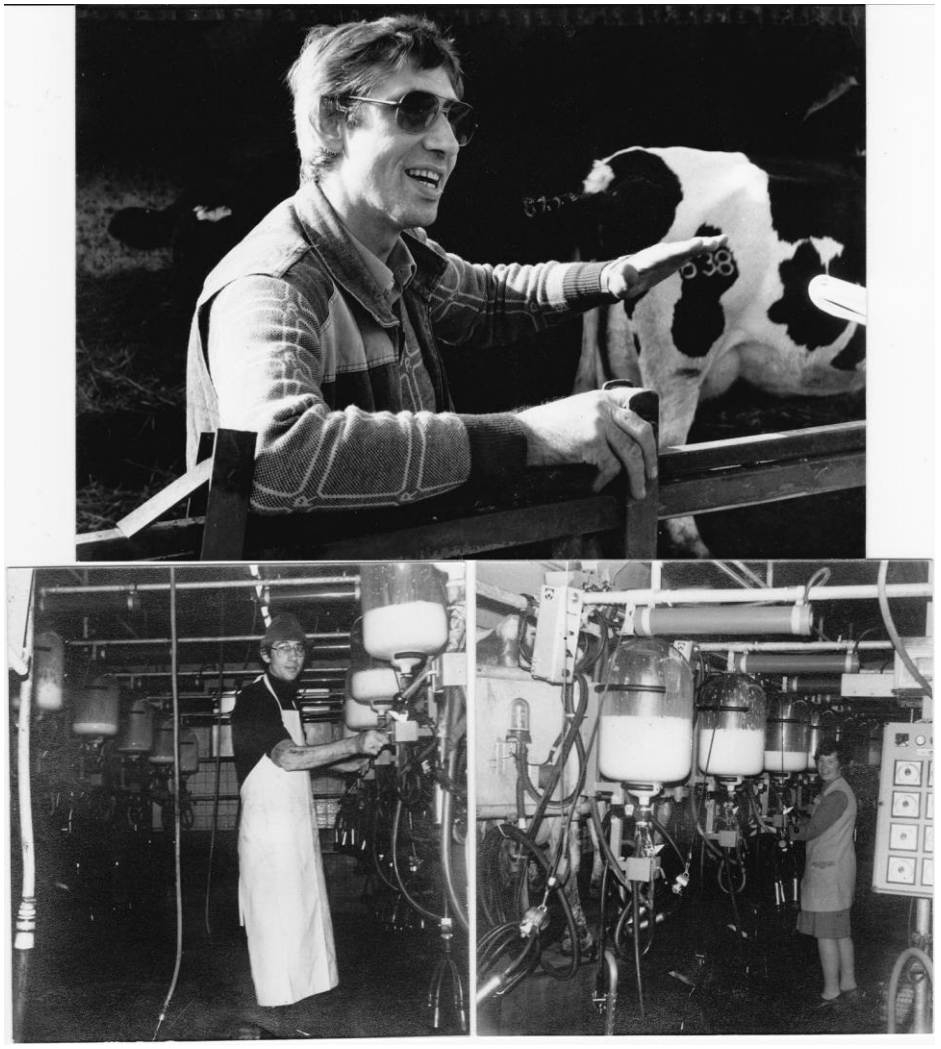
Our Strategy

- Presentation Triple-A vereniging, Diessen 30.11.2019

Who we are



Where we come from

Growing through Cooperation

- Farm Overview
  - 250 ha (60ha owned)
    - 150 ha 5 km Area
    - 100 ha 20 km Area (Eifel/Germany)
    - Everything but not flat
    - 200 m difference between lowest and highest fields
  - Main Crops :
  - Corn 90 ha
  - Permanent Grass 70 ha
  - Rygrass + Alfalfa : 40 ha
  - Small Grains : 50 ha
- Different soil types and growing seasons
- 400 cows
- Production 2019 :
- 10.900 kg 3,93% F 3,39% P
- 34 kg
- 360 heifers
  - Heifer raising agreement with 2 cooperating farms (120 each)
  - 120 heifers from 0-6 month at the home farm (do not count for land usage)

Whats my mindset ?

We manage, house and feed our animals in order to keep them healthy, reproductive and productive

Whats my Agenda for today ?

