Calving snell score – summery statistics

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Introduction
A report describing the changes in breeding values for calving traits, when shifting to snell score evaluation for November22 run.

The report describes statistics for these groups
- Nordic AI bulls born >=2010
- Nordic non genotyped females, born >= 2015, with own record
- Nordic genotyped females, born >=2015, with own record
- Nordic genotyped females, born >=2019, without own record

Data
New official snell score breeding values are compared with current official breeding values.

The statistic in the report describes:
- Mean and standard deviation of snell score breeding value
- Mean and standard deviation of current breeding value
- Mean and standard deviation of difference between snell score and current breeding value
- Correlations between snell score and current breeding value
- For the combined traits birth and calv the distribution of differences are shown both as tables and as plot

Programs
/usr/home/nav/nav/calving/run/Effects_of_change_Nov22/HOLRDCJER/
- 1genotyped_cows_without_phenotype.sas
- 2genotyped_cows_with_phenotype.sas
- 3nongenotyped_cows_with_phenotype.sas
- 4Nordic_AI_bulls.sas

For females
Direct traits: divided by geno or nongeno, and by own record or no record
Maternal traits: divided by geno or nongeno, and by own progeny or no progeny

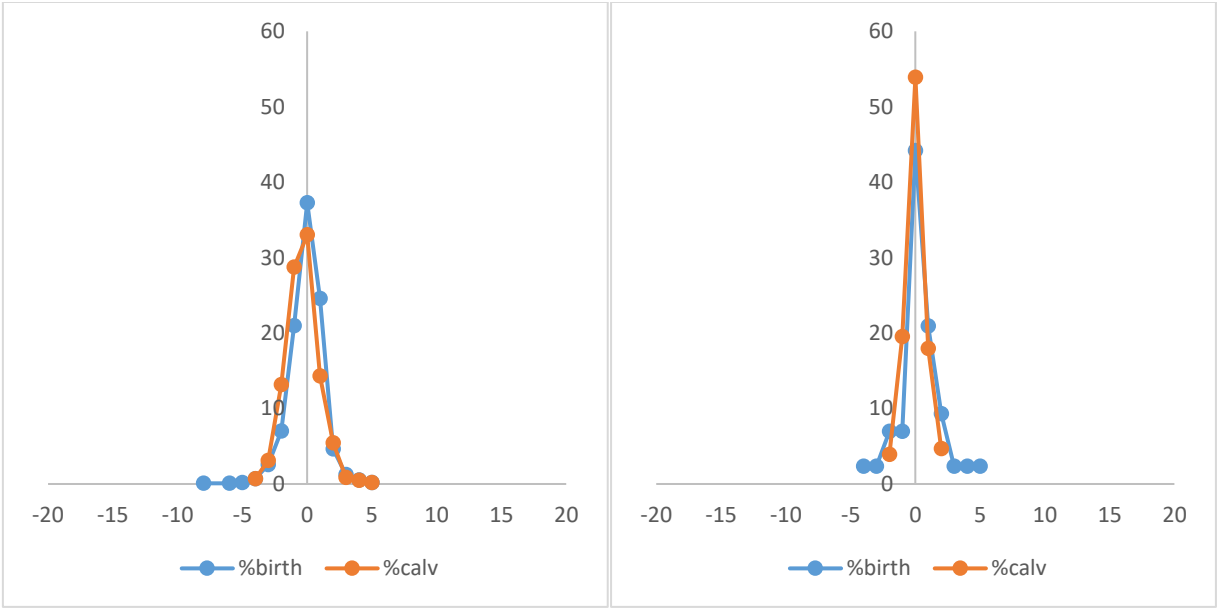
Results
Results are attached in the appendix

Distribution of index change for Nordic AI bulls for combined traits "birth" and "calv".
Overall, the distribution of index changes for AI bulls are distributed around zero as expected. For the bulls having at least 15 offspring the distribution is more widely distributed than for young bulls with no off-spring. RDC bulls distributed more widely than the other breeds. This means that some RDC bulls will have big changes in breeding values when changing to snell score model.

Table X: Distribution of differences for “birth” and “calv” for Nordic AI Holstein Bulls

	With >= 15 offspring, born 2010-2019				With <1 offspring born 2019-2021			
	Number of bulls		% of bulls		Number of bulls		% of bulls	
diff	birth	calv	birth	calv	birth	calv	birth	calv
-8	1		0					
-6	1		0					
-5	2		0					
-4	8	7	1	1	1		2	
-3	29	32	3	3	1		2	
-2	80	135	7	13	3	5	7	4
-1	239	295	21	29	3	25	7	20
0	425	339	37	33	19	69	44	54
1	280	147	25	14	9	23	21	18
2	53	56	5	5	4	6	9	5
3	14	9	1	1	1		2	
4	6	5	1	0	1		2	
5	2	2	0	0	1		2	

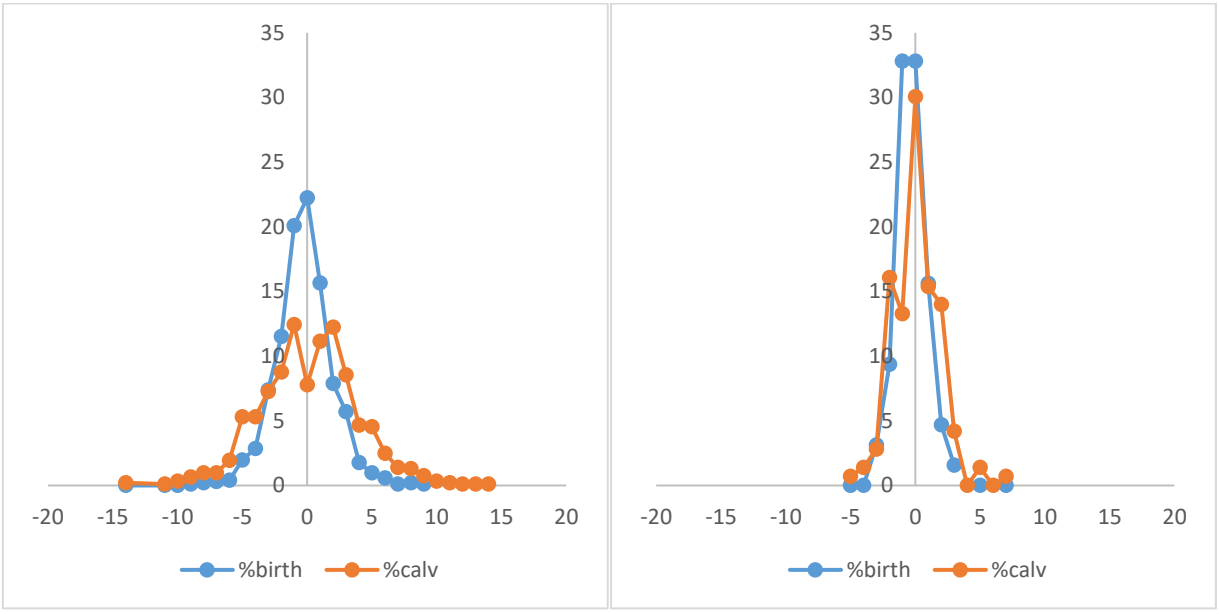
Figure X: Distribution (in %) of index change for Nordic AI HOL bulls with >= 15 offspring, born 2010-2019 (left) and with 0 offspring, born 2019-2021 (wright)



Distribution of differences for “birth” and “calv” for Nordic AI RDC Bulls

	With >= 15 offspring, born 2010-2019				With <1 offspring born 2019-2021			
	Number of bulls		% of bulls		Number of bulls		% of bulls	
diff	birth	calv	birth	calv	birth	calv	birth	calv
-14		2		0				
-11		1		0				
-10		3		0				
-9	1	6	0	1				
-8	2	9	0	1				
-7	3	9	0	1				
-6	4	18	0	2				
-5	20	49	2	5		1		1
-4	29	49	3	5		2		1
-3	75	67	7	7	2	4	3	3
-2	117	81	12	9	6	23	9	16
-1	204	115	20	12	21	19	33	13
0	226	72	22	8	21	43	33	30
1	159	103	16	11	10	22	16	15
2	80	113	8	12	3	20	5	14
3	58	79	6	9	1	6	2	4
4	18	43	2	5		0		0
5	10	42	1	5		2		1
6	6	23	1	2		0		0
7	1	13	0	1		1		1
8	2	12	0	1				
9	1	7	0	1				
10		3		0				
11		2		0				
12		1		0				
13		1		0				
14		1		0				

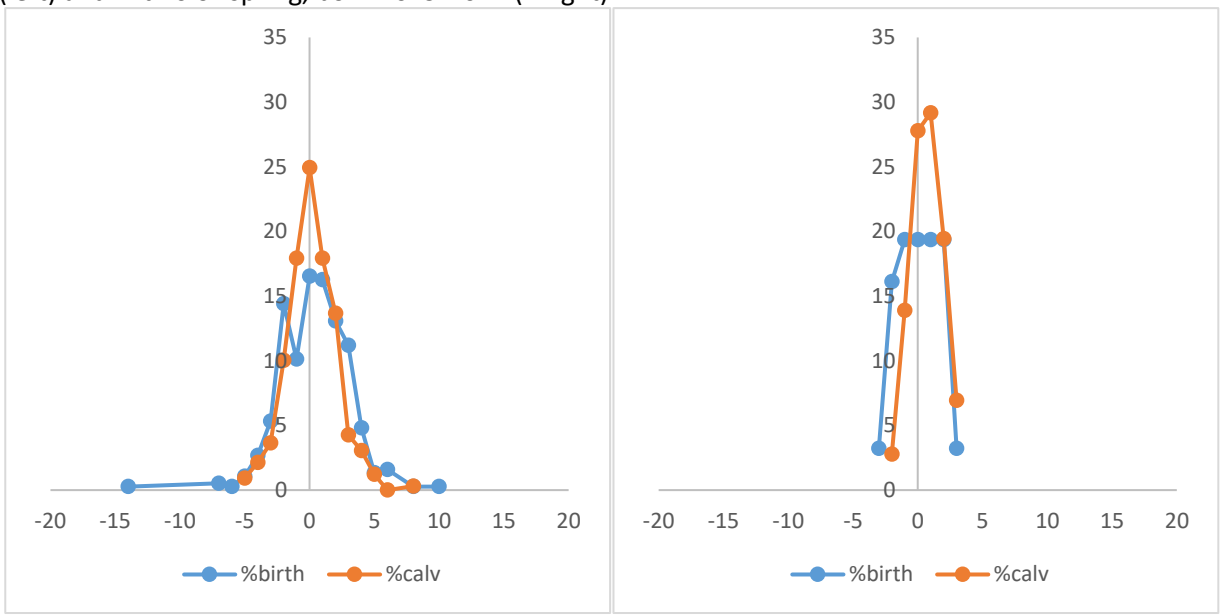
Figure X: Distribution (in %) of index change for Nordic AI RDC Bulls with >= 15 offspring, born 2010-2019 (left) and with 0 offspring, born 2019-2021 (wright)



Distribution of differences for “birth” and “calv” for Nordic AI Jersey Bulls

	With >= 15 offspring, born 2010-2019				With <1 offspring born 2019-2021			
	Number of bulls		% of bulls		Number of bulls		% of bulls	
diff	birth	calv	birth	calv	birth	calv	birth	calv
-14	1		0					
-7	2		1					
-6	1		0					
-5	4	3	1	1				
-4	10	7	3	2				
-3	20	12	5	4	1		3	
-2	54	33	14	10	5	2	16	3
-1	38	59	10	18	6	10	19	14
0	62	82	17	25	6	20	19	28
1	61	59	16	18	6	21	19	29
2	49	45	13	14	6	14	19	19
3	42	14	11	4	1	5	3	7
4	18	10	5	3				
5	5	4	1	1				
6	6		2	0				
8	1	1	0	0				
10	1		0					

Figure X: Distribution (in %) of index change for Nordic AI JER bulls with >= 15 offspring, born 2010-2019 (left) and with 0 offspring, born 2019-2021 (wright)



HOL summery stastistics for snell and current breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_sn_no	std_sn_no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
1	2010	dSB1	193	886	2954	99.4	99.8	7.8	8.5	-0.4	1.6	0.99
2	2011	dSB1	154	469	1093	99.2	99.3	7.1	7.7	-0.1	1.4	0.99
3	2012	dSB1	170	742	1371	98.9	99.1	8.3	8.7	-0.2	1.3	0.99
4	2013	dSB1	151	771	1497	102.0	102.2	7.1	7.2	-0.2	1.2	0.99
5	2014	dSB1	114	1216	1578	100.9	100.9	7.1	7.1	0.0	1.1	0.99
6	2015	dSB1	82	1861	2376	102.7	102.4	7.5	7.5	0.4	0.9	0.99
7	2016	dSB1	65	1621	2136	100.6	100.5	7.8	7.6	0.1	0.8	1.00
8	2017	dSB1	66	1801	2315	101.4	100.9	8.2	8.2	0.5	0.9	0.99
9	2018	dSB1	77	1465	2254	101.4	101.1	6.7	6.5	0.2	0.8	0.99
10	2019	dSB1	54	1077	1714	102.6	102.0	6.4	6.4	0.6	0.7	0.99
11	2020	dSB1	14	107	110	102.8	103.1	8.1	9.0	-0.3	2.2	0.97
12	2010	dCE1	193	778	2611	98.3	98.9	7.6	8.6	-0.5	1.7	0.99
13	2011	dCE1	154	409	958	98.5	98.7	7.2	8.3	-0.3	1.9	0.98
14	2012	dCE1	170	644	1208	99.5	100.0	7.8	8.5	-0.5	1.5	0.99
15	2013	dCE1	151	678	1341	102.0	102.6	6.7	7.2	-0.6	1.5	0.98
16	2014	dCE1	114	1083	1425	101.0	101.2	6.9	7.5	-0.2	1.3	0.99
17	2015	dCE1	82	1653	2135	102.7	103.0	4.7	5.2	-0.4	1.0	0.98
18	2016	dCE1	65	1433	1909	101.9	102.3	5.6	6.2	-0.4	1.3	0.98
19	2017	dCE1	66	1586	2053	102.2	102.7	5.7	6.2	-0.5	1.0	0.99
20	2018	dCE1	77	1281	1985	102.0	102.2	5.0	5.4	-0.2	1.0	0.99
21	2019	dCE1	54	948	1512	103.5	103.7	4.9	5.2	-0.2	0.8	0.99
22	2020	dCE1	13	100	98	106.5	107.3	3.5	4.9	-0.8	2.1	0.93
23	2010	dCS1	143	695	2042	100.9	100.6	9.0	8.9	0.3	1.1	0.99
24	2011	dCS1	115	342	755	100.6	100.4	8.1	8.1	0.2	1.2	0.99
25	2012	dCS1	136	534	913	99.9	99.7	8.4	8.1	0.2	1.1	0.99
26	2013	dCS1	114	578	1004	98.1	98.0	8.4	8.1	0.1	1.1	0.99
27	2014	dCS1	103	876	1125	97.9	98.0	8.3	8.0	-0.1	0.9	0.99
28	2015	dCS1	81	1171	1601	95.9	96.2	6.9	6.6	-0.3	0.8	0.99
29	2016	dCS1	63	1006	1417	96.8	96.9	7.3	7.0	0.0	0.9	0.99
30	2017	dCS1	66	1095	1565	96.3	96.4	7.7	7.2	-0.2	0.9	1.00
31	2018	dCS1	74	930	1479	97.0	97.2	7.1	6.8	-0.1	0.9	0.99
32	2019	dCS1	51	714	1105	95.1	95.1	6.1	6.0	0.0	1.0	0.99
33	2020	dCS1	11	95	84	93.2	91.4	5.5	6.7	1.7	1.7	0.98
34	2010	dSB2	193	1338	3634	99.4	99.7	7.4	8.1	-0.4	2.1	0.97
35	2011	dSB2	155	982	1904	99.4	99.2	7.1	7.3	0.2	1.8	0.97
36	2012	dSB2	171	1363	2298	99.3	99.1	8.0	8.2	0.2	1.7	0.98

HOL summery stastistics for snell and current breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_sn_no	std_sn_no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
37	2013	dSB2	151	1355	2289	100.4	100.3	6.6	6.6	0.1	1.7	0.97
38	2014	dSB2	114	1912	2225	101.2	101.2	6.7	6.4	0.1	1.6	0.97
39	2015	dSB2	82	2817	3095	101.2	101.2	6.1	5.4	0.1	1.3	0.98
40	2016	dSB2	66	2637	3087	100.8	100.9	6.4	5.8	-0.1	1.4	0.98
41	2017	dSB2	66	2699	2740	101.0	100.8	7.1	6.7	0.2	1.2	0.99
42	2018	dSB2	77	2425	2834	100.9	100.7	5.6	5.2	0.1	1.2	0.98
43	2019	dSB2	55	1700	2370	100.9	100.7	5.6	5.3	0.3	1.3	0.97
44	2020	dSB2	16	205	234	102.9	103.3	6.8	8.2	-0.5	2.6	0.95
45	2010	dCE2	193	1163	3177	98.4	99.1	7.4	8.3	-0.6	2.2	0.97
46	2011	dCE2	155	855	1664	97.8	98.2	5.9	7.0	-0.4	2.2	0.95
47	2012	dCE2	171	1175	2001	99.1	99.5	6.8	7.5	-0.4	2.1	0.96
48	2013	dCE2	151	1181	2024	100.1	100.4	6.0	6.9	-0.2	2.3	0.95
49	2014	dCE2	114	1682	1973	100.9	101.1	5.8	6.0	-0.2	1.6	0.96
50	2015	dCE2	82	2476	2726	102.1	102.8	4.2	4.3	-0.7	1.6	0.93
51	2016	dCE2	66	2313	2707	101.5	102.3	4.6	4.8	-0.8	1.4	0.96
52	2017	dCE2	66	2366	2384	101.4	102.1	4.8	5.6	-0.8	1.4	0.97
53	2018	dCE2	77	2113	2470	101.3	101.8	4.3	4.9	-0.5	1.4	0.96
54	2019	dCE2	55	1484	2068	103.4	103.7	4.9	5.2	-0.3	1.5	0.96
55	2020	dCE2	15	184	206	103.9	104.9	4.1	6.6	-1.0	4.2	0.79
56	2010	dCS2	143	1029	2298	100.8	100.5	8.4	8.5	0.3	0.8	1.00
57	2011	dCS2	116	753	1288	100.2	100.0	8.4	8.3	0.2	0.7	1.00
58	2012	dCS2	137	977	1425	100.1	100.0	7.8	7.8	0.2	0.7	1.00
59	2013	dCS2	114	1019	1492	98.3	98.2	7.5	7.4	0.1	0.7	1.00
60	2014	dCS2	104	1298	1419	98.3	98.2	7.5	7.4	0.1	0.7	1.00
61	2015	dCS2	80	1712	1870	96.9	96.8	6.5	6.4	0.1	0.6	1.00
62	2016	dCS2	64	1578	1818	97.3	97.0	7.1	7.0	0.3	0.5	1.00
63	2017	dCS2	66	1581	1574	95.7	95.4	7.5	7.3	0.3	0.6	1.00
64	2018	dCS2	76	1451	1682	96.4	96.5	7.5	7.3	-0.2	0.6	1.00
65	2019	dCS2	53	1087	1415	94.4	94.4	6.8	6.6	-0.1	1.1	0.99
66	2020	dCS2	16	143	183	92.4	92.9	8.1	8.1	-0.5	2.5	0.95
67	2010	mSB1	193	887	2719	97.4	97.2	7.8	8.5	0.2	1.7	0.98
68	2011	mSB1	155	541	1125	97.3	97.4	8.0	8.5	-0.1	1.5	0.98
69	2012	mSB1	171	773	1359	97.8	97.7	7.3	7.4	0.1	1.3	0.99
70	2013	mSB1	151	791	1408	99.1	99.0	6.9	7.6	0.1	1.4	0.99
71	2014	mSB1	113	1183	1401	99.1	99.5	8.9	9.1	-0.4	1.4	0.99
72	2015	mSB1	83	1731	2126	101.6	101.9	6.7	7.2	-0.3	1.3	0.98

HOL summery stastistics for snell and current breeding value for nordic AI bulls with minimum 15 offspring, by birth year

