

STØTTET AF

Mælkeafgiftsfonden

Singlestep type traits - Genotyped females getting a phenotype

Trine Andersen, 16. September 2022

SS breeding values from August22 run

SS breeding values from may22 run

Genotypes from april22 monthly evaluation

Looking at breeding values for cows females having phenotypic record for first lactation for august22 run but not for may22 run. Looking at birth year class 2019-2020. The breeding value is the official breeding value, which is a combination of first to third lactation.

the mean breeding value for genotyped cows is the same in Aug22 and May22, and the mean difference is close to zero, which we also expect. When getting a phenotype some cows will increase and some will decrease in breeding value but overall the level of breeding value is the same.

Furthermore, the Singlestep Aug22 run is compared with the Twostep Aug22 run for the same females.

HOL N cows	trait	Mean SS breeding value		STD SS breeding value		Diff = SSaug - SSmay	
		Aug22	May22	Aug22	May22	mean_diff	std_diff
6277	Stature	102.2	102.6	10.4	9.9	-0.4	3.2
6279	Body depth	100.2	100.2	9.0	8.6	0.0	2.5
6279	Chest width	99.7	99.3	9.3	8.8	0.4	2.7
6279	Dairy form	101.9	102.4	7.7	7.4	-0.5	2.5
6279	top line	99.7	100.2	8.1	7.8	-0.5	2.1
6279	Rump width	100.4	100.4	10.2	9.7	0.0	3.0
6279	Rump angle	100.8	100.6	9.3	8.6	0.2	2.8
6279	Rear legs, side view	99.6	99.3	9.8	9.3	0.3	2.9
6279	Rear legs, back rear view	100.7	101.1	9.3	8.8	-0.3	2.6
6279	Hock quality	101.2	101.7	8.6	8.3	-0.5	2.2
6279	Bone quality	101.0	101.6	9.6	9.3	-0.6	2.4
6279	Foot angle	101.6	101.6	8.0	7.6	-0.1	2.6
6277	Fore udder attachment	102.2	102.8	8.7	8.3	-0.7	2.5
6277	Rear udder height	102.8	103.6	9.2	9.0	-0.8	2.4
6277	Rear udder width	101.7	102.1	8.5	8.4	-0.4	2.2
6277	Udder cleft support	100.3	100.6	8.7	8.2	-0.3	2.4
6277	Udder depth	102.7	103.5	10.4	9.9	-0.8	2.6
6277	Teat length	100.5	100.5	8.7	8.3	0.0	2.4
6277	Teat thickness	99.8	99.7	9.6	9.2	0.1	2.6
6277	Teat placement front	101.3	101.5	9.2	8.8	-0.2	2.5
6277	Teat placement Back	100.7	101.0	9.2	8.7	-0.3	2.5
6277	Udder balance	100.8	101.4	11.0	10.6	-0.6	2.2
6277	Body	101.4	101.6	10.0	9.6	-0.2	2.6
6279	leg	101.2	101.8	7.9	7.6	-0.7	2.1
6277	udder	102.8	103.6	9.1	8.6	-0.8	2.5

RDC N cows	trait	Mean SS breeding value		STD SS breeding value		Diff = SSaug - SSmay	
		Aug22	May22	Aug22	May22	mean_diff	std_diff
3515	Stature	101.5	101.9	10.0	9.6	-0.4	2.2
3515	Body depth	102.6	102.9	9.3	9.1	-0.3	2.3
3515	Chest width	100.5	100.6	8.6	8.3	-0.1	2.4
3515	Dairy form	102.2	102.5	4.6	4.4	-0.3	1.8
3515	top line	101.2	100.7	8.1	7.8	0.5	2.3
3515	Rump width	101.4	101.5	9.7	9.3	-0.1	2.4
3515	Rump angle	100.6	100.1	7.6	7.3	0.5	2.1
3515	Rear legs, side view	100.9	101.2	6.7	6.4	-0.3	1.9
3515	Rear legs, back rear view	102.5	103.0	7.2	6.9	-0.5	2.0
3515	Hock quality	102.8	102.6	8.7	8.3	0.2	3.0
3515	Bone quality	102.4	102.5	9.6	9.1	-0.1	3.4
3515	Foot angle	100.6	101.1	6.0	5.8	-0.4	1.9
3514	Fore udder attachment	103.1	103.4	8.2	7.6	-0.4	2.8
3514	Rear udder height	102.0	102.3	7.9	7.3	-0.4	2.4
3514	Rear udder width	102.1	102.7	7.5	7.2	-0.6	2.5
3514	Udder cleft support	101.7	102.1	9.3	8.6	-0.4	2.8
3514	Udder depth	102.5	102.9	8.9	8.5	-0.4	2.5
3514	Teat length	100.5	101.0	9.0	8.6	-0.5	2.7
3514	Teat thickness	101.0	101.2	8.4	7.8	-0.2	2.1
3514	Teat placement front	101.4	101.9	9.5	9.2	-0.5	2.5
3514	Teat placement Back	101.5	101.3	9.4	8.9	0.2	2.7
3514	Udder balance	100.7	101.5	9.8	9.4	-0.8	2.1
3515	Body	102.3	102.6	9.4	9.2	-0.3	2.2
3515	leg	103.3	103.6	8.9	8.6	-0.3	2.8
3514	udder	102.9	103.7	7.3	6.8	-0.8	2.1