- Management
- Housing
- Feeding
- Health
- Reproduction
- Production Goals

Management : the people get it done

- Field work in Luxembourg
  - 80 % done by our neighbor and his son
  - 20 % by my uncle and a friend (both retired)
- Field work in Germany gets coordinated and done by a local farmer
- Herd management
  - My father and me
  - 4 polish employees rotating (2 month work 1 month home)
- Network of 14 people including family members, contract workers, heifer raisers, retired part time workers and employees
- Well trained, motivated, long time worker is key factor for good herd management...(and farmer satisfaction)

Current trends in Herd Management

- HI 10.2019 : affinity for new technology more important than passion for cows
- Sensors and Computers are complementary tools (just what genomics should be in breeding)
- Stay in “physical touch” with the individual cow on a day to day basis in order to keep a close relation to the herd
- Don't loose your “cow sense” but teach it to the next generation. Technology is there to complement not to replace it
- Passion for cows is the most important characteristic for a good dairy farmer.
- Connection to and focus on the individual animal keeps acceptance of society high for what we do. Unfortunately on a very low level right now.

Housing : a low stress production environment

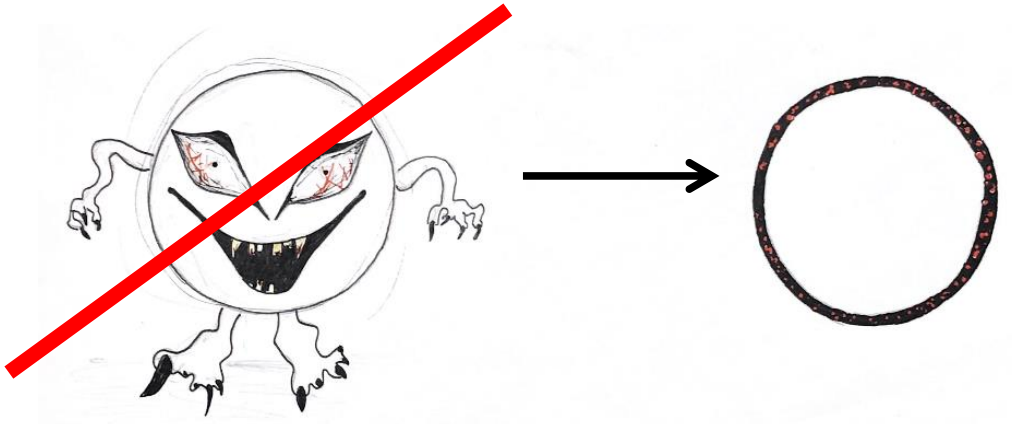
What I m not going to talk about is :

- Light
- Air
- Availability of Water and Feed
- Characteristics of the floor and square meters per cow
- Dimensions and characteristics of the stalls
- Robot or milking parlor setup

- Special needs areas for sick and fresh cows
- easy access foot trimming box
- Because we all know that these factors have an enormous effect on animal welfare, health and production
- Stockmanship skills of the people working with the animals can make the difference

Deep Stall Bedding Management

- Keep the stalls full
- Raking and levelling 2x/Day
- Pathogenic Bacteria die in the presence of oxygen and the absence of water.
- Keep the top layer dry and the bottom layer composting



Feeding a healthy ration

?

The impact of maldigestion

- Ration change in terms of nutrient composition or availability
  - Some rumen microbial populations decline, others strive
  - Has an impact on rumen pH
  - pH variation further enhances changes in microbial population
  - The system risks to get unstable
- Maldigestion
  - Dying Bacteria in the intestinal tract
  - Endotoxines (LPS) release
  - Endotoxins in the Blood
  - Big trouble for the cow
- Smooth transitioning is saving money and antibiotics

Why did I start low Protein feeding in 2014 : It was all about health

- Dr. Schmack states :
  - Protein gets overfed since Soybean meal gets imported
  - MUN recommendations have wrongly been set on 25 mg/dL (he recommends <10)
  - We are slowly but continuously ruining the health of our animals
    - Liver and kidney cells degenerate under the continuous effect of ammonia and ureum
    - This degeneration gets transmitted to the unborn calf because ammonia and ureum pass the placental barrier.

Arguments on the table

- Have seen a lot of health and reproduction problems in Herds with high MUN (>30)
- Ammonia is TOXIC
- Detoxification of Ammonia in the Liver costs metabolic energy
- Ammonia and Ureum have a dose dependent detrimental effect on Liver and Kidney

- Cow is among the most efficient N users on the Planet
- So why not let her be efficient ("...keep protein on the safe side ")
- Protein is the most expensive feed to buy
- I decided to give it a try to see how far I come
- Environmental effects on Ammonia excretion were of no interest to me in