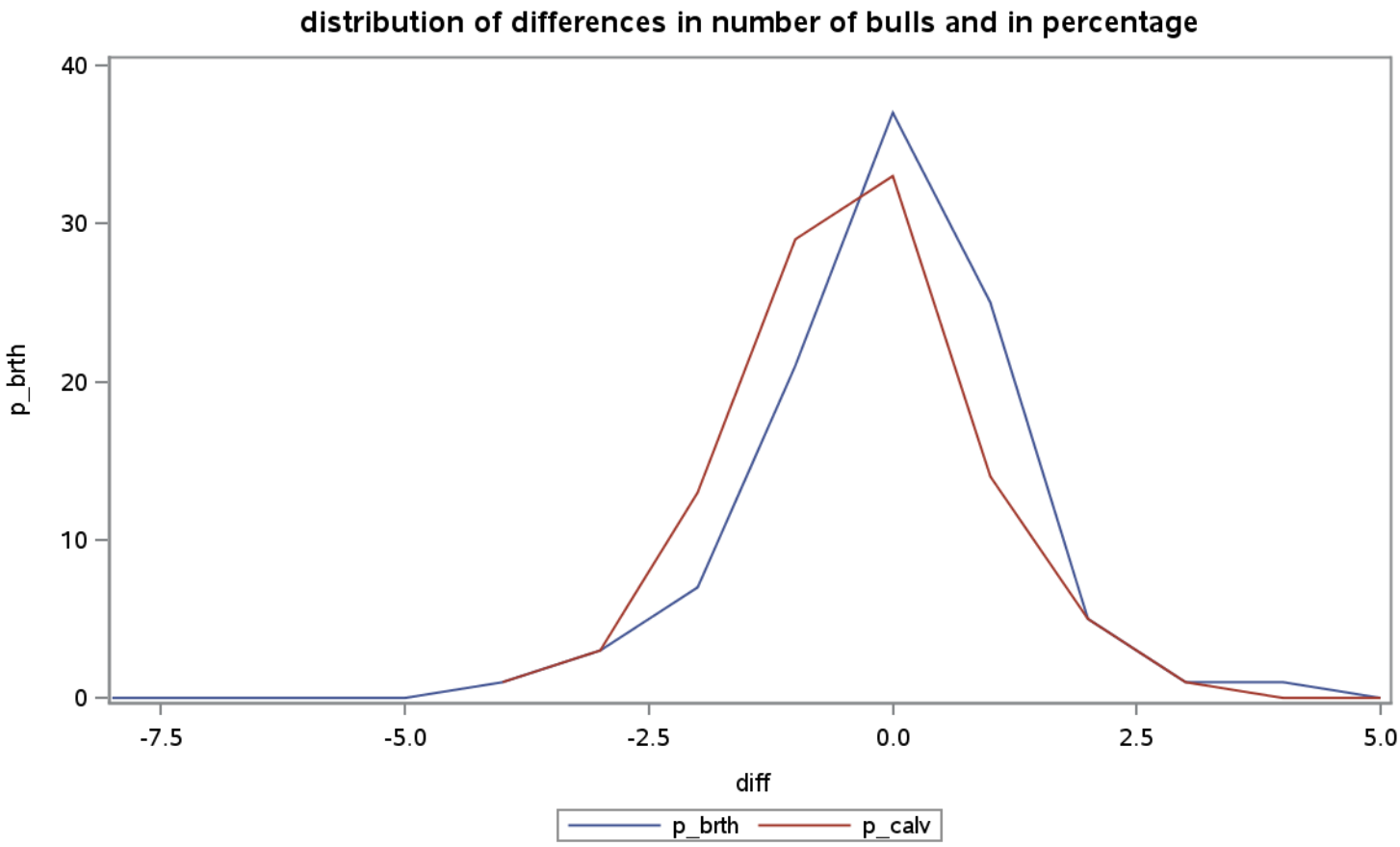
Obs	BYR	name	no	mean_sn_no	std_sn_no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
73	2016	mSB1	66	1631	2033	101.2	101.8	6.6	6.8	-0.6	0.9	0.99
74	2017	mSB1	66	1226	1468	103.2	104.0	6.3	6.3	-0.8	1.1	0.99
75	2018	mSB1	29	341	537	101.3	102.4	6.6	6.9	-1.0	1.2	0.99
76	2010	mCE1	193	779	2414	97.8	97.4	7.7	8.0	0.4	1.3	0.99
77	2011	mCE1	155	479	1006	98.3	98.0	7.5	7.8	0.3	1.4	0.98
78	2012	mCE1	171	685	1212	98.1	98.1	6.6	6.8	0.0	1.2	0.98
79	2013	mCE1	151	700	1253	99.6	99.6	6.3	6.5	0.0	1.2	0.98
80	2014	mCE1	113	1043	1245	100.7	100.7	7.6	7.9	0.0	1.1	0.99
81	2015	mCE1	83	1521	1874	102.5	102.3	5.9	6.4	0.1	1.1	0.99
82	2016	mCE1	66	1429	1786	103.1	102.8	5.6	5.9	0.3	1.0	0.99
83	2017	mCE1	66	1077	1294	105.0	104.8	6.1	6.4	0.2	1.1	0.99
84	2018	mCE1	29	298	472	104.8	104.5	5.7	5.8	0.3	1.6	0.96
85	2010	mCS1	143	698	1816	97.2	97.8	10.3	9.7	-0.6	1.8	0.98
86	2011	mCS1	115	426	785	97.8	98.2	11.7	11.1	-0.4	1.8	0.99
87	2012	mCS1	137	571	881	96.4	97.0	8.9	8.6	-0.5	1.7	0.98
88	2013	mCS1	114	595	907	98.3	98.5	10.3	9.9	-0.2	1.8	0.98
89	2014	mCS1	104	797	900	100.5	100.1	9.9	9.7	0.5	1.9	0.98
90	2015	mCS1	80	1054	1310	100.9	100.2	8.9	8.2	0.7	1.6	0.99
91	2016	mCS1	63	1008	1245	98.9	98.7	10.4	10.0	0.2	1.5	0.99
92	2017	mCS1	66	794	1009	103.5	102.1	9.0	8.6	1.4	1.6	0.98
93	2018	mCS1	27	264	383	105.1	103.7	8.8	8.7	1.5	1.9	0.98
94	2010	mSB2	193	1250	3911	95.3	96.8	7.6	7.7	-1.5	2.9	0.93
95	2011	mSB2	155	772	1674	97.0	98.4	8.1	8.1	-1.4	3.0	0.93
96	2012	mSB2	171	1089	1879	97.7	99.4	7.1	7.2	-1.8	2.7	0.93
97	2013	mSB2	151	1055	1785	97.3	98.9	7.6	7.1	-1.6	3.1	0.91
98	2014	mSB2	114	1457	1810	100.8	101.5	7.1	7.2	-0.7	2.6	0.93
99	2015	mSB2	83	1560	1941	101.7	101.6	7.7	7.0	0.1	2.4	0.95
100	2016	mSB2	65	773	1032	102.4	102.3	6.0	5.6	0.1	3.1	0.86
101	2017	mSB2	28	124	138	101.9	102.7	6.3	6.5	-0.7	3.1	0.88
102	2010	mCE2	193	1098	3456	96.1	95.7	7.9	8.2	0.4	2.1	0.97
103	2011	mCE2	155	683	1480	98.0	98.0	7.3	7.6	0.0	1.9	0.97
104	2012	mCE2	171	958	1663	98.2	98.2	5.9	6.3	0.0	1.9	0.95
105	2013	mCE2	151	927	1583	98.3	98.5	6.9	7.0	-0.2	2.3	0.95
106	2014	mCE2	114	1271	1591	101.8	102.0	6.4	6.4	-0.2	1.7	0.97
107	2015	mCE2	83	1356	1691	102.9	102.6	6.2	6.7	0.3	1.6	0.97
108	2016	mCE2	65	674	904	104.2	103.5	5.1	5.5	0.7	1.7	0.95

HOL summery stastistics for snell and current breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_sn_no	std_sn_no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
109	2017	mCE2	27	110	121	103.9	103.7	5.6	6.0	0.1	1.2	0.98
110	2010	mCS2	143	962	2508	95.1	95.6	9.7	9.5	-0.5	1.2	0.99
111	2011	mCS2	114	593	1125	96.1	96.7	10.3	10.2	-0.6	1.2	0.99
112	2012	mCS2	137	779	1181	96.4	97.0	9.4	9.0	-0.5	1.4	0.99
113	2013	mCS2	114	771	1143	97.6	97.9	9.9	9.8	-0.3	1.2	0.99
114	2014	mCS2	104	973	1146	98.9	98.7	9.6	9.5	0.2	1.3	0.99
115	2015	mCS2	82	926	1152	101.3	100.7	8.8	8.4	0.5	1.3	0.99
116	2016	mCS2	61	520	684	99.6	99.7	9.6	9.4	-0.1	1.4	0.99
117	2017	mCS2	26	99	107	100.4	99.8	7.6	7.4	0.6	1.8	0.97
118	2010	brth	193	886	2954	99.1	99.6	7.3	8.1	-0.5	1.5	0.99
119	2011	brth	154	469	1093	99.0	99.1	6.5	7.1	-0.1	1.3	0.98
120	2012	brth	170	742	1371	99.0	99.2	7.7	8.2	-0.2	1.2	0.99
121	2013	brth	151	771	1497	101.6	101.6	6.3	6.5	-0.1	1.1	0.98
122	2014	brth	114	1216	1578	101.1	101.1	6.3	6.3	0.0	1.0	0.99
123	2015	brth	82	1861	2376	102.5	102.2	6.0	6.0	0.2	0.8	0.99
124	2016	brth	65	1621	2136	101.0	101.0	6.5	6.4	0.0	0.8	0.99
125	2017	brth	66	1801	2315	101.5	101.2	7.3	7.3	0.3	0.7	0.99
126	2018	brth	77	1465	2254	101.4	101.3	5.7	5.6	0.2	0.7	0.99
127	2019	brth	54	1077	1714	102.6	102.0	5.4	5.3	0.6	0.7	0.99
128	2020	brth	14	107	110	103.6	103.9	7.1	8.7	-0.4	2.4	0.98
129	2010	calv	193	887	2719	96.6	96.8	7.7	8.2	-0.2	1.3	0.99
130	2011	calv	155	541	1125	97.1	97.5	7.7	8.1	-0.4	1.3	0.99
131	2012	calv	171	773	1359	97.6	98.1	7.0	7.1	-0.5	1.1	0.99
132	2013	calv	151	791	1408	98.6	98.9	6.9	7.2	-0.3	1.2	0.99
133	2014	calv	113	1183	1401	99.7	100.3	8.3	8.3	-0.5	1.1	0.99
134	2015	calv	83	1731	2126	101.9	102.1	6.5	6.8	-0.1	1.0	0.99
135	2016	calv	66	1631	2033	102.0	102.3	6.0	5.9	-0.3	1.0	0.99
136	2017	calv	66	1226	1468	103.8	104.3	6.0	6.2	-0.5	1.3	0.98
137	2018	calv	29	341	537	102.2	102.4	6.4	6.7	-0.2	1.3	0.98

distribution of differences in number of bulls and in percentage

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-8	1	.	0	.
2	-6	1	.	0	.
3	-5	2	.	0	.
4	-4	8	7	1	1
5	-3	29	32	3	3
6	-2	80	135	7	13
7	-1	239	295	21	29
8	0	425	339	37	33
9	1	280	147	25	14
10	2	53	56	5	5
11	3	14	9	1	1
12	4	6	5	1	0
13	5	2	2	0	0

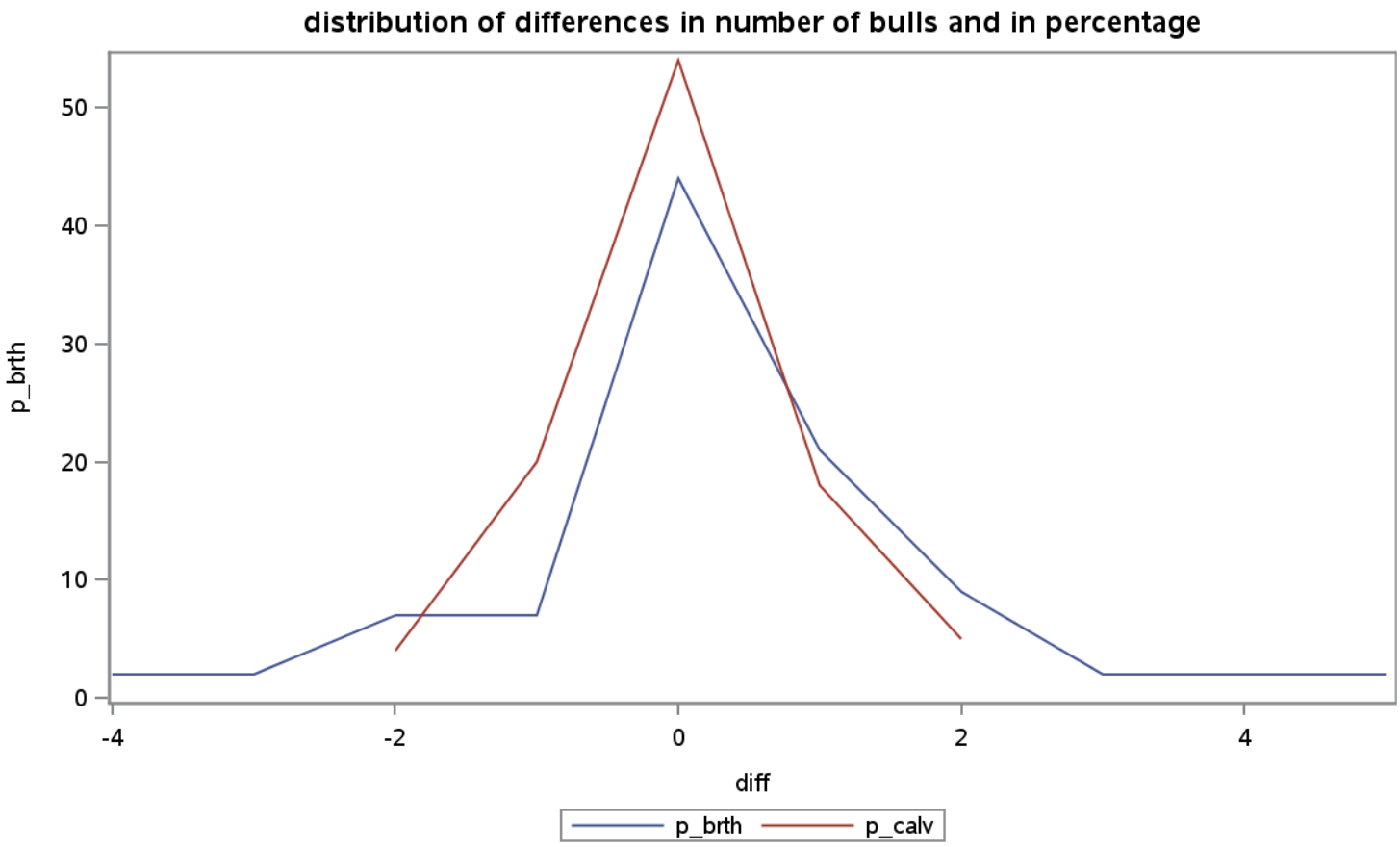

distribution of differences in number of bulls and in percentage
p_brth
40
30
20
10
0
-7.5
-5.0
-2.5
0.0
2.5
5.0
diff
p_brth
p_calv

HOL summery stastistics for snell and current breeding value for nordic AI bulls with no offspring, by birth year

Obs	BYR	name	no	mean_sn_no	std_sn_no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
1	2020	dSB1	17	-82	39	103.0	102.8	4.7	5.6	0.2	1.7	0.96
2	2021	dSB1	21	-99	0	102.8	102.6	4.3	4.4	0.3	1.1	0.97
3	2020	dCE1	17	-82	39	103.4	104.0	4.5	5.5	-0.6	1.4	0.98
4	2021	dCE1	21	-99	0	102.9	103.0	3.2	4.2	-0.1	1.4	0.97
5	2020	dCS1	19	-73	45	95.3	95.3	6.7	6.9	0.0	1.5	0.98
6	2021	dCS1	21	-99	0	98.0	97.7	6.0	6.0	0.2	1.0	0.99
7	2020	dSB2	15	-92	26	101.8	101.2	5.0	6.5	0.6	2.5	0.94
8	2021	dSB2	21	-99	0	101.8	101.4	3.1	3.4	0.3	1.7	0.86
9	2020	dCE2	15	-92	26	102.4	102.7	4.2	5.8	-0.4	2.1	0.96
10	2021	dCE2	21	-99	0	102.4	102.8	3.0	4.0	-0.4	1.9	0.89
11	2020	dCS2	18	-77	42	95.1	95.2	6.5	7.2	-0.1	1.7	0.97
12	2021	dCS2	21	-99	0	96.7	96.7	5.8	6.1	0.0	0.7	0.99
13	2019	mSB1	63	-6	24	102.1	102.3	2.9	3.1	-0.2	0.7	0.98
14	2020	mSB1	44	-32	47	101.0	101.6	3.2	3.4	-0.5	0.9	0.97
15	2021	mSB1	21	-99	0	101.2	101.4	2.2	2.4	-0.2	0.5	0.98
16	2019	mCE1	63	-6	24	103.2	103.1	3.8	4.1	0.1	1.0	0.97
17	2020	mCE1	44	-32	47	102.8	102.5	2.6	2.6	0.3	1.0	0.92
18	2021	mCE1	21	-99	0	103.3	103.4	2.9	3.0	-0.1	0.8	0.96
19	2019	mCS1	63	-6	24	103.6	102.7	6.3	6.0	0.9	1.3	0.98
20	2020	mCS1	44	-32	47	105.4	104.3	6.0	5.7	1.1	1.1	0.98
21	2021	mCS1	21	-99	0	101.8	101.0	5.0	4.7	0.8	1.0	0.98
22	2019	mSB2	63	-6	24	101.8	101.6	3.0	3.7	0.2	2.7	0.70
23	2020	mSB2	44	-32	47	101.6	100.3	3.0	3.2	1.3	2.4	0.71
24	2021	mSB2	21	-99	0	101.1	101.7	2.2	2.6	-0.6	2.3	0.54
25	2019	mCE2	63	-6	24	103.6	103.5	3.8	3.9	0.2	1.4	0.94
26	2020	mCE2	44	-32	47	103.1	102.4	2.5	2.4	0.7	1.3	0.86
27	2021	mCE2	21	-99	0	103.5	103.6	3.8	3.2	-0.1	1.5	0.92
28	2019	mCS2	63	-6	24	102.0	101.5	5.5	5.4	0.5	1.1	0.98
29	2020	mCS2	44	-32	47	103.5	103.0	5.1	5.3	0.6	0.8	0.99
30	2021	mCS2	21	-99	0	100.6	100.0	4.8	4.6	0.7	0.8	0.99
31	2020	brth	17	-82	39	102.9	102.8	4.7	5.8	0.1	1.9	0.96
32	2021	brth	21	-99	0	102.7	102.4	3.6	3.9	0.3	1.2	0.95
33	2019	calv	63	-6	24	102.4	102.4	2.9	3.1	0.0	0.9	0.96
34	2020	calv	44	-32	47	101.6	101.5	3.1	3.0	0.1	0.8	0.97
35	2021	calv	21	-99	0	101.6	101.9	2.2	2.4	-0.3	0.7	0.96

distribution of differences in number of bulls and in percentage

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-4	1	.	2	.
2	-3	1	.	2	.
3	-2	3	5	7	4
4	-1	3	25	7	20
5	0	19	69	44	54
6	1	9	23	21	18
7	2	4	6	9	5
8	3	1	.	2	.
9	4	1	.	2	.
10	5	1	.	2	.


distribution of differences in number of bulls and in percentage
p_brth
50
40
30
20
10
0
-4
-2
0
2
4
diff
p_brth
p_calv

RDC summery stastistics for snell and current breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_sn_no	std_sn_no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
1	2010	dSB1	165	238	532	97.3	97.7	9.1	9.3	-0.4	2.9	0.95
2	2011	dSB1	168	319	651	99.1	99.2	8.6	9.3	-0.1	3.0	0.95
3	2012	dSB1	167	306	563	99.3	99.4	7.7	8.1	0.0	2.7	0.94
4	2013	dSB1	118	411	712	99.7	99.9	8.0	7.9	-0.3	2.2	0.96
5	2014	dSB1	83	614	879	99.7	99.7	8.4	8.8	0.0	2.4	0.96
6	2015	dSB1	69	660	848	100.8	100.8	6.4	6.3	0.0	1.9	0.95
7	2016	dSB1	69	605	789	101.4	101.6	7.4	7.7	-0.2	2.4	0.95
8	2017	dSB1	66	626	770	100.5	100.7	6.4	6.7	-0.2	2.2	0.94
9	2018	dSB1	52	667	925	100.4	100.6	6.2	6.0	-0.2	2.2	0.93
10	2019	dSB1	47	403	471	101.6	102.1	9.0	8.9	-0.5	1.8	0.98
11	2020	dSB1	12	73	82	101.0	101.5	6.4	6.2	-0.5	1.6	0.97
12	2010	dCE1	165	187	410	98.9	98.9	10.1	9.8	0.1	2.0	0.98
13	2011	dCE1	166	265	550	100.7	101.0	10.5	10.1	-0.2	2.3	0.98
14	2012	dCE1	166	247	461	100.5	100.8	9.6	9.2	-0.3	1.9	0.98
15	2013	dCE1	118	337	625	100.1	100.4	9.3	8.5	-0.3	2.1	0.98
16	2014	dCE1	83	514	762	100.2	100.2	10.1	9.4	0.0	1.8	0.99
17	2015	dCE1	69	543	741	101.5	101.8	8.0	7.1	-0.3	1.8	0.98
18	2016	dCE1	69	506	676	102.2	102.1	8.1	7.6	0.1	1.7	0.98
19	2017	dCE1	66	519	647	101.3	101.1	8.6	7.9	0.1	1.5	0.99
20	2018	dCE1	52	566	807	102.7	102.4	7.1	6.9	0.2	1.4	0.98
21	2019	dCE1	47	335	405	102.7	102.8	8.0	7.3	-0.1	1.8	0.98
22	2020	dCE1	11	68	78	101.2	101.8	6.0	6.6	-0.6	1.3	0.98
23	2010	dCS1	44	107	182	104.5	103.9	13.1	11.6	0.6	2.7	0.98
24	2011	dCS1	46	84	129	100.6	100.4	11.7	11.0	0.2	2.4	0.98
25	2012	dCS1	59	121	200	100.7	100.7	12.7	11.6	-0.1	2.3	0.99
26	2013	dCS1	48	174	249	100.5	100.2	11.2	10.7	0.3	1.8	0.99
27	2014	dCS1	32	271	295	98.7	98.6	13.2	11.5	0.1	2.1	0.99
28	2015	dCS1	35	261	283	97.6	97.4	11.0	10.2	0.2	1.5	0.99
29	2016	dCS1	33	225	239	97.7	97.7	10.2	9.3	0.1	2.2	0.98
30	2017	dCS1	35	239	264	99.8	98.9	11.3	10.2	0.9	2.1	0.99
31	2018	dCS1	27	198	268	95.5	95.1	9.8	8.7	0.5	1.6	0.99
32	2019	dCS1	24	182	178	100.5	98.5	11.5	9.6	2.0	2.4	0.99
33	2010	dSB2	165	393	783	96.6	96.4	8.5	8.9	0.1	2.9	0.95
34	2011	dSB2	168	551	1142	100.3	100.5	8.7	8.9	-0.3	2.7	0.95
35	2012	dSB2	169	519	886	99.4	99.4	7.7	8.2	0.0	2.5	0.95
36	2013	dSB2	121	687	1106	99.0	99.4	9.3	9.2	-0.4	2.5	0.96

