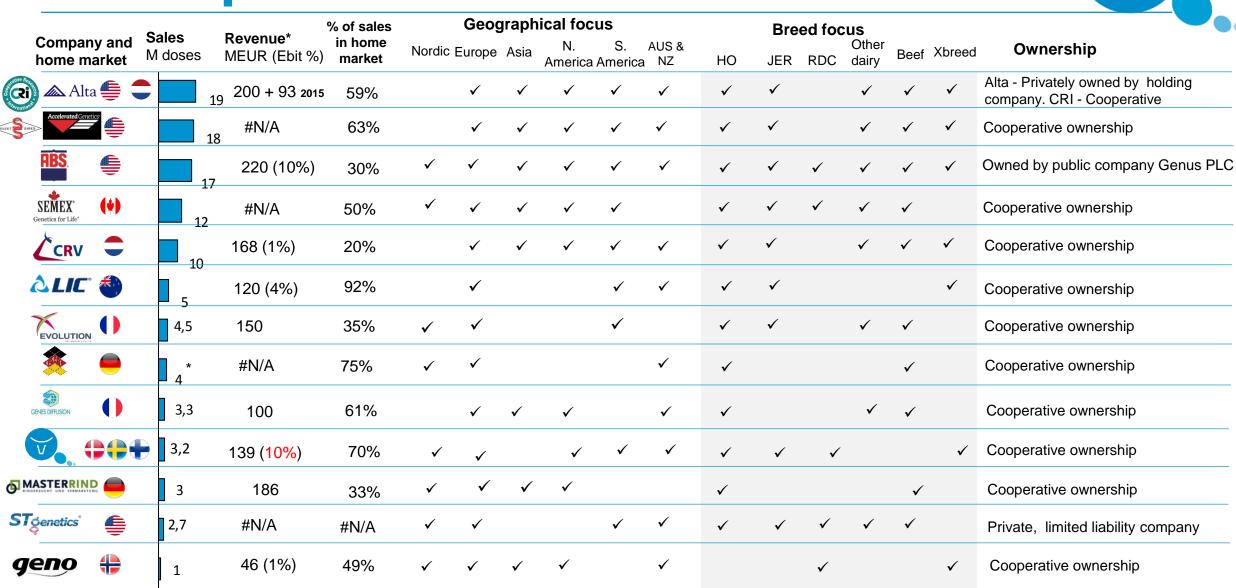
RFID - vision!



- New standard for digitalization
- Semen production and handling in Laboratory
 - Storage
 - Accounting
 - Traceability

- Distribution of semen (Can also be with use of robotics)
 - Depots
 - Technicians
 - Farmers
 - Export
- A.I. Field work
 - Technicians
 - Farmers

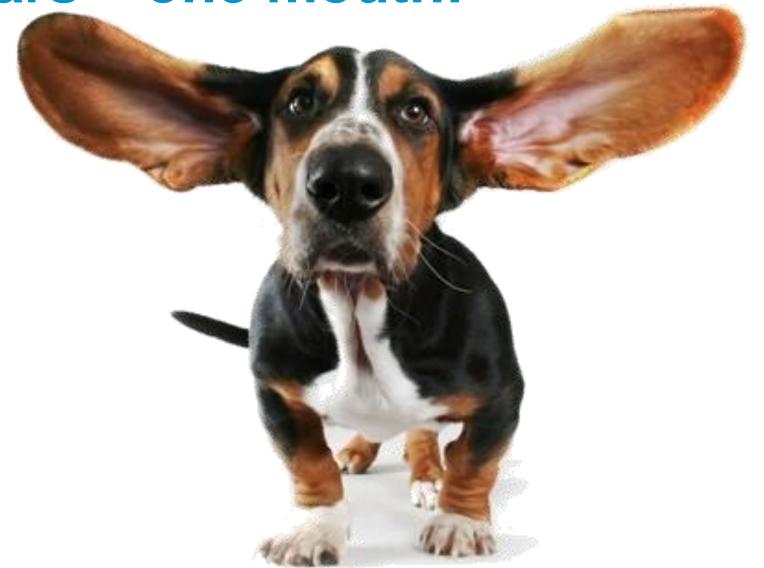
Competitor overview





Two ears – one mouth!