ASTA - Laboratoire de contrôle de lait cru

Zurück

Analysenbericht

Betrieb: **5032**
PROCOLA
02/12/2014

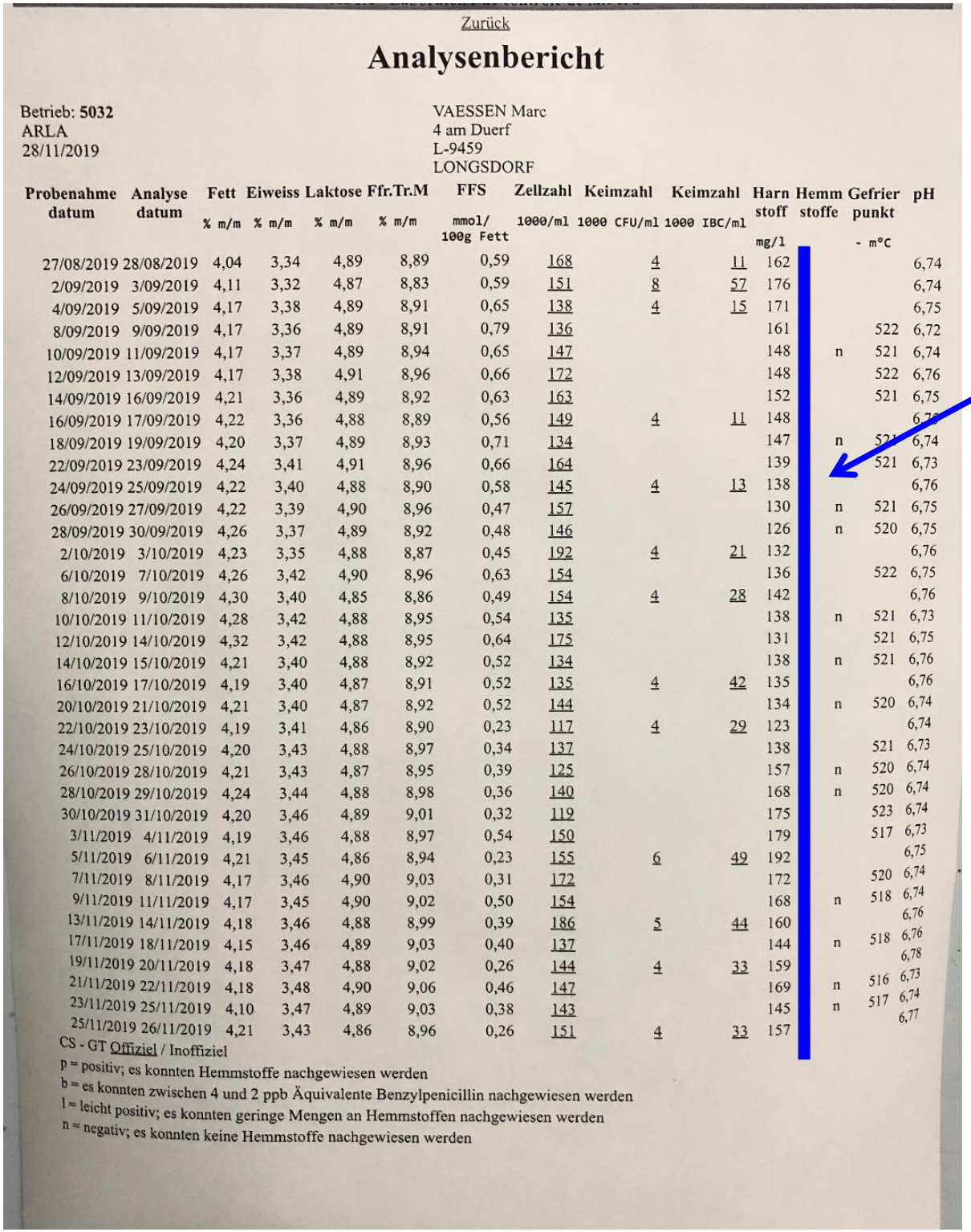
VAESSEN Henri
& Marc
4 am Duerf
L-9459
LONGSDORF