RDC summery stastistics for snell and current breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_sn_no	std_sn_no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
37	2014	dSB2	83	1030	1352	100.1	99.8	7.0	7.3	0.3	2.0	0.96
38	2015	dSB2	69	1055	1169	100.1	100.4	7.5	7.6	-0.3	2.0	0.97
39	2016	dSB2	70	1061	1482	101.0	101.2	7.9	8.1	-0.2	2.2	0.96
40	2017	dSB2	66	1053	1341	101.0	101.3	6.6	6.7	-0.3	1.8	0.96
41	2018	dSB2	52	1162	1493	101.0	101.0	5.4	6.0	0.0	1.9	0.95
42	2019	dSB2	48	641	755	100.9	101.9	7.4	7.6	-1.0	2.3	0.95
43	2020	dSB2	13	117	126	101.2	102.8	6.4	6.3	-1.6	1.6	0.97
44	2010	dCE2	165	287	578	98.5	98.5	10.3	10.1	0.0	2.9	0.96
45	2011	dCE2	168	436	954	101.5	101.7	10.0	10.2	-0.2	3.2	0.95
46	2012	dCE2	168	401	700	100.3	100.8	10.0	10.1	-0.4	3.1	0.95
47	2013	dCE2	121	538	927	99.7	100.4	10.6	9.6	-0.7	3.2	0.95
48	2014	dCE2	83	841	1158	100.0	100.0	9.0	9.3	-0.1	2.4	0.97
49	2015	dCE2	69	831	968	101.7	102.3	7.8	7.7	-0.5	2.7	0.94
50	2016	dCE2	70	878	1242	101.6	101.8	8.0	8.3	-0.2	2.8	0.94
51	2017	dCE2	66	856	1109	101.9	101.8	8.0	8.2	0.1	2.6	0.95
52	2018	dCE2	52	973	1273	102.2	102.9	7.5	7.6	-0.7	2.3	0.95
53	2019	dCE2	47	540	645	102.9	103.2	7.6	7.3	-0.3	2.9	0.92
54	2020	dCE2	13	106	114	101.9	103.3	6.3	6.7	-1.3	1.8	0.96
55	2010	dCS2	44	202	269	105.7	104.9	14.6	12.7	0.8	2.3	1.00
56	2011	dCS2	58	147	169	100.1	99.9	13.3	12.0	0.2	2.6	0.98
57	2012	dCS2	66	191	258	100.9	101.1	13.2	11.6	-0.3	2.2	0.99
58	2013	dCS2	56	218	284	98.7	99.5	11.3	10.3	-0.7	1.8	0.99
59	2014	dCS2	43	283	309	98.5	99.3	11.8	10.7	-0.8	2.1	0.99
60	2015	dCS2	43	291	330	98.3	97.9	10.7	9.5	0.4	1.7	0.99
61	2016	dCS2	40	318	347	98.8	98.5	13.3	11.7	0.3	2.0	1.00
62	2017	dCS2	43	277	294	99.8	99.3	10.7	9.5	0.4	2.2	0.98
63	2018	dCS2	38	240	235	96.6	96.2	11.3	9.9	0.4	1.8	0.99
64	2019	dCS2	30	247	203	96.1	95.4	12.0	10.8	0.7	1.8	0.99
65	2010	mSB1	165	222	524	99.0	98.6	9.4	9.4	0.4	3.7	0.92
66	2011	mSB1	168	257	537	97.8	97.4	8.3	8.5	0.4	3.4	0.92
67	2012	mSB1	169	249	443	99.8	99.8	7.0	7.6	0.0	3.2	0.91
68	2013	mSB1	122	344	569	100.6	100.8	7.0	7.5	-0.2	3.3	0.90
69	2014	mSB1	84	524	751	99.5	99.5	8.3	8.6	0.0	3.1	0.93
70	2015	mSB1	71	544	670	99.7	99.9	7.7	7.9	-0.1	2.9	0.93
71	2016	mSB1	70	511	738	100.2	100.0	7.6	8.4	0.2	3.8	0.89
72	2017	mSB1	65	341	464	100.7	100.9	6.8	7.2	-0.1	3.0	0.91

RDC summery stastistics for snell and current breeding value for nordic AI bulls with minimum 15 offspring, by birth year

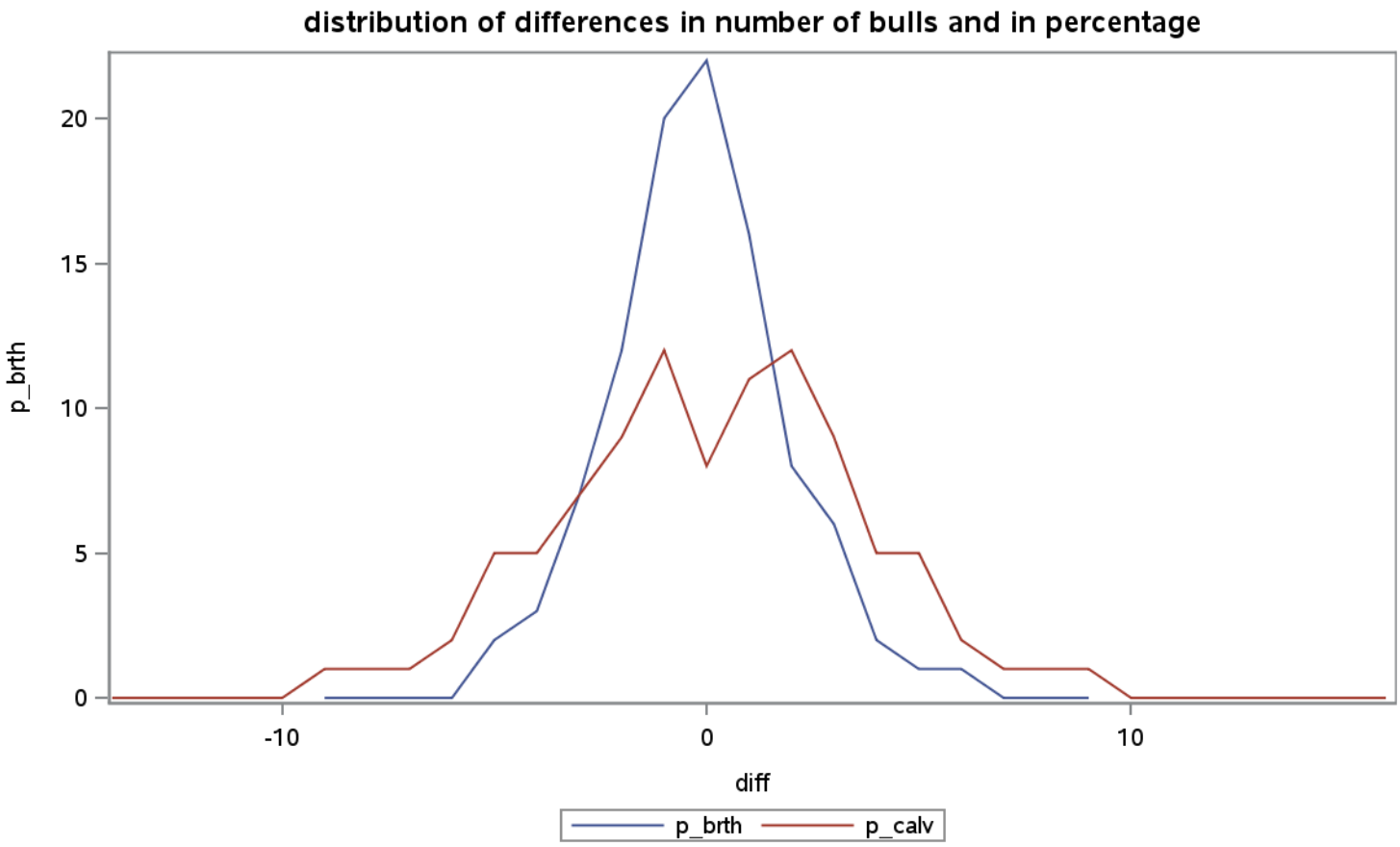
Obs	BYR	name	no	mean_sn_no	std_sn_no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
73	2018	mSB1	11	47	40	101.2	102.3	9.1	10.6	-1.1	2.8	0.97
74	2010	mCE1	165	180	425	98.0	98.5	9.6	9.1	-0.5	2.3	0.97
75	2011	mCE1	168	215	464	97.4	97.8	9.1	9.0	-0.4	2.2	0.97
76	2012	mCE1	169	207	373	100.5	100.5	8.9	8.5	0.0	2.1	0.97
77	2013	mCE1	121	293	501	100.2	100.2	8.6	8.4	0.0	2.0	0.97
78	2014	mCE1	84	445	655	101.1	101.1	7.8	7.9	0.1	2.1	0.96
79	2015	mCE1	71	455	576	99.4	98.9	8.4	8.3	0.5	1.8	0.98
80	2016	mCE1	70	430	623	101.3	101.1	8.5	8.7	0.2	1.6	0.98
81	2017	mCE1	63	296	396	101.4	100.5	7.9	8.1	0.9	1.6	0.98
82	2010	mCS1	44	114	172	100.5	99.8	13.8	12.8	0.7	3.0	0.98
83	2011	mCS1	49	86	103	103.5	103.3	10.9	11.9	0.2	4.4	0.93
84	2012	mCS1	60	110	153	102.9	102.1	13.6	13.0	0.8	3.4	0.97
85	2013	mCS1	48	149	196	102.4	101.7	11.4	11.8	0.7	3.5	0.95
86	2014	mCS1	33	225	234	99.3	97.5	12.8	12.2	1.8	2.5	0.98
87	2015	mCS1	36	185	187	100.5	99.7	13.1	12.3	0.8	3.6	0.96
88	2016	mCS1	31	202	194	103.7	103.0	13.2	12.7	0.8	3.6	0.96
89	2017	mCS1	32	160	150	101.2	100.6	11.1	11.2	0.5	3.1	0.96
90	2010	mSB2	165	295	761	100.7	99.7	9.4	9.2	1.0	5.7	0.81
91	2011	mSB2	168	326	694	99.1	98.8	8.0	8.7	0.2	5.6	0.78
92	2012	mSB2	169	323	585	100.2	100.0	7.7	8.0	0.2	5.4	0.76
93	2013	mSB2	122	444	744	102.2	100.9	7.2	7.3	1.3	5.5	0.72
94	2014	mSB2	84	567	807	101.1	101.2	8.1	8.2	-0.2	4.8	0.83
95	2015	mSB2	71	466	559	100.1	100.4	8.7	8.7	-0.3	4.6	0.86
96	2016	mSB2	63	233	372	100.1	100.4	8.2	9.0	-0.3	6.7	0.70
97	2017	mSB2	13	47	52	104.8	104.1	5.3	9.8	0.7	6.3	0.82
98	2010	mCE2	165	236	625	98.4	98.7	9.0	8.7	-0.3	2.5	0.96
99	2011	mCE2	168	270	595	98.5	98.7	8.7	8.6	-0.2	2.8	0.95
100	2012	mCE2	169	266	486	100.8	100.8	7.8	8.2	0.0	2.7	0.94
101	2013	mCE2	122	375	653	100.3	100.0	7.1	7.6	0.2	2.4	0.95
102	2014	mCE2	84	476	688	101.4	101.4	6.1	7.0	0.0	2.3	0.95
103	2015	mCE2	71	386	474	100.1	99.8	7.6	8.0	0.3	2.7	0.94
104	2016	mCE2	60	205	316	101.9	101.9	7.5	8.1	-0.1	2.8	0.94
105	2017	mCE2	12	45	48	104.0	103.4	7.1	10.3	0.6	4.0	0.96
106	2010	mCS2	44	149	251	100.0	99.1	8.9	10.0	0.9	2.8	0.96
107	2011	mCS2	50	104	122	103.2	101.9	10.7	11.9	1.3	2.9	0.97
108	2012	mCS2	60	148	210	102.3	101.7	10.4	10.8	0.6	2.5	0.97

RDC summery stastistics for snell and current breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_sn_no	std_sn_no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
109	2013	mCS2	49	190	261	103.4	103.2	9.4	10.2	0.2	2.8	0.96
110	2014	mCS2	37	211	239	98.5	97.4	11.5	12.0	1.2	2.9	0.97
111	2015	mCS2	35	174	166	100.9	100.5	10.0	11.6	0.4	3.4	0.96
112	2016	mCS2	26	130	120	103.1	102.5	11.6	12.6	0.7	2.9	0.97
113	2010	brth	165	238	532	97.0	97.2	8.8	9.2	-0.2	2.7	0.96
114	2011	brth	168	319	651	99.8	100.1	8.8	9.3	-0.3	2.4	0.97
115	2012	brth	167	306	563	99.5	99.6	7.9	8.5	-0.1	2.2	0.97
116	2013	brth	118	411	712	99.4	99.8	8.7	8.5	-0.4	2.0	0.97
117	2014	brth	83	614	879	99.9	99.8	7.8	8.2	0.1	1.8	0.98
118	2015	brth	69	660	848	100.7	101.0	6.6	6.6	-0.3	1.6	0.97
119	2016	brth	69	605	789	101.5	101.8	7.6	7.9	-0.3	1.6	0.98
120	2017	brth	66	626	770	100.9	101.1	6.6	6.7	-0.2	1.7	0.97
121	2018	brth	52	667	925	101.0	101.2	5.8	6.0	-0.3	1.7	0.96
122	2019	brth	47	403	471	101.6	102.4	8.3	8.2	-0.8	1.6	0.98
123	2020	brth	12	73	82	101.0	102.1	6.5	6.5	-1.1	1.4	0.98
124	2010	calv	165	222	524	99.4	98.9	9.3	9.1	0.5	4.1	0.90
125	2011	calv	168	257	537	98.0	97.9	8.0	8.5	0.1	3.8	0.90
126	2012	calv	169	249	443	100.1	100.0	7.2	7.9	0.0	3.6	0.89
127	2013	calv	122	344	569	101.3	100.8	6.9	7.4	0.5	3.6	0.88
128	2014	calv	84	524	751	100.4	100.5	7.7	7.9	-0.2	3.2	0.91
129	2015	calv	71	544	670	99.8	100.0	8.0	8.1	-0.2	2.9	0.94
130	2016	calv	70	511	738	100.5	100.4	7.4	8.4	0.1	4.4	0.85
131	2017	calv	65	341	464	101.5	101.1	6.8	7.9	0.4	3.6	0.89
132	2018	calv	11	47	40	100.9	101.5	9.3	10.8	-0.6	2.5	0.98

distribution of differences in number of bulls and in percentage

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-14	.	2	.	0
2	-11	.	1	.	0
3	-10	.	3	.	0
4	-9	1	6	0	1
5	-8	2	9	0	1
6	-7	3	9	0	1
7	-6	4	18	0	2
8	-5	20	49	2	5
9	-4	29	49	3	5
10	-3	75	67	7	7
11	-2	117	81	12	9
12	-1	204	115	20	12
13	0	226	72	22	8
14	1	159	103	16	11
15	2	80	113	8	12
16	3	58	79	6	9
17	4	18	43	2	5
18	5	10	42	1	5
19	6	6	23	1	2
20	7	1	13	0	1
21	8	2	12	0	1
22	9	1	7	0	1
23	10	.	3	.	0
24	11	.	2	.	0
25	12	.	1	.	0
26	13	.	1	.	0
27	14	.	1	.	0
28	16	.	1	.	0


distribution of differences in number of bulls and in percentage
p_brth
20
15
10
5
0
-10
0
10
diff
p_brth
p_calv

RDC summery stastistics for snell and current breeding value for nordic AI bulls with no offspring, by birth year

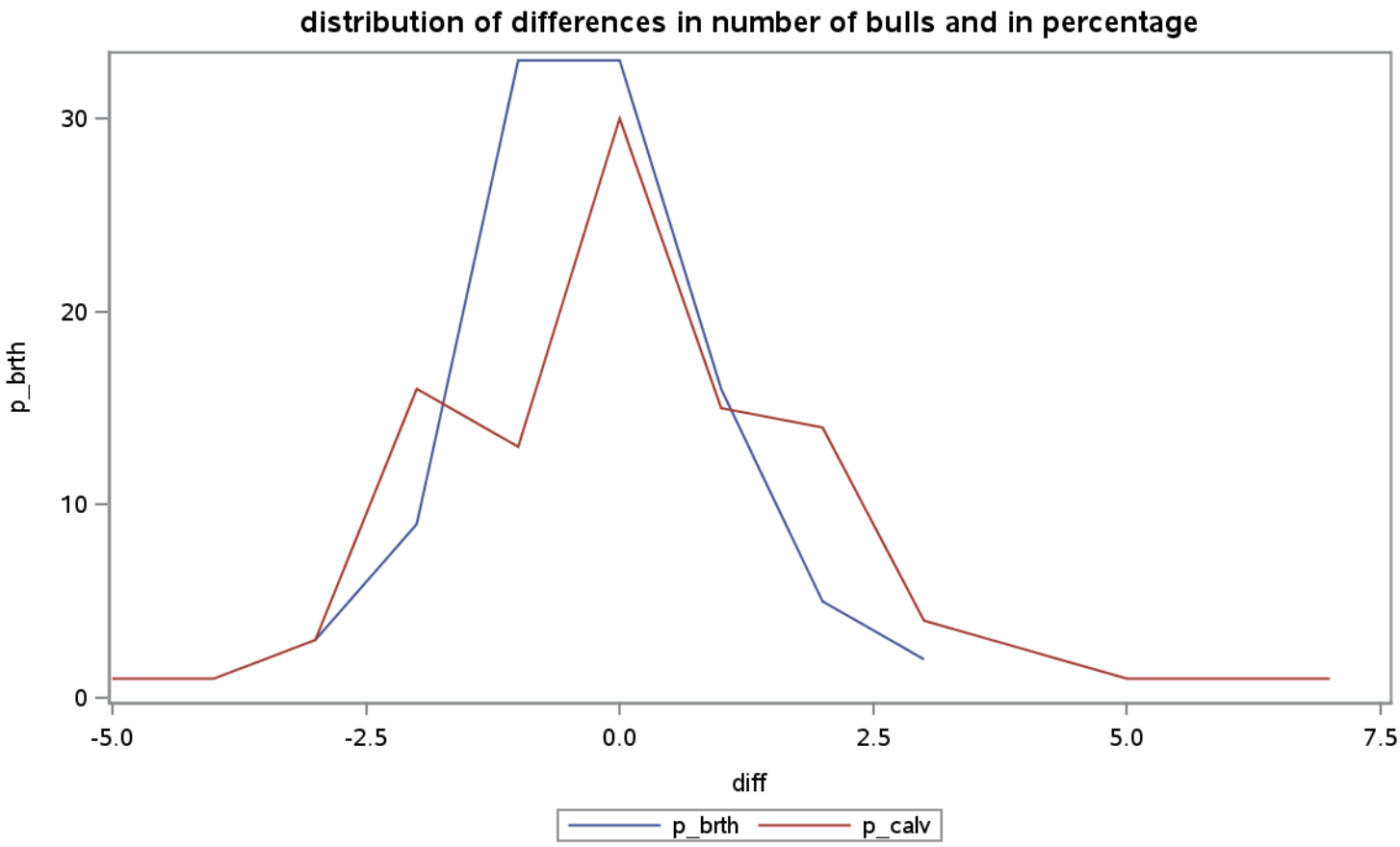
Obs	BYR	name	no	mean_sn_no	std_sn_no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
1	2019	dSB1	15	-79	41	101.0	101.3	2.9	2.8	-0.3	1.3	0.90
2	2020	dSB1	23	-95	21	102.0	102.4	3.3	3.1	-0.3	1.5	0.90
3	2021	dSB1	26	-99	0	100.2	100.1	6.1	6.2	0.1	1.1	0.98
4	2019	dCE1	15	-79	41	99.8	100.1	4.2	3.9	-0.2	1.9	0.89
5	2020	dCE1	23	-95	21	102.0	101.7	4.0	3.9	0.2	1.0	0.97
6	2021	dCE1	26	-99	0	101.1	101.0	4.7	4.5	0.1	1.4	0.95
7	2019	dCS1	24	-50	51	99.8	99.0	6.3	5.7	0.8	2.6	0.91
8	2020	dCS1	36	-61	49	96.7	96.1	6.1	5.7	0.7	2.0	0.95
9	2021	dCS1	26	-99	0	100.2	99.4	5.7	5.4	0.8	1.7	0.96
10	2019	dSB2	14	-85	36	101.7	101.8	3.6	3.8	-0.1	1.2	0.95
11	2020	dSB2	24	-91	28	102.0	102.6	3.6	4.1	-0.6	1.7	0.91
12	2021	dSB2	26	-99	0	101.2	101.6	4.3	5.1	-0.4	1.7	0.95
13	2019	dCE2	16	-74	44	100.0	100.8	4.4	4.6	-0.8	1.9	0.91
14	2020	dCE2	26	-84	36	102.0	102.2	4.7	4.1	-0.2	1.7	0.93
15	2021	dCE2	26	-99	0	101.8	101.7	4.5	4.6	0.1	2.1	0.89
16	2019	dCS2	22	-54	50	100.0	99.3	6.3	5.5	0.7	2.8	0.89
17	2020	dCS2	33	-66	47	97.8	97.0	5.1	4.8	0.8	1.8	0.93
18	2021	dCS2	26	-99	0	98.6	98.7	6.0	5.8	-0.1	1.4	0.97
19	2019	mSB1	66	-18	38	100.8	100.9	4.4	4.6	-0.2	1.4	0.95
20	2020	mSB1	51	-43	50	98.6	99.0	8.3	8.5	-0.4	1.9	0.98
21	2021	mSB1	26	-99	0	100.0	100.4	3.9	4.1	-0.3	1.2	0.96
22	2019	mCE1	66	-18	38	101.1	100.8	4.2	4.2	0.3	1.2	0.96
23	2020	mCE1	51	-43	50	100.4	100.4	7.4	7.0	0.1	1.6	0.98
24	2021	mCE1	26	-99	0	101.7	101.1	3.7	3.9	0.5	1.0	0.97
25	2019	mCS1	66	-18	38	102.5	101.7	6.5	6.4	0.8	1.9	0.96
26	2020	mCS1	51	-43	50	101.7	101.2	5.7	5.3	0.6	2.3	0.92
27	2021	mCS1	26	-99	0	102.9	101.7	4.8	5.2	1.2	1.9	0.93
28	2019	mSB2	66	-18	38	101.4	101.0	4.9	4.9	0.3	3.0	0.80
29	2020	mSB2	51	-43	50	99.4	99.0	5.9	7.1	0.3	2.9	0.92
30	2021	mSB2	26	-99	0	101.3	100.6	3.4	3.9	0.7	2.5	0.78
31	2019	mCE2	66	-18	38	101.5	101.5	3.7	4.0	0.1	1.8	0.89
32	2020	mCE2	51	-43	50	100.4	100.6	5.8	6.0	-0.2	1.5	0.97
33	2021	mCE2	26	-99	0	101.2	101.5	3.3	3.8	-0.2	1.2	0.95
34	2019	mCS2	66	-18	38	101.6	101.4	4.6	5.5	0.2	2.4	0.91
35	2020	mCS2	51	-43	50	101.9	102.1	4.9	5.2	-0.2	1.5	0.96
36	2021	mCS2	26	-99	0	102.1	101.7	3.6	4.9	0.4	1.8	0.96