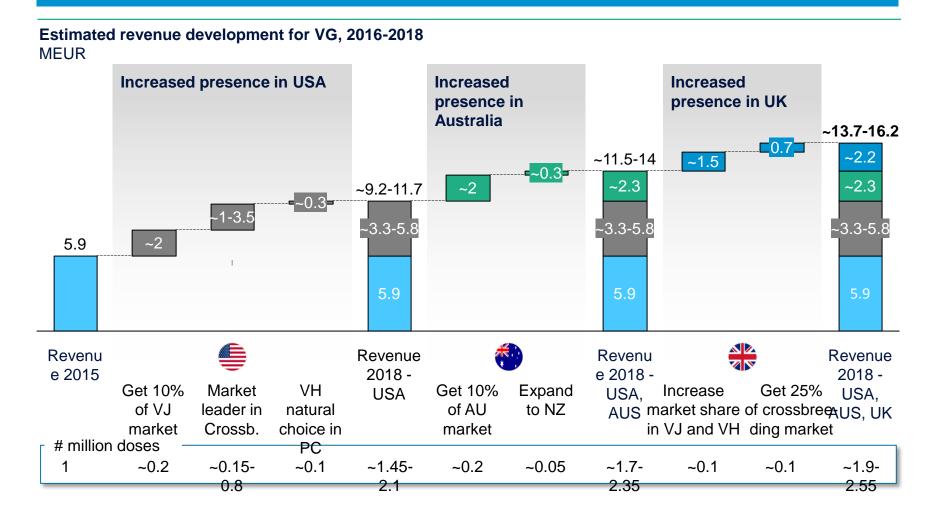




Reaching the sales target of 2.5 doses/14 MEUR



Seven projects have to be exploited and implemented to secure the sales target of 14 millions to be reached a growth in underlying export markets might or might not happen why it is important to initiated and accomplish the seven projects



Farmer segments

Custodians Lifestylers

Pragmatists

Modern Family Business

Challenged Enterprise

Corporate farm



Farming is a way of life

Farm and Family life closely linked



Farming as joy

Farming NOT a main source of income



Love for farming

Need to make money

Enjoy life



Focus on family success and income

Enjoy farming lifestyle

Value family legacy

Focus on growth



Farming is a burden and a struggle

Pessimistic



Heavy business focus and profitdriven

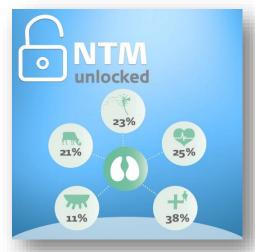
Focus on growth and reaching financial goals

EMOTIONAL

RATIONAL / HARD

Social Media Activities















VikingDefenceTM

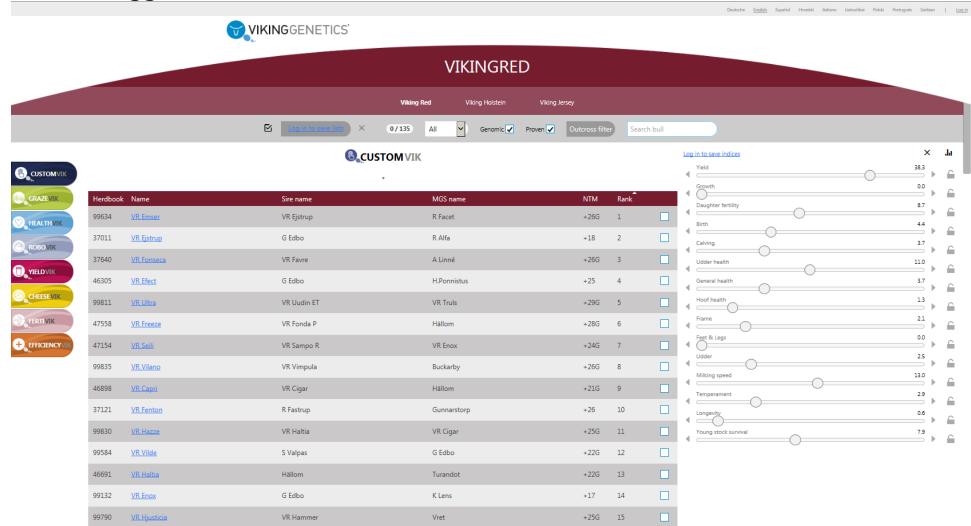




Customized ranking

V

rank.vikinggenetics.com



Updated VikMate



VIKINGGENETICS'



Distributor's sires + Add Delete selecte Interbulld Semen Name Breed Country Doses Cows % of Heifers % of HOLDNKM000000255945 Conv HOL DNK 100 Delete HOLDNKM000000255952 Conv VH Arlie DNK 100 Delete HOLSWEM000000045062 Conv VH Beta SWE 100 Delete HOLSWEM000000045062 X-Vik VH Beta SWE 25 Delete JERDNKM000000304135 VJ Falcao DNK 250 Conv Delete JERDNKM000000304135 X-Vik VJ Falcao DNK 50 Delete RDCDNKM000000037125 150 VR Gaffa DNK Conv Delete RDCFINM000000046898 VR Capri 200 Delete

LOG OUT

New "daughter" - VG UK



The French Connection



- Jersey program based on joint population
 - Base is VJ breeding program and Nordic Jersey reference
 - VG has ownership to all bulls
 - VG responsible for all costs in relation to breeding program and evaluations
 - Evolution has access to all VG Jersey bulls and will be considered VJ home market
 - Evolution can buy doses to present VG home market prices



Mindmapping our challenges





Stronger together faba + VÄXA • VIKING +

Thank you for your attention!