Probenahme datum	Analyse datum	Fett % m/m	Eiweiss % m/m	Laktose % m/m	Ffr.Tr.M % m/m	Zellzahl 1000/ml	Keimzahl 1000/ml	Harnstoff	Hemmstoffe	Gefrierpunkt	pH
2/09/2014	3/09/2014	3,67	3,26	4,81	8,78	164		230		517	6,63
4/09/2014	5/09/2014	3,62	3,25	4,77	8,75	214	4	207			6,68
8/09/2014	9/09/2014	3,67	3,24	4,81	8,74	185		240		517	6,67
10/09/2014	12/09/2014	3,69	3,25	4,83	8,76	181		260		519	6,68
14/09/2014	15/09/2014	3,59	3,23	4,80	8,71	195		211	-	515	6,69
16/09/2014	17/09/2014	3,56	3,19	4,74	8,62	160		227		508	6,69
18/09/2014	19/09/2014	3,65	3,18	4,77	8,67	193		241			6,74
20/09/2014	22/09/2014	3,71	3,19	4,82	8,69	188		257	-	518	6,71
22/09/2014	23/09/2014	3,68	3,18	4,80	8,69	157	4	222			6,73
24/09/2014	25/09/2014	3,65	3,22	4,83	8,73	161		196	-	519	6,68
28/09/2014	29/09/2014	3,60	3,18	4,78	8,70	150	4	180			6,68
2/10/2014	3/10/2014	3,65	3,11	4,80	8,59	147		198		508	6,68
6/10/2014	7/10/2014	3,69	3,16	4,80	8,70	168		228			6,71
8/10/2014	9/10/2014	3,61	3,20	4,83	8,71	144		166	-	516	6,70
12/10/2014	13/10/2014	3,60	3,21	4,80	8,72	171		150	-	516	6,68
14/10/2014	15/10/2014	3,60	3,18	4,77	8,67	183	4	165			6,65
20/10/2014	21/10/2014	3,62	3,21	4,78	8,71	143	16	181			6,70
22/10/2014	23/10/2014	3,66	3,18	4,79	8,73	152	4	153			6,70
26/10/2014	27/10/2014	3,56	3,17	4,85	8,72	154		104	-	517	6,67
28/10/2014	29/10/2014	3,68	3,21	4,81	8,73	167		116			6,67
3/11/2014	4/11/2014	3,71	3,19	4,79	8,71	171		117	-	515	6,67
5/11/2014	6/11/2014	3,60	3,13	4,75	8,60	178	158	119			6,69
9/11/2014	10/11/2014	3,69	3,16	4,78	8,70	136	159	103			6,67
11/11/2014	12/11/2014	3,74	3,17	4,81	8,73	154		88		516	6,66
13/11/2014	14/11/2014	3,69	3,18	4,78	8,69	142		73	-	516	6,66
17/11/2014	18/11/2014	3,67	3,18	4,78	8,73	172	210	86			6,67
19/11/2014	20/11/2014	3,67	3,16	4,81	8,70	115		77		517	6,65
23/11/2014	24/11/2014	3,68	3,21	4,80	8,73	153		105		516	6,68
25/11/2014	26/11/2014	3,63	3,18	4,80	8,72	161	222	94			6,68
27/11/2014	28/11/2014	3,68	3,20	4,82	8,73	141		109	-	515	6,68
1/12/2014	2/12/2014	3,69	3,23	4,82	8,80	159	4	105			6,68