RDC summery stastistics for snell and current breeding value for nordic AI bulls with no offspring, by birth year

Obs	BYR	name	no	mean_sn_no	std_sn_no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
37	2019	brth	15	-79	41	101.2	101.4	3.1	3.3	-0.2	1.1	0.94
38	2020	brth	23	-95	21	102.3	102.7	3.4	3.3	-0.4	0.9	0.97
39	2021	brth	26	-99	0	100.8	100.9	5.3	5.7	-0.1	1.1	0.98
40	2019	calv	66	-18	38	101.2	101.1	4.6	4.6	0.1	1.8	0.93
41	2020	calv	51	-43	50	99.1	99.2	7.9	8.2	-0.1	1.9	0.97
42	2021	calv	26	-99	0	100.8	100.7	3.8	3.9	0.1	1.5	0.92

distribution of differences in number of bulls and in percentage

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-5	.	1	.	1
2	-4	.	2	.	1
3	-3	2	4	3	3
4	-2	6	23	9	16
5	-1	21	19	33	13
6	0	21	43	33	30
7	1	10	22	16	15
8	2	3	20	5	14
9	3	1	6	2	4
10	5	.	2	.	1
11	7	.	1	.	1


distribution of differences in number of bulls and in percentage
p_brth
30
20
10
0
-5.0
-2.5
0.0
2.5
5.0
7.5
diff
p_brth
p_calv

JER summery stastistics for snell and current breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_sn_no	std_sn_no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
1	2010	dSB1	55	158	192	101.2	100.8	7.3	8.3	0.4	2.2	0.97
2	2011	dSB1	47	140	160	100.0	98.9	8.3	9.9	1.1	2.6	0.98
3	2012	dSB1	47	275	525	100.6	100.3	7.5	9.0	0.3	2.5	0.97
4	2013	dSB1	50	221	504	98.6	98.1	8.1	9.6	0.6	3.1	0.95
5	2014	dSB1	36	395	562	101.5	101.4	7.4	8.3	0.0	1.9	0.98
6	2015	dSB1	30	881	862	100.6	99.5	6.4	7.0	1.1	1.8	0.97
7	2016	dSB1	26	523	585	101.7	102.3	8.7	9.6	-0.6	3.0	0.95
8	2017	dSB1	29	959	804	101.5	100.7	9.1	10.6	0.8	2.2	0.99
9	2018	dSB1	20	636	839	103.0	102.0	6.8	7.9	1.1	1.7	0.98
10	2019	dSB1	29	700	613	98.3	96.9	13.4	14.6	1.4	2.1	0.99
11	2010	dCE1	55	152	188	100.1	101.1	7.8	6.4	-1.0	5.1	0.75
12	2011	dCE1	47	137	165	98.8	98.8	7.8	7.2	0.1	5.2	0.76
13	2012	dCE1	47	266	516	101.2	100.4	8.1	7.0	0.8	4.6	0.82
14	2013	dCE1	50	213	492	96.7	98.6	7.9	6.5	-1.9	6.4	0.63
15	2014	dCE1	36	382	548	102.2	103.1	7.5	6.5	-0.9	5.0	0.75
16	2015	dCE1	30	847	839	101.7	101.4	8.6	7.3	0.3	2.8	0.95
17	2016	dCE1	26	496	558	99.1	99.3	6.8	7.4	-0.2	3.8	0.86
18	2017	dCE1	29	911	754	100.2	98.8	8.2	7.6	1.4	3.8	0.89
19	2018	dCE1	20	607	804	100.0	100.7	6.8	5.0	-0.7	4.3	0.77
20	2019	dCE1	29	658	576	96.0	96.9	7.3	6.3	-0.9	4.2	0.82
21	2010	dCS1	55	118	145	98.2	98.8	6.4	6.1	-0.6	1.9	0.95
22	2011	dCS1	47	109	120	100.9	100.5	7.6	7.2	0.4	1.8	0.97
23	2012	dCS1	47	222	426	99.7	99.6	6.9	7.1	0.1	2.0	0.96
24	2013	dCS1	50	188	420	100.3	100.7	7.4	6.8	-0.4	1.9	0.96
25	2014	dCS1	36	336	470	97.3	97.6	6.7	6.9	-0.3	1.9	0.96
26	2015	dCS1	30	720	691	99.3	98.8	5.9	5.9	0.5	1.8	0.95
27	2016	dCS1	25	478	517	102.1	101.5	5.7	6.2	0.6	1.6	0.97
28	2017	dCS1	29	802	671	102.3	101.8	6.2	6.4	0.5	1.2	0.98
29	2018	dCS1	20	572	760	102.0	101.2	5.0	4.8	0.8	1.7	0.94
30	2019	dCS1	29	614	531	103.5	102.8	5.0	5.0	0.7	1.6	0.95
31	2010	dSB2	55	406	396	102.0	101.4	7.2	8.5	0.6	2.9	0.95
32	2011	dSB2	48	330	267	100.2	99.2	7.6	9.2	0.9	3.3	0.94
33	2012	dSB2	47	606	990	100.8	99.9	7.2	8.8	0.9	3.2	0.94
34	2013	dSB2	51	469	702	98.3	98.0	8.3	9.6	0.3	3.2	0.95
35	2014	dSB2	37	765	836	100.4	99.9	6.1	7.2	0.5	2.4	0.95
36	2015	dSB2	30	1682	1438	101.0	99.9	6.1	6.5	1.0	2.7	0.91

JER summery stastistics for snell and current breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_sn_no	std_sn_no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
37	2016	dSB2	26	1101	998	99.7	100.7	8.7	9.8	-1.0	2.8	0.96
38	2017	dSB2	29	1654	1187	103.6	102.7	8.4	9.8	0.9	2.5	0.98
39	2018	dSB2	21	868	1021	104.5	104.6	8.2	9.9	-0.1	2.7	0.97
40	2019	dSB2	31	926	822	97.2	96.3	15.1	16.7	0.9	2.9	0.99
41	2010	dCE2	55	393	398	102.2	102.6	8.2	6.9	-0.5	5.4	0.76
42	2011	dCE2	47	324	279	100.3	99.7	7.8	7.5	0.6	5.8	0.71
43	2012	dCE2	47	584	982	101.3	100.2	7.6	7.4	1.1	4.9	0.79
44	2013	dCE2	51	446	688	98.1	99.7	8.0	7.4	-1.6	6.6	0.64
45	2014	dCE2	37	727	801	101.8	103.3	6.7	6.1	-1.5	5.3	0.66
46	2015	dCE2	30	1610	1405	102.2	102.0	6.7	6.5	0.2	2.7	0.92
47	2016	dCE2	26	1038	955	99.0	99.1	7.3	8.4	0.0	4.3	0.86
48	2017	dCE2	29	1574	1128	100.1	99.1	9.6	8.1	1.1	4.8	0.87
49	2018	dCE2	20	857	988	99.9	100.5	8.9	5.9	-0.6	5.1	0.84
50	2019	dCE2	31	859	774	96.4	97.6	9.6	7.8	-1.2	5.5	0.82
51	2010	dCS2	55	307	294	99.2	99.0	6.1	5.9	0.2	1.2	0.98
52	2011	dCS2	47	257	180	100.5	100.3	7.5	7.2	0.3	1.1	0.99
53	2012	dCS2	47	493	793	99.9	99.6	7.2	7.2	0.3	1.0	0.99
54	2013	dCS2	51	402	582	100.2	100.0	7.1	6.9	0.2	1.2	0.99
55	2014	dCS2	37	658	703	98.0	97.4	7.0	6.9	0.5	0.8	0.99
56	2015	dCS2	30	1378	1133	99.2	98.7	6.4	6.2	0.5	0.9	0.99
57	2016	dCS2	26	971	881	100.9	100.9	6.7	6.6	0.0	0.6	1.00
58	2017	dCS2	29	1376	979	102.3	101.9	6.5	6.5	0.4	0.4	1.00
59	2018	dCS2	20	793	924	99.6	99.8	4.4	4.4	-0.2	0.8	0.98
60	2019	dCS2	31	789	701	102.8	102.6	4.9	4.9	0.3	0.9	0.98
61	2010	mSB1	55	183	191	95.5	96.0	8.3	8.8	-0.5	1.9	0.98
62	2011	mSB1	47	154	163	92.4	93.0	8.3	9.1	-0.5	2.0	0.98
63	2012	mSB1	47	311	554	96.1	96.0	11.2	12.3	0.0	2.3	0.99
64	2013	mSB1	50	243	469	97.4	97.2	8.3	9.2	0.1	1.8	0.98
65	2014	mSB1	36	420	535	95.5	94.8	9.6	10.6	0.7	1.6	0.99
66	2015	mSB1	30	985	968	101.7	101.4	7.3	7.3	0.3	1.7	0.97
67	2016	mSB1	26	672	695	99.3	99.0	8.4	9.1	0.3	1.8	0.98
68	2017	mSB1	29	707	572	98.6	97.7	8.9	9.9	0.9	1.8	0.99
69	2010	mCE1	55	174	185	94.8	94.7	9.0	9.5	0.1	3.7	0.92
70	2011	mCE1	47	149	165	96.2	95.8	9.2	9.1	0.4	3.6	0.92
71	2012	mCE1	47	296	531	97.0	96.7	9.7	10.6	0.3	3.3	0.95
72	2013	mCE1	50	230	449	98.0	97.3	10.1	10.3	0.7	3.7	0.93

JER summery stastistics for snell and current breeding value for nordic AI bulls with minimum 15 offspring, by birth year

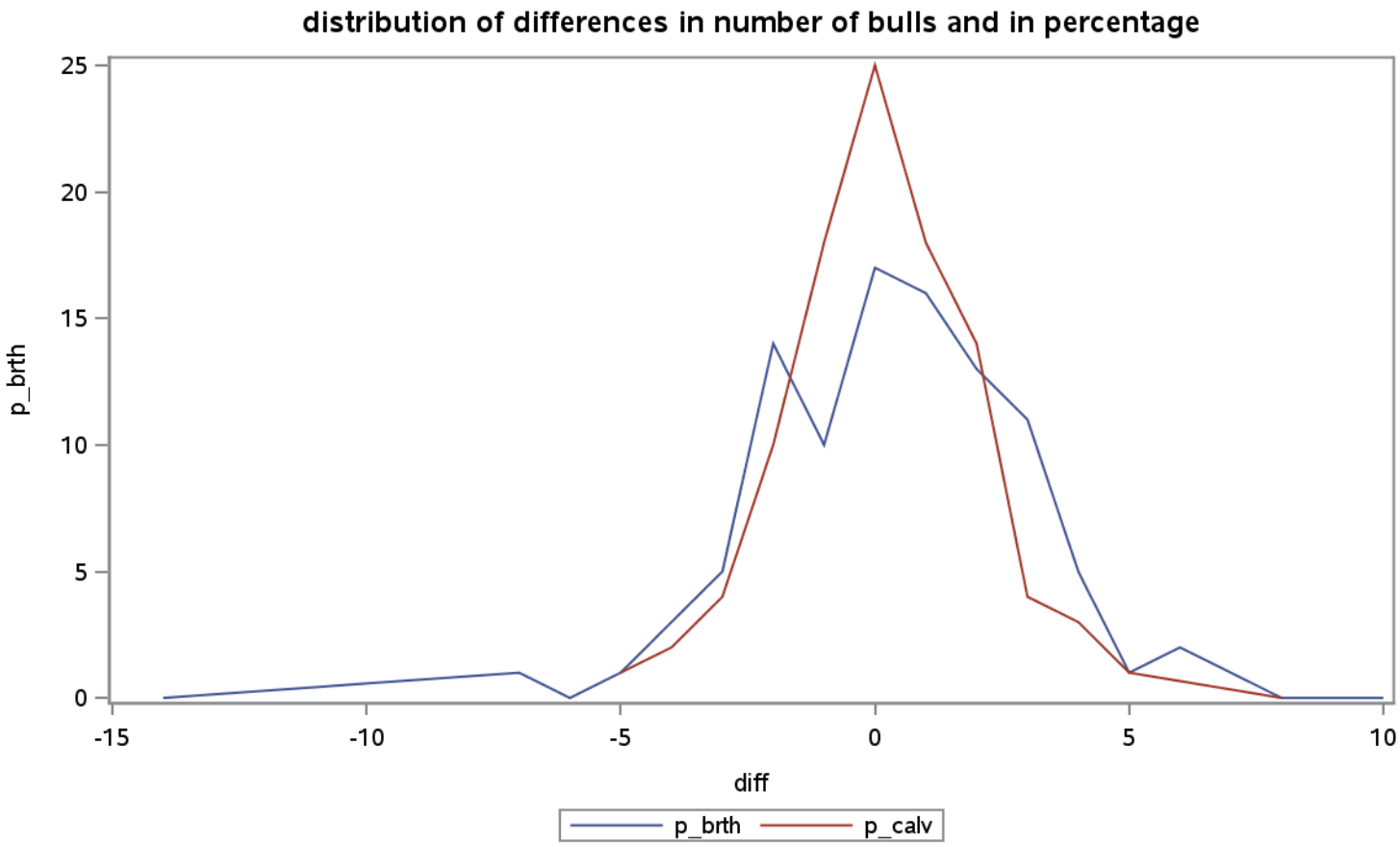
Obs	BYR	name	no	mean_sn_no	std_sn_no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
73	2014	mCE1	36	397	508	96.3	96.5	9.2	9.2	-0.1	4.0	0.90
74	2015	mCE1	30	937	934	102.8	102.7	6.3	6.6	0.2	2.1	0.95
75	2016	mCE1	26	635	659	98.7	97.6	8.1	8.1	1.1	2.8	0.94
76	2017	mCE1	29	661	535	101.3	100.6	7.4	7.3	0.7	3.3	0.90
77	2010	mCS1	55	146	155	101.1	100.9	6.6	7.2	0.3	2.4	0.94
78	2011	mCS1	47	127	124	98.8	97.6	8.8	8.9	1.1	3.0	0.94
79	2012	mCS1	47	259	454	100.0	99.5	7.5	7.2	0.5	2.9	0.92
80	2013	mCS1	50	203	373	99.7	99.1	6.2	6.5	0.5	2.2	0.94
81	2014	mCS1	36	355	441	97.6	98.6	9.3	8.8	-1.0	2.2	0.97
82	2015	mCS1	30	829	797	101.5	101.7	7.2	6.6	-0.2	2.0	0.96
83	2016	mCS1	26	603	627	102.6	102.7	5.9	6.4	-0.1	1.9	0.95
84	2017	mCS1	29	630	511	100.2	99.5	7.9	7.3	0.7	1.9	0.97
85	2010	mSB2	55	284	304	96.9	97.2	7.8	8.2	-0.3	1.7	0.98
86	2011	mSB2	47	245	261	96.7	96.2	8.4	8.6	0.5	1.8	0.98
87	2012	mSB2	47	423	664	98.0	98.0	8.8	9.3	0.1	2.5	0.96
88	2013	mSB2	50	344	603	98.2	97.8	8.0	8.1	0.4	2.1	0.97
89	2014	mSB2	37	546	708	96.2	96.4	9.8	10.0	-0.1	1.7	0.98
90	2015	mSB2	30	867	749	98.2	98.1	9.8	10.3	0.2	1.9	0.98
91	2016	mSB2	26	350	376	97.0	96.3	9.0	10.1	0.7	2.3	0.98
92	2017	mSB2	16	115	94	99.8	97.8	7.4	8.1	2.0	4.0	0.87
93	2010	mCE2	55	271	290	96.4	97.5	7.9	8.7	-1.1	3.6	0.91
94	2011	mCE2	47	232	263	98.5	98.5	7.5	7.9	0.0	3.8	0.88
95	2012	mCE2	47	399	634	97.1	97.6	8.7	8.8	-0.4	3.6	0.91
96	2013	mCE2	50	325	576	99.4	99.4	8.5	8.5	0.0	4.1	0.88
97	2014	mCE2	37	515	673	97.9	98.2	8.4	8.4	-0.3	3.8	0.90
98	2015	mCE2	30	818	713	100.7	100.3	7.2	8.4	0.5	2.7	0.95
99	2016	mCE2	26	326	352	97.9	96.9	9.3	8.4	1.0	4.2	0.89
100	2017	mCE2	16	108	87	103.8	103.1	9.4	8.8	0.8	4.0	0.90
101	2010	mCS2	55	237	252	98.9	99.5	6.9	7.4	-0.6	1.8	0.97
102	2011	mCS2	47	201	196	96.2	97.3	8.9	8.9	-1.1	2.1	0.97
103	2012	mCS2	47	355	544	99.2	99.3	6.2	6.7	-0.1	2.2	0.95
104	2013	mCS2	50	289	488	98.2	98.6	6.6	6.8	-0.5	1.7	0.97
105	2014	mCS2	37	467	603	99.3	99.3	7.9	8.6	0.0	2.3	0.97
106	2015	mCS2	30	739	623	101.8	101.6	6.4	6.1	0.3	2.3	0.93
107	2016	mCS2	25	324	338	102.4	102.7	7.0	6.7	-0.3	2.4	0.94
108	2017	mCS2	16	105	84	99.7	99.9	7.9	6.8	-0.2	3.2	0.92

JER summery stastistics for snell and current breeding value for nordic AI bulls with minimum 15 offspring, by birth year

Obs	BYR	name	no	mean_sn_no	std_sn_no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
109	2010	brth	55	158	192	101.7	101.6	7.3	8.2	0.1	2.0	0.97
110	2011	brth	47	140	160	100.0	99.0	7.6	9.2	1.0	2.5	0.97
111	2012	brth	47	275	525	100.9	100.2	7.3	8.3	0.7	2.3	0.97
112	2013	brth	50	221	504	98.0	98.0	8.5	9.5	0.0	2.5	0.97
113	2014	brth	36	395	562	101.3	101.6	6.7	7.3	-0.3	1.9	0.97
114	2015	brth	30	881	862	101.2	100.3	6.2	7.1	0.9	1.6	0.98
115	2016	brth	26	523	585	100.5	101.2	8.6	9.8	-0.7	2.5	0.97
116	2017	brth	29	959	804	102.1	101.1	9.2	10.8	1.1	2.1	0.99
117	2018	brth	20	636	839	103.3	103.1	7.4	8.4	0.2	1.8	0.98
118	2019	brth	29	700	613	97.0	95.9	13.8	15.4	1.1	2.8	0.99
119	2010	calv	55	183	191	95.0	95.7	8.1	8.8	-0.7	1.6	0.99
120	2011	calv	47	154	163	94.0	94.0	8.8	9.1	0.0	1.5	0.99
121	2012	calv	47	311	554	96.3	96.3	9.7	10.9	0.0	2.3	0.98
122	2013	calv	50	243	469	97.5	97.2	8.7	9.0	0.3	1.8	0.98
123	2014	calv	36	420	535	95.5	95.3	9.8	10.2	0.2	1.4	0.99
124	2015	calv	30	985	968	100.9	100.5	7.8	8.0	0.4	1.1	0.99
125	2016	calv	26	672	695	97.9	97.3	8.6	9.3	0.6	1.7	0.99
126	2017	calv	29	707	572	98.9	97.7	8.3	9.6	1.3	2.4	0.97

distribution of differences in number of bulls and in percentage

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-14	1	.	0	.
2	-7	2	.	1	.
3	-6	1	.	0	.
4	-5	4	3	1	1
5	-4	10	7	3	2
6	-3	20	12	5	4
7	-2	54	33	14	10
8	-1	38	59	10	18
9	0	62	82	17	25
10	1	61	59	16	18
11	2	49	45	13	14
12	3	42	14	11	4
13	4	18	10	5	3
14	5	5	4	1	1
15	6	6	.	2	.
16	8	1	1	0	0
17	10	1	.	0	.