JER		Mean SS breeding value		STD SS breeding value		Diff = SSaug - SSmay	
N cows	trait	Aug22	May22	Aug22	May22	mean_diff	std_diff
2536	Stature	104.1	104.1	9.0	8.8	0.0	2.0
2539	Body depth	99.5	99.5	9.7	9.5	0.0	2.2
2539	Chest width	99.5	99.3	10.8	10.7	0.2	2.3
2539	Dairy form	103.0	103.4	9.4	9.0	-0.4	2.2
2539	top line	103.1	103.1	8.9	8.5	0.0	2.0
2539	Rump width	100.4	100.2	9.1	8.9	0.2	2.1
2539	Rump angle	100.7	100.8	8.7	8.5	-0.1	2.0
2539	Rear legs, side view	101.0	100.9	8.5	8.4	0.1	1.9
2539	Rear legs, back rear view	101.1	100.9	8.2	7.9	0.2	1.7
2539	Hock quality	103.1	103.4	12.1	11.5	-0.3	2.3
2539	Bone quality	101.8	102.0	11.0	10.9	-0.3	2.2
2539	Foot angle	101.6	101.7	8.8	8.4	-0.1	2.1
2538	Fore udder attachment	102.6	102.3	9.9	9.9	0.2	2.1
2538	Rear udder height	102.9	103.0	7.7	7.3	-0.1	1.9
2538	Rear udder width	102.2	102.3	7.6	7.5	-0.1	1.8
2538	Udder cleft support	100.9	101.0	9.3	8.9	0.0	2.1
2538	Udder depth	103.9	104.0	10.3	9.9	-0.1	2.1
2539	Teat length	100.8	100.6	12.3	11.9	0.2	3.0
2539	Teat thickness	100.9	101.0	8.9	8.9	0.0	1.9
2538	Teat placement front	102.0	102.4	10.1	9.8	-0.4	2.0
2538	Teat placement Back	101.4	101.7	11.3	11.0	-0.3	2.1
2538	Udder balance	99.7	99.8	8.8	8.7	0.0	1.8
2536	Body	103.4	103.5	9.2	9.0	0.0	1.9
2539	leg	102.4	102.6	9.2	9.1	-0.2	1.9
2538	udder	103.5	103.4	9.6	9.4	0.1	1.8

HOL		Mean breeding value		STD breeding value		Diff = SSAug - twoAug	
N cows	trait	SS Aug22	Two Aug22	SS Aug22	Two Aug22	mean_diff	std_diff
6277	Stature	102.2	101.2	10.4	9.7	1.0	2.3
6279	Body depth	100.2	99.7	9.0	8.7	0.5	2.5
6279	Chest width	99.7	99.3	9.3	9.2	0.4	3.0
6279	Dairy form	101.9	101.5	7.7	7.5	0.4	2.4
6279	top line	99.7	99.9	8.1	8.0	-0.1	2.3
6279	Rump width	100.4	99.9	10.2	10.1	0.4	2.7
6279	Rump angle	100.8	100.5	9.3	9.0	0.3	2.4
6279	Rear legs, side view	99.6	100.3	9.8	9.5	-0.7	3.0
6279	Rear legs, back rear view	100.7	99.2	9.3	8.9	1.5	3.3
6279	Hock quality	101.2	101.1	8.6	8.0	0.1	2.5
6279	Bone quality	101.0	101.1	9.6	9.2	-0.1	2.4
6279	Foot angle	101.6	100.7	8.0	7.6	0.9	3.3
6277	Fore udder attachment	102.2	100.8	8.7	8.1	1.4	2.8
6277	Rear udder height	102.8	101.8	9.2	9.0	1.0	2.9
6277	Rear udder width	101.7	100.6	8.5	8.1	1.1	2.5
6277	Udder cleft support	100.3	99.4	8.7	8.7	0.9	2.8
6277	Udder depth	102.7	102.5	10.4	9.8	0.2	2.6
6277	Teat length	100.5	100.5	8.7	8.7	0.0	2.2
6277	Teat thickness	99.8	100.0	9.6	8.8	-0.2	2.4
6277	Teat placement front	101.3	100.8	9.2	8.9	0.4	2.3
6277	Teat placement Back	100.7	100.9	9.2	10.0	-0.2	2.8
6277	Udder balance	100.8	100.3	11.0	10.5	0.5	2.8
6277	Body	101.4	100.6	10.0	9.8	0.9	2.5
6279	leg	101.2	100.1	7.9	7.8	1.1	2.7
6277	udder	102.8	101.5	9.1	8.9	1.3	2.8