CS - GT Offiziel / Inoffiziel

Lowering X P
by +-2 % in Ration

- Before
- Transition
- After



Zurück

Analysenbericht

Betrieb: **5032**
ARLA
28/11/2019

VAESSEN Marc
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LONGSDORF

Probenahme datum	Analyse datum	Fett % m/m	Eiweiss % m/m	Laktose % m/m	Ffr.Tr.M % m/m	FFS mmol/ 100g Fett	Zellzahl 1000/ml	Keimzahl 1000 CFU/ml	Keimzahl 1000 IBC/ml	Harn stoff mg/l	Hemm stoffe	Gefrier punkt - m°C	pH
27/08/2019	28/08/2019	4,04	3,34	4,89	8,89	0,59	168	4	11	162			6,74
2/09/2019	3/09/2019	4,11	3,32	4,87	8,83	0,59	151	8	57	176			6,74
4/09/2019	5/09/2019	4,17	3,38	4,89	8,91	0,65	138	4	15	171			6,75
8/09/2019	9/09/2019	4,17	3,36	4,89	8,91	0,79	136			161		522	6,72
10/09/2019	11/09/2019	4,17	3,37	4,89	8,94	0,65	147			148	n	521	6,74
12/09/2019	13/09/2019	4,17	3,38	4,91	8,96	0,66	172			148		522	6,76
14/09/2019	16/09/2019	4,21	3,36	4,89	8,92	0,63	163			152		521	6,75
16/09/2019	17/09/2019	4,22	3,36	4,88	8,89	0,56	149	4	11	148			6,7
18/09/2019	19/09/2019	4,20	3,37	4,89	8,93	0,71	134			147	n	52	6,74
22/09/2019	23/09/2019	4,24	3,41	4,91	8,96	0,66	164			139		521	6,73
24/09/2019	25/09/2019	4,22	3,40	4,88	8,90	0,58	145	4	13	138			6,76
26/09/2019	27/09/2019	4,22	3,39	4,90	8,96	0,47	157			130	n	521	6,75
28/09/2019	30/09/2019	4,26	3,37	4,89	8,92	0,48	146			126	n	520	6,75
2/10/2019	3/10/2019	4,23	3,35	4,88	8,87	0,45	192	4	21	132			6,76
6/10/2019	7/10/2019	4,26	3,42	4,90	8,96	0,63	154			136		522	6,75
8/10/2019	9/10/2019	4,30	3,40	4,85	8,86	0,49	154	4	28	142			6,76
10/10/2019	11/10/2019	4,28	3,42	4,88	8,95	0,54	135			138	n	521	6,73
12/10/2019	14/10/2019	4,32	3,42	4,88	8,95	0,64	175			131		521	6,75
14/10/2019	15/10/2019	4,21	3,40	4,88	8,92	0,52	134			138	n	521	6,76
16/10/2019	17/10/2019	4,19	3,40	4,87	8,91	0,52	135	4	42	135			6,76
20/10/2019	21/10/2019	4,21	3,40	4,87	8,92	0,52	144			134	n	520	6,74
22/10/2019	23/10/2019	4,19	3,41	4,86	8,90	0,23	117	4	29	123			6,74
24/10/2019	25/10/2019	4,20	3,43	4,88	8,97	0,34	137			138		521	6,73
26/10/2019	28/10/2019	4,21	3,43	4,87	8,95	0,39	125			157	n	520	6,74
28/10/2019	29/10/2019	4,24	3,44	4,88	8,98	0,36	140			168	n	520	6,74
30/10/2019	31/10/2019	4,20	3,46	4,89	9,01	0,32	119			175		523	6,74
3/11/2019	4/11/2019	4,19	3,46	4,88	8,97	0,54	150			179		517	6,73
5/11/2019	6/11/2019	4,21	3,45	4,86	8,94	0,23	155	6	49	192			6,75
7/11/2019	8/11/2019	4,17	3,46	4,90	9,03	0,31	172			172		520	6,74
9/11/2019	11/11/2019	4,17	3,45	4,90	9,02	0,50	154			168	n	518	6,74
13/11/2019	14/11/2019	4,18	3,46	4,88	8,99	0,39	186	5	44	160			6,76
17/11/2019	18/11/2019	4,15	3,46	4,89	9,03	0,40	137			144	n	518	6,76
19/11/2019	20/11/2019	4,18	3,47	4,88	9,02	0,26	144	4	33	159			6,78
21/11/2019	22/11/2019	4,18	3,48	4,90	9,06	0,46	147			169	n	516	6,73
23/11/2019	25/11/2019	4,10	3,47	4,89	9,03	0,38	143			145	n	517	6,74
25/11/2019	26/11/2019	4,21	3,43	4,86	8,96	0,26	151	4	33	157			6,77

CS - GT Offiziel / Inoffiziel
p = positiv; es konnten Hemmstoffe nachgewiesen werden
b = es konnten zwischen 4 und 2 ppb Äquivalente Benzylpenicillin nachgewiesen werden
l = leicht positiv; es konnten geringe Mengen an Hemmstoffen nachgewiesen werden
n = negativ; es konnten keine Hemmstoffe nachgewiesen werden