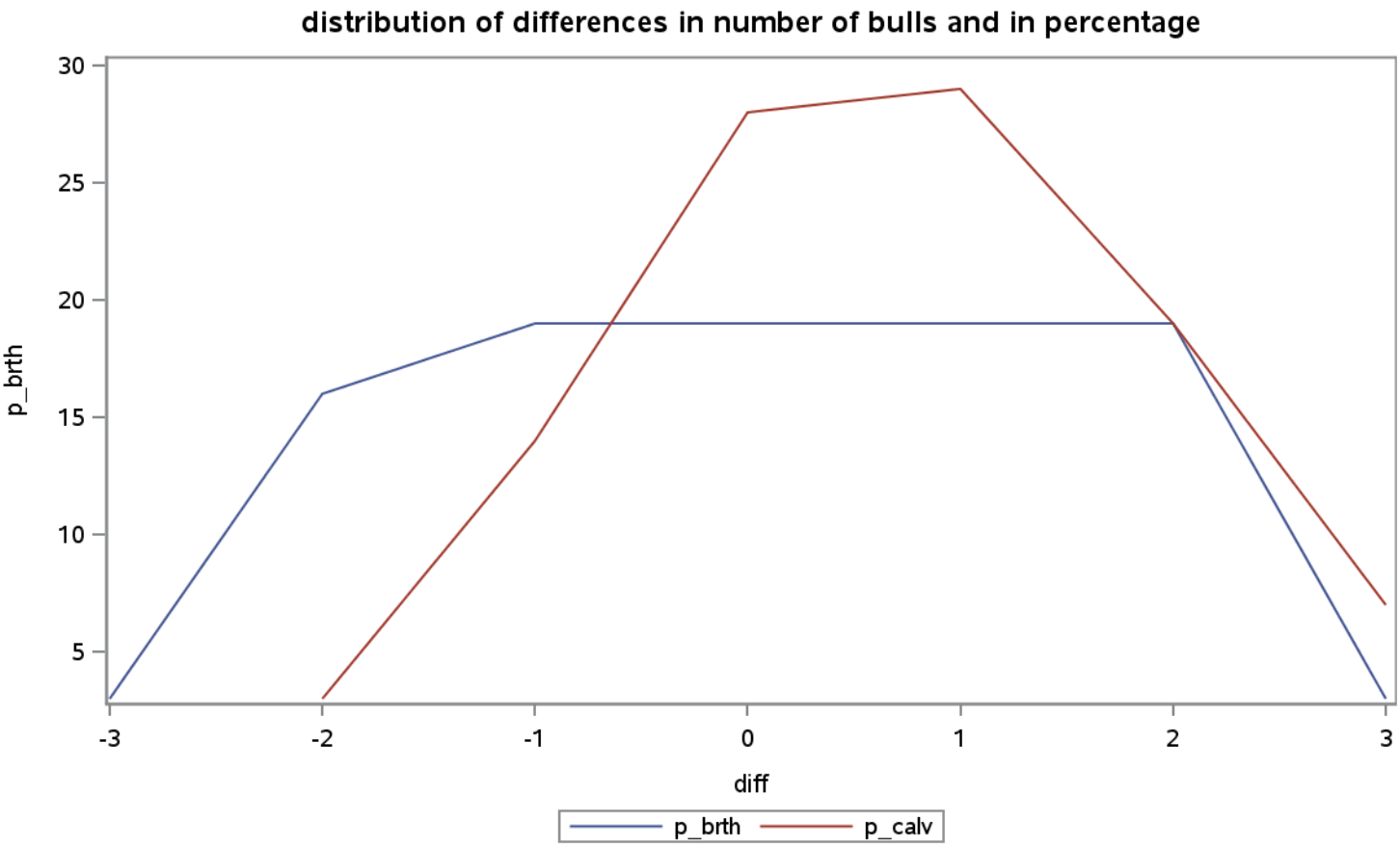

distribution of differences in number of bulls and in percentage
p_brth
25
20
15
10
5
0
-15
-10
-5
0
5
10
diff
p_brth
p_calv

JER summery stastistics for snell and current breeding value for nordic AI bulls with no offspring, by birth year

Obs	BYR	name	no	mean_sn_no	std_sn_no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
1	2019	dSB1	12	-99	0	99.7	99.3	5.9	7.0	0.4	1.3	0.99
2	2020	dSB1	12	-83	39	101.9	102.5	3.8	3.9	-0.6	0.9	0.97
3	2019	dCE1	12	-99	0	99.7	99.0	4.1	5.1	0.7	3.3	0.76
4	2020	dCE1	12	-83	39	98.4	98.5	4.7	5.9	-0.1	2.9	0.87
5	2019	dCS1	12	-99	0	101.1	100.9	5.0	5.3	0.2	0.6	0.99
6	2020	dCS1	13	-76	43	101.6	102.0	4.2	4.4	-0.4	0.8	0.98
7	2019	dSB2	12	-99	0	100.3	99.8	5.9	7.1	0.4	1.6	0.99
8	2020	dSB2	12	-83	39	102.6	102.6	3.9	4.7	0.0	1.3	0.97
9	2019	dCE2	12	-99	0	100.1	99.3	4.3	5.9	0.8	4.7	0.62
10	2020	dCE2	12	-83	39	97.9	97.8	4.5	5.6	0.1	4.3	0.66
11	2019	dCS2	12	-99	0	101.2	101.0	4.0	4.4	0.1	1.1	0.97
12	2020	dCS2	12	-83	39	101.4	101.9	4.7	5.1	-0.4	1.0	0.98
13	2019	mSB1	43	-28	45	100.0	99.6	4.4	4.7	0.4	0.7	0.99
14	2020	mSB1	22	-45	50	100.1	98.7	4.2	4.9	1.4	1.2	0.98
15	2019	mCE1	43	-28	45	101.4	101.2	5.1	5.0	0.2	1.8	0.94
16	2020	mCE1	22	-45	50	96.6	97.1	4.2	3.4	-0.5	2.2	0.86
17	2019	mCS1	43	-28	45	101.5	101.0	3.3	3.4	0.5	1.3	0.92
18	2020	mCS1	22	-45	50	100.5	101.2	4.1	4.3	-0.6	1.0	0.97
19	2019	mSB2	44	-27	45	98.7	97.8	4.4	4.8	0.9	2.2	0.89
20	2020	mSB2	22	-45	50	98.1	98.2	4.4	4.6	-0.1	1.0	0.98
21	2019	mCE2	44	-27	45	101.1	100.9	4.9	5.1	0.3	2.1	0.91
22	2020	mCE2	22	-45	50	96.2	96.4	4.4	3.9	-0.2	1.9	0.90
23	2019	mCS2	44	-27	45	101.0	100.9	3.8	3.4	0.1	2.1	0.84
24	2020	mCS2	22	-45	50	102.3	101.3	3.0	3.6	1.0	2.2	0.78
25	2019	brth	12	-99	0	99.9	99.3	5.8	7.0	0.6	1.4	0.99
26	2020	brth	12	-83	39	101.7	102.1	3.9	4.9	-0.4	1.5	0.97
27	2019	calv	43	-28	45	99.9	99.2	4.1	4.7	0.7	1.3	0.96
28	2020	calv	22	-45	50	98.1	97.7	4.5	4.8	0.4	1.0	0.98

distribution of differences in number of bulls and in percentage

Obs	diff	d_brth	d_calv	p_brth	p_calv
1	-3	1	.	3	.
2	-2	5	2	16	3
3	-1	6	10	19	14
4	0	6	20	19	28
5	1	6	21	19	29
6	2	6	14	19	19
7	3	1	5	3	7


distribution of differences in number of bulls and in percentage
p_brth
30
25
20
15
10
5
-3
-2
-1
0
1
2
3
diff
p_brth
p_calv

HOL summery stastistics for snell and current breeding value for genotyped females without own record, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
1	2019	dSB1	2842	99.5	99.6	5.4	5.3	-0.1	1.4	0.97
2	2020	dSB1	1058	100.3	100.2	4.8	4.8	0.1	1.2	0.97
3	2019	dCE1	2842	99.8	99.9	4.3	4.7	-0.1	1.1	0.98
4	2020	dCE1	1058	100.2	100.4	3.9	4.3	-0.2	1.0	0.97
5	2019	dCS1	2842	99.9	99.8	5.4	5.5	0.1	0.9	0.99
6	2020	dCS1	1058	99.3	99.3	5.1	5.0	0.0	1.0	0.98
7	2019	dSB2	2842	98.9	99.2	5.1	4.6	-0.3	2.1	0.91
8	2020	dSB2	1058	99.3	99.5	4.4	4.1	-0.1	1.9	0.90
9	2019	dCE2	2842	99.5	99.7	3.8	4.4	-0.2	1.5	0.94
10	2020	dCE2	1058	100.0	100.2	3.4	4.1	-0.2	1.5	0.94
11	2019	dCS2	2842	99.7	99.7	5.5	5.6	0.0	1.0	0.98
12	2020	dCS2	1058	99.2	99.2	5.1	5.2	0.0	0.9	0.98
13	2019	brth	2842	99.4	99.5	5.0	4.9	-0.1	1.5	0.96
14	2020	brth	1058	100.0	100.0	4.4	4.5	0.0	1.4	0.95

distribution of differences in number of females and in percentage

Obs	diff	d_brth	p_brth
1	-19	1	0
2	-18	1	0
3	-16	2	0
4	-15	1	0
5	-10	3	0
6	-9	2	0
7	-8	2	0
8	-7	7	0
9	-5	4	0
10	-4	35	1
11	-3	79	2
12	-2	226	6
13	-1	808	21
14	0	1628	42
15	1	800	21
16	2	203	5
17	3	68	2
18	4	20	1
19	5	8	0
20	6	2	0

HOL summery stastistics for snell and current breeding value for genotyped females without progeny, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
1	2019	mSB1	11976	100.9	101.0	4.1	4.2	-0.2	0.6	0.99
2	2020	mSB1	39544	101.5	101.8	3.8	4.0	-0.3	0.7	0.99
3	2021	mSB1	52881	100.6	100.8	3.1	3.3	-0.2	0.6	0.98
4	2022	mSB1	13556	101.2	101.4	2.7	2.9	-0.3	0.6	0.98
5	2019	mCE1	11976	101.3	101.3	3.8	3.9	0.1	0.6	0.99
6	2020	mCE1	39544	102.1	102.0	3.6	3.7	0.1	0.8	0.98
7	2021	mCE1	52881	101.8	101.7	3.0	3.1	0.1	0.7	0.97
8	2022	mCE1	13556	102.3	102.2	2.9	3.0	0.0	0.7	0.97
9	2019	mCS1	11976	100.3	100.0	6.1	5.8	0.2	1.1	0.98
10	2020	mCS1	39544	103.0	102.5	6.3	6.0	0.6	1.2	0.98
11	2021	mCS1	52881	102.2	101.7	4.7	4.5	0.5	1.1	0.98
12	2022	mCS1	13556	102.8	102.2	4.4	4.2	0.6	1.0	0.97
13	2019	mSB2	11976	100.9	101.0	3.6	3.5	-0.2	1.9	0.86
14	2020	mSB2	39544	101.7	101.0	3.7	3.8	0.7	2.7	0.74
15	2021	mSB2	52881	100.8	100.6	3.1	3.0	0.2	1.9	0.81
16	2022	mSB2	13556	101.0	100.7	2.8	2.9	0.3	1.8	0.80
17	2019	mCE2	11976	101.6	101.6	3.6	3.7	0.1	1.0	0.96
18	2020	mCE2	39544	101.8	101.7	3.4	3.6	0.2	1.2	0.94
19	2021	mCE2	52881	102.3	102.0	3.1	3.1	0.3	1.1	0.94
20	2022	mCE2	13556	102.3	102.1	2.9	2.9	0.2	1.0	0.94
21	2019	mCS2	11976	99.5	99.5	5.4	5.4	0.0	1.0	0.98
22	2020	mCS2	39544	102.1	102.0	5.5	5.7	0.1	1.1	0.98
23	2021	mCS2	52881	101.3	101.0	4.3	4.3	0.3	0.8	0.98
24	2022	mCS2	13556	102.0	101.6	4.0	4.0	0.4	0.8	0.98
25	2019	calv	11976	101.1	101.2	3.8	3.8	-0.1	0.7	0.98
26	2020	calv	39544	101.8	101.8	3.7	3.7	0.0	0.9	0.97
27	2021	calv	52881	100.9	100.9	3.1	3.1	0.0	0.6	0.98
28	2022	calv	13556	101.4	101.4	2.7	2.8	0.0	0.6	0.97

distribution of differences in number of females and in percentage

Obs	diff	d_calv	p_calv
1	-6	1	0
2	-5	1	0
3	-4	3	0
4	-3	108	0
5	-2	2504	2
6	-1	23016	20
7	0	67825	57
8	1	20522	17
9	2	3618	3
10	3	303	0
11	4	49	0
12	5	3	0
13	6	1	0
14	13	1	0
15	14	2	0

RDC summery stastistics for snell and current breeding value for genotyped females without own record, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
1	2019	dSB1	1933	100.3	100.5	4.0	4.0	-0.3	1.2	0.95
2	2020	dSB1	660	101.0	101.1	4.2	4.1	-0.1	1.1	0.96
3	2019	dCE1	1933	101.0	100.7	4.9	4.5	0.2	1.0	0.98
4	2020	dCE1	660	101.1	101.0	5.7	5.3	0.1	0.9	0.99
5	2019	dCS1	1933	100.3	99.9	5.5	5.2	0.4	1.6	0.96
6	2020	dCS1	660	99.9	99.4	6.3	5.9	0.5	1.4	0.97
7	2019	dSB2	1933	100.7	100.8	4.2	4.3	-0.1	1.2	0.96
8	2020	dSB2	660	101.2	101.5	4.2	4.4	-0.3	1.1	0.97
9	2019	dCE2	1933	101.1	100.9	4.7	4.7	0.2	1.5	0.95
10	2020	dCE2	660	101.7	101.4	5.8	5.7	0.3	1.4	0.97
11	2019	dCS2	1933	99.9	99.7	6.3	5.6	0.2	1.7	0.97
12	2020	dCS2	660	98.6	98.6	6.8	6.1	0.1	1.7	0.97
13	2019	brth	1933	100.6	100.7	4.0	4.1	-0.1	0.9	0.97
14	2020	brth	660	101.2	101.4	4.4	4.5	-0.2	0.9	0.98

distribution of differences in number of females and in percentage

Obs	diff	d_brth	p_brth
1	-4	3	0
2	-3	16	1
3	-2	136	5
4	-1	731	28
5	0	1168	45
6	1	435	17
7	2	78	3
8	3	19	1
9	4	5	0
10	5	1	0
11	7	1	0

RDC summery stastistics for snell and current breeding value for genotyped females without progeny, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
1	2019	mSB1	6891	100.5	100.4	3.9	4.4	0.1	1.5	0.94
2	2020	mSB1	15194	100.6	101.0	4.6	4.9	-0.4	1.4	0.96
3	2021	mSB1	18109	100.8	101.0	3.7	4.0	-0.2	1.2	0.95
4	2022	mSB1	4747	101.0	101.1	3.4	3.6	-0.1	1.2	0.95
5	2019	mCE1	6891	100.4	100.3	5.0	5.0	0.2	1.0	0.98
6	2020	mCE1	15194	101.6	101.6	5.2	5.5	0.0	1.3	0.97
7	2021	mCE1	18109	101.4	101.2	4.1	4.2	0.2	1.0	0.97
8	2022	mCE1	4747	101.5	101.3	3.8	3.8	0.3	0.9	0.97
9	2019	mCS1	6891	101.6	101.2	7.0	6.8	0.4	2.5	0.93
10	2020	mCS1	15194	100.2	99.6	6.4	6.5	0.5	2.3	0.94
11	2021	mCS1	18109	102.0	101.3	5.3	5.2	0.8	2.1	0.92
12	2022	mCS1	4747	101.3	100.8	5.1	4.9	0.6	1.9	0.93
13	2019	mSB2	6891	100.7	100.2	4.5	4.6	0.4	2.9	0.79
14	2020	mSB2	15194	100.5	100.5	4.7	5.4	0.0	2.8	0.85
15	2021	mSB2	18109	100.7	100.3	3.8	4.1	0.4	2.4	0.82
16	2022	mSB2	4747	101.3	100.8	3.5	3.8	0.4	2.4	0.79
17	2019	mCE2	6891	100.5	100.4	4.1	4.4	0.1	1.5	0.94
18	2020	mCE2	15194	100.9	101.2	4.5	5.1	-0.3	1.5	0.96
19	2021	mCE2	18109	100.8	100.9	3.8	4.1	-0.1	1.2	0.95
20	2022	mCE2	4747	101.1	101.2	3.4	3.6	-0.1	1.1	0.95
21	2019	mCS2	6891	101.2	101.1	5.0	5.6	0.1	2.2	0.92
22	2020	mCS2	15194	100.3	100.6	4.9	5.6	-0.3	2.0	0.94
23	2021	mCS2	18109	101.5	101.7	4.3	4.8	-0.1	1.6	0.94
24	2022	mCS2	4747	101.1	101.1	3.9	4.4	0.0	1.5	0.94
25	2019	calv	6891	100.6	100.4	4.0	4.4	0.3	1.8	0.91
26	2020	calv	15194	100.8	101.0	4.8	5.3	-0.2	1.8	0.94
27	2021	calv	18109	100.9	100.8	3.8	4.1	0.1	1.5	0.93
28	2022	calv	4747	101.3	101.1	3.5	3.7	0.1	1.4	0.92

distribution of differences in number of females and in percentage

Obs	diff	d_calv	p_calv
1	-7	7	0
2	-6	38	0
3	-5	181	0
4	-4	590	1
5	-3	1735	4
6	-2	4781	11
7	-1	8918	20
8	0	11237	25
9	1	9890	22
10	2	4892	11
11	3	1804	4
12	4	610	1
13	5	171	0
14	6	47	0
15	7	20	0
16	8	11	0
17	9	7	0
18	10	1	0
19	13	1	0

JER summery stastistics for snell and current breeding value for genotyped females without own record, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
1	2019	dSB1	713	100.7	100.5	5.2	5.8	0.2	1.4	0.97
2	2020	dSB1	300	100.8	100.6	5.7	6.4	0.1	1.4	0.98
3	2019	dCE1	713	100.1	99.7	4.5	4.3	0.4	2.5	0.84
4	2020	dCE1	300	100.8	100.0	4.4	4.3	0.8	2.7	0.81
5	2019	dCS1	713	100.4	100.4	4.0	4.0	0.0	0.7	0.98
6	2020	dCS1	300	100.2	100.3	4.0	4.0	-0.1	0.9	0.98
7	2019	dSB2	713	101.5	101.3	5.0	5.6	0.2	1.7	0.95
8	2020	dSB2	300	102.1	101.8	4.9	5.7	0.3	1.7	0.96
9	2019	dCE2	713	101.0	100.3	4.5	4.5	0.7	3.0	0.78
10	2020	dCE2	300	101.8	100.8	4.3	4.0	1.0	3.1	0.73
11	2019	dCS2	713	100.5	100.5	3.7	3.7	0.0	0.7	0.98
12	2020	dCS2	300	100.5	100.5	4.0	4.0	0.0	0.7	0.98
13	2019	brth	713	101.1	100.8	5.1	5.8	0.3	1.4	0.98
14	2020	brth	300	101.5	101.2	5.2	6.0	0.4	1.4	0.98

distribution of differences in number of females and in percentage

Obs	diff	d_brth	p_brth
1	-5	1	0
2	-4	3	0
3	-3	7	1
4	-2	82	8
5	-1	176	17
6	0	294	29
7	1	266	26
8	2	131	13
9	3	37	4
10	4	9	1
11	5	5	0
12	6	2	0

JER summery stastistics for snell and current breeding value for genotyped females without progeny, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
1	2019	mSB1	4519	98.5	98.1	5.0	5.4	0.4	0.9	0.99
2	2020	mSB1	10160	100.1	99.5	5.3	5.9	0.5	1.2	0.98
3	2021	mSB1	12462	99.3	98.8	3.7	3.9	0.5	0.8	0.98
4	2022	mSB1	2887	100.0	99.6	3.4	3.7	0.4	0.7	0.98
5	2019	mCE1	4519	100.1	99.7	4.3	4.7	0.4	1.6	0.94
6	2020	mCE1	10160	99.9	99.7	4.3	4.2	0.2	1.8	0.91
7	2021	mCE1	12462	100.3	99.9	3.4	3.3	0.4	1.4	0.91
8	2022	mCE1	2887	100.1	100.3	3.3	3.0	-0.1	1.5	0.89
9	2019	mCS1	4519	99.9	99.6	4.3	4.2	0.4	1.2	0.96
10	2020	mCS1	10160	101.0	100.9	4.8	4.7	0.1	1.1	0.97
11	2021	mCS1	12462	100.8	100.3	3.4	3.5	0.4	1.0	0.96
12	2022	mCS1	2887	100.7	100.3	2.9	3.1	0.4	0.9	0.95
13	2019	mSB2	4519	99.2	98.2	4.5	4.8	1.0	1.9	0.92
14	2020	mSB2	10160	99.0	98.8	4.7	4.8	0.2	1.8	0.93
15	2021	mSB2	12462	99.9	98.9	3.3	3.5	1.0	1.4	0.92
16	2022	mSB2	2887	99.7	99.1	3.0	3.3	0.6	1.4	0.91
17	2019	mCE2	4519	99.8	99.6	5.5	5.3	0.2	2.2	0.92
18	2020	mCE2	10160	99.6	99.3	4.5	4.0	0.2	2.2	0.88
19	2021	mCE2	12462	100.6	100.2	3.9	3.7	0.4	1.7	0.90
20	2022	mCE2	2887	100.8	100.7	3.3	3.2	0.0	1.6	0.88
21	2019	mCS2	4519	99.7	99.8	4.6	4.2	-0.1	1.7	0.93
22	2020	mCS2	10160	101.3	101.0	4.2	4.3	0.3	1.8	0.91
23	2021	mCS2	12462	100.4	100.4	3.1	3.2	0.0	1.4	0.90
24	2022	mCS2	2887	100.3	100.1	3.1	3.0	0.2	1.3	0.91
25	2019	calv	4519	98.9	98.2	4.5	5.0	0.7	1.2	0.97
26	2020	calv	10160	99.6	99.2	4.8	5.2	0.4	1.2	0.97
27	2021	calv	12462	99.8	98.9	3.3	3.6	0.8	0.9	0.97
28	2022	calv	2887	100.1	99.6	2.9	3.3	0.5	1.0	0.96

distribution of differences in number of females and in percentage

Obs	diff	d_calv	p_calv
1	-8	1	0
2	-6	1	0
3	-5	2	0
4	-4	5	0
5	-3	100	0
6	-2	896	3
7	-1	3420	11
8	0	8307	28
9	1	11243	37
10	2	4733	16
11	3	1241	4
12	4	72	0
13	5	7	0