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		SS Aug22	Two Aug22	SS Aug22	Two Aug22	mean_diff	std_diff
3515	Stature	101.5	99.9	10.0	7.1	1.6	3.6
3515	Body depth	102.6	101.5	9.3	8.7	1.1	2.1
3515	Chest width	100.5	100.6	8.6	8.4	-0.1	2.5
3515	Dairy form	102.2	101.5	4.6	4.8	0.7	1.9
3515	top line	101.2	100.9	8.1	8.2	0.3	2.1
3515	Rump width	101.4	100.9	9.7	8.4	0.5	2.4
3515	Rump angle	100.6	100.6	7.6	7.7	0.0	1.8
3515	Rear legs, side view	100.9	101.4	6.7	7.0	-0.5	1.7
3515	Rear legs, back rear view	102.5	102.0	7.2	7.3	0.5	2.2
3515	Hock quality	102.8	101.8	8.7	7.5	1.0	2.2
3515	Bone quality	102.4	101.5	9.6	8.3	0.9	2.3
3515	Foot angle	100.6	100.3	6.0	5.9	0.3	2.0
3514	Fore udder attachment	103.1	101.4	8.2	7.5	1.6	2.4
3514	Rear udder height	102.0	100.3	7.9	7.1	1.6	2.3
3514	Rear udder width	102.1	100.5	7.5	7.3	1.6	1.9
3514	Udder cleft support	101.7	100.5	9.3	9.2	1.2	2.4
3514	Udder depth	102.5	101.1	8.9	8.4	1.4	1.9
3514	Teat length	100.5	100.9	9.0	8.5	-0.4	1.8
3514	Teat thickness	101.0	101.4	8.4	8.6	-0.4	1.7
3514	Teat placement front	101.4	100.2	9.5	9.2	1.2	2.2
3514	Teat placement Back	101.5	100.3	9.4	10.4	1.2	3.1
3514	Udder balance	100.7	99.9	9.8	9.7	0.8	2.2
3515	Body	102.3	101.3	9.4	8.5	1.0	2.2
3515	leg	103.3	101.9	8.9	8.0	1.4	2.4
3514	udder	102.9	101.2	7.3	7.0	1.7	1.8

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2536	Stature	104.1	101.9	9.0	9.3	2.3	2.1
2539	Body depth	99.5	99.1	9.7	9.7	0.4	2.3
2539	Chest width	99.5	99.3	10.8	11.8	0.2	3.0
2539	Dairy form	103.0	100.7	9.4	8.7	2.2	2.4
2539	top line	103.1	102.5	8.9	9.0	0.7	2.2
2539	Rump width	100.4	99.6	9.1	10.1	0.8	2.4
2539	Rump angle	100.7	100.4	8.7	9.1	0.3	2.0
2539	Rear legs, side view	101.0	101.4	8.5	8.8	-0.4	2.4
2539	Rear legs, back rear view	101.1	100.6	8.2	9.0	0.5	2.6
2539	Hock quality	103.1	103.2	12.1	13.6	-0.1	3.3
2539	Bone quality	101.8	102.7	11.0	12.3	-0.9	3.1
2539	Foot angle	101.6	100.6	8.8	8.7	1.0	2.6
2538	Fore udder attachment	102.6	101.8	9.9	10.2	0.8	2.2
2538	Rear udder height	102.9	101.8	7.7	7.2	1.1	2.0
2538	Rear udder width	102.2	101.2	7.6	7.3	1.1	2.0
2538	Udder cleft support	100.9	101.0	9.3	9.9	0.0	2.5
2538	Udder depth	103.9	102.7	10.3	9.9	1.2	2.1
2539	Teat length	100.8	100.4	12.3	12.1	0.4	2.3
2539	Teat thickness	100.9	100.8	8.9	9.1	0.1	1.9
2538	Teat placement front	102.0	101.7	10.1	10.8	0.3	2.3
2538	Teat placement Back	101.4	101.5	11.3	13.0	-0.2	3.3
2538	Udder balance	99.7	100.0	8.8	9.8	-0.2	2.3
2536	Body	103.4	101.3	9.2	9.6	2.2	2.2
2539	leg	102.4	101.9	9.2	10.1	0.5	2.7
2538	udder	103.5	102.3	9.6	9.5	1.2	2.1