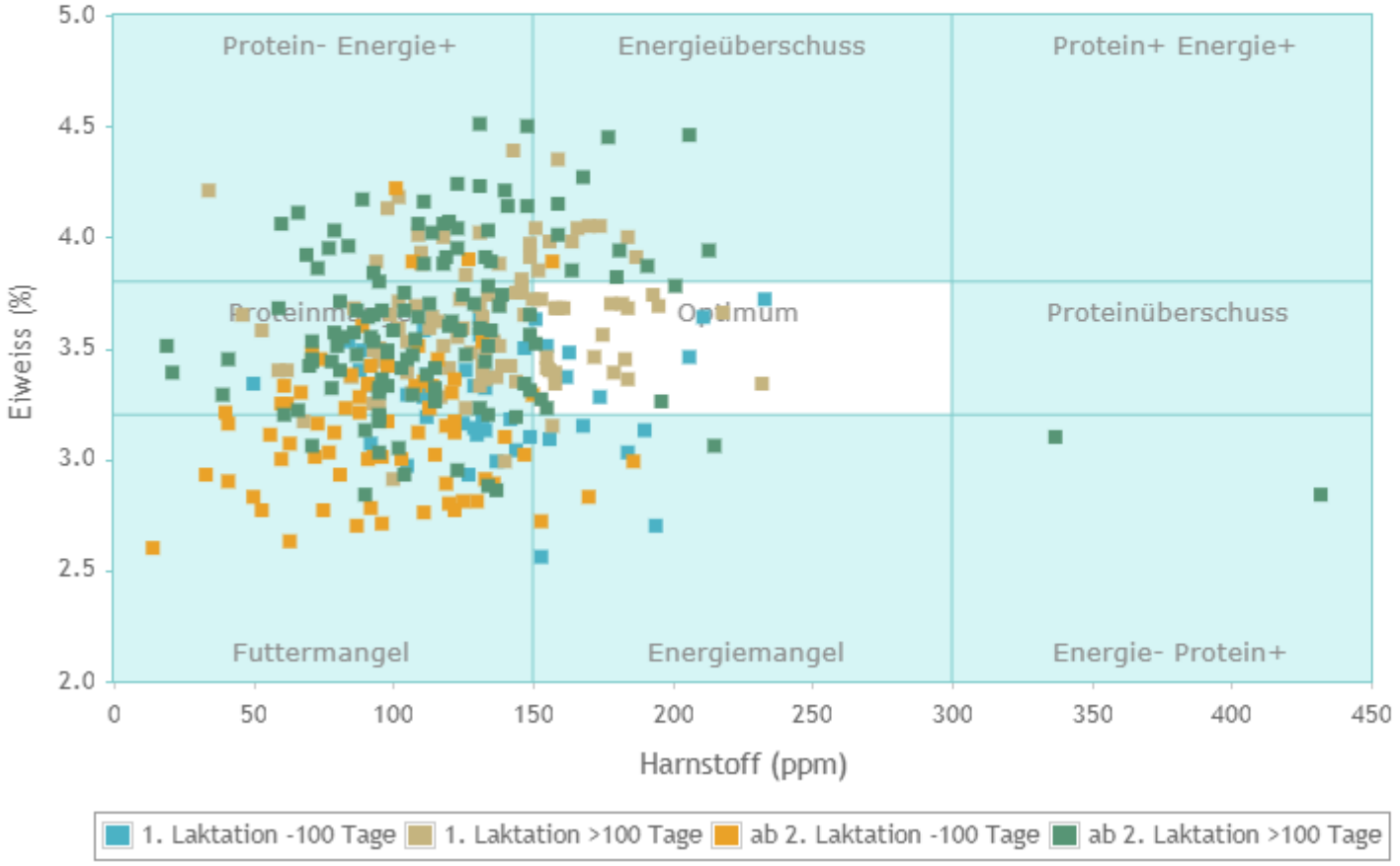
2019
Feeding 14-15% XP in the ration

- Adjusting Protein feeding all the time
- Try to keep MUN under 15
- Monitor Fiber digestion in Manure
- No more “Lead factor”

Management

Nährstoffversorgung Harnstoff/Eiweiß

10.2019 | alle Tiere



Herde

Jahresdurchschnitt

Jahr	A + B	HB	Gesamt	Ø Alter	Ø M-tg	M-kg	F-%	F-kg	E-%	E-kg	F-kg + E-kg
2019	340,36	380	385	4,0	315	10.912	3,96	432	3,37	368	800
2018	282,47	301	304	4,1	321	11.503	3,66	421	3,38	389	810
2017	267,49	269	269	4,1	325	11.452	3,68	422	3,40	389	811
2016	246,74	264	264	3,9	328	11.908	3,64	434	3,33	396	830
2015	200,41	221	221	4,1	320	12.012	3,50	421	3,26	391	812
2014	174,91	192	192	4,3	308	11.023	3,79	418	3,28	362	780
2013	162,17	179	179	4,1	316	10.462	3,82	400	3,34	349	749
2012	127,72	141	141	4,3	326	10.876	3,78	411	3,34	363	774
2011	130,60	127	127	4,5	316	11.033	3,58	395	3,33	367	762
2010	128,67	132	132	4,3	312	10.987	3,52	387	3,31	364	751

- 2015
- Low XP
- 812 kg F+P
- 2014
- Standard XP
- 780 kg F+P

Low Protein feeding translates into low Manure N

LE GOUVERNEMENT
DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère de l'Agriculture,
de la Viticulture et de la
Protection des consommateurs

Administration des services techniques de l'agriculture

Division des laboratoires de contrôle et d'essais

ASTA

Ettelbruck, le 24 janvier 2018

VAESSEN MARC
4 AM DUERF
L-9459 LONGSDORF

Untersuchungsbefund B180346E1800829

Probe : 0040/18: Gülle separiert flüssig
Art der Probe : Kuhgülle
Annahme : 15.01.2018
Betriebsnummer : 388-050