HOL summery stastistics for snell and current breeding value for genotyped females with own record, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
1	2015	dSB1	11925	99.5	99.8	5.1	5.5	-0.2	1.3	0.97
2	2016	dSB1	18824	100.6	100.7	5.4	5.7	-0.1	1.3	0.98
3	2017	dSB1	28370	101.0	100.9	5.5	5.7	0.1	1.2	0.98
4	2018	dSB1	39661	100.7	100.6	5.0	5.3	0.0	1.2	0.97
5	2019	dSB1	44276	100.8	100.6	5.3	5.4	0.1	1.2	0.98
6	2020	dSB1	52863	101.6	101.4	4.5	4.8	0.2	1.1	0.97
7	2021	dSB1	52878	101.7	101.5	4.2	4.5	0.2	1.0	0.97
8	2022	dSB1	13546	101.9	101.5	4.3	4.5	0.3	1.0	0.98
9	2015	dCE1	11925	99.3	99.5	4.9	5.5	-0.2	1.3	0.97
10	2016	dCE1	18824	100.3	100.5	4.9	5.6	-0.2	1.3	0.98
11	2017	dCE1	28370	100.6	100.7	4.7	5.3	-0.1	1.2	0.98
12	2018	dCE1	39661	100.6	100.7	4.5	5.0	-0.1	1.2	0.98
13	2019	dCE1	44276	100.9	101.0	4.3	4.8	-0.1	1.1	0.98
14	2020	dCE1	52863	101.5	101.7	3.9	4.4	-0.2	1.1	0.97
15	2021	dCE1	52878	102.2	102.4	3.6	4.1	-0.2	1.0	0.97
16	2022	dCE1	13546	102.5	102.7	3.6	4.1	-0.2	1.0	0.98
17	2015	dCS1	11925	100.4	100.3	6.0	6.4	0.1	1.1	0.99
18	2016	dCS1	18824	99.7	99.6	6.0	6.3	0.1	1.1	0.98
19	2017	dCS1	28370	99.3	99.3	5.7	6.0	0.0	1.0	0.99
20	2018	dCS1	39661	99.2	99.2	5.7	5.9	0.1	1.0	0.99
21	2019	dCS1	44276	99.0	98.9	5.5	5.7	0.0	0.9	0.99
22	2020	dCS1	52863	97.9	98.0	5.3	5.5	0.0	0.9	0.99
23	2021	dCS1	52878	97.2	97.1	5.0	5.1	0.0	0.9	0.99
24	2022	dCS1	13546	97.0	97.0	4.9	5.0	0.0	1.0	0.98
25	2015	dSB2	11925	99.6	99.6	4.5	5.2	0.0	1.9	0.93
26	2016	dSB2	18824	100.5	100.4	4.5	5.1	0.1	1.9	0.93
27	2017	dSB2	28370	100.6	100.6	4.6	5.0	0.1	1.9	0.93
28	2018	dSB2	39661	100.8	100.6	4.4	4.8	0.2	1.8	0.92
29	2019	dSB2	44276	100.5	100.4	4.2	4.6	0.1	1.8	0.92
30	2020	dSB2	52863	101.0	100.9	4.0	4.3	0.1	1.7	0.92
31	2021	dSB2	52878	100.8	100.7	3.8	4.2	0.2	1.6	0.93
32	2022	dSB2	13546	100.8	100.6	3.8	4.2	0.2	1.5	0.93
33	2015	dCE2	11925	98.8	99.0	4.4	5.3	-0.2	2.0	0.94
34	2016	dCE2	18824	99.6	99.8	4.3	5.2	-0.2	2.0	0.93
35	2017	dCE2	28370	100.3	100.5	4.1	5.0	-0.2	1.9	0.93
36	2018	dCE2	39661	100.5	100.7	4.0	4.8	-0.2	1.9	0.93

HOL summery stastistics for snell and current breeding value for genotyped females with own record, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
37	2019	dCE2	44276	100.5	100.7	3.8	4.6	-0.3	1.8	0.93
38	2020	dCE2	52863	101.2	101.5	3.5	4.4	-0.3	1.7	0.93
39	2021	dCE2	52878	101.7	102.1	3.3	4.1	-0.4	1.6	0.93
40	2022	dCE2	13546	102.0	102.3	3.1	4.0	-0.3	1.6	0.93
41	2015	dCS2	11925	100.3	100.3	6.0	6.4	0.1	1.1	0.99
42	2016	dCS2	18824	99.8	99.7	5.9	6.3	0.1	1.1	0.99
43	2017	dCS2	28370	99.3	99.3	5.7	6.0	0.0	1.0	0.99
44	2018	dCS2	39661	99.4	99.3	5.6	5.9	0.1	1.0	0.99
45	2019	dCS2	44276	98.7	98.6	5.6	5.9	0.1	1.0	0.99
46	2020	dCS2	52863	97.6	97.6	5.4	5.6	0.1	0.9	0.99
47	2021	dCS2	52878	96.4	96.4	5.0	5.2	0.0	0.9	0.99
48	2022	dCS2	13546	96.0	96.1	5.0	5.3	-0.1	0.9	0.98
49	2015	brth	11925	99.4	99.6	4.7	5.3	-0.2	1.5	0.96
50	2016	brth	18824	100.5	100.6	4.9	5.4	-0.1	1.5	0.97
51	2017	brth	28370	100.8	100.8	4.9	5.4	0.0	1.4	0.97
52	2018	brth	39661	100.7	100.7	4.6	5.0	0.1	1.4	0.96
53	2019	brth	44276	100.7	100.6	4.7	5.1	0.1	1.3	0.97
54	2020	brth	52863	101.5	101.4	4.2	4.6	0.1	1.3	0.96
55	2021	brth	52878	101.7	101.5	3.9	4.3	0.2	1.2	0.96
56	2022	brth	13546	101.8	101.5	3.9	4.3	0.3	1.2	0.96

distribution of differences in number of females and in percentage

Obs	diff	d_brth	p_brth
1	-57	1	0
2	-55	1	0
3	-54	1	0
4	-48	1	0
5	-22	1	0
6	-16	1	0
7	-15	2	0
8	-14	3	0
9	-13	2	0
10	-12	2	0
11	-11	3	0
12	-10	6	0
13	-9	6	0
14	-8	17	0
15	-7	83	0
16	-6	233	0
17	-5	737	0
18	-4	2125	1
19	-3	5418	2
20	-2	14264	5
21	-1	45011	17
22	0	106995	41
23	1	58750	22
24	2	19685	8
25	3	6564	3
26	4	1645	1
27	5	461	0
28	6	175	0
29	7	63	0
30	8	27	0
31	9	16	0
32	10	26	0
33	11	12	0
34	12	5	0
35	14	1	0

HOL summery stastistics for snell and current breeding value for genotyped females with progeny, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
1	2015	mSB1	11269	97.6	97.4	5.0	5.3	0.3	1.1	0.98
2	2016	mSB1	16891	98.6	98.5	4.8	5.1	0.1	1.1	0.98
3	2017	mSB1	24214	99.3	99.2	5.0	5.3	0.0	1.0	0.98
4	2018	mSB1	33531	100.3	100.4	4.7	5.0	-0.1	0.9	0.98
5	2019	mSB1	35244	100.8	101.0	4.3	4.6	-0.2	0.9	0.98
6	2020	mSB1	14187	101.9	102.3	4.0	4.3	-0.4	0.9	0.98
7	2015	mCE1	11269	97.3	97.2	5.1	5.2	0.1	1.0	0.98
8	2016	mCE1	16891	98.3	98.2	4.8	4.9	0.0	1.0	0.98
9	2017	mCE1	24214	99.3	99.3	4.8	4.9	0.0	0.9	0.98
10	2018	mCE1	33531	100.1	100.1	4.4	4.5	0.0	0.9	0.98
11	2019	mCE1	35244	101.3	101.3	4.3	4.4	0.0	0.8	0.98
12	2020	mCE1	14187	102.4	102.3	4.2	4.3	0.1	0.8	0.98
13	2015	mCS1	11269	98.7	99.3	6.0	5.9	-0.6	1.8	0.95
14	2016	mCS1	16891	99.0	99.4	6.3	6.2	-0.4	1.7	0.96
15	2017	mCS1	24214	100.1	100.1	5.8	5.7	0.0	1.6	0.96
16	2018	mCS1	33531	99.7	99.7	5.9	5.7	0.0	1.5	0.97
17	2019	mCS1	35244	100.6	100.4	6.3	6.0	0.3	1.5	0.97
18	2020	mCS1	14187	103.3	102.6	6.3	6.1	0.6	1.5	0.97
19	2015	mSB2	11269	96.4	97.3	5.0	5.1	-0.9	2.1	0.91
20	2016	mSB2	16891	97.8	98.4	4.8	4.8	-0.6	2.1	0.91
21	2017	mSB2	24214	99.2	99.4	4.6	4.6	-0.2	2.0	0.91
22	2018	mSB2	33531	100.5	100.5	4.3	4.3	0.0	2.0	0.89
23	2019	mSB2	35244	100.9	101.0	4.1	4.2	-0.1	2.1	0.87
24	2020	mSB2	14187	101.9	101.3	4.0	4.4	0.6	2.8	0.79
25	2015	mCE2	11269	96.7	96.6	5.0	5.2	0.1	1.5	0.96
26	2016	mCE2	16891	98.0	97.9	4.7	4.8	0.1	1.5	0.95
27	2017	mCE2	24214	99.1	99.1	4.3	4.5	0.0	1.3	0.96
28	2018	mCE2	33531	100.4	100.4	4.2	4.3	0.0	1.3	0.95
29	2019	mCE2	35244	101.8	101.7	4.0	4.2	0.1	1.2	0.96
30	2020	mCE2	14187	101.8	101.8	3.8	4.2	0.1	1.3	0.95
31	2015	mCS2	11269	98.3	98.7	6.2	6.1	-0.4	1.3	0.98
32	2016	mCS2	16891	98.5	98.9	6.0	5.9	-0.3	1.3	0.98
33	2017	mCS2	24214	99.9	99.8	5.8	5.7	0.1	1.2	0.98
34	2018	mCS2	33531	100.2	100.2	6.0	6.0	0.0	1.1	0.98
35	2019	mCS2	35244	99.8	99.8	5.5	5.5	0.0	1.1	0.98
36	2020	mCS2	14187	102.2	102.0	5.4	5.6	0.1	1.2	0.98

HOL summery stastistics for snell and current breeding value for genotyped females with progeny, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
37	2015	calv	11269	97.0	97.0	4.9	5.2	0.0	1.0	0.98
38	2016	calv	16891	98.2	98.3	4.7	4.9	-0.1	1.0	0.98
39	2017	calv	24214	99.2	99.2	4.8	4.9	0.0	0.9	0.98
40	2018	calv	33531	100.4	100.4	4.5	4.6	-0.1	0.9	0.98
41	2019	calv	35244	101.0	101.2	4.2	4.4	-0.1	0.9	0.98
42	2020	calv	14187	102.2	102.2	4.0	4.2	0.0	1.0	0.97

distribution of differences in number of females and in percentage

Obs	diff	d_calv	p_calv
1	-5	2	0
2	-4	19	0
3	-3	286	0
4	-2	4315	3
5	-1	35106	26
6	0	70022	52
7	1	19891	15
8	2	3551	3
9	3	1113	1
10	4	509	0
11	5	250	0
12	6	160	0
13	7	73	0
14	8	26	0
15	9	12	0
16	13	1	0

RDC summery stastistics for snell and current breeding value for genotyped females with own record, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
1	2015	dSB1	9418	99.7	99.6	4.4	4.6	0.1	1.3	0.96
2	2016	dSB1	13290	99.5	99.4	4.4	4.7	0.1	1.3	0.96
3	2017	dSB1	15330	99.7	99.5	4.2	4.4	0.2	1.3	0.96
4	2018	dSB1	17530	100.6	100.6	3.8	4.1	0.0	1.3	0.95
5	2019	dSB1	17284	100.6	100.6	4.1	4.2	-0.1	1.2	0.96
6	2020	dSB1	18941	101.1	101.1	3.7	3.8	0.0	1.0	0.96
7	2021	dSB1	18109	100.2	100.4	4.0	4.0	-0.1	1.0	0.97
8	2022	dSB1	4747	100.2	100.4	5.1	5.0	-0.1	1.1	0.98
9	2015	dCE1	9418	99.6	99.6	5.9	5.8	0.0	1.3	0.98
10	2016	dCE1	13290	99.2	99.2	5.9	5.7	0.0	1.1	0.98
11	2017	dCE1	15330	99.3	99.4	5.5	5.3	-0.1	1.2	0.98
12	2018	dCE1	17530	100.4	100.4	5.6	5.3	0.0	1.3	0.98
13	2019	dCE1	17284	100.8	100.5	5.0	4.8	0.2	1.1	0.97
14	2020	dCE1	18941	100.4	100.3	5.4	5.2	0.1	1.1	0.98
15	2021	dCE1	18109	101.0	100.8	4.8	4.6	0.2	1.0	0.98
16	2022	dCE1	4747	101.0	100.8	5.1	4.9	0.2	1.1	0.98
17	2015	dCS1	9418	100.1	100.2	6.5	6.4	-0.1	1.7	0.96
18	2016	dCS1	13290	101.1	101.2	6.8	6.6	-0.1	1.7	0.97
19	2017	dCS1	15330	100.6	100.4	6.2	6.0	0.2	1.6	0.97
20	2018	dCS1	17530	100.0	100.0	5.8	5.7	0.0	1.5	0.97
21	2019	dCS1	17284	100.0	99.8	6.1	5.8	0.1	1.6	0.96
22	2020	dCS1	18941	100.1	99.8	6.8	6.4	0.2	1.5	0.97
23	2021	dCS1	18109	100.2	99.6	6.3	5.8	0.6	1.5	0.97
24	2022	dCS1	4747	100.1	99.5	6.5	5.9	0.5	1.6	0.97
25	2015	dSB2	9418	99.8	99.7	4.8	5.1	0.0	1.4	0.96
26	2016	dSB2	13290	99.8	99.7	4.7	5.0	0.1	1.4	0.96
27	2017	dSB2	15330	99.8	99.9	4.7	4.9	-0.1	1.4	0.96
28	2018	dSB2	17530	100.6	100.6	4.2	4.5	0.1	1.4	0.95
29	2019	dSB2	17284	100.5	100.4	4.0	4.4	0.0	1.3	0.95
30	2020	dSB2	18941	101.2	101.3	3.9	4.3	-0.1	1.3	0.96
31	2021	dSB2	18109	101.0	101.1	3.4	3.8	-0.1	1.2	0.95
32	2022	dSB2	4747	100.4	100.7	4.1	4.5	-0.2	1.3	0.96
33	2015	dCE2	9418	99.7	99.7	6.0	6.2	-0.1	1.9	0.95
34	2016	dCE2	13290	99.3	99.2	5.7	6.0	0.1	1.7	0.96
35	2017	dCE2	15330	99.7	99.7	5.2	5.4	0.0	1.7	0.95
36	2018	dCE2	17530	100.2	100.3	5.2	5.4	-0.1	1.7	0.95

RDC summery stastistics for snell and current breeding value for genotyped females with own record, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
37	2019	dCE2	17284	100.7	100.6	4.8	5.1	0.1	1.7	0.94
38	2020	dCE2	18941	100.6	100.5	5.5	5.8	0.1	1.6	0.96
39	2021	dCE2	18109	101.2	101.1	4.5	4.9	0.1	1.5	0.95
40	2022	dCE2	4747	101.1	101.0	5.0	5.1	0.1	1.7	0.95
41	2015	dCS2	9418	100.2	100.4	7.1	6.7	-0.2	1.8	0.97
42	2016	dCS2	13290	100.5	100.8	7.1	6.6	-0.3	1.8	0.97
43	2017	dCS2	15330	100.6	100.5	6.4	6.0	0.0	1.7	0.96
44	2018	dCS2	17530	99.5	99.6	6.4	6.0	-0.1	1.5	0.97
45	2019	dCS2	17284	100.0	99.9	6.7	6.2	0.1	1.7	0.97
46	2020	dCS2	18941	98.8	98.9	6.9	6.4	-0.2	1.6	0.97
47	2021	dCS2	18109	99.2	99.0	6.8	6.2	0.2	1.5	0.98
48	2022	dCS2	4747	99.2	99.0	6.8	6.2	0.2	1.5	0.98
49	2015	brth	9418	99.7	99.6	4.7	5.0	0.0	1.2	0.97
50	2016	brth	13290	99.6	99.4	4.6	4.9	0.1	1.1	0.97
51	2017	brth	15330	99.7	99.6	4.3	4.5	0.1	1.1	0.97
52	2018	brth	17530	100.6	100.6	4.0	4.3	0.0	1.0	0.97
53	2019	brth	17284	100.6	100.6	4.0	4.3	0.0	1.0	0.97
54	2020	brth	18941	101.1	101.2	3.9	4.2	0.0	1.0	0.98
55	2021	brth	18109	100.7	100.8	3.7	4.0	-0.1	0.9	0.97
56	2022	brth	4747	100.5	100.6	4.7	4.9	-0.2	1.0	0.98

distribution of differences in number of females and in percentage

Obs	diff	d_brth	p_brth
1	-12	1	0
2	-8	2	0
3	-7	5	0
4	-6	6	0
5	-5	49	0
6	-4	268	0
7	-3	1057	1
8	-2	5526	5
9	-1	25592	22
10	0	50612	44
11	1	24051	21
12	2	5746	5
13	3	1320	1
14	4	250	0
15	5	94	0
16	6	48	0
17	7	9	0
18	8	3	0
19	9	8	0
20	10	1	0
21	12	1	0

RDC summery stastistics for snell and current breeding value for genotyped females with progeny, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
1	2015	mSB1	8294	99.7	99.5	4.6	5.0	0.2	2.0	0.92
2	2016	mSB1	11168	99.7	99.8	4.9	5.2	-0.1	2.0	0.92
3	2017	mSB1	12729	99.5	99.4	5.1	5.3	0.1	1.9	0.93
4	2018	mSB1	14010	100.2	100.2	4.8	5.3	0.0	1.9	0.94
5	2019	mSB1	12318	100.5	100.5	4.4	4.8	0.1	1.9	0.92
6	2020	mSB1	4384	101.0	101.3	4.9	5.2	-0.2	1.8	0.94
7	2015	mCE1	8294	98.4	98.5	6.2	6.1	-0.1	1.3	0.98
8	2016	mCE1	11168	100.1	100.2	5.7	5.9	-0.1	1.3	0.97
9	2017	mCE1	12729	98.9	98.7	5.4	5.4	0.1	1.3	0.97
10	2018	mCE1	14010	100.8	100.8	5.7	5.6	-0.1	1.2	0.98
11	2019	mCE1	12318	100.6	100.4	5.3	5.3	0.2	1.2	0.98
12	2020	mCE1	4384	101.9	101.7	5.8	6.0	0.2	1.4	0.97
13	2015	mCS1	8294	100.4	100.9	7.5	7.7	-0.5	3.1	0.91
14	2016	mCS1	11168	99.4	99.3	7.2	7.4	0.1	2.8	0.93
15	2017	mCS1	12729	100.8	101.0	7.8	7.5	-0.3	2.8	0.93
16	2018	mCS1	14010	99.7	99.4	8.2	7.9	0.4	2.8	0.94
17	2019	mCS1	12318	101.9	101.5	7.3	7.2	0.4	2.7	0.93
18	2020	mCS1	4384	99.6	99.3	7.2	7.5	0.4	2.5	0.94
19	2015	mSB2	8294	100.1	99.3	5.1	5.1	0.7	3.2	0.80
20	2016	mSB2	11168	99.9	99.7	5.0	5.1	0.1	3.4	0.77
21	2017	mSB2	12729	99.9	99.6	5.1	5.1	0.3	3.3	0.79
22	2018	mSB2	14010	100.2	100.2	5.2	5.2	-0.1	3.4	0.79
23	2019	mSB2	12318	100.7	100.2	4.9	5.1	0.5	3.3	0.78
24	2020	mSB2	4384	101.4	101.2	5.1	5.9	0.2	3.6	0.80
25	2015	mCE2	8294	98.3	98.4	5.2	5.5	-0.1	1.7	0.95
26	2016	mCE2	11168	99.1	99.4	4.9	5.2	-0.3	1.6	0.95
27	2017	mCE2	12729	99.1	99.0	4.8	5.0	0.0	1.7	0.94
28	2018	mCE2	14010	100.9	100.9	5.2	5.3	0.0	1.5	0.96
29	2019	mCE2	12318	100.6	100.5	4.3	4.7	0.1	1.6	0.94
30	2020	mCE2	4384	101.3	101.5	4.7	5.4	-0.2	1.7	0.95
31	2015	mCS2	8294	100.0	100.5	6.3	6.5	-0.4	2.5	0.93
32	2016	mCS2	11168	99.7	99.9	6.4	6.5	-0.3	2.4	0.93
33	2017	mCS2	12729	100.1	100.3	6.3	6.8	-0.2	2.5	0.93
34	2018	mCS2	14010	100.0	100.0	6.5	7.3	0.0	2.4	0.94
35	2019	mCS2	12318	101.7	101.6	5.3	6.1	0.1	2.3	0.92
36	2020	mCS2	4384	100.2	100.3	5.3	6.1	-0.1	2.3	0.93

RDC summery stastistics for snell and current breeding value for genotyped females with progeny, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
37	2015	calv	8294	99.6	99.2	4.8	5.1	0.4	2.2	0.91
38	2016	calv	11168	99.7	99.7	4.9	5.1	0.0	2.2	0.90
39	2017	calv	12729	99.5	99.3	4.8	5.0	0.2	2.1	0.91
40	2018	calv	14010	100.3	100.4	4.9	5.2	-0.1	2.1	0.92
41	2019	calv	12318	100.7	100.4	4.5	4.9	0.3	2.1	0.90
42	2020	calv	4384	101.4	101.4	5.1	5.7	0.0	2.3	0.92

distribution of differences in number of females and in percentage

Obs	diff	d_calv	p_calv
1	-10	3	0
2	-9	8	0
3	-8	32	0
4	-7	86	0
5	-6	264	0
6	-5	632	1
7	-4	1612	3
8	-3	3678	6
9	-2	6719	11
10	-1	10318	16
11	0	12967	21
12	1	11998	19
13	2	7627	12
14	3	3678	6
15	4	1683	3
16	5	774	1
17	6	362	1
18	7	189	0
19	8	118	0
20	9	66	0
21	10	42	0
22	11	23	0
23	12	10	0
24	13	7	0
25	14	1	0
26	15	1	0
27	16	3	0
28	17	1	0
29	20	1	0

JER summery stastistics for snell and current breeding value for genotyped females with own record, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
1	2015	dSB1	5250	100.5	100.2	4.6	5.1	0.3	1.5	0.96
2	2016	dSB1	6203	101.0	100.6	4.9	5.5	0.4	1.6	0.96
3	2017	dSB1	7648	100.0	99.6	4.5	5.1	0.4	1.5	0.96
4	2018	dSB1	9371	100.8	100.9	4.3	4.8	-0.1	1.4	0.96
5	2019	dSB1	11296	101.1	101.0	5.1	5.7	0.1	1.4	0.97
6	2020	dSB1	13571	101.0	100.8	5.2	5.9	0.2	1.5	0.97
7	2021	dSB1	12462	102.7	102.4	5.9	6.5	0.3	1.3	0.98
8	2022	dSB1	2887	100.4	99.9	5.5	6.2	0.5	1.6	0.97
9	2015	dCE1	5250	100.7	100.9	4.7	5.4	-0.2	3.8	0.72
10	2016	dCE1	6203	102.1	102.0	4.9	5.0	0.1	3.8	0.70
11	2017	dCE1	7648	100.8	100.8	5.5	5.5	0.0	3.5	0.80
12	2018	dCE1	9371	101.1	101.0	4.0	4.4	0.1	3.3	0.69
13	2019	dCE1	11296	100.3	100.0	4.5	4.7	0.3	3.1	0.77
14	2020	dCE1	13571	100.9	100.3	4.4	4.6	0.6	3.3	0.74
15	2021	dCE1	12462	100.3	100.4	4.4	4.4	-0.1	3.1	0.76
16	2022	dCE1	2887	99.5	99.7	4.1	3.9	-0.2	3.5	0.63
17	2015	dCS1	5250	99.1	99.4	6.2	6.4	-0.3	1.3	0.98
18	2016	dCS1	6203	98.3	98.4	5.2	5.5	-0.1	1.2	0.98
19	2017	dCS1	7648	99.0	99.1	5.1	5.3	0.0	1.1	0.98
20	2018	dCS1	9371	99.9	99.8	4.4	4.5	0.1	1.0	0.97
21	2019	dCS1	11296	100.5	100.4	4.3	4.4	0.1	1.0	0.98
22	2020	dCS1	13571	100.3	100.1	4.1	4.3	0.1	1.0	0.97
23	2021	dCS1	12462	101.0	100.8	3.7	3.9	0.2	0.9	0.98
24	2022	dCS1	2887	100.9	100.5	3.6	3.8	0.4	0.9	0.97
25	2015	dSB2	5250	101.5	101.2	4.1	4.6	0.3	1.7	0.93
26	2016	dSB2	6203	100.4	100.2	3.8	4.4	0.2	1.6	0.93
27	2017	dSB2	7648	100.1	99.6	4.1	4.4	0.5	1.6	0.94
28	2018	dSB2	9371	101.2	101.2	3.5	4.0	0.0	1.5	0.93
29	2019	dSB2	11296	101.4	101.3	5.1	5.7	0.1	1.7	0.95
30	2020	dSB2	13571	102.5	102.2	4.7	5.4	0.3	1.7	0.95
31	2021	dSB2	12462	102.9	102.6	6.0	6.6	0.3	1.6	0.97
32	2022	dSB2	2887	100.3	99.9	6.1	6.7	0.4	1.8	0.96
33	2015	dCE2	5250	101.6	101.8	4.0	5.3	-0.2	4.4	0.59
34	2016	dCE2	6203	102.4	102.6	3.9	4.9	-0.2	4.2	0.56
35	2017	dCE2	7648	101.6	101.5	4.2	5.2	0.2	4.0	0.66
36	2018	dCE2	9371	100.9	100.9	3.5	4.5	0.0	3.9	0.56

JER summery stastistics for snell and current breeding value for genotyped females with own record, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
37	2019	dCE2	11296	100.8	100.4	4.5	5.0	0.4	3.7	0.70
38	2020	dCE2	13571	101.4	100.7	4.3	4.6	0.6	3.8	0.64
39	2021	dCE2	12462	100.6	100.6	4.4	4.6	0.0	3.6	0.68
40	2022	dCE2	2887	100.3	100.4	4.3	4.5	-0.1	4.0	0.59
41	2015	dCS2	5250	99.0	99.2	6.4	6.4	-0.2	1.1	0.99
42	2016	dCS2	6203	98.1	98.1	5.5	5.6	0.1	1.0	0.98
43	2017	dCS2	7648	99.4	99.2	5.1	5.2	0.1	1.0	0.98
44	2018	dCS2	9371	99.7	99.7	4.5	4.5	0.1	0.9	0.98
45	2019	dCS2	11296	100.6	100.5	4.2	4.3	0.1	0.8	0.98
46	2020	dCS2	13571	100.3	100.2	4.2	4.3	0.1	0.9	0.98
47	2021	dCS2	12462	100.9	100.7	4.0	4.0	0.2	0.8	0.98
48	2022	dCS2	2887	100.6	100.4	3.9	3.9	0.2	0.8	0.98
49	2015	brth	5250	101.1	101.0	4.3	4.6	0.1	1.2	0.97
50	2016	brth	6203	101.3	101.2	4.3	4.8	0.1	1.2	0.97
51	2017	brth	7648	100.4	100.0	4.3	4.8	0.4	1.2	0.97
52	2018	brth	9371	101.1	101.2	3.7	4.3	-0.1	1.2	0.96
53	2019	brth	11296	101.2	101.1	5.1	5.8	0.1	1.3	0.98
54	2020	brth	13571	101.8	101.4	5.0	5.7	0.3	1.4	0.98
55	2021	brth	12462	102.6	102.4	5.9	6.6	0.2	1.3	0.99
56	2022	brth	2887	100.3	99.9	5.5	6.3	0.4	1.6	0.97

distribution of differences in number of females and in percentage

Obs	diff	d_brth	p_brth
1	-13	1	0
2	-9	1	0
3	-8	5	0
4	-7	12	0
5	-6	37	0
6	-5	74	0
7	-4	309	0
8	-3	1164	2
9	-2	4438	6
10	-1	13464	20
11	0	22057	32
12	1	17136	25
13	2	7625	11
14	3	2005	3
15	4	303	0
16	5	37	0
17	6	16	0
18	7	1	0
19	8	1	0
20	10	1	0
21	15	1	0

JER summery stastistics for snell and current breeding value for genotyped females with progeny, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
1	2015	mSB1	3704	97.9	98.0	5.9	6.2	-0.1	1.1	0.99
2	2016	mSB1	4033	96.7	96.8	6.4	6.8	-0.2	1.1	0.99
3	2017	mSB1	5327	98.4	98.4	5.8	6.1	0.0	1.1	0.98
4	2018	mSB1	6760	100.2	100.0	4.9	5.3	0.2	1.1	0.98
5	2019	mSB1	7484	98.7	98.3	5.4	5.8	0.4	1.0	0.99
6	2020	mSB1	3583	99.2	98.6	6.1	6.7	0.6	1.2	0.99
7	2015	mCE1	3704	98.1	98.5	5.7	6.1	-0.4	2.4	0.92
8	2016	mCE1	4033	97.2	97.3	5.8	6.3	-0.1	2.4	0.93
9	2017	mCE1	5327	99.8	99.8	5.3	5.6	0.1	2.2	0.92
10	2018	mCE1	6760	99.7	99.6	4.8	5.2	0.1	2.1	0.92
11	2019	mCE1	7484	100.1	99.7	4.8	5.1	0.4	2.1	0.92
12	2020	mCE1	3583	100.1	99.8	5.1	4.8	0.3	2.2	0.90
13	2015	mCS1	3704	100.0	99.3	4.7	5.1	0.6	1.7	0.94
14	2016	mCS1	4033	99.9	99.7	4.6	4.7	0.2	1.6	0.94
15	2017	mCS1	5327	100.3	100.2	5.0	5.0	0.1	1.6	0.95
16	2018	mCS1	6760	100.0	100.1	5.0	5.0	-0.2	1.3	0.96
17	2019	mCS1	7484	100.4	100.0	4.5	4.6	0.3	1.3	0.96
18	2020	mCS1	3583	100.2	100.0	5.2	5.1	0.3	1.2	0.97
19	2015	mSB2	3704	99.2	99.1	4.8	4.6	0.1	1.1	0.97
20	2016	mSB2	4033	98.3	98.1	5.2	5.3	0.1	1.2	0.97
21	2017	mSB2	5327	98.0	97.7	5.5	5.8	0.3	1.3	0.98
22	2018	mSB2	6760	99.4	99.6	4.5	4.9	-0.2	1.4	0.96
23	2019	mSB2	7484	99.1	98.3	4.7	5.1	0.9	2.0	0.92
24	2020	mSB2	3583	98.1	97.7	5.1	5.5	0.5	2.1	0.92
25	2015	mCE2	3704	99.2	99.8	4.8	5.2	-0.7	2.7	0.85
26	2016	mCE2	4033	99.0	99.1	5.1	5.5	-0.1	2.7	0.88
27	2017	mCE2	5327	99.7	99.5	5.1	5.5	0.3	2.5	0.89
28	2018	mCE2	6760	99.7	99.6	5.4	5.7	0.1	2.4	0.91
29	2019	mCE2	7484	99.9	99.6	5.6	5.5	0.3	2.5	0.90
30	2020	mCE2	3583	100.1	99.8	5.0	4.4	0.3	2.6	0.86
31	2015	mCS2	3704	98.4	98.8	4.8	5.0	-0.4	1.4	0.96
32	2016	mCS2	4033	99.1	99.8	4.1	4.4	-0.6	1.4	0.95
33	2017	mCS2	5327	99.9	100.1	4.8	4.9	-0.2	1.5	0.95
34	2018	mCS2	6760	100.0	100.0	5.0	4.9	0.0	1.4	0.96
35	2019	mCS2	7484	100.2	100.2	4.7	4.5	-0.1	1.8	0.92
36	2020	mCS2	3583	100.3	100.1	4.7	4.7	0.2	1.9	0.92

JER summery stastistics for snell and current breeding value for genotyped females with progeny, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
37	2015	calv	3704	98.2	98.4	5.5	5.6	-0.2	1.1	0.98
38	2016	calv	4033	97.0	97.1	6.0	6.3	-0.1	1.2	0.98
39	2017	calv	5327	98.4	98.2	5.5	5.8	0.2	1.1	0.98
40	2018	calv	6760	99.8	99.7	4.8	5.2	0.1	1.1	0.98
41	2019	calv	7484	99.0	98.3	4.8	5.4	0.7	1.4	0.97
42	2020	calv	3583	98.9	98.3	5.4	6.0	0.6	1.5	0.97

distribution of differences in number of females and in percentage

Obs	diff	d_calv	p_calv
1	-14	1	0
2	-10	1	0
3	-8	1	0
4	-7	2	0
5	-6	10	0
6	-5	28	0
7	-4	107	0
8	-3	462	1
9	-2	1783	6
10	-1	5527	18
11	0	10412	34
12	1	7970	26
13	2	3188	10
14	3	1136	4
15	4	215	1
16	5	45	0
17	6	2	0
18	8	1	0

HOL summery stastistics for snell and current breeding value for nongenotyped females with own record, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
1	2015	dSB1	256488	98.4	98.6	5.5	5.9	-0.3	1.4	0.97
2	2016	dSB1	249074	99.6	99.7	5.6	5.9	-0.1	1.4	0.97
3	2017	dSB1	226708	99.9	99.8	5.7	6.0	0.0	1.4	0.97
4	2018	dSB1	214828	99.6	99.6	5.3	5.6	0.1	1.3	0.97
5	2019	dSB1	205594	99.6	99.5	5.5	5.7	0.1	1.3	0.97
6	2020	dSB1	205855	100.4	100.2	5.0	5.2	0.2	1.3	0.97
7	2021	dSB1	209108	100.5	100.3	4.7	5.0	0.2	1.2	0.97
8	2022	dSB1	94195	100.8	100.5	4.8	5.0	0.3	1.2	0.97
9	2015	dCE1	256488	98.2	98.2	5.0	5.7	-0.1	1.4	0.97
10	2016	dCE1	249074	99.2	99.3	5.1	5.7	-0.1	1.4	0.97
11	2017	dCE1	226708	99.6	99.6	5.0	5.6	0.0	1.4	0.97
12	2018	dCE1	214828	99.7	99.7	4.7	5.3	0.0	1.3	0.97
13	2019	dCE1	205594	99.8	99.8	4.6	5.1	0.0	1.3	0.97
14	2020	dCE1	205855	100.4	100.4	4.4	4.9	-0.1	1.2	0.97
15	2021	dCE1	209108	100.9	101.0	4.2	4.7	-0.1	1.2	0.97
16	2022	dCE1	94195	101.4	101.5	4.2	4.7	-0.1	1.2	0.97
17	2015	dCS1	256488	101.6	101.5	6.1	6.4	0.1	1.2	0.98
18	2016	dCS1	249074	100.8	100.7	6.1	6.3	0.1	1.2	0.98
19	2017	dCS1	226708	100.3	100.3	6.0	6.2	0.0	1.2	0.98
20	2018	dCS1	214828	100.2	100.2	5.9	6.1	0.0	1.2	0.98
21	2019	dCS1	205594	100.2	100.2	5.7	5.9	0.0	1.2	0.98
22	2020	dCS1	205855	99.4	99.5	5.7	5.8	0.0	1.1	0.98
23	2021	dCS1	209108	98.9	98.8	5.5	5.6	0.1	1.1	0.98
24	2022	dCS1	94195	98.5	98.4	5.6	5.7	0.1	1.2	0.98
25	2015	dSB2	256488	98.7	98.8	4.8	5.4	-0.1	2.1	0.93
26	2016	dSB2	249074	99.5	99.5	4.9	5.4	0.1	2.0	0.93
27	2017	dSB2	226708	99.6	99.6	4.9	5.3	-0.1	2.0	0.93
28	2018	dSB2	214828	99.8	99.7	4.8	5.2	0.1	2.0	0.92
29	2019	dSB2	205594	99.6	99.5	4.6	5.0	0.1	1.9	0.92
30	2020	dSB2	205855	99.9	99.8	4.5	4.8	0.1	1.9	0.92
31	2021	dSB2	209108	99.9	99.8	4.3	4.6	0.1	1.8	0.92
32	2022	dSB2	94195	100.1	100.0	4.3	4.6	0.1	1.8	0.92
33	2015	dCE2	256488	98.0	98.0	4.5	5.5	0.0	2.1	0.93
34	2016	dCE2	249074	98.8	98.8	4.5	5.4	0.0	2.1	0.93
35	2017	dCE2	226708	99.4	99.4	4.4	5.3	0.0	2.0	0.93
36	2018	dCE2	214828	99.8	99.7	4.3	5.1	0.0	2.0	0.92

HOL summery stastistics for snell and current breeding value for nongenotyped females with own record, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
37	2019	dCE2	205594	99.6	99.7	4.0	4.9	-0.1	2.0	0.92
38	2020	dCE2	205855	100.2	100.3	4.0	4.8	-0.1	1.9	0.93
39	2021	dCE2	209108	100.7	100.8	3.8	4.6	-0.1	1.8	0.92
40	2022	dCE2	94195	101.1	101.3	3.7	4.5	-0.2	1.8	0.92
41	2015	dCS2	256488	101.7	101.7	6.2	6.4	0.0	1.3	0.98
42	2016	dCS2	249074	100.9	100.8	6.0	6.3	0.1	1.2	0.98
43	2017	dCS2	226708	100.4	100.4	6.0	6.2	-0.1	1.2	0.98
44	2018	dCS2	214828	100.3	100.3	5.8	6.0	0.0	1.2	0.98
45	2019	dCS2	205594	99.9	99.9	5.7	6.0	0.0	1.2	0.98
46	2020	dCS2	205855	99.1	99.1	5.6	5.9	0.0	1.1	0.98
47	2021	dCS2	209108	98.2	98.3	5.5	5.8	-0.1	1.1	0.98
48	2022	dCS2	94195	97.6	97.7	5.6	5.9	-0.1	1.2	0.98
49	2015	brth	256488	98.3	98.5	5.0	5.6	-0.2	1.6	0.96
50	2016	brth	249074	99.4	99.5	5.1	5.7	-0.1	1.6	0.96
51	2017	brth	226708	99.7	99.7	5.2	5.6	0.0	1.5	0.96
52	2018	brth	214828	99.7	99.6	4.9	5.4	0.1	1.5	0.96
53	2019	brth	205594	99.6	99.5	5.0	5.4	0.1	1.5	0.96
54	2020	brth	205855	100.3	100.1	4.7	5.0	0.1	1.4	0.96
55	2021	brth	209108	100.4	100.3	4.4	4.8	0.2	1.4	0.96
56	2022	brth	94195	100.8	100.5	4.4	4.8	0.2	1.4	0.96

distribution of differences in number of females and in percentage

Obs	diff	d_brth	p_brth
1	-62	3	0
2	-61	1	0
3	-60	1	0
4	-58	1	0
5	-57	1	0
6	-56	1	0
7	-55	1	0
8	-54	1	0
9	-49	1	0
10	-32	1	0
11	-31	4	0
12	-30	3	0
13	-29	4	0
14	-28	1	0
15	-27	1	0
16	-25	1	0
17	-22	1	0
18	-21	1	0
19	-20	2	0
20	-18	1	0
21	-17	7	0
22	-16	19	0
23	-15	39	0
24	-14	25	0
25	-13	33	0
26	-12	66	0
27	-11	65	0
28	-10	102	0
29	-9	188	0
30	-8	448	0
31	-7	914	0
32	-6	2573	0
33	-5	7230	0
34	-4	18156	1
35	-3	45350	3
36	-2	121018	7
37	-1	322498	19

distribution of differences in number of females and in percentage

Obs	diff	d_brth	p_brth
38	0	578395	35
39	1	358452	22
40	2	136677	8
41	3	45934	3
42	4	14004	1
43	5	4810	0
44	6	2085	0
45	7	1100	0
46	8	502	0
47	9	402	0
48	10	350	0
49	11	215	0
50	12	93	0
51	13	43	0
52	14	16	0
53	15	5	0
54	16	1	0
55	17	1	0
56	18	1	0
57	19	1	0
58	21	1	0

HOL summery stastistics for snell and current breeding value for nongenotyped females with progeny, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
1	2015	mSB1	197709	97.1	96.7	5.2	5.5	0.4	1.1	0.98
2	2016	mSB1	189145	98.0	97.8	5.0	5.3	0.2	1.1	0.98
3	2017	mSB1	168161	98.6	98.4	5.2	5.5	0.2	1.1	0.98
4	2018	mSB1	159726	99.8	99.8	5.0	5.2	0.0	1.0	0.98
5	2019	mSB1	142266	100.2	100.3	4.6	4.9	-0.1	1.0	0.98
6	2020	mSB1	46909	101.1	101.3	4.6	4.9	-0.2	1.0	0.98
7	2015	mCE1	197709	96.5	96.4	4.9	5.1	0.1	1.1	0.98
8	2016	mCE1	189145	97.5	97.4	4.8	5.0	0.1	1.0	0.98
9	2017	mCE1	168161	98.5	98.4	4.9	5.0	0.0	1.0	0.98
10	2018	mCE1	159726	99.6	99.6	4.4	4.5	0.0	1.0	0.98
11	2019	mCE1	142266	100.6	100.6	4.4	4.5	0.0	0.9	0.98
12	2020	mCE1	46909	101.7	101.6	4.5	4.6	0.0	0.9	0.98
13	2015	mCS1	197709	97.8	98.7	5.8	5.7	-0.9	1.8	0.95
14	2016	mCS1	189145	98.4	99.0	6.1	5.9	-0.6	1.8	0.96
15	2017	mCS1	168161	99.7	99.9	5.8	5.6	-0.2	1.8	0.95
16	2018	mCS1	159726	99.7	99.8	5.8	5.5	-0.1	1.7	0.96
17	2019	mCS1	142266	100.7	100.6	6.0	5.7	0.2	1.7	0.96
18	2020	mCS1	46909	102.5	102.1	5.7	5.5	0.4	1.6	0.96
19	2015	mSB2	197709	95.8	96.8	5.3	5.1	-0.9	2.3	0.90
20	2016	mSB2	189145	97.2	97.8	5.2	5.0	-0.7	2.3	0.90
21	2017	mSB2	168161	98.5	98.7	5.1	4.9	-0.2	2.2	0.90
22	2018	mSB2	159726	99.8	99.8	5.0	4.7	0.0	2.2	0.90
23	2019	mSB2	142266	100.2	100.3	4.6	4.6	-0.1	2.2	0.89
24	2020	mSB2	46909	100.9	100.6	4.7	4.9	0.3	2.6	0.85
25	2015	mCE2	197709	95.7	95.6	4.9	5.0	0.1	1.7	0.94
26	2016	mCE2	189145	97.0	97.0	4.7	4.8	0.0	1.6	0.94
27	2017	mCE2	168161	98.1	98.2	4.5	4.6	-0.1	1.5	0.94
28	2018	mCE2	159726	99.4	99.4	4.4	4.5	-0.1	1.5	0.94
29	2019	mCE2	142266	100.6	100.6	4.4	4.5	0.0	1.4	0.95
30	2020	mCE2	46909	100.8	100.9	4.3	4.6	-0.1	1.5	0.95
31	2015	mCS2	197709	97.4	98.0	5.8	5.8	-0.6	1.3	0.97
32	2016	mCS2	189145	97.8	98.3	5.7	5.7	-0.5	1.3	0.97
33	2017	mCS2	168161	99.3	99.3	5.7	5.6	-0.1	1.3	0.97
34	2018	mCS2	159726	100.0	100.1	5.7	5.6	-0.1	1.3	0.98
35	2019	mCS2	142266	99.9	99.9	5.3	5.3	0.0	1.3	0.97
36	2020	mCS2	46909	101.6	101.4	5.0	5.2	0.2	1.3	0.97

HOL summery stastistics for snell and current breeding value for nongenotyped females with progeny, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
37	2015	calv	197709	96.3	96.3	5.1	5.3	0.0	1.1	0.98
38	2016	calv	189145	97.5	97.5	4.9	5.1	0.0	1.1	0.98
39	2017	calv	168161	98.4	98.3	5.1	5.2	0.0	1.0	0.98
40	2018	calv	159726	99.7	99.7	4.8	4.9	0.0	1.0	0.98
41	2019	calv	142266	100.3	100.4	4.6	4.7	-0.1	0.9	0.98
42	2020	calv	46909	101.2	101.3	4.7	4.9	0.0	1.0	0.98

distribution of differences in number of females and in percentage

Obs	diff	d_calv	p_calv
1	-9	1	0
2	-8	2	0
3	-7	5	0
4	-6	7	0
5	-5	38	0
6	-4	282	0
7	-3	3115	0
8	-2	32962	4
9	-1	222715	25
10	0	438828	49
11	1	151425	17
12	2	33117	4
13	3	11596	1
14	4	5336	1
15	5	2333	0
16	6	1184	0
17	7	541	0
18	8	277	0
19	9	91	0
20	10	26	0
21	11	16	0
22	12	6	0
23	13	4	0
24	14	4	0
25	15	2	0
26	16	2	0
27	17	1	0