Analyse	i.d. ursprüngl. Substanz	i.d. Trockensubstanz
Trockensubstanz	5,1 %	
Gesamtstickstoff (N)	2,2 kg / t	42,3 kg / t
Phosphor (P2O5)	1,0 kg / t	19,8 kg / t
Kalium (K2O)	3,7 kg / t	71,6 kg / t
Magnesium (MgO)	1,2 kg / t	22,6 kg / t

Paul Thill
ingénieur

LE GOUVERNEMENT
DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère de l'Agriculture, de la Viticulture
et du Développement rural

Administration des services techniques
de l'agriculture

Ettelbruck, le 26 juillet 2019

VAESSEN MARC
4 AM DUERF
L-9459 LONGSDORF

Düngungshinweis B192178E1912369

Probe : 0341/19: Gülle Stallmitte, unsepariert
Art der Probe : Kuhgülle
Annahme : 18.07.2019
Betriebsnummer : 388-050

Unter Berücksichtigung des analysierten Stickstoffgehaltes beträgt die zulässige Ausbringungsmenge des organischen Düngers bei:

	80 kg N/ha	100 kg N/ha	120 kg N/ha	130 kg N/ha	140 kg N/ha	150 kg N/ha	170 kg N/ha
Gülle/Mist	36,4 t	45,5 t	54,5 t	59,1 t	63,6 t	68,2 t	77,3 t

Dem entsprechen:

Phosphor (P2O5)	32,8 kg	41,0 kg	49,0 kg	53,2 kg	57,2 kg	61,4 kg	69,6 kg
Kalium (K2O)	83,7 kg	104,6 kg	125,4 kg	135,9 kg	146,3 kg	156,9 kg	177,8 kg
Magnesium (MgO)	29,1 kg	36,4 kg	43,6 kg	47,3 kg	50,9 kg	54,6 kg	61,8 kg

Wichtig:
Dieser Düngungshinweis bezieht sich ausschliesslich auf die reine Ausbringung des von uns analysierten organischen Düngers. Eine eventuelle mineralische Düngung ist nicht mit berücksichtigt.

2,2% N 77cubic meters per ha (170kg N/ha)
(some rainwater in lagoon)

My personal conclusions (so far)

- Lowering Protein is simple on paper but tricky in reality
  - 12-15mg/dl is my current goal
  - Do it in small steps and let the rumen microorganisms adept
  - Fiber fermenting Bacteria suffer first if you go too low (Look for stiff manure)
  - We might be higher in milk production but I doubt it
  - Beware of acidosis when switching protein for starch (watch Fat %)
  - I monitor MUN levels, milk production, components, manure consistency
  - I do adjustments in the range of + or – 150 gr of Protein Mix meal per cow per day

My personal conclusions (so far)

- It works for me
- It makes feeding cows a bit more complicated
- I am convinced that it can be beneficial for cow health
- I always looked at it from the cow nutrition side. Now I feel that the environmental effects will drive the implementation of reduced Protein feeding faster than I ever thought.
- No matter if its a good thing or not !

Reproduction and breeding

- No synchronization programs
- Later insemination and more and more extended lactation
  - Less risk of transition cow problems
  - Potential for higher lifetime performance
  - Need to assess every cow individually.
- Importance of “Do not Breed” Decision
- Use of embryo transfer
  - I hate to inseminate a bad Cow
- Use of genomic testing (Kuhvision)

Why did I start with aAa

- Got a very good herd from my father
  - Influential Bulls : O Man, Mtoto, Outside, Talent, Rudolph, Lee,Mascot, Aerostar...
  - Tried linear mating (mostly for udder improvement) with higher Type bulls like Zenith and Sanchez.
  - Results were mostly disappointing
  - Looked closer at the herd from Gilbert Neu,a client and longtime aAa User
  - I decided to call Maurice Kaul and give it a try

aAa and Genomics

- Reading Phil Hasheiders book left me speechless
  - Round and sharp
  - The relationship of parts
  - Self foot trimming !!!
- When Genomics came
  - I knew it is a good thing that is here to stay
- Strategy was and still is to combine the old and the new to breed better cows (ref : Bob Miller 2011)