RDC summery stastistics for snell and current breeding value for nongenotyped females with own record, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
1	2015	dSB1	79789	98.9	99.0	4.9	4.9	-0.1	1.4	0.96
2	2016	dSB1	68539	99.0	99.1	4.8	4.9	0.0	1.4	0.96
3	2017	dSB1	56194	98.9	98.9	4.7	4.8	0.0	1.4	0.96
4	2018	dSB1	49476	99.7	99.8	4.5	4.5	-0.1	1.4	0.95
5	2019	dSB1	42570	99.8	99.9	4.7	4.7	-0.1	1.3	0.96
6	2020	dSB1	37753	100.1	100.2	4.5	4.5	-0.1	1.2	0.96
7	2021	dSB1	33724	99.6	99.8	4.5	4.5	-0.2	1.2	0.96
8	2022	dSB1	14541	99.7	99.8	5.2	5.1	-0.1	1.2	0.97
9	2015	dCE1	79789	99.7	99.7	5.9	5.8	0.0	1.3	0.98
10	2016	dCE1	68539	99.1	99.1	5.9	5.8	0.0	1.2	0.98
11	2017	dCE1	56194	99.2	99.3	5.6	5.4	-0.1	1.2	0.98
12	2018	dCE1	49476	100.0	100.0	5.7	5.4	-0.1	1.3	0.98
13	2019	dCE1	42570	100.4	100.2	5.2	5.0	0.2	1.2	0.98
14	2020	dCE1	37753	99.9	99.9	5.6	5.4	0.0	1.1	0.98
15	2021	dCE1	33724	100.4	100.3	5.2	5.0	0.1	1.1	0.98
16	2022	dCE1	14541	100.5	100.4	5.4	5.1	0.1	1.2	0.97
17	2015	dCS1	79789	99.8	99.9	6.4	6.3	-0.1	1.9	0.95
18	2016	dCS1	68539	100.9	100.9	6.8	6.6	-0.1	1.8	0.96
19	2017	dCS1	56194	100.3	100.2	6.2	5.9	0.1	1.8	0.96
20	2018	dCS1	49476	99.9	99.9	5.8	5.7	0.0	1.7	0.95
21	2019	dCS1	42570	99.8	99.8	6.0	5.7	0.1	1.8	0.95
22	2020	dCS1	37753	99.9	99.8	6.6	6.3	0.2	1.8	0.96
23	2021	dCS1	33724	100.0	99.6	6.2	5.8	0.5	1.7	0.96
24	2022	dCS1	14541	100.0	99.5	6.4	5.9	0.5	1.8	0.96
25	2015	dSB2	79789	99.0	99.1	5.2	5.4	0.0	1.5	0.96
26	2016	dSB2	68539	99.2	99.2	5.0	5.3	0.1	1.5	0.96
27	2017	dSB2	56194	99.2	99.3	5.0	5.1	-0.1	1.4	0.96
28	2018	dSB2	49476	99.8	99.8	4.8	4.9	0.0	1.4	0.96
29	2019	dSB2	42570	99.7	99.7	4.5	4.7	0.0	1.3	0.96
30	2020	dSB2	37753	100.3	100.4	4.5	4.8	-0.1	1.3	0.96
31	2021	dSB2	33724	100.3	100.4	4.0	4.4	-0.1	1.3	0.95
32	2022	dSB2	14541	99.9	100.2	4.3	4.7	-0.3	1.4	0.96
33	2015	dCE2	79789	99.7	99.8	6.0	6.1	-0.1	1.9	0.95
34	2016	dCE2	68539	99.2	99.0	5.9	6.2	0.1	1.8	0.96
35	2017	dCE2	56194	99.6	99.5	5.3	5.5	0.1	1.7	0.95
36	2018	dCE2	49476	99.9	100.0	5.4	5.6	-0.1	1.8	0.95

RDC summery stastistics for snell and current breeding value for nongenotyped females with own record, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
37	2019	dCE2	42570	100.4	100.2	5.1	5.3	0.2	1.7	0.95
38	2020	dCE2	37753	100.1	100.0	5.7	5.9	0.1	1.7	0.96
39	2021	dCE2	33724	100.6	100.6	5.0	5.3	0.0	1.7	0.95
40	2022	dCE2	14541	100.7	100.6	5.2	5.4	0.1	1.8	0.94
41	2015	dCS2	79789	100.1	100.1	7.0	6.6	0.1	2.1	0.95
42	2016	dCS2	68539	100.6	100.8	7.1	6.6	-0.1	1.9	0.96
43	2017	dCS2	56194	100.6	100.5	6.4	6.0	0.1	1.9	0.95
44	2018	dCS2	49476	99.9	99.9	6.5	6.0	0.0	1.8	0.96
45	2019	dCS2	42570	100.2	100.0	6.7	6.1	0.1	1.9	0.96
46	2020	dCS2	37753	99.4	99.4	6.9	6.4	0.0	1.9	0.96
47	2021	dCS2	33724	99.6	99.3	6.8	6.3	0.2	1.8	0.97
48	2022	dCS2	14541	99.5	99.2	6.8	6.3	0.3	1.8	0.96
49	2015	brth	79789	99.0	99.1	5.1	5.3	-0.1	1.3	0.97
50	2016	brth	68539	99.0	99.0	4.9	5.1	0.0	1.2	0.97
51	2017	brth	56194	99.0	99.1	4.8	4.9	0.0	1.2	0.97
52	2018	brth	49476	99.8	99.8	4.6	4.8	-0.1	1.1	0.97
53	2019	brth	42570	99.9	99.9	4.6	4.8	0.0	1.1	0.97
54	2020	brth	37753	100.2	100.2	4.6	4.9	-0.1	1.1	0.97
55	2021	brth	33724	100.0	100.1	4.4	4.5	-0.1	1.1	0.97
56	2022	brth	14541	99.9	100.1	5.0	5.1	-0.2	1.1	0.98

distribution of differences in number of females and in percentage

Obs	diff	d_brth	p_brth
1	-11	1	0
2	-10	2	0
3	-9	4	0
4	-8	22	0
5	-7	51	0
6	-6	194	0
7	-5	815	0
8	-4	2769	1
9	-3	6629	2
10	-2	22439	6
11	-1	87472	23
12	0	155260	41
13	1	79257	21
14	2	20732	5
15	3	4834	1
16	4	1263	0
17	5	439	0
18	6	232	0
19	7	73	0
20	8	35	0
21	9	28	0
22	10	25	0
23	11	7	0
24	12	2	0
25	14	1	0

RDC summery stastistics for snell and current breeding value for nongenotyped females with progeny, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
1	2015	mSB1	53291	99.1	98.9	5.0	5.3	0.2	2.1	0.92
2	2016	mSB1	45915	99.7	99.7	5.1	5.3	-0.1	2.0	0.93
3	2017	mSB1	37973	99.2	99.1	5.3	5.4	0.2	1.9	0.94
4	2018	mSB1	31861	99.7	99.6	5.3	5.7	0.0	2.0	0.94
5	2019	mSB1	23348	100.2	100.1	4.8	5.1	0.1	2.0	0.92
6	2020	mSB1	5906	100.7	100.8	4.9	5.2	-0.1	1.9	0.93
7	2015	mCE1	53291	97.3	97.5	6.4	6.3	-0.2	1.4	0.98
8	2016	mCE1	45915	99.1	99.3	6.0	6.1	-0.2	1.3	0.98
9	2017	mCE1	37973	98.0	97.9	5.5	5.5	0.1	1.2	0.97
10	2018	mCE1	31861	99.5	99.5	6.1	5.9	0.0	1.2	0.98
11	2019	mCE1	23348	99.7	99.5	5.9	5.8	0.2	1.2	0.98
12	2020	mCE1	5906	100.5	100.4	6.2	6.2	0.2	1.3	0.98
13	2015	mCS1	53291	99.8	101.0	7.1	7.3	-1.2	3.4	0.89
14	2016	mCS1	45915	98.9	99.5	6.8	7.0	-0.5	3.1	0.90
15	2017	mCS1	37973	100.1	101.0	7.4	7.2	-0.9	3.0	0.92
16	2018	mCS1	31861	99.3	99.7	8.0	7.7	-0.4	3.2	0.92
17	2019	mCS1	23348	101.0	101.2	7.2	7.0	-0.2	3.3	0.89
18	2020	mCS1	5906	99.2	99.5	6.8	7.0	-0.4	3.1	0.90
19	2015	mSB2	53291	99.7	98.9	5.4	5.2	0.7	3.2	0.82
20	2016	mSB2	45915	99.8	99.5	5.2	5.1	0.2	3.3	0.79
21	2017	mSB2	37973	99.7	99.2	5.2	5.1	0.4	3.2	0.81
22	2018	mSB2	31861	99.7	99.8	5.3	5.3	-0.1	3.3	0.80
23	2019	mSB2	23348	100.3	99.9	4.9	5.2	0.4	3.2	0.80
24	2020	mSB2	5906	101.0	100.8	5.0	5.6	0.2	3.5	0.79
25	2015	mCE2	53291	97.2	97.3	5.7	5.8	-0.1	1.6	0.96
26	2016	mCE2	45915	98.1	98.4	5.3	5.5	-0.3	1.6	0.96
27	2017	mCE2	37973	97.9	97.9	5.1	5.2	0.0	1.6	0.95
28	2018	mCE2	31861	99.4	99.4	5.7	5.7	0.0	1.5	0.96
29	2019	mCE2	23348	99.5	99.4	5.1	5.3	0.0	1.6	0.95
30	2020	mCE2	5906	99.9	100.0	5.3	5.8	-0.2	1.7	0.96
31	2015	mCS2	53291	99.7	100.2	5.9	6.1	-0.5	2.7	0.90
32	2016	mCS2	45915	99.4	99.8	6.1	6.3	-0.3	2.5	0.92
33	2017	mCS2	37973	99.8	100.0	6.1	6.5	-0.3	2.6	0.92
34	2018	mCS2	31861	99.5	99.5	6.5	7.2	0.0	2.6	0.93
35	2019	mCS2	23348	101.0	100.9	5.4	6.1	0.1	2.5	0.91
36	2020	mCS2	5906	99.9	100.0	5.2	5.9	0.0	2.5	0.91

RDC summery stastistics for snell and current breeding value for nongenotyped females with progeny, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
37	2015	calv	53291	98.9	98.5	5.2	5.4	0.4	2.2	0.91
38	2016	calv	45915	99.5	99.5	5.1	5.2	0.1	2.2	0.91
39	2017	calv	37973	99.1	98.8	5.1	5.1	0.3	2.1	0.92
40	2018	calv	31861	99.6	99.6	5.2	5.4	0.0	2.2	0.92
41	2019	calv	23348	100.2	99.9	4.8	5.2	0.3	2.2	0.91
42	2020	calv	5906	100.8	100.8	5.0	5.5	0.1	2.3	0.91

distribution of differences in number of females and in percentage

Obs	diff	d_calv	p_calv
1	-15	1	0
2	-14	1	0
3	-13	3	0
4	-12	3	0
5	-11	8	0
6	-10	28	0
7	-9	52	0
8	-8	155	0
9	-7	359	0
10	-6	911	0
11	-5	2147	1
12	-4	5057	3
13	-3	10659	5
14	-2	19380	10
15	-1	31879	16
16	0	40832	21
17	1	38671	20
18	2	24950	13
19	3	12233	6
20	4	5598	3
21	5	2599	1
22	6	1258	1
23	7	626	0
24	8	402	0
25	9	221	0
26	10	114	0
27	11	64	0
28	12	39	0
29	13	24	0
30	14	12	0
31	15	3	0
32	16	4	0
33	20	1	0

JER summery stastistics for snell and current breeding value for nongenotyped females with own record, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
1	2015	dSB1	26979	99.7	99.4	5.1	5.5	0.3	1.6	0.96
2	2016	dSB1	26004	100.3	100.0	5.2	5.7	0.4	1.6	0.96
3	2017	dSB1	23559	99.6	99.1	4.9	5.5	0.5	1.6	0.96
4	2018	dSB1	25462	100.2	100.2	4.7	5.2	0.0	1.6	0.96
5	2019	dSB1	24919	100.4	100.3	5.4	6.0	0.1	1.6	0.97
6	2020	dSB1	27449	100.7	100.3	5.5	6.2	0.3	1.6	0.97
7	2021	dSB1	28863	101.9	101.6	6.1	6.8	0.3	1.6	0.98
8	2022	dSB1	14948	99.4	98.9	6.1	7.0	0.5	1.9	0.97
9	2015	dCE1	26979	100.3	100.5	5.0	5.2	-0.3	3.7	0.74
10	2016	dCE1	26004	101.4	101.4	5.0	4.9	0.0	3.8	0.71
11	2017	dCE1	23559	100.3	100.5	5.8	5.5	-0.1	3.6	0.80
12	2018	dCE1	25462	100.6	100.7	4.3	4.5	-0.1	3.4	0.71
13	2019	dCE1	24919	99.9	99.7	4.7	4.8	0.2	3.3	0.76
14	2020	dCE1	27449	100.6	100.1	4.5	4.6	0.6	3.3	0.73
15	2021	dCE1	28863	100.0	100.1	4.7	4.4	-0.1	3.3	0.74
16	2022	dCE1	14948	99.2	99.2	4.5	4.1	0.0	3.5	0.67
17	2015	dCS1	26979	99.0	99.4	5.8	6.0	-0.3	1.2	0.98
18	2016	dCS1	26004	98.5	98.6	5.1	5.3	-0.2	1.1	0.98
19	2017	dCS1	23559	99.0	99.0	5.0	5.3	0.0	1.1	0.98
20	2018	dCS1	25462	99.8	99.7	4.2	4.4	0.0	1.1	0.97
21	2019	dCS1	24919	100.6	100.5	4.4	4.5	0.1	1.1	0.97
22	2020	dCS1	27449	100.2	100.1	4.1	4.3	0.1	1.0	0.97
23	2021	dCS1	28863	100.9	100.7	3.7	3.9	0.2	1.0	0.97
24	2022	dCS1	14948	101.0	100.7	3.6	3.8	0.3	1.1	0.96
25	2015	dSB2	26979	100.5	100.2	4.8	5.2	0.3	1.8	0.94
26	2016	dSB2	26004	99.8	99.6	4.4	4.9	0.2	1.7	0.94
27	2017	dSB2	23559	99.5	99.0	4.7	5.0	0.5	1.8	0.94
28	2018	dSB2	25462	100.4	100.4	4.2	4.6	0.0	1.7	0.93
29	2019	dSB2	24919	100.5	100.4	5.6	6.1	0.0	1.9	0.95
30	2020	dSB2	27449	102.0	101.6	5.2	5.9	0.4	1.8	0.95
31	2021	dSB2	28863	102.3	102.1	6.2	6.8	0.2	1.9	0.96
32	2022	dSB2	14948	99.2	99.0	6.8	7.6	0.2	2.3	0.96
33	2015	dCE2	26979	101.1	101.2	4.5	5.3	-0.1	4.2	0.63
34	2016	dCE2	26004	101.7	101.9	4.4	5.0	-0.2	4.3	0.60
35	2017	dCE2	23559	101.3	101.3	4.6	5.3	0.0	4.0	0.68
36	2018	dCE2	25462	100.5	100.6	4.1	4.7	-0.1	3.9	0.62

JER summery stastistics for snell and current breeding value for nongenotyped females with own record, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
37	2019	dCE2	24919	100.2	99.9	4.9	5.3	0.3	3.9	0.70
38	2020	dCE2	27449	101.1	100.4	4.7	4.7	0.6	3.9	0.66
39	2021	dCE2	28863	100.1	100.2	4.8	4.7	-0.1	3.9	0.68
40	2022	dCE2	14948	99.8	99.8	4.9	4.8	0.0	4.1	0.64
41	2015	dCS2	26979	99.0	99.2	6.0	6.0	-0.2	0.9	0.99
42	2016	dCS2	26004	98.4	98.4	5.3	5.4	0.0	0.9	0.98
43	2017	dCS2	23559	99.3	99.1	5.0	5.1	0.1	1.0	0.98
44	2018	dCS2	25462	99.6	99.6	4.4	4.5	0.0	0.9	0.98
45	2019	dCS2	24919	100.5	100.5	4.3	4.4	0.1	0.9	0.98
46	2020	dCS2	27449	100.2	100.1	4.1	4.3	0.1	0.9	0.98
47	2021	dCS2	28863	100.7	100.6	3.9	4.0	0.1	0.9	0.97
48	2022	dCS2	14948	100.7	100.5	3.8	3.9	0.1	1.1	0.96
49	2015	brth	26979	100.2	100.1	4.9	5.2	0.1	1.4	0.97
50	2016	brth	26004	100.5	100.4	4.8	5.2	0.1	1.3	0.97
51	2017	brth	23559	99.9	99.5	4.8	5.3	0.4	1.3	0.97
52	2018	brth	25462	100.4	100.5	4.3	4.8	-0.1	1.4	0.96
53	2019	brth	24919	100.4	100.3	5.5	6.1	0.1	1.4	0.98
54	2020	brth	27449	101.3	100.9	5.3	6.1	0.4	1.5	0.98
55	2021	brth	28863	101.8	101.7	6.1	6.8	0.1	1.5	0.98
56	2022	brth	14948	99.3	98.9	6.2	7.1	0.4	1.9	0.97

distribution of differences in number of females and in percentage

Obs	diff	d_brth	p_brth
1	-26	1	0
2	-18	2	0
3	-16	3	0
4	-15	2	0
5	-14	2	0
6	-13	3	0
7	-11	1	0
8	-10	2	0
9	-9	9	0
10	-8	28	0
11	-7	121	0
12	-6	228	0
13	-5	515	0
14	-4	1329	1
15	-3	3942	2
16	-2	12932	7
17	-1	38424	19
18	0	60433	30
19	1	47832	24
20	2	22325	11
21	3	7138	4
22	4	1984	1
23	5	635	0
24	6	220	0
25	7	38	0
26	8	13	0
27	9	3	0
28	11	2	0
29	12	5	0
30	13	2	0
31	14	2	0
32	16	1	0
33	17	1	0
34	18	2	0
35	20	1	0
36	25	2	0

JER summery stastistics for snell and current breeding value for nongenotyped females with progeny, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
1	2015	mSB1	17023	97.3	97.4	6.1	6.5	-0.1	1.1	0.99
2	2016	mSB1	15718	96.5	96.7	6.3	6.7	-0.2	1.1	0.99
3	2017	mSB1	14493	97.8	97.8	6.1	6.4	0.0	1.1	0.99
4	2018	mSB1	15377	99.9	99.7	5.1	5.4	0.2	1.1	0.98
5	2019	mSB1	14283	98.8	98.4	5.3	5.7	0.3	1.0	0.99
6	2020	mSB1	6090	98.8	98.2	6.0	6.5	0.5	1.1	0.99
7	2015	mCE1	17023	97.6	97.9	5.7	6.2	-0.3	2.4	0.93
8	2016	mCE1	15718	96.9	96.9	5.8	6.4	-0.1	2.4	0.93
9	2017	mCE1	14493	99.1	99.0	5.7	6.1	0.1	2.2	0.94
10	2018	mCE1	15377	99.4	99.2	4.9	5.3	0.1	2.1	0.92
11	2019	mCE1	14283	99.9	99.4	4.9	5.2	0.4	2.0	0.92
12	2020	mCE1	6090	99.9	99.6	4.9	4.9	0.3	2.1	0.91
13	2015	mCS1	17023	99.6	99.1	4.6	4.8	0.5	1.5	0.95
14	2016	mCS1	15718	99.9	99.7	4.6	4.7	0.2	1.5	0.95
15	2017	mCS1	14493	100.3	100.2	4.8	4.8	0.1	1.5	0.95
16	2018	mCS1	15377	100.0	100.2	4.8	4.9	-0.2	1.4	0.96
17	2019	mCS1	14283	100.4	100.1	4.5	4.5	0.3	1.3	0.96
18	2020	mCS1	6090	100.1	99.8	4.9	4.9	0.3	1.2	0.97
19	2015	mSB2	17023	99.2	99.1	5.2	4.9	0.1	1.2	0.97
20	2016	mSB2	15718	98.7	98.5	5.4	5.4	0.1	1.2	0.98
21	2017	mSB2	14493	98.0	97.7	5.6	5.8	0.3	1.3	0.98
22	2018	mSB2	15377	99.7	99.8	4.9	5.1	-0.1	1.4	0.96
23	2019	mSB2	14283	99.3	98.4	5.0	5.3	0.8	2.0	0.93
24	2020	mSB2	6090	98.2	97.6	5.2	5.5	0.6	2.2	0.92
25	2015	mCE2	17023	98.9	99.5	4.9	5.2	-0.6	2.7	0.86
26	2016	mCE2	15718	98.9	99.1	5.1	5.5	-0.2	2.7	0.87
27	2017	mCE2	14493	99.5	99.3	5.2	5.6	0.2	2.6	0.89
28	2018	mCE2	15377	99.8	99.7	5.4	5.7	0.1	2.5	0.90
29	2019	mCE2	14283	99.8	99.5	5.9	5.8	0.3	2.5	0.91
30	2020	mCE2	6090	100.0	99.9	5.2	4.8	0.1	2.4	0.88
31	2015	mCS2	17023	98.2	98.7	4.7	4.7	-0.5	1.2	0.97
32	2016	mCS2	15718	99.0	99.7	4.2	4.5	-0.7	1.3	0.96
33	2017	mCS2	14493	99.8	100.0	4.5	4.6	-0.3	1.5	0.95
34	2018	mCS2	15377	99.9	100.0	4.8	4.7	-0.1	1.4	0.96
35	2019	mCS2	14283	100.1	100.2	4.7	4.5	-0.1	1.8	0.93
36	2020	mCS2	6090	100.0	99.9	4.8	4.6	0.1	1.9	0.91

JER summery stastistics for snell and current breeding value for nongenotyped females with progeny, by birth year

Obs	BYR	name	no	mean_sn	mean_cu	std_sn	std_cu	mean_dif	std_dif	corr_sn_cu
37	2015	calv	17023	97.7	97.9	5.8	6.0	-0.2	1.1	0.98
38	2016	calv	15718	97.0	97.1	6.0	6.4	-0.1	1.2	0.98
39	2017	calv	14493	97.9	97.7	5.8	6.0	0.2	1.1	0.98
40	2018	calv	15377	99.7	99.6	5.1	5.4	0.1	1.2	0.98
41	2019	calv	14283	99.0	98.4	5.0	5.4	0.6	1.3	0.97
42	2020	calv	6090	98.7	98.1	5.2	5.9	0.6	1.5	0.97

distribution of differences in number of females and in percentage

Obs	diff	d_calv	p_calv
1	-13	1	0
2	-11	1	0
3	-9	2	0
4	-8	1	0
5	-7	7	0
6	-6	33	0
7	-5	77	0
8	-4	337	0
9	-3	1336	2
10	-2	5075	6
11	-1	16553	20
12	0	28975	35
13	1	20400	25
14	2	7431	9
15	3	2221	3
16	4	441	1
17	5	78	0
18	6	15	0