- What frustrates me today
  - AI Stud X (05.11.2019) Top 34 Genomic Bulls

aAa	Jersey	Holstein
123		2
126	1	
135		2
156	13	
234	10	28
246	6	
345	1	1
456	3	

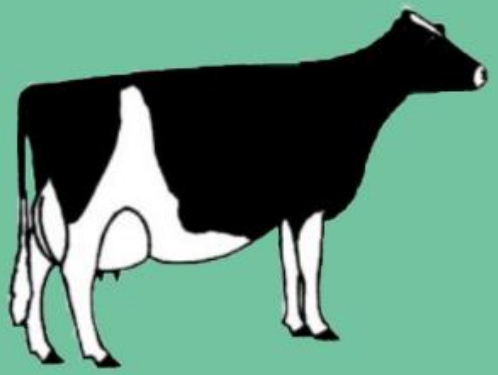
- In Holsteins it is impossible to breed with the genomic elite and yet follow the principles of aAa

Guess which one left the herd last week

Conclusion

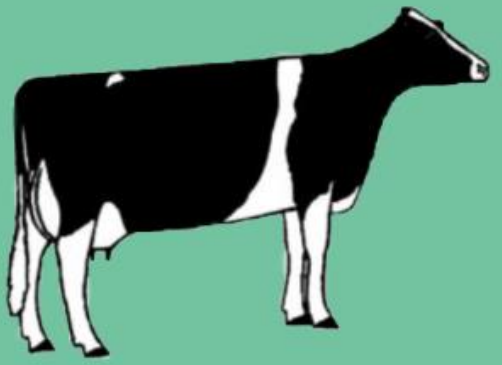
My Goal is to achieve an average lifetime production of more than 50.000 kg and deliver an animal for slaughter that's worth at least 1000.-

My strategy is to provide a low stress production environment, feed a low protein health promoting diet and breed for a high producing and persistent, medium sized, easy calving cow with lots of strength and stamina and no need for foot trimming.



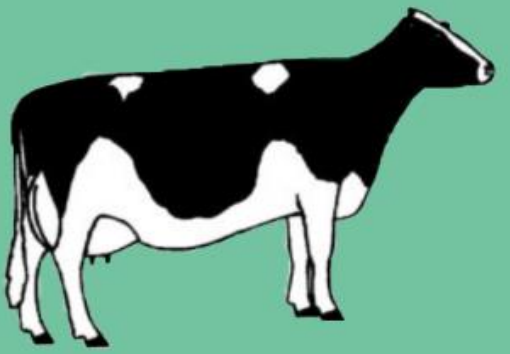
1 - Dairy

More milk for size. Fast milk letdown. Ample will to milk.



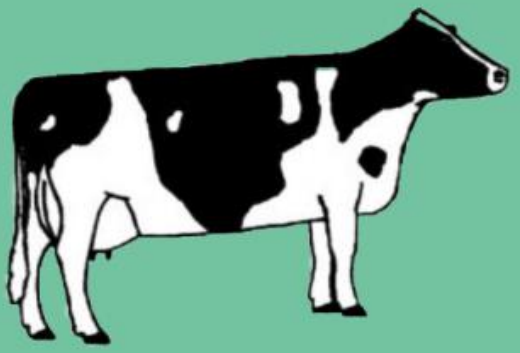
2 - Tall

Faster growth. High, elastic udder for convenient handling & milking.



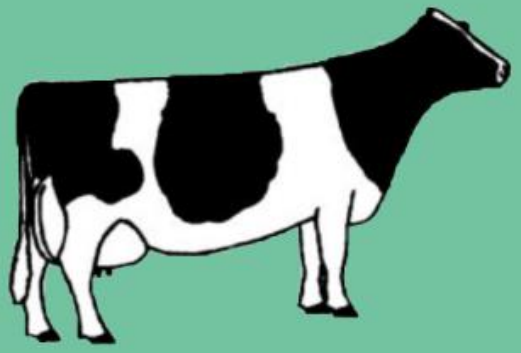
3 - Open

Easy moving. Longer breeding life. Room for udder & calving.



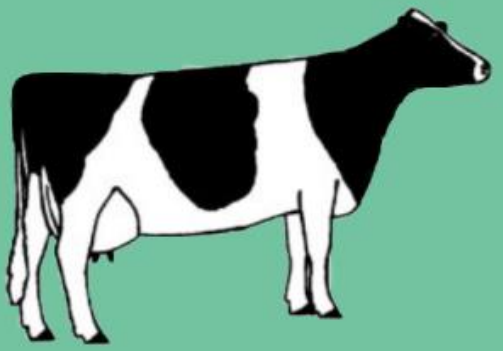
4 - Strong

Larger mature size. Room for heart & lungs. Healthy udder, feet & legs.



5 - Smooth

Less injury to teats & legs. Less awkward. Better appetite & capacity.



6 - Style

Attentive character. More durable bones. Less hoof trimming.